FEDERAL RESERVE’S SECOND MONETARY POLICY REPORT FOR 2014

HEARING
BEFORE THE
COMMITTEE ON
BANKING, HOUSING, AND URBAN AFFAIRS
UNITED STATES SENATE
ONE HUNDRED THIRTEENTH CONGRESS
SECOND SESSION
VOLUME I
ON
OVERSIGHT ON THE MONETARY POLICY REPORT TO CONGRESS PURSUANT TO THE FULL EMPLOYMENT AND BALANCED GROWTH ACT OF 1978

JULY 15, 2014

Printed for the use of the Committee on Banking, Housing, and Urban Affairs

Available at: http://www.fdsys.gov/
CONTENTS

TUESDAY, JULY 15, 2014

Opening statement of Chairman Johnson ............................................................. 1
Opening statements, comments, or prepared statements of:
  Senator Crapo ................................................................................................... 2

WITNESS
Janet L. Yellen, Chair, Board of Governors of the Federal Reserve System ...... 3
  Prepared statement .......................................................................................... 33
  Responses to written questions of:
    Senator Crapo ............................................................................................ 36
    Senator Menendez ..................................................................................... 44
    Senator Vitter ............................................................................................ 45
    Senator Johanns ......................................................................................... 45
    Senator Toomey ......................................................................................... 47
    Senator Moran ............................................................................................ 52
    Senator Coburn ........................................................................................... 55

ADDITIONAL MATERIAL SUPPLIED FOR THE RECORD

Monetary Policy Report to the Congress dated July 15, 2014 ............................. 1643
Chart submitted by Senator Patrick J. Toomey .................................................... 1701
OPENING STATEMENT OF CHAIRMAN TIM JOHNSON

Chairman JOHNSON. I call this hearing to order.

This morning we welcome Chair Yellen back to the Committee for testimony on the Federal Reserve’s semiannual Monetary Policy Report to the Congress. Since Chair Yellen was last before the Committee, Stanley Fischer, Lael Brainard, and Jerome Powell were confirmed by the Senate to serve on the Board. It is important that the Fed maintain a full complement of Governors to effectively carry out its monetary policy and regulatory functions. To that end, there are two remaining spots to be filled on the Board, and I hope for the swift nomination of well-qualified candidates with expertise in community banking, as well as tough and effective oversight experience.

The Fed continues to grapple with many pressing issues that span both monetary and regulatory policy, and I look forward to hearing Chair Yellen’s perspective on these issues today. The steady path to economic recovery following the Great Recession took a sidestep with first quarter GDP falling. The unemployment rate has continued to drop in recent months, but long-term unemployment and youth unemployment remain unacceptably high. And the housing sector has been slow to rebound from its troubles during the crisis, with too many creditworthy borrowers locked out of the mortgage market.

Given these headwinds against a more robust recovery and a low inflation rate, I am encouraged by the FOMC’s view that monetary policy will likely remain accommodative for a considerable time following the completion of the Fed’s asset purchase program.

I am also encouraged by the continued progress being made to implement Wall Street reform and improve U.S. financial stability. Chair Yellen, your recent comments outlining the importance of macroprudential tools that lean against financial excesses and focus on building resilience in the financial system rightly point to the need to ensure that firms—particularly the largest and most
systemically important firms—are prepared for the worst and able to withstand shocks from a variety of sources.

To that end, it is imperative that Wall Street reform rules be completed as soon as possible. We must not forget how costly the last financial crisis has been, so regulators and Congress must continue to do all we can to keep our financial system stable and promote strong economic growth.

With that, I will now turn to Ranking Member Crapo for his opening statement.

STATEMENT OF SENATOR MIKE CRAPO

Senator Crapo. Thank you, Mr. Chairman, and welcome, Chair Yellen.

During Chair Yellen's, Dr. Yellen's nomination hearing, I noted the need to fill the additional vacancies that the Chairman referenced at the Federal Reserve Board with individuals bringing balanced viewpoints. Again, I stated the President should nominate someone with community bank experience to the Board to fill one of the remaining vacancies. Community banks play an important role in their local economies and face a disproportionate burden from regulation. We should ensure that the perspective of those banks is represented in regulatory policymaking.

Today's hearing is another important opportunity to discuss monetary policy and financial regulatory policy. Since our last hearing with Chair Yellen, the Fed has continued to reduce the pace of its large-scale asset purchases, known as “quantitative easing” or “QE.” It has been a welcome development to see that under the Chair's direction and that this process of tapering has begun and now we will likely be able to see all QE purchases cease later this year.

I have consistently made my opposition to the policy of QE very clear. The quadrupling of the size of the Fed's balance sheet that has occurred as a result of the Fed's QE purchases of Treasury and agency-backed mortgage-backed securities is worrisome. These QE assets will remain on the Fed's balance sheet for a very long time, and the reserves used to purchase them will remain in the financial system.

The process of normalizing monetary policy will be difficult, particularly in light of the fact that our economy has failed to strengthen in the way that was promised by the supporters of this unconventional monetary stimulus.

Recent Federal Open Market Committee minutes indicate that in the coming years any miscommunication about monetary policy during this normalization period could create risks to the economic outlook. Continued clear communication will be important, particularly as the Fed is seeking to rely on new tools that are unfamiliar to the market.

For example, Fed officials have indicated that overnight reverse purchase agreements, also known as “repos,” will likely play a large part in setting monetary policy during normalization, while the Federal funds rate becomes less important. At the FOMC meeting, some raised concerns that the Fed's overnight repo facility could increase problems during adverse market conditions, poten-
tially causing counterparties to shift funds away from making loans and opting for the Fed’s safety net instead.

How will the Fed balance the need for open communication with the ability to preserve flexibility should unintended consequences arise in this important market?

I am also interested in your recent comments on the use of macroprudential tools by the Fed. You specifically recognized that experience with these tools is limited and that many central banks will still have much to learn to use these measures effectively. Introducing the concept of managing U.S. monetary policy by regulations and prudential oversight is untested and perhaps more theoretical than real.

I agree with those who are concerned that regulators may not be able to get the timing right. Many economists, including those at the Fed, have not been very good judges of identifying market bubbles and predicting when the bubbles will burst. Your speech discussed the ability of regulators to change regulatory standards on mortgage lending, such as debt-to-income and loan-to-value ratios as a macroprudential tool that could slow mortgage lending.

I am very skeptical that during a housing boom registration would ever act aggressively to restrict lending to individuals with high levels of debt or low incomes. In fact, recent experience suggests all the political pressures run counter to that happening.

It is also highly questionable to think that forecasters will identify beforehand when these tools should be adjusted the credit cycle. While financial stability can complement the goals of monetary policy, it is paramount that the regulators strike the right balance without unduly harming the economy.

Again, we have a lot of issues to deal with, and I look forward to your testimony today, Chair Yellen. Thank you.

Chairman JOHNSON. Thank you, Senator Crapo.

To preserve time for questions, opening statements will be limited to the Chair and Ranking Member. I would like to remind my colleagues that the record will be open for the next 7 days for additional statements and other materials.

I would now like to welcome Chair Janet Yellen back to the Committee. Dr. Yellen is serving her first term as Chair of the Board of Governors of the Federal Reserve System. Prior to holding this position, Dr. Yellen served as Vice Chair of the Board for over 3 years. She has also previously served as Chair of the Council of Economic Advisers and President and CEO of the Federal Reserve Bank of San Francisco.

Chair Yellen, it is good to see you once again. Please begin your testimony.

STATEMENT OF JANET L. YELLEN, CHAIR, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Ms. Yellen. Thank you. Chairman Johnson, Ranking Member Crapo, and Members of the Committee, I am pleased to present the Federal Reserve’s semiannual Monetary Policy Report to the Congress. In my remarks today, I will discuss the current economic situation and outlook before turning to monetary policy. I will conclude with a few words about financial stability.
The economy is continuing to make progress toward the Federal Reserve’s objectives of maximum employment and price stability.

In the labor market, gains in total nonfarm payroll employment averaged about 230,000 per month over the first half of this year, a somewhat stronger pace than in 2013 and enough to bring the total increase in jobs during the economic recovery thus far to more than 9 million. The unemployment rate has fallen nearly 1½ percentage points over the past year and stood at 6.1 percent in June, down about 4 percentage points from its peak. Broader measures of labor utilization have also registered notable improvements over the past year.

Real gross domestic product is estimated to have declined sharply in the first quarter. The decline appears to have resulted mostly from transitory factors, and a number of recent indicators of production and spending suggest that growth rebounded in the second quarter, but this bears close watching. The housing sector, however, has shown little recent progress. While this sector has recovered notably from its earlier trough, housing activity leveled off in the wake of last year’s increase in mortgage rates, and readings this year have, overall, continued to be disappointing.

Although the economy continues to improve, the recovery is not yet complete. Even with the recent declines, the unemployment rate remains above the Federal Open Market Committee participants’ estimates of its longer-run normal level. Labor force participation appears weaker than one would expect based on the aging of the population and the level of unemployment. These and other indicators that significant slack remains in labor markets are corroborated by the continued slow pace of growth in most measures of hourly compensation.

Inflation has moved up in recent months but remains below the FOMC’s 2-percent objective for inflation in the longer run. The personal consumption expenditures, or PCE, price index increased 1.8 percent over the 12 months through May. Pressures on food and energy prices account for some of the increase in PCE price inflation. Core inflation, which excludes food and energy prices, rose 1.5 percent. Most committee participants project that both total and core inflation will be between 1½ and 1¾ percent for this year as a whole.

Although the decline in GDP in the first quarter led to some downgrading of our growth projections for this year, I and other FOMC participants continue to anticipate that economic activity will expand at a moderate pace over the next several years, supported by accommodative monetary policy, a waning drag from fiscal policy, the lagged effects of higher home prices and equity values, and strengthening foreign growth. The committee sees the projected pace of economic growth as sufficient to support ongoing improvement in the labor market with further job gains, and the unemployment rate is anticipated to continue to decline toward its longer-run sustainable level. Consistent with the anticipated further recovery in the labor market, and given that longer-term inflation expectations appear to be well anchored, we expect inflation to move back toward our 2-percent objective over coming years.

As always, considerable uncertainty surrounds our projections for economic growth, unemployment, and inflation. FOMC participants
currently judge these risks to be nearly balanced but to warrant monitoring in the months ahead.

I will now turn to monetary policy. The FOMC is committed to policies that promote maximum employment and price stability, consistent with our dual mandate from the Congress.

Given the economic situation that I just described, we judge that a high degree of monetary policy accommodation remains appropriate. Consistent with that assessment, we have maintained the target range for the Federal funds rate at 0 to ¼ percent and have continued to rely on large-scale asset purchases and forward guidance about the path of the Federal funds rate to provide the appropriate level of support for the economy.

In light of the cumulative progress toward maximum employment that has occurred since the inception of the Federal Reserve’s asset purchase program in September 2012 and the FOMC’s assessment that labor market conditions would continue to improve, the committee has made measured reductions in the monthly pace of our asset purchases at each of our regular meetings this year. If incoming data continue to support our expectation of ongoing improvement in labor market conditions and inflation moving back toward 2 percent, the committee likely will make further measured reductions in the pace of asset purchases at upcoming meetings, with purchases concluding after the October meeting. Even after the committee ends these purchases, the Federal Reserve’s sizable holdings of longer-term securities will help maintain accommodative financial conditions, thus supporting further progress in returning employment and inflation to mandate-consistent levels.

The committee is also fostering accommodative financial conditions through forward guidance that provides greater clarity about our policy outlook and expectations for the future path of the Federal funds rate. Since March, our postmeeting statements have included a description of the framework that is guiding our monetary policy decisions. Specifically, our decisions are and will be based on an assessment of the progress—both realized and expected—toward our objectives of maximum employment and 2 percent inflation. Our evaluation will not hinge on one or two factors but, rather, will take into account a wide range of information, including measures of labor market conditions, indicators of inflation and long-term inflation expectations, and readings on financial developments.

Based on its assessment of these factors, in June the committee reiterated its expectation that the current target range for the Federal funds rate likely will be appropriate for a considerable period after the asset purchase program ends, especially if projected inflation continues to run below the committee’s 2-percent longer-run goal and provided that inflation expectations remain well anchored. In addition, we currently anticipate that even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the Federal funds rate below levels that the committee views as normal in the longer run.

Of course, the outlook for the economy and financial markets is never certain, and now is no exception. Therefore, the committee’s decisions about the path of the Federal funds rate remain dependent on our assessment of incoming information and the implications for the economic outlook. If the labor market continues to im-
prove more quickly than anticipated by the committee, resulting in faster convergence toward our dual objectives, then increases in the Federal funds rate target likely would occur sooner and be more rapid than currently envisioned. Conversely, if economic performance is disappointing, then the future path of interest rates likely would be more accommodative than currently anticipated.

The committee remains confident that it has the tools it needs to raise short-term interest rates when the time is right and to achieve the desired level of short-term interest rates thereafter, even with the Federal Reserve’s elevated balance sheet. At our meetings this spring, we have been constructively working through the many issues associated with the eventual normalization of the stance and conduct of monetary policy. These ongoing discussions are a matter of prudent planning and do not imply any imminent change in the stance of monetary policy. The committee will continue its discussions in upcoming meetings, and we expect to provide additional information later this year.

The committee recognizes that low interest rates may provide incentives for some investors to “reach for yield,” and those actions could increase vulnerabilities in the financial system to adverse events. While prices of real estate, equities, and corporate bonds have risen appreciably and valuation metrics have increased, they remain generally in line with historical norms. In some sectors, such as lower-rated corporate debt, valuations appear stretched and issuance has been brisk. Accordingly, we are closely monitoring developments in the leveraged loan market and are working to enhance the effectiveness of our supervisory guidance. More broadly, the financial sector has continued to become more resilient, as banks have continued to boost their capital and liquidity positions, and growth in wholesale short-term funding in financial markets has been modest.

In sum, since the February Monetary Policy Report, further important progress has been made in restoring the economy to health and in strengthening the financial system. Yet too many Americans remain unemployed, inflation remains below our longer-run objective, and not all of the necessary financial reform initiatives have been completed. The Federal Reserve remains committed to employing all of its resources and tools to achieve its macroeconomic objectives and to foster a stronger and more resilient financial system.

Thank you. I would be pleased to take your questions.

Chairman JOHNSON. Thank you for your testimony.

As we begin questions, will the clerk please put 5 minutes on the clock for each Member?

Chair Yellen, there seems to be mixed signals about the economy. In the face of these mixed signals, how cautiously will the Fed proceed as it considers ending large-scale asset purchases?

Ms. YELLEN. Chairman Johnson, as you know, there are mixed signals concerning the economy. Most importantly, GDP growth is reported by the Bureau of Economic Analysis to have declined almost 3 percent at an annual rate in the first quarter.

That said, many indicators concerning the economy, indicators of spending and production, are substantially more positive than that. As I noted, the labor market throughout that period has also con-
continued to improve, and at a somewhat faster rate than we had seen previously. Indicators of consumer sentiment and of business sentiment and optimism also seem to be positive.

So my reading at the present time is that the GDP decline is largely due to factors I would judge to be transitory, and I do think that that negative number substantially understates the momentum in the economy. But, of course, this is something we need to watch very carefully and are doing so. Nevertheless, my overall view is more positive.

Now, as I mentioned, the labor market, I believe, has been improving. Not only has the unemployment rate been declining, but broader measures of performance of the labor market have also shown improvement, and that is important. This is, of course, exactly what we want to achieve. But the Federal Reserve does need to be quite cautious with respect to monetary policy. We have in the past seen sort of false dawns, periods in which we thought growth would speed, pick up, and the labor market would improve more quickly, and later events have proven those hopes to be unfortunately overoptimistic.

So we are watching very carefully, especially when short-term overnight rates are at zero, so we have no ability to lower them further. We need to be careful to make sure that the economy is on a solid trajectory before we consider raising interest rates. And I think the forward guidance that we have provided in the policies that we have put in place are providing a great deal of accommodation to the economy to make sure that it is on a sound trajectory.

Chairman JOHNSON. Pertaining to the Collins amendment, the Senate recently passed legislation to clarify the Fed's ability to apply insurance-specific capital standards to insurance companies overseas. Why is it important that Congress act quickly and pass this legislation?

Ms. YELLEN. Well, as my colleagues and I have made clear on many occasions, our objective in designing regulations for insurance companies that come under our supervision or other nonbank SIFIs will be to tailor to suit the needs and special characteristics of the entities that we supervise, and we are certainly trying to achieve that in the case of the insurance entities that we supervise.

But there are constraints on our ability to tailor appropriate regulations, and the Collins amendment does pose constraints. So I think it would be useful to increase flexibility to allow us greater latitude in tailoring appropriate regulations.

Chairman JOHNSON. In light of your recent speech, will you elaborate on how you envision the Fed using macroprudential tools instead of monetary policy to maintain financial stability and build resilience in the financial system?

Ms. YELLEN. I think most importantly we have substantially strengthened the capital and liquidity positions of banking firms and financial firms that we supervise more generally. Our objective is to make sure that these firms are on solid footing, and to the extent that the financial system or the economy are buffeted with shocks, that these firms will be resilient, that they can continue to lend to support the credit needs of our economy even under adverse circumstances. And I would say our stress tests are a very important part of that as well.
So, first and foremost, the entire agenda from Dodd-Frank and more broadly coming out of the financial crisis to see a more resilient, better capitalized financial system, banking system, I would say is the core of that effort. If there were an asset price bubble and we did not intervene effectively to deal with that and that bubble burst, we want to make sure that the financial system can withstand such a shock, and that is an objective of our efforts.

We can also use more targeted tools that try to make sure that, as business cycle conditions improve as we go into more robust boom times, that, for example, in our stress tests we have automatically designed the scenarios to impose a more severe stress that firms need to be able to survive as asset prices increase and the economy grows more robust.

Those are the kinds of tools I largely have in mind.

Chairman JOHNSON. Senator Crapo.

Senator CRAPO. Thank you, Mr. Chairman.

Chair Yellen, in your testimony you mentioned that you currently anticipate that the Federal funds rate will continue below levels that the committee views as normal for an extended period of time. You also added that, depending on the economic outlook, this rate increase could occur sooner or later, as we get a better feeling for the strength of the economy.

Based on your view of the economy and the markets, when do you currently anticipate this first rate hike to occur?

Ms. YELLEN. The Committee has given guidance that says what we will be looking at is the progress we are making toward our two congressionally mandated objectives—maximum employment and price stability or our 2-percent inflation goal. There is no formula and there is no mechanical answer that I can give you about when the first rate increase will occur. It will depend on the progress of the economy and how we assess it based on a variety of indicators.

To get a sense of the views that members of our committee hold, included in the Monetary Policy Report is a summary of economic projections that all participants in the FOMC provided at the beginning of our June meeting. So these projections are just that. They depend on each participant’s own personal economic outlook, and they are not a policy statement of the FOMC. But they provide some sense of concretely what participants expected at the beginning of that meeting. And those projections show that almost all participants anticipate that the first increase in the Federal funds rate, if things continue on the trajectories they expect, would come sometime in 2015, and the median projection for where the Federal funds rate would stand at the end of that year was around 1 percent, so a positive but relatively low level. And I think that gives you a feeling for what participants thought would be appropriate given their projections in June.

I want to emphasize, as I have said repeatedly, that what actually happens, our projections change with incoming data. The economy is uncertain, and what will actually happen clearly is going to depend on the progress the economy makes.

Senator CRAPO. Thank you.

Ms. YELLEN. But I think that is consistent with the forward guidance that is contained in the FOMC statement as well.
Senator CRAP. Thank you. And based on the minutes of the most recent FOMC meetings, the discussion of monetary policy normalization has become an important topic for the committee. One of the strategies that is discussed is that the Fed will drain reserves by lending its securities out to the market as a part of reverse purchase agreements, or repos.

There is concern that such a facility would be a safe haven in times of market stress, attracting large funds and depriving business of credit. Is this a concern of yours? And how would the Fed address the potential that the facility could aggravate a market crisis?

Ms. YELLEN. Let me say that these are matters that we are discussing in an ongoing basis, and no final decisions have been made about the precise strategy that we will use when the time comes to normalize monetary policy. But we have tried to provide in the minutes a very good summary of the thinking in the Committee as these discussions have taken place.

One of the challenges we face is, as you mentioned in your opening remarks, the Fed’s balance sheet is very large; there are very large quantity of reserves in the banking system; and because of that, that poses some limits on our ability to precisely control the Federal funds rate. We cannot really use quite the same strategy of intervention we used prior to the crisis. So we have indicated that the main tool we will use is the interest rate we pay on overnight reserves. The overnight RRP facility that you referred to I think of as a back-up tool that will be used to help us control the Federal funds rate, to improve our control over the Federal funds rate.

I think it is a very useful and effective tool. We have gleaned that from the initial testing that we have done. But as you mention, we do have concerns about allowing that facility to become too large or to play too prominent a role, and for precisely the reason that you gave. If stresses were to develop in the market, in effect it provides a safe haven that could cause flight from lending to other participants in the money markets. So two tools that we can use and are discussing to control those risks. One would be to maintain a relatively large spread between the interest rate we pay on overnight reverse RPs and the interest rate on excess reserves. The larger that spread, the less use that facility will be.

Also, we can contemplate limits on the extent to which it can be used, either aggregate limits or limits that would apply to individual participants, and all of that is figuring into our discussions.

Senator CRAP. Thank you

Chairman JOHNSON. Senator Reed.

Senator REED. Thank you very much, Mr. Chairman, and thank you, Madam Chairwoman. You pointed out obviously that the mandate or one of the mandates of the Fed is full employment. We have seen some progress, but there have been variations regionally. My State still suffers from a significant unemployment crisis. And also underlying the overall statistics is the persistently high long-term unemployment number.

Can you comment about what the Fed is doing to try to address these two specific issues and further comment upon whether, as I
feel, Congress can complement your efforts by reinstating long-term unemployment benefits for these people?

Ms. YELLEN. As you note, nationally long-term unemployment is at almost unprecedented levels historically, and the average duration of unemployment spells is extremely long. And also, of course, there are variations from State to State in the level of unemployment with some States seeing much lower unemployment than the national average and the reverse.

Our monetary policy really cannot affect things at the level of individual States, and we have no specific tools to target long-term unemployment, but my expectation is that as the national unemployment rate comes down and if the pace of job creation stays where it is or even rises, I expect to see improvements on all fronts. And, in fact, long-term unemployment has declined, and the evidence that I have seen, although perhaps not utterly definitive, suggests that the decline in long-term unemployment does on balance reflect those who have experienced long spells getting jobs and moving into employment and not simply becoming so discouraged that they move out of the labor force.

So that is a healthy development, and, you know, while long-term unemployment remains at exceptionally high levels and is a grave concern, I do think we are seeing improvements as the job market is strengthening. And I think in every State we should expect to see—as confidence in the recovery grows and it strengthens, we should definitely expect to see improvements.

Senator REED. You point out that the Federal Reserve’s monetary policies have limitations, but fiscal policies of the Congress can be much more proactive in terms of, one, unemployment benefits so that these people have some support as they look for and do not get discouraged in their quest for jobs; and, second, infrastructure and a host of programs. And I would assume you would see these as complementary to your goal and necessary to your goal.

Ms. YELLEN. Senator, I think that these are really matters for Congress to debate and decide. With respect to long-term unemployment benefits, obviously we have a situation where long-term unemployment is far more common in the population and imposing serious tolls.

Senator REED. You do not have to respond, but my sense is that for the last several years you have been the only game in town in terms of trying to deal with this issue, because we have not taken some of the actions that we could that would have been beneficial and see us at a much better situation today. So——

Ms. YELLEN. Fiscal policy has been, I think CBO would confirm, a significant drag on the recovery, and fortunately that is diminishing. And, in fact, I think that is one of the positives for the economic outlook for economic growth going forward.

Senator REED. Well, thank you. I hope you are right.

Ms. YELLEN. I hope so, too.

Senator REED. Just quickly changing the subject and probably making a point, because my time is rapidly diminishing, the Federal Reserve in 2011 had a program, independent foreclosure review process, which they were trying to help people who had been mis-served by the foreclosure process services. That was scrapped shortly afterwards, and essentially you went to a direct payment
sort of form, about $3.9 billion. I am told that that program still has cash on hand, that you have not been able to reach the people, people receiving checks have not cashed them, or do not intend to.

This residual money, can you reprogram to State agencies or local initiatives that are much more effective in getting the money out? Could you consider that?

Ms. YELLEN. No decision at all has been made at this point on what to do with residual funds, and so there may be a number of options. We have yet to debate that.

Senator REED. Well, again, there are States, you know, and regions that need this help, and if you could get the money to the people who can get it out, that would be, I think, positive. Thank you, Madam Chairwoman.

Chairman JOHNSON. Senator Vitter.

Senator VITTER. Thank you, Mr. Chairman. Thank you, Madam Chair, for being here and for your work.

This week, on the Senate floor, through the TRIA bill, the Senate is expected to adopt and pass my amendment to mandate that at least one member of the Federal Reserve Board have direct community bank or community bank supervisory experience. What is your reaction to that mandate?

Ms. YELLEN. Senator, I would welcome the appointment of a community banker to our Board. I think a community banker can add a great deal to the work that we do, and I have worked with community bankers like Governor Duke or community bank supervisors like then-Governor Raskin and have seen how much that experience can contribute to our work. So——

Senator VITTER. Great

Ms. YELLEN. I am very positive on the idea of having a community banker appointed to the Board.

That said, I do not support requiring it via legislation. There are seven Governorships. The Board has many different needs. I think if we were to sit down and make a list of all of the kinds of expertise that are needed and are useful, there would be more than seven items on that list. And I would, you know, prefer to see appointments made in light of the priorities, including for a community banker, rather than for the indefinite future locking in and earmarking particular seats for particular purposes. I feel that is a road that could go further in a direction that would worry me. If we are earmarking, we could end up earmarking each seat for a particular kind of expertise, and I think greater flexibility needs to change over time. But that is not in any way to diminish my support for seeing a community banker appointed to the Board.

Senator VITTER. Well, we look forward to this community bank experience being more forcefully put on the Board through this legislation, so we will agree on that and look forward to it.

Madam Chair, we have talked a lot over your various visits about too big to fail. It is a concern of mine and other Members of the Committee on both sides of the aisle. And what I have personally heard is your agreeing with that general concern, but I have not really seen that translate into concrete policy moves to curb and change the continuation of too big to fail. That is my opinion.
So in that context, you were last before us on February 27th. What, if any, specific policy changes, initiatives, movement has the Fed or other regulators taken to curb and help end too big to fail?

Ms. Yellen. We have finalized our Basel III capital requirements that significantly increase the quality and quantity of capital in the banking system. Even before we did that, through our stress tests, we have worked to ensure that especially the largest and most systemic institutions have the ability to not only survive a very adverse stress to the system, but also to lend and support the needs of the economy through such a stress. The amount of capital in the banking system has basically doubled since 2009. We have put out for comment a liquidity coverage ratio rule that we hope to finalize this year. We are in the process of working through a regulation that will implement so-called SIFI surcharges or surcharges for the largest, most systemic firms. We have finalized and enhanced a higher leverage standard for the eight largest firms in the United States. And we are working very hard to make sure that these firms are resolvable in the event they should encounter a stress that overwhelms those substantial defenses. The FDIC, under its orderly liquidation authority, has the ability to resolve such a firm. It has established an architecture for doing so, and the United States is working with other global regulators to think through how that authority could be exercised to deal with cross-border issues.

We are discussing in the United States and globally a requirement for the largest and most systemic organizations to hold sufficient unsecured long-term debt at the holding company level to enable a resolution that would be smooth in the event that such a firm had to be resolved. And we are working with those firms also on living wills to enhance their ability to be resolved under the Bankruptcy Code.

Senator Vitter. Thank you, Mr. Chairman.

Chairman Johnson. Senator Schumer.

Senator Schumer. Thank you, Mr. Chairman, and thank you, Madam Chair. You have done a very good job. You make Brooklyn proud, and I am so glad to have these hearings. I have been sitting at Humphrey-Hawkins hearings since 1981 in the House and Senate, and they are very elucidating.

So my first question deals with probably your most difficult issue as Fed Chair and as a member of the Fed: the age-old balancing test between fighting inflation and going to full employment. It is a hard tightrope to walk, particularly as conditions change, and we are now in a period of change. Obviously unemployment has declined, thankfully, and obviously the economy is beginning to pick up. And as a result, there is a lot of pressure coming from many for you to not only accelerate the end of QE2, of quantitative easing, and to raise rates.

I would urge caution very strongly. To me, the greatest problem this country still faces is lack of good-paying jobs and decline of middle-class incomes. That is with us very, very strongly. And worldwide labor markets still keep a lid on inflation. Your stated target of 2 percent, 10 years ago if people heard the stated target was 2 percent, your predecessors, their jaws would drop. But we are not even at that.
So I would just ask you to be very cautious before you taper the QE3 program too quickly and entertain the prospect of raising rates. Could you comment?

Ms. Yellen. Yes. I certainly agree and tried to emphasize that while we are making progress in the labor market, we have not achieved our goal. And it is also the case that inflation is running under our 2-percent objective. So both of those facts, plus the fact that there have been substantial headwinds holding the recovery back and those headwinds, while we are, I believe, effectively overcoming them and making progress, until they are completely gone, it calls for an accommodative monetary policy to offset that. And I would say even if you consider our forward guidance we put in place in March, the committee indicated that even after we think the time has come to raise rates, that we think it will be some considerable time before we move them back to historically normal levels. And that reflects—well, different people have different views, but to my mind, it in part reflects the fact that headwinds holding back the recovery do continue. Productivity growth has been slow, and, of course, we need to be cautious to make sure the economy continues to recover.

We have tried with respect to our asset purchases to set out a clear objective that we had to see a significant improvement in the outlook for the labor market and to put in place a process by which reductions in the pace of our purchases would be measured, deliberate, and allow us time to assess how the economy is recovering, and we have followed, I think, a very deliberate course.

As I have also emphasized, this is not a preset course. If we were to judge the conditions had changed significantly, it is not locked in stone.

Senator Schumer. Thank you. I am glad and somewhat relieved to hear it. I know there are pressures.

I would like to just tweeze each side of that question as my final question. We are seeing improvement in job growth, but we are still seeing declines in median income and middle-class incomes and lower incomes. And what it means is the number of jobs created that really pay well is not growing quickly enough and poorer-paying jobs are growing more quickly. How can the Fed, if any way, deal with that?

And on the other side, one of the things you worry about, of course, are bubbles, QE3 and others have pushed a lot of money into corporate bonds, into the stock market. I do not think there are bubbles there yet. But I hope you are considering ways to reduce the possibility of bubbles without wholesale increases in rates.

Can you comment on both sides of that?

Ms. Yellen. With respect to wages, most measures of compensation have been running roughly in line with inflation so that real gains in compensation adjusted for prices or in real terms have been nonexistent. So while rising compensation or wage growth is one sign that the labor market is healing, we are not even at the point where wages are rising at a pace that they could give rise to inflation. In fact, real wages have been rising less rapidly than productivity growth, and what we have seen is a shift in the distribution of national income away from labor and toward capital. So there is some room there for faster growth in wages and for real
wage gains before we need to worry that that is creating overall inflationary pressure for the economy. That is something we are watching closely.

With respect to bubbles, I have stated my strong preferences to use macroprudential and supervision policies to address areas where we see concerns, and as I mentioned, we are doing that in the case of, for example, leveraged lending. But I would never take off the table totally the idea that monetary policy might be needed to address financial stability concerns. To me, I do not see financial stability concerns at the level at this point where they need to be a key determinant of monetary policy. And it is not my preference as a first line of defense by any means, but I would never want to take off the table that in some circumstances, particularly if macroprudential tools failed, monetary policy might be called on to play a role. But we are not there.

Senator SCHUMER. Thank you.

Chairman JOHNSON. Senator Johanns.

Senator JOHANNS. Thank you, Mr. Chairman.

Madam Chair, thank you for being here today. This is the third time you have been before the Committee—once as a nominee and now twice in your role as Chair. When you came to the Committee last fall, I was concerned about the lack of progress to deal with the $4 trillion balance sheet. I was then and I still am concerned that the risk of quantitative easing outweighs the benefits.

In your testimony, you speak of your concerns about false dawns, and there has been some fits and starts with the Fed in terms of tapering.

So my question gets to this issue: You are anticipating that by October this program will cease, come to an end. What could happen in that period of time that would cause you to recalibrate and decide that October is not the appropriate date; maybe the program should go on for a period of time. Tell me what metrics you are looking at to make these judgments as you go along.

Ms. YELLEN. Thank you.

Senator JOHANNS. In fact, you have moved at a pace that maybe I did not anticipate. You are down to $35 billion per month. But the reality is there is still a $4 trillion balance sheet out there, which is concerning.

In your testimony, you speak of your concerns about false dawns, and there has been some fits and starts with the Fed in terms of tapering.

Ms. YELLEN. The committee indicated that the path of purchases is not on a preset course, and all along, at each of our meetings where we have had to decide whether or not to cut the pace of purchases or to stop that or even to increase purchases, we have asked ourselves two questions: Is the labor market continuing to improve and do we retain confidence that going forward it will continue to do so? And do we see evidence that inflation is moving and will continue to move back to our 2-percent objective over time?

And at every one of our meetings since last December, when we started to taper the pace of purchases, we have asked those questions, and the answer has been, yes, we think inflation stabilized and will gradually move up; and, yes, we think the labor market will continue to improve, and we have cut—and we use the term “measured pace” or $10 billion a meeting. Now our forecast is that
for the next—that we will continue to see those conditions. And I think the evidence we are seeing is consistent with that, and if we continue to see progress in the labor market, as I expect, and inflation stabilizing or moving up toward 2 percent, we would continue on the course we are, and as I mentioned, purchases would cease after October. But if there were to be some very significant change in the outlook that we see between now and October so that we lost confidence that the labor market will improve for some reason, or that inflation would move back up to 2 percent, then we would have to rethink that plan.

Senator JOHANNS. Let——

Ms. YELLEN. But that is the plan.

Senator JOHANNS. Excuse me. Let me ask you a question—I am running out of time here—about the labor market, because I think this is a very, very concerning issue for the economy and for the country.

The proportion of Americans in the labor force is now less than 63 percent. We have not seen those numbers since Jimmy Carter was President many, many years ago.

I do not know if that is you or me, but it is annoying.

We have not seen those kinds of numbers since Jimmy Carter was President. The Fed has said that you look at the labor market. You have just reiterated that in your testimony. Originally it seemed like the benchmark you were trying to achieve was 6.5 percent. It is now 6.1 percent. But to me, that does not tell the story. The fact that our unemployment rate is at 6.1 percent does not reflect the reality that really what is happening is people are taking part-time work. Whether that is Obamacare or some other reason we could debate a long time.

So tell me what you are looking for when you constantly refer to the labor market? Are you looking for more participation, more full-time employment? What is it you are trying to achieve? And I am going to ask you to be brief because I am out of time.

Ms. YELLEN. Briefly, labor force participation certainly has moved down. Part of that, I believe, is an aging population and demographic. But when we see diminished labor force participation among prime-age men and women, that suggests something that is not just demographic. And so my personal view is that a portion of the decline in labor force participation we have seen is a kind of hidden slack or unemployment. It may be, if that is correct, that as the labor market strengthens, labor force participation will remain flat instead of the demographic trend continuing to pull it down, that as people who have been discouraged come back into the labor force and start looking and getting jobs, we will see the labor force participation rate flatten out, and the unemployment rate may not come down as quickly as it has been. But we will need to look at that. That is a hypothesis.

I do want to make clear: 6.5 percent has never been our objective for the labor force. What we said about 6.5 is that we would not—as long as inflation was not a concern, we would not think about raising the Federal funds rate above the 0 to ¼ percent range until unemployment had declined at least below 6.5 percent. So that has never been our target, and 6.1 percent is not our target either. Participants in the FOMC are asked what they think a so-called full
employment or normal longer-run unemployment rate is, and in the Monetary Policy Report we distributed in June, they thought that was 5.2 to 5.5 percent.

But, of course, we do not know, and we are looking at all the things you mentioned in judging the labor force, in judging the labor market, not just the unemployment rate but a broad range of indicators, including involuntary part-time employment, as you mentioned, and broader metrics concerning the labor market.

Senator JOHANNES. Thank you, Madam Chair.

Chairman JOHNSON. Senator Menendez.

Senator MENENDEZ. Thank you, Mr. Chairman.

Madam Chair, you were quoted in a New Yorker profile this week saying that while the economy is improving from the depths of the financial crisis and the Great Recession, “The headwinds are still there.” And even when the headwinds have diminished to the point where the economy is finally back on track and it is where we want it to be, “It is still going to require an unusually accommodative monetary policy.” That was your statement.

That seems pretty consistent with the concern of prominent economists outside of the Fed, that current economic conditions and fiscal policy are producing an environment that requires low than normal interest rates to generate economic growth and create jobs.

Can you explain to me what you mean about the need for “unusually accommodative monetary policy”? And do you agree with the views being discussed by many, Larry Summers and others, about lower than normal interest rates and the dangers of tightening too soon?

Ms. YELLEN. I do agree with the view that there are substantial headwinds facing the economy. One example would be that we see in surveys of households that their expectations about their future finances and growth in their real incomes are exceptionally depressed. And I think that is a factor that is depressing spending.

We see in the housing market, where we had some progress but it now looks like it is stalled, a lack of credit availability for anyone who has anything other than a pristine credit rating I think remains a factor, and that is in many ways and complicated ways a legacy of what we have lived through.

So I think there are—and fiscal policy has been a factor, in my view holding back the recovery. And that is what monetary policy has had to counteract, and that is in part why we have needed such an accommodative monetary policy for so long.

Now, the economy is making progress. I do believe it is making progress, and eventually, if we continue, a day will come when I think it will be appropriate to begin to raise our target for the Federal funds rate. But to the extent that even when the economy gets back on track, it does not mean that these headwinds will have completely disappeared. And in addition to that, productivity growth is rather low. At least that may not be a permanent state of affairs, but it is certainly something that we have seen in the aftermath—well, we have seen it during most of the recovery. That is a factor that I think is suppressing business investment and will work for some time to hold interest rates down.

These concerns and these factors are related to what economists are discussing, including secular stagnation. The committee, when
it thinks about what is normal in the longer run, the committee has recently slightly reduced their estimates of what will be normal in the longer run. The median view on that is now something around the 3¼ percent. But we do not really know. But it is the same factors that are making the committee feel that it will be appropriate to raise rates only gradually, they are some of the same factors that figure in the secular stagnation.

Senator Menendez. Let me ask you beyond what the Fed is doing. Are there fiscal policy steps the Congress can take to improve the situation and reduce the headwinds against growth? For example, we have interest rates at near historic lows and construction employment is still below the precrisis levels. For example, would it not be time to invest in repairing our Nation’s transportation and other infrastructure as a way to help against such headwinds?

Ms. Yellen. As I have said, fiscal policy for a number of years has been a drag on growth, and that is, we can translate that into a factor that has necessitated lower than normal interest rates to get the economy moving back on track. And, of course, it is a judgment for Congress what the appropriate priorities are, but I would certainly say that fiscal policy has been unusually tight for a period like we have lived through.

Senator Menendez. I understand that you do not want to dictate what Congress’ priorities are, but if, in fact, Congress were to say, well, investing significantly, robustly in our transportation infrastructure and other similar infrastructure projects, would that be something that would help against the headwinds?

Ms. Yellen. Well, certainly it would be a counter to those headwinds, yes.

Senator Menendez. Thank you.

Chairman Johnson. Senator Heller.

Senator Heller. Thank you, Mr. Chairman, and thank you for holding this particular hearing.

Chairman, thank you for being here. I apologize. I have not been here for all the questioning. The Ranking Member and myself are running back and forth to the Energy Committee talking about fire suppression. I know you get a lot of credit and blame. I want you to know I am not blaming you for the fires out West, all right? So we can take that question off the table. I know you do take a lot of credit and a lot of blame, and I just want to thank you for taking time.

You said in your opening remarks that the recovery is not complete from the Great Recession. And we have had a lot of lively debates here in this Committee over the soundness and the safety of our market structures. We even had a hearing last week on high-frequency trading. Some are going so far to claim that markets perhaps are rigged. If you talked to individuals 5 years ago, in 2008, and told them we were going to go 5 years through a Great Recession and in that 5-year period you are going to see the stock market go from 6,500 to 17,000, not too many people would have believed that.

So I guess the question is: Books are being written about this. Individuals are now going as far as to claim the markets are
rigged. I want to get your feelings on this. Do you believe the stock markets are rigged?

Ms. YELLEN. I think there are a number of concerns that have been outlined about high-frequency trading, and I believe it was in June Mary Jo White, the Chair of the SEC, gave a very important and very detailed discussion of high-frequency trading, outlining where she saw problems and what potential solutions might be to those problems.

Senator HELLER. The quantitative easing, do you believe that unintended consequences of QE1, 2, and 3 may be with all the bond buying, that it is forcing people into the stock markets, creating this bubble?

Ms. YELLEN. I think an environment of low interest rates in general, which have been promoted by both our keeping the Federal funds rate at 0 and additionally by our purchases, low rates do have an incentive to push individuals to look for yield, to reach for yield. And that is both a good thing and a bad thing.

On the one hand, we need healthy risk taking in order to spur our recovery. And low interest rates I think have had a positive effect on helping the recovery. But, of course, we have to be careful about looking for situations where low rates may be incenting behavior that can be dangerous to financial stability. And I particularly outlined in my remarks an area like leveraged lending where we are seeing a marked deterioration in underwriting standards, and it looks like it may be part of a reach for yield, and we are trying to deal with that through supervisory means.

But the kind of broad-based increase in leverage in the economy and maturity transformation and credit growth that one tends to see in a situation where there are intense financial stability risks, I do not think we see those things. So at this point they are more isolated and not broad-based in general, at least in my assessment.

Senator HELLER. Thank you, Dr. Yellen.

I will go back to Senator Johanns’ questions on quantitative easing. I may ask it just a little bit differently, but you do see a time when the Federal Reserve stops the bond-buying program?

Ms. YELLEN. As I indicated in my opening remarks, if things continue on the current course, as the committee expects, the purchases would cease after our October meeting.

Senator HELLER. So if they cease, do you see—I guess my question today would be: Would you ever see the restarting of quantitative easing? In other words, once it ends, do you believe that this is now the new normal, the Federal Government buys these bonds? Or would you commit to saying that quantitative easing has come and gone and we have seen the last of it?

Ms. YELLEN. It really depends on what the economy does. The economic outlook is very uncertain. I hope we are on a solid course of recovery and that it will continue and not encounter some serious setback.

I would not take it off the table forever as a tool the Federal Reserve might need to someday in some circumstances use again. But my hope is we are on a path of recovery and monetary policy will over time normalize, that our purchases will end, eventually our balance sheet will begin to shrink back toward more normal size,
and when the time is right, that short-term interest rates will begin to move above their current very, very low levels, too.

Senator HELLER. Dr. Yellen, thank you.

Mr. Chairman, thank you.

Chairman JOHNSON. Senator Brown.

Senator BROWN. Thank you, Mr. Chairman. Madam Chair, thank you for being here.

These hearings so often focus on when the Fed will change its policies so financial markets will rally and Wall Street lenders can make money. Too often we forget about the human side of these issues. As Federal Reserve Chair, you have worked to put a face on economic numbers. We are appreciative of that. Last February, you spoke of the toll on unemployed workers “being simply terrible on the mental and physical health of workers, on their marriages, on their children.”

It seems, though, Madam Chair, too many people around here still view unemployed workers as lazy, as shiftless people who do not really want to work. And so we simply don’t extend programs like unemployment insurance.

Talk for a minute or two about the psychological effects that unemployment has on workers, why the psychology is so important, why it should matter to all of us, even a Senator who goes to work in a suit every day and speaks with an upper-class accent.

Ms. YELLEN. I think many workers who lose jobs that they are attached to and depend on for their livelihoods experience exceptional psychological trauma when they become unemployed, and especially when the unemployment is of long duration, as it has been for so many individuals who find themselves unemployed now.

First of all, there is a very significant loss in lifetime income. Many studies have documented for workers who experience job loss when unemployment is as high as it has been and they find it difficult to get another job. And, of course, there is the fear that goes with that of, “How will I support my family? How will I take care of my children?” I gave a speech in Chicago in February and talked to a number of unemployed workers, and I heard personal stories about individuals who were supporting children and concerned that because in some cases they could only find part-time, low-paying jobs, that they could not continue to support their children adequately.

And there are a number of studies when I use those words, that it takes such a toll on families and children and psychologically, that is based on a number of studies that have documented that, that there are health costs to workers who lose their jobs, that in terms of the progress of their children that there are losses to their children when a parent loses a job for a significant amount of time, and in terms of the odds of divorce and breakup of a family, that is obviously present, too.

And for people their jobs are often their identities, and when an individual cannot find a job for a prolonged period of time, “Who am I and what is my role? And how do I contribute to my community and to my family?” become a real psychological toll. I think anyone who has ever talked to people experiencing significant unemployment realizes what the psychological toll is and the ways it affects their well-being and that of their community.
Senator BROWN. Thank you for realizing that that is an important part of your job, to continue to forcefully speak out about the human side and the human cost of economic policies.

Let me shift to another question. Too many Americans look at Washington’s response to the financial crisis and feel that nothing has changed. After all, the four largest banks are 25 percent larger than they were in 2007. Federal Reserve Vice Chair Stanley Fischer said last week, “What about simply breaking up the largest financial institutions? While there is no simply,” he points out in this area, “actively breaking up the largest banks would be a very complex task with uncertain payoff.”

It is troubling to me that the largest banks are so complex that one of our Nation’s top regulators cannot understand these institutions, particularly since he worked at one of them. But Dr. Fischer’s view reflects years-old sentiment expressed by Governor Dan Tarullo in 2009 that “Break up the banks” is more of a slogan, Governor Tarullo said, than a serious policy proposal. But Governor Tarullo’s views evolved. Last year, he praised a plan that I worked on with Senator Kaufman from Delaware, who has since left the Senate, to cap a bank’s nondeposit liabilities at 3 percent of U.S. GDP.

My question is: Do you agree with Vice Chair Fischer or do you agree with Governor Tarullo?

Ms. YELLEN. I think one of the things that Vice Chair Fischer said that I certainly agree with is that systemic risk in the financial system is not purely a question of too-big-to-fail institutions. And we should not lull ourselves into thinking that if we deal with ways to resolve or diminish the role of those institutions that systemic risk is not still a real phenomenon that we have to worry about.

During the Great Depression, when we had a financial crisis, it was mainly a large number of small banks that were affected, and then we saw runs on the banking system that had the potential to and did cause a collapse of credit in the economy. So I think he pointed out, and I agree, that we have to worry about more than the too-big-to-fail firms, and we could have systemic risk if a large number of smaller institutions are hit for some reason.

But it is certainly, I agree with my colleague Governor Tarullo, we are completely committed to trying to deal with too big to fail, and we have put in place numerous steps and have more in the works that will strengthen these institutions, force them to hold a great deal of additional capital, and reduce their odds of failure. And then on top of that, if they do fail, it is important that we be able to resolve these firms, and we are also working on having the ability to do that.

So, on the one hand, there will be much lower odds that a so-called systemic firm would fail, and should that occur, we will have better tools to be able to deal with it. And through the living will process and through other aspects of our supervision, we are trying to give these firms feedback on ways in which they can alter their structure in order to enhance their resolvability.

Senator BROWN. I think the important point you made was during the living will process, for these 11 largest firms, that the issue
21

of complex—that we really cannot address the issues of complexity, you and the FDIC. So thank you, Madam Chair.

Chairman JOHNSON. Senator Toomey.

Senator TOOMEY. Thank you, Mr. Chairman. And thank you, Madam Chair, for joining us yet again.

I think you know from our previous conversations I have long been of the view that the risks associated with this unprecedented experiment in monetary policy probably outweigh the meager benefits. So I disclose that up front.

But I want to understand better a different aspect of this, and that is, a movement toward normalization, which, arguably, is underway now, necessarily depends on the projections that the Fed makes. You have discussed some of those inflation projections, unemployment projections, GDP projections.

What concerns me is that these things are very hard to project, and the Fed does not have a great track record in projecting these things. I do not think the Fed really anticipated, for instance, the extent to which a decline in the workforce participation would drive unemployment rates lower.

I have a little graph here, which I know you cannot see from where you are, but, Mr. Chairman, I will ask that it be included in the record.

It simply depicts the Fed’s projection of GDP 1 year out, and then compares that to where GDP actually was, and it has been pretty terrible wrong for 10 years. It seems as though there is a systemic bias with a more optimistic outlook than what has actually come to pass.

So my question is: To what extent—how introspective is the Fed being about their own limitations in making projections which ultimately are driving a movement in the direction of normalization? And maybe more precisely, do Fed members incorporate into your own decision-making process the fact that these projections have not been so good? And that is not to say you are unique in getting these projections wrong. I understand how difficult they are. But don’t they argue for a more conservative approach and a quicker move to normalization since you know that very frequently these projections have been wrong?

Ms. YELLEN. I certainly agree that projecting future economic activity is a very difficult business, and our GDP projections have been for a number of years too optimistic. I would say that our projections about the labor market and unemployment as well as inflation have come closer to the mark. So GDP stands out as someplace where our projections have been systematically off.

And, of course, we have to gear monetary policy to what actually occurs in the economy, and not just what we expect will happen in the future to the economy. So our forward guidance, for example, is very explicit in saying that the time of normalization of policy, the time at which we would begin to raise the Federal funds rate above the 0 to ¼ percent range will depend on both actual progress, which we can see that is not a forecast, and our expectations about future progress in achieving both of those goals.

So we are looking at what happens in the economy, and when we are wrong, we take that into account. And as we see ourselves coming closer to our goals or failing to achieve our goals, that is
real live data that we respond to and adjust our policy accordingly. And I think that must be a feature of monetary policy, is that it adjusts to actually unfolding events and not just what we expected.

Senator TOOMEY. Thank you. One other question. You know there is often a lot of discussion about the Fed following some kind of well-defined rule, and obviously many central banks do that. The Fed itself has done it in the past.

What is your reaction to the idea that the Fed would be able to design its own rule, but it would be an objective, data-driven rule, the Fed would be required to disclose the rule, and the Fed would be allowed to deviate from the rule, but it would have to come to Congress and explain when and why it was doing so? What are your thoughts on an arrangement of that nature?

Ms. YELLEN. No central bank in the world follows a mechanical mathematical rule, and I think it would be a terrible mistake to ask the Federal Reserve to specify a mathematical rule——

Senator TOOMEY. Well, we have got central banks that peg their currency. I mean, that is pretty much a well-defined rule.

Ms. YELLEN. Or a currency board.

Senator TOOMEY. Or having a gold standard is a pretty well-defined rule. So historically it has not been uncommon.

Ms. YELLEN. OK. So if that is what you mean by your rule of gold standard or currency board, yes, that has happened. But given the goals that Congress has assigned to us with respect to inflation and employment, I am not aware of any, for example, inflation-targeting country, of which there are many, that has a mathematical rule.

Nevertheless, it makes perfect sense to behave in a relatively systematic way, looking, when you have objectives, asking the question how far are you from achieving those objectives, and how fast do you expect progress to be made in determining whether or not—exactly how much accommodation is needed. And a number of different factors come into play at different times. If we were following a specific mathematical rule, I really think performance in this recovery would have been dreadful. Most of the rules we would have used, first of all, we could have not followed in the depths of the downturn. They would have called for negative interest rates. And if we had tightened monetary policies, some of those rules would have called for—given the headwinds we face, the recovery would not be as far advanced as it is.

So there are special factors and structural changes that need to be taken into account that would make me very disinclined to follow a mathematical rule. But I think it is important that the central bank behave in a systematic and predictable way and to explain what it is doing and how it sees itself as likely to respond to future economic developments as they unfold, and that is precisely what we are trying to do with our forward guidance.

Senator TOOMEY. Thank you, Madam Chair.

Chairman JOHNSON. Senator Tester.

Senator TESTER. Yes, thank you, Mr. Chairman, and thank you, Chairman Yellen, for the work that you have done.

I think in previous sessions that we have had, I think you have agreed that the FSOC and the Fed have and should exercise their authority to develop industry-specific guidelines and metrics rather
than forcing insurers or asset management firms into a bank-centric regulatory model. I mean, that is still your position, I would assume?

Ms. YELLEN. I believe with respect to designation that each unique company that is under consideration needs to be carefully——

Senator TESTER. Good.

Ms. YELLEN. ——evaluated in detail.

Senator TESTER. OK. Thank you. In the past, some of us on this Committee have raised concerns that the FSOC seems to have a lack of transparency in the SIFI designation process. Could you give me your views as far as whether the process should be transparent or not? Or maybe I should word it this way: Can you tell me why the process should not be transparent if you think it should not be transparent?

Ms. YELLEN. I think that it should be transparent what it is that the FSOC is considering and looking for and trying to evaluate when it evaluates any particular firm. And I believe the FSOC has made it clear that they are trying to identify entities that are responsible for systemic risk to the financial system and the metrics that it looks to to evaluate that.

But there is a great deal of confidential firm-specific information that comes into play in evaluating a particular firm that I do not think should be in the public domain——

Senator TESTER. I have got——

Ms. YELLEN. ——unless it is actually designated, in which case it has been brought into the public domain.

Senator TESTER. Right. But you do believe the metrics should be transparent?

Ms. YELLEN. Well, the criteria that we use to establish—to designate should be clear.

Senator TESTER. Do you believe they are now?

Ms. YELLEN. I believe they are reasonably clear.

Senator TESTER. OK, because there are some—well, there are some, and I am one of them, that believe the process has not been transparent at all. And what I would ask of you, because I believe you think it should be—and I agree with you. The information that is specific to a company does not need to be transparent, but I think the metrics they are using, so we know what they are looking for, so that, quite frankly, everybody knows what they are looking for when it comes to designation is important.

Ms. YELLEN. Right, and I believe they have indicated what kinds of things they are taking into account.

Senator TESTER. About 6 months ago, when you were before this Committee, we talked about clarifying the end user exemption from the margin that was included in the Dodd-Frank, given the minimal risk that they pose in the overall market. You and former Chairman Bernanke and Governor Tarullo all indicated comfort with exempting end users from the costly margin requirements. Is this still true today? Do you still feel this way?

Ms. YELLEN. Yes.

Senator TESTER. Good. You had indicated that the rule would be out by the end of the year, the end-user rule. I am just wondering if you are still on schedule.
Ms. YELLN. I think that is correct that we are.

Senator TESTER. A few more head nods. OK. That is very, very good. Thank you very much for that.

I want to talk a little bit about the assessment just to give me an idea—and I may have asked this question before, and if I have, forgive me. When you are looking at the assessment of incoming information when it comes to the economy and when it comes to the Fed funds, the labor market is one of them. GDP is one of them. I would assume housing is one of them. What are some other indicators you are looking at?

Ms. YELLN. We are really trying to assess the likely path of the labor market and employment and inflation, which are the two goals Congress told us to focus on. But in trying to make those assessments, we have to look at a huge range of data: housing, consumer spending, the strength of investment spending, what is happening in the global economy, what do we expect will happen to our exports and imports. All of that figures into what will growth be in the economy, and then in turn, matters like productivity growth will affect how that translates into progress in the labor market. And with respect to inflation, of course, we are looking at many different metrics.

Senator TESTER. And of all those things you listed, which is of the most concern?

Ms. YELLN. At this moment?

Senator TESTER. Yes.

Ms. YELLN. What is of the most concern?

Senator TESTER. Yes.

Ms. YELLN. I mean, essentially the committee, having looked at all of these different factors, holds the view that we will enjoy moderate growth for the rest of the year and for the next couple of years, and the labor market will improve. And so while we are concerned that housing is a sector where we expected to see better recovery. We are not, that is a concern. But it is not quantitatively important enough to cause us to judge that it will hold back the recovery.

Senator TESTER. Thank you.

Thank you, Mr. Chairman.

Chairman JOHNSON. Senator Coburn.

Senator COBURN. Thank you, Madam Chairman, for being here. I appreciate your work and your interest.

You gave a speech recently on the importance of macroprudential tools to curtail financial instability if a particular asset class gets overheated. The persistent low interest rate environment has caused a reach for yield. The Fed is taking the stance that regulatory tools such as increased capital requirements, countercyclical buffers, margining, central clearing, requirements for derivatives will improve the resiliency of our financial system.

So my question for you: Rather than preventing asset bubbles from happening, we are now taking the approach that they are going to happen and we are going to deal with them. Is that an accurate statement?
Ms. Yellen. I think the steps that you indicated to strengthen the financial system do two things. They diminish the odds that bubbles will develop. For example, these rules diminish the chance that leverage will buildup as an economy strengthens. We have taken steps and will take further steps to diminish the likely buildup in leverage in the economy, so——

Senator Coburn. But you would agree that zero interest rate policy is tending to make people reach for yield now and is an impetus toward bubble creation in certain asset classes?

Ms. Yellen. It can be, and that is why we are watching very carefully, but——

Senator Coburn. Is there any one particular area that you are worried about right now in terms of asset bubbles?

Ms. Yellen. I have mentioned leverage lending and corporate debt markets, especially lower-rated companies. I think we are seeing a deterioration in lending standards. And we are attentive to risks that can develop in this environment, for example, that banks may be or others may be taking on interest rate risk, and when interest rates ultimately begin to rise, that if firms or individuals have taken risks and are not adequately prepared to deal with them, that can cause distress.

Among the institutions that we supervise, we are certainly looking at management of interest rate risk. We are using stress testing, and in this latest round, we had specific scenarios designed to look at how large banking organizations would fare if interest rates were to increase rapidly. And we are focused on how firms are managing their own interest rate risk.

So I think there are some risks in a low interest rate environment. I have indicated that, and we are aware of them. But I think the improvements we have put in place in terms of regulation both diminishes the odds that risk will develop and, if there is an asset bubble and it bursts, it will—and we are not going to be able to catch every asset bubble or everything that develops——

Senator Coburn. I guess that goes to my core question. Rather than have a policy that causes bubbles to create, why wouldn’t we have a policy that does not cause that, one? And, number two, it just seems to me now that we are kind of locked in this zero interest rate phenomenon, and one of the consequences of that is reaching for yield, and now we are going to try to attenuate the response to the zero interest rate rather than change the zero interest rate policy so that we do not have the bubbles in the first place.

Ms. Yellen. We have to recognize also that we are dealing with a real problem. The reason we have low interest rates is to deal with a very real problem, namely, the economy is operating significantly short of its potential, employment is suppressed well below its maximum sustainable level, and inflation is running below our objectives. That is why we are holding interest rates low, and were we to significantly raise interest rates to deal with a set of concerns that you indicated, we should expect even worse performance on those important goals that Congress has established for the Federal Reserve. And if we were to weaken the economy, it is not even clear that we would be mitigating financial stability risks overall, because——
Senator COBURN. We are in the trap.

Ms. YELLEN. There are considerations in both directions, and so we need to be very attentive to the financial stability risks. And as I have indicated, if they were to become extreme and other tools were not available or were not successful, I would not take monetary policy off the table as a tool to be used. But we should by no means think that it would be costless because it could be very costly in terms of achieving other very important objectives, and a weak economy creates its own set of financial stability risks. So it is not even clear that on balance we would be promoting financial stability.

So this is not a simple matter. There are complex tradeoffs involved here.

Senator COBURN. Mr. Chairman, I have additional questions for the record.

Chairman JOHNSON. Yes.

Senator COBURN. Thank you.

Chairman JOHNSON. The Chair notes that we have five Members and less than 20 minutes remaining to devote.

Senator WARNER. Thank you, Mr. Chairman, and thank you, Chairman Yellen, for your good work. I will try to make my questions quick and make one front-end comment.

As someone who advocated very strongly during Dodd-Frank that nonbanks could be SIFIs, I have to tell you I share Senator Tester’s concern about the transparency as we go through this process. We have got to get it right, and my concern is that for the nonbank SIFI designation, there is still a great question on transparency about whether it is size or product component, and the more clarity we can get on this, the better.

There are two questions I want to get at. One is an issue that has not been raised yet. I know some of us on this side of the aisle have grave concerns around student debt. At $1.1 trillion now, it is greater than credit card debt. I personally believe it is retarding recovery in the housing industry. It is clearly retarding the growth in the number of entrepreneurs. Some of us have proposed refinancing proposals. We have looked at income-based repayment plans. There is a bipartisan opportunity out there that would allow an employer to take a portion of an employee’s salary and apply it directly to the student debt pretax, the same way we already allow for tuition.

But is this a subject that at the Fed you have looked at and want to make a comment on in terms of this rising potential bubble in student debt and its effect on the economy?

Ms. YELLEN. We certainly are looking at it, and the growth in student debt has been really dramatic. I think there has been some work that documents that it is probably having an effect on the ability of young people to purchase homes. And it certainly is a burden for those individuals that they will be carrying through their lives.

On the other hand, education is extremely important, and making available the financing that is necessary in this economy for individuals to acquire an education is of the first order of importance. I would be concerned, of course, that some of the decisions that stu-
dents are making, they may not fully understand the burdens that they are assuming and how they will affect their lives. And, second of all, they may not be always accurately evaluating what the payoffs are to the training that they are taking on, and especially when there is inadequate information about the performance of the schools or programs that they are enrolled in, what are the job-finding and income prospects, and——

Senator WARNER. We have actually some bipartisan legislation that we ought to have a user-friendly Web site for all institutions, the same way we have got in housing and elsewhere, a Zillow-type site for students. And so know before you go is the approach we have. But I would point out that, you know, we have seen student debt quadruple from about $200 billion——

Ms. YELLEN. It is very——

Senator WARNER. ——to well north of—$240 billion in 2003 to $1.1 trillion roughly now. I would urge you and even at the FSOC level to look at this, and if you have got some additional suggestions.

I want to use my last moment to get in a question that I have asked before, but I want to prod you one more time, and that is on excess reserves. And when we were last—before, you kind of gave me the same answer that Chairman Bernanke gave, and the concern that if you kind of got rid of some of these excess reserves, which, you know, you are currently paying 25 basis points, and the excess reserves that have gone from $2.4 trillion to close to $2.6 trillion. The European Central Bank has actually got a negative 10 basis points on their policy toward these excess reserves. I realize your concerns, the effect it might have on money market funds, but with money market fund rates already so low, I still just do not understand why reexamining this policy might push some of our financial institutions to actually be willing to do a little more lending rather than to house these funds at the Fed.

Ms. YELLEN. It is a very legitimate question, and it is something that we have considered and debated, and there have been mixed views in the committee on the desirability of doing that. We have been quite concerned about what it might mean, given the structure of our money markets, for money——

Senator WARNER. Money market funds are already pretty low at this point.

Ms. YELLEN. Yeah. We have——

Senator WARNER. But my hope would be that you continue that debate, or at least this Member believes that this could be something that could be stimulative to the economy and get these banks taking this capital away from the Fed and actually into the economy. Thank you, Madam Chair.

Chairman JOHNSON. Senator Merkley.

Senator MERKLEY. Thank you very much, Mr. Chair. And thank you for your testimony today.

I will try to be very crisp in these questions, given the time. But insurance advocates have expressed concerns that new regulations might be forthcoming based on an international standard influenced by Nations that do not have our State guarantee system, and they believe that this may result in new capital requirements that
are unnecessary and inappropriate for the structure of the industry in our Nation.

Are there any thoughts that you might have to share on that particular topic?

Ms. YELLEN. I would simply say that the Federal Reserve is participating now in an international association of insurance supervisors discussing for internationally active insurance firms what might be appropriate capital standards for groups, you know, for essentially consolidated capital requirements for—not legal entity insurance firms that are regulated by the States—but the consolidated holding companies. Nothing that happens in that context—it is similar to our participation in the Basel Committee. We are looking to put in place appropriate standards here in the United States, and nothing that is decided in that international group has any force in the United States unless we propose rules, put them out for comment, and finalize them.

But I think it is helpful to get the perspectives of others and, to the extent possible and appropriate, to have an internationally level playing field.

Senator MERKLEY. Thank you. I am going to jump right into the next point, which I wanted to double down on the student loan question, because I feel like there is a huge amount of emerging information about the delay in home acquisition, and this is certainly a drag in itself on our economy as well as an impact on the quality of life of our young folks. But it also has a significant extended effect through the decades to come because of the slow pace of wealth aggregation for families if they do not engage in home ownership earlier on. And it is actually shocking to see a reverse of a key statistic in which folks who are 25 to 30 who have gone to college are now less likely to own a home than folks who did not go to college. So I just want to encourage—this issue really goes to the heart of the American dream because the cost of college is not only affecting those who went and have this debt, but it is affecting the aspirations of our children in high school who are starting to get advice, particularly in blue-collar communities like the one I live in, that maybe you should not risk carrying this mountain of debt in the context of such high uncertainty over jobs that might be able to have a monthly wage that could make those payments.

Ms. YELLEN. I agree with you that when you look at the numbers on student debt, it has to be a significant concern for just the reasons you gave.

Senator MERKLEY. Thank you. I will look forward to any work that the Fed is doing in this area to understand better the impacts on the economy.

I want to turn to the financial reform rulemaking process, and I know you have expressed concern with the frustratingly slow pace of some of the rulemaking, and we have still got quite a long list from Dodd-Frank here 4 years later that has not been completed on credit rating agencies, conflict of interest, and securitization are the issues that Senator Levin was so forceful in bringing forward during Dodd-Frank, security-based swaps, compensation structures, and so forth.

Do we have kind of a crisis of confidence in our ability to make the rulemaking system function? When we have in a law a goal for
a rule and sometimes it is a year, sometimes it is 2 years, and we just cannot seem to get the rules completed and maybe even end up in Never, Never Land, appropriately named because it seems like we are never going to get to final rules, is this a change from two decades ago? What do we do about it?

Ms. Yellen. I know it has been frustratingly slow. It is complicated, and we want to take the time to get it right. We are involved in a lot of rulemakings that involve multiple agencies with different perspectives, and we are also trying to coordinate with other countries to move forward together so we maintain in many areas a level playing field, and this is immensely time-consuming work.

I understand your frustration. I guess I see a bunch of rules in the pipeline that I hope will be completed in the not too distant future—the liquidity coverage ratio, QRM, other things that we can expect to come out of the pipeline. And I see a further agenda of rules that I really hope we will make a great deal of progress on this year.

So to me, the glass is more half full than half empty, and I actually believe we have made substantial progress and will continue to push forward.

Senator Merkley. Thank you,

Chairman Johnson. Senator Hagan.

Senator Hagan. Thank you, Mr. Chairman. And, Chairman Yellen, thank you for your service and for being here today.

I wanted to follow up on a letter that I sent to the Federal Reserve, the OCC, and the FDIC, and it is regarding the liquidity coverage ratio standard. I have heard a number of concerns from communities in North Carolina about the exclusion of the municipal securities from the high-quality liquid assets designation, and in particular, I am concerned that this exclusion of the municipal securities could restrict the ability of State and local governments to raise the capital that they need to finance these public investments in schools and hospitals and roads and airports, and then all the other infrastructure systems. And these projects are really the cornerstone of the U.S. economy.

What is the justification for excluding these municipal securities when other types of debt, including foreign sovereign debt, are covered? It seems like a strange outcome to me for the debt of some foreign countries to be treated more favorably than the AAA-rated debt of States like North Carolina.

Ms. Yellen. So let me say this is a proposal we have put out for comment, and we will look very carefully at the comments we receive on this and other topics.

The rationale for excluding them is that we are expecting firms to hold truly high-quality liquid assets, and the liquidity of municipal bonds is substantially lower than any of the assets that are included on that list. So the absence of liquid markets where those securities are traded was the reason for excluding them, but we will be looking very carefully at comments before we come out with a final proposal.

Senator Hagan. Well, I ask that you consider the impact that this exclusion could have on infrastructure investments and then
the ability of the States and local governments to actually manage their debt.

Ms. Yellen. We will look at those comments.

Senator Hagan. Thank you. And I also wanted to follow up on Senator Merkley’s question concerning the new global standards for the insurance entities. I believe it is important that the insurance companies be protected and that the State model for regulating the insurance also be respected. And as a member of the Financial Stability Board and a participant in these meetings, can you explain in a little bit more detail what the Federal Reserve is doing to ensure that any international regulations do not harm these companies and respect the State-based model of the insurance regulation?

Ms. Yellen. We are working very closely and the State regulators are participating in these international discussions as well. Nothing that is under consideration would affect the way in which legal entity insurance companies are regulated with respect to capital by the States. So we are looking at a separate set of capital requirements that would apply to the consolidated organization. And, again, nothing that happens in this international forum has any effect on American firms until we have incorporated them into regulations which go out for comment and are ultimately finalized.

Senator Hagan. Thank you.

Chairman Johnson. Senator Warren.

Senator Warren. Thank you, Mr. Chairman.

Chairman Johnson. Senator Warren.

Senator Warren. Thank you, Mr. Chairman. And thank you, Chair Yellen, for being here today.

You know, one of the tools that Congress has given the Fed to combat too big to fail is Section 165 of Dodd-Frank. This is the section that requires large financial institutions to submit plans each year describing how they could be liquidated in a rapid and orderly fashion without bringing down the entire economy or needing a taxpayer bailout.

Now, the Fed and the FDIC must review these plans, and if they do not buy that the plan would actually result in the rapid and orderly liquidation of the company, then they must order the company to submit a new plan. And here is the key part. As part of the order to submit a new plan, the Fed and the FDIC can require the company to simplify its structure or sell off some of its assets—in other words, break up the bank so that it could be more easily liquidated and not pose a risk to the economy.

So let us consider what happened during the Lehman Brothers bankruptcy in 2008. That is the one that sparked the financial crisis, nearly melted down the economy, and triggered the bailout by the taxpayers. The court proceedings took 3 years, clearly not rapid or orderly. But Lehman was tiny compared to today’s biggest banks. When it failed, Lehman had $639 billion in assets. Today JPMorgan has nearly $2.5 trillion in assets. That is 4 times as big as Lehman was when it failed.

Lehman had 209 registered subsidiaries when it failed. JPMorgan—I really almost could not believe this when I read it. JPMorgan today has 3,391 subsidiaries. That is more than 15 times the number of subsidiaries that Lehman had when it failed. Three years to resolve Lehman.
Now, JPMorgan has filed resolution plans in each of the last 3 years, and the Fed has not rejected any of them as not credible. Given our recent experience with the bankruptcy of Lehman Brothers, can you honestly say that JPMorgan could be resolved in a rapid and orderly fashion, as described in its plans, with no threats to the economy and no need for a taxpayer bailout?

Ms. Yellen. The living will process, as I understand it, is something that is intended to be iterative in the sense that the firms submit plans and will receive feedback from the regulators on whether or not we think the Fed and the FDIC regard these plans as sufficient to enable resolution under the Bankruptcy Code.

We have given feedback on the first round of plans that were submitted and are working actually at this point to give feedback on the second round of plans. In fact, the firms have now submitted a third round of plans——

Senator Warren. I am sorry, Chairman. I am just a little bit confused. JPMorgan submitted a round of plans in 2012, and my understanding is that neither the Fed nor the FDIC said that those plans were not credible. It then submitted plans in 2013, and neither the Fed nor the FDIC said they were not credible. And it has submitted plans in 2014.

So I am not quite sure——

Ms. Yellen. We have not even——

Senator Warren. ——whether you are saying the plans are not credible and you are continuing to talk with them and asking them to change their plans. Is that the case?

Ms. Yellen. We are working to give these firms feedback on their second round of submissions, and I think what we need to do is to give them a road map for where we see obstacles to orderly resolution under the bankruptcy Code——

Senator Warren. Well——

Ms. Yellen. ——and to give them an opportunity to address those obstacles.

Senator Warren. I appreciate that you are doing that, but the statute, it seems to me, is pretty clear here, that it is mandatory that these plans be submitted each year and that each year you determine whether or not the plans are credible. And I guess the question I am asking is: Have they ever gotten to a plan that you can say with a straight face is credible?

Ms. Yellen. I have understood this to be a process that these are extremely complex documents for these firms to produce. Our second round of submissions, we are looking at plans that run into tens of thousands of pages. And I think what was intended is that this determination you are talking about, about whether or not they are credible, the question is, Do they facilitate an orderly resolution? And I think we need to give these firms feedback——

Senator Warren. So I will stop there because we are running out of time, but I have to say, Chair Yellen, I think the language in the statute is pretty clear that you are required, the Fed is required to call it every year on whether these institutions have a credible plan. And I remind you, there are very effective tools that you have available to you that you can use if those plans are not credible, including forcing these financial institutions to simplify
their structure or forcing them to liquidate some of their assets—in other words, break them up.

And I just want to say one more thing about this process. The plans are designed not just to be reviewed by the Fed and the FDIC, but also to bring some kind of confidence to the marketplace and to the American taxpayer that, in fact, there really is a plan for doing something if one of these banks starts to implode.

You said that these plans run to the tens of thousands of pages. All I can say is that what has been released to the public is 35 pages long. That is about one page for every 100 subsidiaries that have been to be dealt with. I think that the plans that have been released by these companies have not been something that the public can look at and say, yeah, I see that they have got a plan to get through this.

So I hope you would urge greater transparency by these large financial institutions that are required to submit these plans, and I hope the Fed will be making a call on whether or not the Fed under its statutory responsibility sees these plans as credible for resolving these financial institutions if they hit financial trouble. Thank you.

Thank you, Mr. Chairman.

Chairman Johnson. Chair Yellen, I would like to thank you for your testimony. This hearing is adjourned.

Ms. Yellen. Thank you, Mr. Chairman.

[Whereupon, at 12:06 p.m., the hearing was adjourned.]

[Prepared statements, responses to written questions, and additional material supplied for the record follow:]
Chairman Johnson, Ranking Member Crapo, and Members of the Committee, I am pleased to present the Federal Reserve’s semiannual Monetary Policy Report to the Congress. In my remarks today, I will discuss the current economic situation and outlook before turning to monetary policy. I will conclude with a few words about financial stability.

Current Economic Situation and Outlook

The economy is continuing to make progress toward the Federal Reserve’s objectives of maximum employment and price stability.

In the labor market, gains in total nonfarm payroll employment averaged about 230,000 per month over the first half of this year, a somewhat stronger pace than in 2013 and enough to bring the total increase in jobs during the economic recovery thus far to more than 9 million. The unemployment rate has fallen nearly 1 1/2 percentage points over the past year and stood at 6.1 percent in June, down about 4 percentage points from its peak. Broader measures of labor utilization have also registered notable improvements over the past year.

Real gross domestic product (GDP) is estimated to have declined sharply in the first quarter. The decline appears to have resulted mostly from transitory factors, and a number of recent indicators of production and spending suggest that growth rebounded in the second quarter, but this bears close watching. The housing sector, however, has shown little recent progress. While this sector has recovered notably from its earlier trough, housing activity leveled off in the wake of last year’s increase in mortgage rates, and readings this year have, overall, continued to be disappointing.

Although the economy continues to improve, the recovery is not yet complete. Even with the recent declines, the unemployment rate remains above Federal Open Market Committee (FOMC) participants’ estimates of its longer-run normal level. Labor force participation appears weaker than one would expect based on the aging of the population and the level of unemployment. These and other indications that significant slack remains in labor markets are corroborated by the continued slow pace of growth in most measures of hourly compensation.

Inflation has moved up in recent months but remains below the FOMC’s 2 percent objective for inflation over the longer run. The personal consumption expenditures (PCE) price index increased 1.8 percent over the 12 months through May. Pressures on food and energy prices account for some of the increase in PCE price inflation. Core inflation, which excludes food and energy prices, rose 1 1/2 percent. Most committee participants project that both total and core inflation will be between 1 1/2 and 1 3/4 percent for this year as a whole.

Although the decline in GDP in the first quarter led to some downgrading of our growth projections for this year, I and other FOMC participants continue to anticipate that economic activity will expand at a moderate pace over the next several years, supported by accommodative monetary policy, a waning drag from fiscal policy, the lagged effects of higher home prices and equity values, and strengthening foreign growth. The committee sees the projected pace of economic growth as sufficient to support ongoing improvement in the labor market with further job gains, and the unemployment rate is anticipated to continue to decline toward its longer-run sustainable level. Consistent with the anticipated further recovery in the labor market, and given that longer-term inflation expectations appear to be well anchored, we expect inflation to move back toward our 2 percent objective over coming years.

As always, considerable uncertainty surrounds our projections for economic growth, unemployment, and inflation. FOMC participants currently judge these risks to be nearly balanced but to warrant monitoring in the months ahead.

Monetary Policy

I will now turn to monetary policy. The FOMC is committed to policies that promote maximum employment and price stability, consistent with our dual mandate from the Congress. Given the economic situation that I just described, we judge that a high degree of monetary policy accommodation remains appropriate. Consistent with that assessment, we have maintained the target range for the Federal funds rate at 0 to 1/4 percent and have continued to rely on large-scale asset purchases and forward guidance about the future path of the Federal funds rate to provide the appropriate level of support for the economy.
In light of the cumulative progress toward maximum employment that has occurred since the inception of the Federal Reserve’s asset purchase program in September 2012 and the FOMC’s assessment that labor market conditions would continue to improve, the committee has made measured reductions in the monthly pace of our asset purchases at each of our regular meetings this year. If incoming data continue to support our expectation of ongoing improvement in labor market conditions and inflation moving back toward 2 percent, the committee likely will make further measured reductions in the pace of asset purchases at upcoming meetings, with purchases concluding after the October meeting. Even after the committee ends these purchases, the Federal Reserve’s sizable holdings of longer-term securities will help maintain accommodative financial conditions, thus supporting further progress in returning employment and inflation to mandate-consistent levels.

The committee is also fostering accommodative financial conditions through forward guidance that provides greater clarity about our policy outlook and expectations for the future path of the Federal funds rate. Since March, our postmeeting statements have included a description of the framework that is guiding our monetary policy decisions. Specifically, our decisions are and will be based on an assessment of the progress—both realized and expected—toward our objectives of maximum employment and 2 percent inflation. Our evaluation will not hinge on one or two factors, but rather will take into account a wide range of information, including measures of labor market conditions, indicators of inflation and long-term inflation expectations, and readings on financial developments.

Based on its assessment of these factors, in June the committee reiterated its expectation that the current target range for the Federal funds rate likely will be appropriate for a considerable period after the asset purchase program ends, especially if projected inflation continues to run below the committee’s 2 percent longer-run goal and provided that inflation expectations remain well anchored. In addition, we currently anticipate that even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the Federal funds rate below levels that the committee views as normal in the longer run.

Of course, the outlook for the economy and financial markets is never certain, and now is no exception. Therefore, the committee’s decisions about the path of the Federal funds rate remain dependent on our assessment of incoming information and the implications for the economic outlook. If the labor market continues to improve more quickly than anticipated by the committee, resulting in faster convergence toward our dual objectives, then increases in the Federal funds rate target likely would occur sooner and be more rapid than currently envisioned. Conversely, if economic performance is disappointing, then the future path of interest rates likely would be more accommodative than currently anticipated.

The committee remains confident that it has the tools it needs to raise short-term interest rates when the time is right and to achieve the desired level of short-term interest rates thereafter, even with the Federal Reserve’s elevated balance sheet. At our meetings this spring, we have been constructively working through the many issues associated with the eventual normalization of the stance and conduct of monetary policy. These ongoing discussions are a matter of prudent planning and do not imply any imminent change in the stance of monetary policy. The committee will continue its discussions in upcoming meetings, and we expect to provide additional information later this year.

Financial Stability

The committee recognizes that low interest rates may provide incentives for some investors to “reach for yield,” and those actions could increase vulnerabilities in the financial system to adverse events. While prices of real estate, equities, and corporate bonds have risen appreciably and valuation metrics have increased, they remain generally in line with historical norms. In some sectors, such as lower-rated corporate debt, valuations appear stretched and issuance has been brisk. Accordingly, we are closely monitoring developments in the leveraged loan market and are working to enhance the effectiveness of our supervisory guidance. More broadly, the financial sector has continued to become more resilient, as banks have continued to boost their capital and liquidity positions, and growth in wholesale short-term funding in financial markets has been modest.

Summary

In sum, since the February Monetary Policy Report, further important progress has been made in restoring the economy to health and in strengthening the financial system. Yet too many Americans remain unemployed, inflation remains below our longer-run objective, and not all of the necessary financial reform initiatives have been completed. The Federal Reserve remains committed to employing all of
its resources and tools to achieve its macroeconomic objectives and to foster a stronger and more resilient financial system.

Thank you. I would be pleased to take your questions.
Q.1. I referenced in my opening statement your recent speech in which you discussed the macroprudential tools available to the Fed. Given the international structure of our markets, I am concerned that the use of these tools may simply disadvantage U.S. markets. How will the Fed make sure that other jurisdictions follow our lead so that our financial markets aren’t put at a competitive disadvantage when it comes to serving the global financial system?

A.1. Macroprudential policies are designed to promote the stability and resilience of the financial system in the United States. These features surely contribute to the attractiveness of U.S. financial markets to international capital. That said, as you note, given the highly interconnected nature of capital markets, coordinating actions with authorities in other countries is crucial. For that reason, we work closely with other jurisdictions in venues such as the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision to craft regulations that do not disadvantage markets or institutions in the United States.

For example, the Basel III capital accord contains a key macroprudential tool, the countercyclical capital buffer, which countries can put in place to provide additional loss-absorbing capacity to the banking system if they see building risks to the financial system. This tool could put U.S. banks at a competitive disadvantage if the United States were to implement the countercyclical capital buffer when other countries did not.

However, the Basel III accord requires that banks’ capital ratios be an average of the capital ratios in place across countries, weighted by each bank’s presence in those countries. Thus, foreign banks operating in the United States would be subject to the same effective capital requirement as U.S. banks when making loans to households and businesses in the United States.

In addition, in February 2014, the Federal Reserve approved a final rule that, in part, required foreign banking organizations with a significant U.S. presence to establish intermediate holding companies over their U.S. subsidiaries. One result of this rule is to put in place a level playing field among all banking organizations operating in the United States. In other words, they would all be subject to essentially the same set of micro- and macroprudential supervision and regulation.

Finally, it is instructive to consider the experience of other developed economies with macroprudential policies. A variety of macroprudential policies, ranging from loan-level underwriting standards, such as minimum downpayments on homes, to policies designed to limit leverage in the whole financial sector, such as capital surcharges on banks, have been put in place by countries including Canada, Norway, and Switzerland. These policies have not, so far as we can observe, resulted in a notable decline of the attractiveness of these countries to global capital. Of course, these policies are still relatively new, and we are closely monitoring their ultimate impacts.

Q.2. The bank regulatory agencies are now seeking public comment on the regulations that are outdated, unnecessary, or unduly bur-
densome. I applaud your effort on this issue and encourage other regulators to follow the same path. It's important to acknowledge that these regulations don't just impact the banks—they affect the availability and cost of credit and financial services for small businesses and ordinary Americans. How does the Fed plan to lead this process and how will it achieve its goals?

A.2. The Economic Growth and Regulatory Paperwork Reduction Act of 1996 (EGRPRA) requires that regulations prescribed by the Federal banking agencies be reviewed by the agencies at least once every 10 years. The purpose of this review is to identify outdated, unnecessary, or unduly burdensome regulations and consider how to reduce regulatory burden on insured depository institutions while, at the same time, ensuring their safety and soundness and the safety and soundness of the financial system. In connection with the review, the agencies are required to categorize the regulations and publish requests for comment on how burden may be reduced. Finally, the agencies must provide a report to Congress summarizing significant issues, the relative merits of such issues, and whether the issues can be addressed by regulation or would require legislative action.

The Federal Reserve, working with the Office of the Comptroller of the Currency (OCC), Federal Deposit Insurance Corporation (FDIC) and Federal Financial Institutions Examination Council, published the first of four anticipated requests for comment on agency regulations on June 4, 2014. The next request for comment is expected to be published before year end. We are especially interested to hear from community banks and their customers.

In addition to the requests for public comment, we intend to hold several public meetings around the country in order to allow the industry and the public an opportunity to present their views on burden reduction directly to agency personnel. The meetings will allow bankers, consumers, representatives of trade or public interest groups, and bank customers to provide their perspectives on how regulations should be changed to promote efficiency and effectiveness, reduce costs and limit burden. Although the focus of the exercise is on regulatory burden reduction, all members of the public may submit comments on how bank regulation may affect their relationship with their banks and their ability to obtain credit.

The Federal Reserve is committed to an effective review of its regulations to change any outdated, unnecessary, or overly burdensome rules. To that end, we have devoted considerable staff time to the process so far and will continue to do so. Over a dozen agency staff are currently involved in the public comment process and in planning the public outreach meetings which will be held at various Federal Reserve Banks. Each public meeting will be attended by a number of Federal Reserve staff, including senior officers from the Board and the Reserve Banks. As the process continues, additional staff will participate in reviewing the comments, assessing the burden associated with the targeted regulations, preparing the report to Congress and preparing any recommendations for changes to the regulations.

Q.3. Chair Yellen, 2 weeks ago you stated in a speech that reforms to the triparty repo market and money market mutual funds “has,
at times, been frustratingly slow.” Given the importance of these markets and instruments, isn’t the goal of such reforms not to get these rules done, but to get them done right and minimize unintended consequences? Can you please elaborate on your comments? 

**A.3.** Given the centrality of both the triparty repo market and money market funds (MMFs) to the 2008 financial crisis, the pace of reforms indeed has, at times, been frustratingly slow. As recently as 2012, the triparty repo market continued to be massively dependent on discretionary intraday credit from the large clearing banks in the daily settlement process. And it was only in 2013, that the Securities and Exchange Commission (SEC) formally proposed rules for structural reforms aimed at making MMFs, and therefore the financial system, more resilient.

The situation has improved markedly since 2013. Reform efforts in the triparty market have already begun to bear fruit. The share of the market financed by intraday credit has dropped by some 70 percentage points over the past year. By the end of 2014, the long-standing goal of largely eliminating such credit from the triparty settlement process should be reached. Earlier this year, the SEC finalized rules intended to address the structural vulnerability of MMFs. The reforms represent a significant step to making the MMFs more resilient. However, I and others have expressed concerns about some elements and emphasized the need to monitor the overall effects of the package and their implications for systemic risk going forward.

Certainly a key explanation for the slow pace of reform in these critical areas is that the triparty market and MMFs both connect disparate parts of the financial system, including large financial institutions, asset management firms, and nonfinancial corporations. For that reason, when MMFs faced runs and the triparty repo market ceased to function, the consequences were visible throughout the financial system. The importance of triparty repo and MMFs also complicated subsequent efforts to address the vulnerabilities, as reform efforts must involve a wide range of stakeholders and be consistent with a variety of different commercial and regulatory requirements. We believe that a reasonable balance has generally been struck between the need to address very significant vulnerabilities and the need to proceed carefully, with an awareness of the broad range of possible implications of reforms.

**Q.4.** It has been reported that the FSOC is undertaking efforts to consider SIFI designations for asset managers. Designation would subject these firms to dual regulation by the Federal Reserve and the SEC. Are you concerned that this potential dual regulation of asset managers that are SIFIs by both the Fed and the SEC is going to lead to regulatory confusion and uncertainty for the markets, and how do you plan to address those concerns?

**A.4.** The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) established the Financial Stability Oversight Council (FSOC) to bring together regulators from across the U.S. financial system to coordinate their efforts to identify, monitor, and address potential threats to the Nation’s financial stability. As part of this work, the Council is currently assessing potential risks arising from the asset management industry and its industrywide ac-
tivities. That work is ongoing and has yet to reach any conclusions. Moreover, there is no sense in which its outcome is preordained in any way.

It is possible that at the end of the FSOC’s review it may decide to take no action. However, in the event that the FSOC were to identify specific financial stability risks from asset managers or their activities, it has a number of policy options at its disposal. These include: communicating potential threats to stability in its annual report to Congress; recommending that existing primary regulators apply heightened standards and safeguards; and designating individual firms as systemically important financial institutions, thereby subjecting them to supervision and regulation by the Federal Reserve. The appropriate response will depend upon the nature of the risks identified; in the event that no material risks are identified, the FSOC need not take action.

The Federal Reserve routinely coordinates supervision of domestic bank holding companies with a number of other agencies, including the SEC; together, the relevant agencies strive to minimize any potential for mixed messages to banks or market participants. Regarding institutions designated by the FSOC, Federal Reserve said it will apply enhanced prudential standards to these institutions through a subsequently issued order or rule following an evaluation of the business model, capital structure, and risk profile of each designated nonbank financial company. This tailoring of orders and rules will mitigate regulatory confusion and the potential for market disruption.

The Federal Reserve is committed to continuing to work in a coordinated manner with our fellow regulators on the FSOC to ensure that the organizations we supervise operate in a safe and sound manner and are able to provide financial intermediation services in a durable way to support economic activity in the wider economy.

Q.5. Building upon that last question, I would like to get your input on a recent statement by Federal Reserve Governor Tarullo that one way asset managers may be regulated is through Fed-imposed margin requirements on their collateralized lending. This could have a major adverse effect on the availability of credit in the U.S. economy. As the Fed is pondering how best to regulate nonbank SIFIs, including asset managers, what kind of a cost-benefit analysis has the Fed done to get a clear understanding of the effect the new regulatory framework will have on these entities and the economy at large?

A.5. In his recent testimony before the U.S. Senate Committee on Banking, Housing, and Urban Affairs, Governor Daniel K. Tarullo, outlined the merits of introducing a minimum “haircut,” or down-payment requirement, for securities financing transactions (SFTs), a category of secured financing that is typically short-term and highly leveraged, of which repurchase agreements (i.e., repos) are an example. This is a policy recommendation being considered and developed by the FSB.1
Minimum haircuts on SFTs would complement post-crisis reforms aimed at bolstering the stability of the banking sector, such as Basel III. A potential unintended consequence of those banking sector reforms is that systemically risky activity might be driven out of banks and into parts of the financial system where prudential rules do not apply or are less stringent.

Like minimum margin requirements for derivatives, numerical floors for SFT haircuts would be intended to serve as a mechanism for limiting the build-up of leverage at the security level and could mitigate the risk of procyclical margin calls.¹ Put another way, in good times, haircuts tend to fall to extremely low levels because market participants perceive there to be little risk. In the event of a sharp drop in asset prices, market participants suddenly raise haircuts in reaction. As a result, borrowers find themselves scrambling to finance their holdings and sometimes dump assets. The resulting “fire sale” price drop harms all market participants, including those who operated more prudently. A minimum margin requirement limits the extent to which such risk can build up.

In addition, by limiting the extent to which unregulated entities can borrow against risky collateral, minimum haircuts could in principle limit the build-up of excessive leverage outside the banking system. Haircuts that are more stable through the cycle may also help to reduce other forms of procyclicality of the financial system such as the tendency for credit to be cheap and plentiful in economic expansions only to dry up for some borrowers in downturns.³

The FSB minimum haircut proposals would not amount to regulating asset managers per se and it would leave important sources of financing untouched. In their current form, the proposals would apply only to SFTs in which entities not subject to capital and liquidity regulation (e.g., hedge funds) receive financing from entities that are subject to regulation (e.g., banks and broker-dealers), and only to transactions in which the collateral is something other than Government or agency securities. This could place an upper bound on the amount of leverage that a hedge fund could obtain from a prime broker if the prime broker would have been willing to accept haircuts below the minimum. However, other activities of asset managers in this market—such as money market funds’ supply of funding to banks through the triparty repo market—would not be affected.

The FSB has undertaken a quantitative impact study to assess the potential impact and unintended consequences associated with its recommendations on minimum haircuts. The results of this study have been used to inform the proposed calibration of the numerical floors at relatively low levels. These proposals remain under development at the FSB.

²For an overview of these issues, see Committee on the Global Financial System (2010), “The Role of Margin Requirements and Haircuts in Procyclicality”, CGFS Papers No 36.
Q.6. As you know, regulators are subject to the Regulatory Flexibility Analysis to consider the impact of newly proposed rules on small entities. The agencies have determined that the final Volcker rule will not have a significant economic impact on a substantial number of small banking entities with total assets of $500 million of less. Yet, Dodd-Frank exempts from a number of its requirements entities with total consolidated assets of $10 billion and less. The difference between $500 million and $10 billion is significant enough to raise concerns. Would your agency’s Regulatory Flexibility analysis in the Volcker rule be any different if the $10 billion threshold were applied? If so, how?

A.6. Section 619 Dodd-Frank Act, which added a new section 13 to the Bank Holding Company Act (BHC Act), generally prohibits any banking entity from engaging in proprietary trading, and from acquiring or retaining an ownership interest in, sponsoring, or having certain relationships with a covered fund, subject to certain exemptions. Under the terms of the statute, section 13 applies to any banking entity regardless of its size.

Section 4 of the Regulatory Flexibility Act (RFA) requires an agency to prepare a final regulatory flexibility analysis for a final rule unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities, defined as of July 22, 2013, to include banking entities with total assets of $500 million or less (small banking entities). As you know, the five agencies with rule-writing authority under section 13 of the BHC Act, including the Federal Reserve, the OCC, the FDIC, the SEC, and the Commodity Futures Trading Commodities (the Agencies) considered the potential economic impact of the final rule on small banking entities in accordance with the RFA, and determined that the final rule would not have a significant economic impact on a substantial number of small banking entities as defined by the RFA largely because banking entities with assets of $500 million or less generally do not engage in the types of activities covered by section 619 of the Dodd-Frank Act.

In drafting the implementing rules, the Agencies considered the effect of section 619 on banking entities that are not the focus of the RFA. In particular, the Agencies designed the implementing rules to minimize the compliance burden on banking entities with $10 billion or less in total assets by tiering the compliance program and reporting requirements based on the size and level of covered activity of the banking entity. For example, section 248.20(f)(1) of the final rule provides that a banking entity, regardless of size, that does not engage in covered trading activities (other than trading in U.S. Government or agency obligations, obligations of specified Governments sponsored enterprises, and State and municipal obligations) or covered fund activities and investments need only establish a compliance program prior to becoming engaged in such activities or making such investments. In addition, a banking entity with total consolidated assets of $10 billion or less that engages in covered trading activities and/or covered fund activities may satisfy the requirements of the final rule by including in its

---

4 As of July 14, 2014, the threshold is $550 million in total assets or less. See 13 CFR 121.201.
5 12 CFR §248.20(f)(1).
existing compliance policies and procedures appropriate references to the requirements of section 13 and the final rule and adjustments as appropriate given the activities, size, scope and complexity of the banking entity.\(^6\) This reduces the compliance program requirements for these banking entities. Only those banking entities with total assets of greater than $10 billion are required to adopt more detailed or enhanced compliance requirements under the final rule.\(^7\)

Moreover, the final rule establishes a high threshold for metrics reporting to capture only firms that engage in significant trading activities. Specifically, the metrics reporting requirements under section 248.20 and Appendix A of the final rule apply only to banking entities with average trading assets and liabilities on a consolidated worldwide basis for the preceding year equal to or greater than $10 billion.\(^8\) The compliance program also limits the special covered fund documentation requirements to banking entities with more than $10 billion in total consolidated assets.\(^9\)

To help community banks understand the requirements of section 619 and the implementing rules, the Agencies also released a fact sheet regarding the application of section 13 of the final rule to community banks (i.e., those with less than $10 billion in total consolidated assets).\(^10\) The fact sheet provides useful information about provisions of the final rules designed to reduce burden on community banks.

Thus, while the RFA focuses on banking entities with assets of $500 million or less, in developing the final rule, the Agencies tried to minimize the impact of the final rule on banking entities with total assets of $10 billion or less.

Q.7. I have heard concerns from banks that are subject to the Fed’s annual stress tests that the ever-changing criteria for these tests creates uncertainty and lack of transparency. One of the main complaints from banks is that they do not fully understand why the Federal Reserve’s calculations differ from their internal calculations. Last week, the House Financial Services Committee held a hearing on a bill that requires the Federal Reserve to disclose more details about the annual stress test process including formal rules for stress testing, which the Comptroller General and the Congressional Budget Office would review. Do you agree that the Fed should publish such formal rules to give more clarity to public and Congress on these stress tests?

A.7. The Federal Reserve believes that transparency in its stress testing is extremely important and has taken several steps to enhance the transparency of the stress tests and comprehensive capital analysis and review. For example, last November, in order to allow the public to better understand the Federal Reserve’s process for designing scenarios, the Federal Reserve issued a Policy State-

---

\(^6\) 12 CFR 248.20(f)(2).

\(^7\) 12 CFR 248.20(b) and (c).

\(^8\) 12 CFR 248.20(d).

\(^9\) 12 CFR 248.20(e).

Each year, the Federal Reserve publishes a detailed overview of its stress testing methodologies, including a description of the types of models employed in the supervisory stress test. In addition, the Federal Reserve hosts an annual stress test modeling symposium, which brings together experts from the regulatory community and the banking industry to share diverse views and experiences in stress test modeling and to help improve the general understanding of stress test modeling practices and applications. Thus, the Federal Reserve is already providing a substantial amount of the information about the annual stress tests.

In evaluating the optimal level of model and scenario disclosure, supervisors must balance the desire for transparency against the benefits of model diversity and potential for negative consequences, such as model convergence or a shift in business activity to areas where risks may not be well captured by the stress testing models. Formal rules for stress testing that include providing companies with the scenarios, methodologies, and loss models in advance of the supervisory stress test would undermine the credibility and effectiveness of the stress tests.

By releasing the Federal Reserve’s process for designing the scenarios and conducting the supervisory stress test, we are able to make the process more transparent and predictable, without eliminating the flexibility to make improvements and incorporate new risks that may develop over time. If the Federal Reserve was required to specify a static set of scenarios and the specific models employed in the stress test through notice and comment rule-making, then covered companies would be able to adjust their business models to focus on activities that are not captured in the particular supervisory stress test. Each year, the Federal Reserve has refined elements of both the substance and process of the annual stress tests. These changes have been informed not only by our own experience, but also by critiques and suggestions offered by others. The Federal Reserve will continue to consider appropriate enhancements to the stress test. In order to give regulators, banks, and the public a dynamic view of the capital positions of large financial firms, supervisory stress testing must itself respond to changes in the economy, the financial system, and risk-management capabilities. Preliminary research by Federal Reserve System economists found that not updating supervisory stress scenarios and models was a key factor in the failure of the supervisory stress tests conducted on Fannie Mae and Freddie Mac before the financial crisis.

Finally, if the Federal Reserve released the models it uses in its stress test, that would eliminate incentives for companies to develop their own models to assess how their businesses and expo-

---

sures could be affected by stress. There is no single model that can capture every risk to financial companies, and overreliance on a single approach that is tailored to assess the industry as a whole would make it far more likely that new risks that develop would be missed, potentially undermining financial stability. Reliance on a single model also allows for a larger probability of a single common failure of that model, potentially underestimating the risk of losses.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR MENENDEZ FROM JANET L. YELLEN

Q.1. As the Fed has engaged in measures to strengthen our economy since the financial crisis, some critics have argued that any growth that results might somehow be “artificial,” or that the economy is on some kind of unsustainable “sugar high” due to supposedly “unnaturally low” interest rates.

If you look at the underlying economic conditions, though, inflation has been consistently below the Fed’s target. Our economy has been creating jobs—the private sector has now created jobs for 52 straight months, the longest streak on record—but we still have work to do to return our labor markets to full strength after the damage done by the financial crisis and Great Recession.

If anything, the data say we should have had even more stimulus in response to the recession, and that pulling back too soon now risks undoing the progress we’ve made so far.

Aren’t low interest rates appropriately reflective of economic conditions? If the biggest challenge facing our economy is the need for demand to keep getting stronger, and investors seem to be requiring low returns because of a perceived lack of investment opportunities, wouldn’t it be more “artificial” for the Fed to impose higher interest rates than what market conditions dictate, and risk choking off growth or creating deflation?

A.1. The Federal Open Market Committee (committee) designs its policy in light of the dual mandate that the Congress has set for the Federal Reserve—namely, to promote price stability and maximum sustainable employment. Necessarily, the policy judgments that the committee makes are conditioned on the current state of the economy and the prospects for the future evolution of the economy, as best as the committee can discern them. As the committee noted in its most recent post-meeting statement, released July 30, 2014, “The Committee expects that, with appropriate policy accommodation, economic activity will expand at a moderate pace, with labor market indicators and inflation moving toward levels the Committee judges consistent with its dual mandate.” If the committee were to maintain too restrictive a policy, it would risk failing to best promote the two legs of the dual mandate, resulting in employment below its maximum sustainable level, and inflation running persistently below the 2 percent objective identified by the committee as most consistent with its dual mandate.
Q.1. As you know Section 113 of the Dodd-Frank Act authorizes FSOC to designate nonbank financial companies as SIFI (systemically important financial institutions) for enhanced oversight and regulation by the Federal Reserve. Historically, the Fed has focused exclusively on banking regulation and monetary policy. So, Dodd-Frank has made a pretty monumental shift in your focus.

So far, FSOC has designated two insurance companies for regulation by the Federal Reserve—American International Group and Prudential Financial, Inc. This is an enormous concern, as you are getting more and more involved yet seem wholly ill-prepared to take on this type of supervision, both with the FSOC and the IAIA.

How is the Fed preparing to regulate these companies? Has there been any effort to hire more employees with actual insurance knowledge? If you have hired any employees with background in insurance regulation, is this number sufficient?

A.1. The Federal Reserve has hired staff with expertise in insurance to supervise the savings and loan holding companies and designated companies for which the Federal Reserve has responsibility and to assist in training other Federal Reserve examiners and staff on insurance issues. We currently employ approximately 70 full-time employees for the supervision of insurance firms. Nearly half of these staff members having over 10 years of supervisory experience. Our staff is comprised of individuals with substantial prior experience in both State insurance departments and industry. We plan to continue to add staff, as appropriate, at both the Board and the Reserve Banks. Board staff consult with the Federal Insurance Office on issues related to our supervisory framework, including insurance capital requirements and stress testing. Board staff also meet regularly with industry representatives and with the National Association of Insurance Commissioners and State insurance regulators to discuss insurance-related issues. The Federal Reserve expects to continue consultations with other regulators and standard-setters, the Financial Stability Oversight Council, the industry and the public, to further the Federal Reserve’s expertise and to gain additional perspectives on the regulation and supervision of insurance companies.

Q.1. Chair Yellen, as you know, in Dodd-Frank, Congress never intended for nonfinancial end users to be subject to costly margin requirements when trading derivatives. Manufacturers, farmers, small businesses use derivatives to manage risk, not create it.

We certainly do not want to see billions of dollars sucked out of the economy to post unnecessary margin. Not only would this increase the costs of hedging, which means higher prices for consumers, but it also restricts capital that would otherwise be used for job creation or reinvestment. Furthermore, the high costs of hedging could drive business overseas to foreign derivatives markets.
There is currently a bipartisan bill in the Senate that exempts nonfinancial end users from posting margin (S. 888). A companion bill passed out of the House last year by a vote of 411-12. Chairman Bernanke said in 2011 that he was comfortable with this proposal. Governor Tarullo has also indicated a comfort level with this approach. And the other regulators, CFTC and SEC, seem to agree that nonfinancial end users need to hedge risk and clearly do not pose a threat to the economy.

Also, recently an international working group arranged by the G20 has come out in agreement and said that nonfinancial end users should not be subject to margin requirements. Chairman Bernanke, the CFTC, the SEC, the G20 officials, and 411 House members all agree that it's ill-advised to have nonfinancial end users subject to costly margin requirements, but the Fed has yet to make this exemption clear.

Do you support the policy goal, and the original intent of Congress, to exempt end users from margin requirements? In your hearing last week, you mentioned that the Fed was on track to finalize an end-user exemption rule by the end of the year. Can you be a little more specific on timing?

How does the Fed intend to harmonize its rule with the internationally proposed standard that does not subject nonfinancial entities to initial margin requirements?

A.1. Although section 723 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) provides an explicit exemption for certain end users from the swap clearing requirement, there is no exemption from the margin requirement in section 731 or section 764 of the Dodd-Frank Act for a swap dealer’s or major swap participant’s (MSP’s) swaps with end users. Sections 731 and 764 of the Dodd-Frank Act require the Commodity Futures Trading Commission, Securities and Exchange Commission, Federal Reserve Board (Board), and other prudential regulators to adopt rules for swap dealers and MSPs imposing initial and variation margin requirements on all noncleared swaps. The statute directs that these margin requirements be risk-based.

Nonfinancial end users appear to pose minimal risks to the safety and soundness of swap dealers and to U.S. financial stability when they hedge commercial risks with derivatives and the related unsecured exposure is appropriately managed within a prudent and well-controlled risk management framework.

In September 2014, the Federal Reserve and other prudential regulators issued a new proposal to implement Section 731 and 764 of the Dodd-Frank Act. The new proposal builds on the proposal originally released by the agencies in April 2011, and the Basel Committee on Banking Supervision—International Organization of Securities Commissions framework. The new proposal does not require a covered swap entity to collect specific or minimum amounts of initial margin or variation margin from nonfinancial end users, but rather leaves that decision to the covered swap entity, consistent with its overall credit risk management. The agencies believe this rule maintains the status quo for nonfinancial end users and is consistent with the requirements of the Dodd-Frank Act.
Q.2. Chair Yellen, as you are aware, the Senate recently unanimously passed S. 2270, the Insurance Capital Standards Clarification Act.

Considering this recent Congressional action, and the widespread agreement that any capital standards for insurers should be appropriately tailored, how is the Fed planning to design its overall supervisory regime for the insurers it supervises? How much will you rely on the standards in place at the State level to protect policyholders?

Also, other than the hiring of Thomas Sullivan as a senior advisor, what steps have you taken to ensure that the Fed has the requisite expertise to regulate insurance companies?

A.2. The supervisory programs for insurance savings and loan holding companies and nonbank financial firms designated by the Financial Stability Oversight Committee (FSOC) that engage in insurance activities continues to be tailored to consider the unique characteristics of insurance operations and to rely on the work of the primary functional regulator(s) to the greatest extent possible.

The Federal Reserve has hired staff with expertise in insurance to supervise the savings and loan holding companies and designated companies for which the Federal Reserve has responsibility and to assist in training other Federal Reserve examiners and staff on insurance issues. We currently employ approximately 70 full-time employees for the supervision of insurance firms. Nearly half of these staff members having over 10 years of supervisory experience. Our staff is comprised of individuals with substantial prior experience in both State insurance departments and industry. We plan to continue to add staff, as appropriate, at both the Board and the Reserve Banks. Board staff consult with the Federal Insurance Office on issues related to our supervisory framework, including insurance capital requirements and stress testing. Board staff also meet regularly with industry representatives and with the National Association of insurance Commissioners and State insurance regulators to discuss insurance-related issues. The Board expects to continue consultations with other regulators and standard-setters, the FSOC, the industry and the public, to further the Board’s expertise and to gain additional perspectives on the regulation and supervision of insurance companies.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR TOOMEY FROM JANET L. YELLEN

Q.1. Regulators have been cracking down on activity in the leveraged loan market, in some cases setting effective caps on how much banks can lend as a multiple of EBITDA.

Isn’t the concern about leveraged lending indicative of a broader problem of too much liquidity reaching for yield?

A.1. The Federal Open Market Committee (committee) is committed to policies that promote maximum employment and price stability, consistent with our dual mandate from the Congress. Low interest rates have been and continue to be an important tool to promote a strong economy. As I stated in my testimony, however, “the Committee recognizes that low interest rates may provide incentives for some investors to ‘reach for yield,’ and those actions
could increase vulnerabilities in the financial system to adverse events. While prices of real estate, equities, and corporate bonds have risen appreciably and valuation metrics have increased, they remain generally in line with historical norms. In some sectors, such as lower-rated corporate debt, valuations appear stretched and issuance has been brisk. Accordingly, we are closely monitoring developments in the leveraged loan market and are working to enhance the effectiveness of our supervisory guidance.”

Specifically, in March of 2013, we issued interagency guidance on leverage lending along with the Federal Deposit Insurance Corporation (FDIC) and the Office of the Comptroller of the Currency (OCC), which promotes underwriting practices that should be employed regardless of the interest rate environment. This guidance includes general policy and risk management expectations but does not set caps on how much banks can lend as a multiple of earnings before interest, taxes, depreciation, and amortization. Regulators continue to highlight the importance of adhering to the leverage lending guidance with the institutions we supervise to help ensure their lending practices are safe and sound.

Q.2. If policy were to normalize, wouldn’t that effectively reign in the amount of leveraged lending that is taking place?

A.2. In a higher rate environment, it is possible that there would be a shift of investor demand away from leveraged lending to other asset classes; however, leveraged loans have experienced rapid expansion in more normal interest rate environments as well, such as the period prior to the 2008 financial crisis. Moreover, monetary policy faces significant limitations as a tool to promote financial stability, and the effects of monetary policy on financial vulnerabilities (such as excessive leverage) are not as well understood or direct as a regulatory or supervisory approach. And while a review of the empirical evidence from recent years suggests that the level of interest rates does influence house prices, leverage, and maturity transformation, it is also clear that tighter monetary policy is a very blunt tool, which could have sizable adverse effects in terms of the Federal Reserve’s mandated goals of maximum employment and price stability. Indeed, in current circumstances, tighter monetary policy could, by undermining the economic recovery, lead to slackening loan demand and higher loan losses, thereby weakening U.S. financial institutions.

To promote financial stability and address risk, the Federal Reserve has focused on its tools related to supervision and regulation, taking a range of steps, including strengthening capital and liquidity regulation of the largest banks and conducting annual stress tests, to strengthen the resiliency of the financial sector. And specifically with respect to leveraged lending, we have issued interagency guidance with the FDIC and the OCC, which promotes underwriting practices that should be employed regardless of the interest rate environment. Regulators have highlighted the importance of adhering to the leverage lending guidance with the institutions we supervise to help ensure their lending practices are safe and sound.
Q.3. Is it really desirable to employ more cumbersome and costly regulations to shield us against the negative effects of loose monetary policy?

A.3. As mentioned earlier, our review of the evidence from recent years suggests that monetary policy is a very blunt tool with which to address a build-up in risk-taking. In addition, importantly, good risk-management practices, especially in rapidly growing areas like leveraged lending, make sense no matter what the level of interest rates.

The guidance outlines sound practices for leveraged lending activities that are applicable in all rate environments. The guidance is designed to assist financial institutions in providing leveraged lending to creditworthy borrowers in a safe-and-sound manner, while avoiding heightening risks to the financial system by originating poorly underwritten loans. Furthermore, implementation of the guidance should be consistent with the size and risk profile of a financial institution’s leveraged activities relative to its assets, earnings, liquidity, and capital. As such, the vast majority of community banks should not be affected by the guidance as they have limited involvement in leveraged lending. The guidance also encourages community and smaller institutions that are involved in leveraged lending to discuss with their primary regulator the implementation of cost-effective controls appropriate for the complexity of their exposures and activities.

Q.4. In your recent appearance before the Senate Banking Committee, Senator Crapo asked you if reverse repurchases may deprive businesses of credit and you responded by saying initial tests have indicated that it’s an effective tool and that by maintaining a large spread between overnight reverse RRPs and the interest on excess reserves, this problem could be mitigated. I wanted to follow up with a few questions of my own:

What is the consequence of an interbank lending market essentially crowded out by zero interest rates?

What is the Federal Reserve’s strategy for returning to a robust and deep interbank lending market rather than relying on the Federal Reserve as the primary counterparty in short-term funding?

A.4. Over recent years, the committee has judged that a highly accommodative stance of monetary policy has been necessary to foster progress toward its statutory objectives of maximum employment and stable prices. In providing policy accommodation, the committee cut its target Federal funds rate effectively to zero by the end of 2008 and has also purchased large volumes of long-term Treasury and agency securities over recent years to put additional pressure on long-term rates. These actions have helped to encourage economic recovery, to improve conditions in labor markets, and to guard against disinflationary pressures. The level of reserve balances in the banking system has increased very substantially over recent years in connection with the committee’s purchases of long-term securities. With an elevated level of reserve balances in the banking system, the need for banks to borrow and lend actively in interbank markets has dropped substantially relative to the levels of activity in these markets prior to the crisis. That said, there is still a significant volume of transactions in the Federal funds and
other short-term bank funding markets, and the interest rates observed in those markets remain tightly linked with other short-term interest rates.

The committee adjusts the stance of monetary policy over time as appropriate to foster progress toward its long-term objectives of maximum employment and stable prices. As the economy continues to recover and inflation returns toward the committee’s 2 percent objective, the committee will adjust the stance of monetary policy. Part of the process will involve raising the level of short-term interest rates to more normal levels. In addition, the size and composition of the Federal Reserve’s balance sheet will also be normalized. The level of reserve balances in the banking system will fall as the size of the Federal Reserve’s balance sheet is reduced, and activity in the Federal funds market and other short-term bank funding markets likely will increase significantly as the level of reserve balances declines.

The committee’s statement on “Policy Normalization Principles and Plans” provides additional information regarding the approach the committee intends to implement when it becomes appropriate to begin normalizing the stance of monetary policy including the size and composition of the Federal Reserve’s balance sheet.

Q.5. The Federal Reserve announced on June 4, 2014, that it, along with the FFIEC, the OCC, and the FDIC, are undertaking a review of regulations to identify those that are “outdated, unnecessary, or unduly burdensome imposed on insured depository institutions.” Regulatory burdens are not just borne by banks, but by bank customers, including the consumers and businesses that borrow from these institutions.

To what extent is the Federal Reserve including access and cost of credit in its analysis?

How does the Federal Reserve define “unduly burdensome?”

What resources has the Federal Reserve dedicated to conducting this review?

A.5. The Economic Growth and Regulatory Paperwork Reduction Act of 1996 (EGRPRA) requires that regulations prescribed by the Federal banking agencies be reviewed by the agencies at least once every 10 years. The purpose of this review is to identify outdated, unnecessary, or unduly burdensome regulations and consider how to reduce regulatory burden on insured depository institutions while, at the same time, ensuring their safety and soundness and the safety and soundness of the financial system. In connection with the review, the agencies are required to categorize the regulations and publish requests for comment on how burden may be reduced. Finally, the agencies must provide a report to Congress summarizing significant issues, the relative merits of such issues, and whether the issues can be addressed by regulation or would require legislative action.

The Federal Reserve, working with the OCC, FDIC, and Federal Financial Institutions Examination Council, published the first of four anticipated requests for comment on agency regulations on June 4, 2014. The next request for comment is expected to be published before year end. We are especially interested to hear from community banks and their customers.
In addition to the requests for public comment, we intend to hold several public meetings around the country in order to allow the industry and the public an opportunity to present their views on burden reduction directly to agency personnel. The meetings will allow bankers, consumers, representatives of trade or public interest groups, and bank customers to provide their perspectives on how regulations should be changed to promote efficiency and effectiveness, reduce costs, and limit burden. Although the focus of the exercise is on regulatory burden reduction, all members of the public may submit comments on how bank regulation may affect their relationship with their banks and their ability to obtain credit.

Whether a regulation may be considered “unduly burdensome” would depend on the purpose of the particular regulation and the role that regulation plays in protecting the safety and soundness of the bank, in assuring the stability of the economy, and in protecting the interests of consumers of banking services. In addition, EGRPRA recognizes that some regulatory burden reductions may require legislative changes.

The Federal Reserve is committed to an effective review of its regulations to change any outdated, unnecessary, or overly burdensome rules. To that end, we have devoted considerable staff time to the process so far and will continue to do so. Over a dozen agency staff are currently involved in the public comment process and in planning the public outreach meetings which will be held at various Reserve Banks. Each public meeting will be attended by a number of Federal Reserve staff, including senior officers from the Board and the Reserve Banks. As the process continues, additional staff will participate in reviewing the comments, assessing the burden associated with the targeted regulations, preparing the report to Congress and preparing any recommendations for changes to the regulations.

Q.6. In a hearing on March 11, I raised an issue at a hearing on insurance capital standards expressing concern with the Financial Stability Board's plans to apply a European capital standard to American insurance companies. I remain concerned that what may be appropriate for European insurers, may not be appropriate for their American counterparts.

What expertise has the Federal Reserve brought in to regulate insurance companies?

How is that expertise being used when the Federal Reserve attends FSB meetings where international insurance capital standards are being discussed?

To what extent are you concerned that the FSB may force an unworkable insurance standard on American insurers?

A.6. The Federal Reserve has hired staff with expertise in insurance to supervise the savings and loan holding companies and designated companies for which the Federal Reserve has responsibility and to assist in training other Federal Reserve examiners and staff on insurance issues. We currently employ approximately 70 full-time employees for the supervision of insurance firms. Nearly half of these staff members have over 10 years of supervisory experience. Our staff include individuals with substantial prior experience in both State insurance departments and the insurance indus-


try. We plan to continue to add staff, as appropriate, at both the Board and the Reserve Banks.

Staff with insurance expertise fully brief the Federal Reserve’s representative to the Financial Stability Board (FSB) in advance of FSB meetings at which insurance-related issues are addressed. In addition, Federal Reserve staff participate actively in selected International Association of Insurance Supervisors (IAIS) work groups and committees that are developing international insurance capital standard. That participation is undertaken in close cooperation and coordination with U.S. colleagues from the National Association of Insurance Commissioners, the State insurance departments, and the Federal Insurance Office.

The capital standard under development by the IAIS are not bank-centric. Moreover, they are not contemplated to replace existing insurance risk-based capital standards at U.S. domiciled insurance legal entities within the broader firm. A goal of the international capital standards being developed by the IAIS is to achieve greater comparability of the capital requirements of internationally active insurance groups across jurisdictions at the groupwide level. This should promote financial stability, provide a more level playing field for firms and enhance supervisory cooperation and coordination by increasing the understanding among groupwide and host supervisors. It should also lead to greater confidence being placed on the groupwide supervisors analysis by host supervisors.

Any IAIS capital standard would supplement existing legal entity risk-based capital requirements by evaluating the financial activities of the firm overall rather than by individual legal entity. Once developed by the IAIS, each national supervisor would determine the extent and manner in which any capital standards developed by the IAIS would be applied to Global Systematically Important Insurers (GSII) regulated by that national supervisor. The Federal Reserve is fully committed to transparency and due process in the development and promulgation of regulatory standards. We support the practice of the IAIS to release for public comment its proposals for the basic capital requirements for GSII and expect that the IAIS will follow a similar process in the development of the insurance capital standards. It is important to note that neither the FSB nor the IAIS has the ability to implement requirements in any jurisdiction. Implementation in the United States would have to be consistent with U.S. law and comply with the administrative rulemaking process, including an opportunity for public comment.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR MORAN FROM JANET L. YELLEN

Q.1. The role of Vice-Chair for Supervision was created in Section 1108 of Dodd-Frank. To this day, the Administration has not nominated anyone to fill this role. I sent a letter along with Sen. Johanns in July of 2012 to President Obama calling attention to this statutory requirement. With several hundred community banks under the direct supervision of the Federal Reserve, I would
contend that this position is critically important to coordinate the efforts in D.C. and the regional Federal Reserve banks.

I appreciate Governor Tarullo’s appearances before Congress, however, I feel that a fundamental responsibility of the United States Senate is to analyze and approve of a person to fill a position that was created with the requirement of a Senate confirmation. Since the White House has not nominated anyone to fill this position in the 4 years since the passage of Dodd-Frank, it would certainly appear that the Senate’s ability to oversee the business of the Federal Reserve is diminished when such a high ranking position is filled by a person who was not confirmed for that role.

What efforts are currently underway by yourself and the Federal Reserve to convince President Obama to send a nomination to the Senate? If no requests from the Federal Reserve have been made, could you explain why this has not occurred?

A.1. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) designated a new position, Vice Chairman for Supervision, charged with developing policy recommendations regarding the supervision and regulation of firms supervised by the Federal Reserve Board (Board) and overseeing the supervision and regulation of such firms. In accordance with 12 U.S.C. 242, members of the Board, including the Vice Chairman for Supervision, are appointed by the President, by and with the advice and consent of the U.S. Senate. The Board currently has five members and welcomes the nominations of individuals to fill the remaining vacancies.

In the absence of a Vice Chairman for Supervision, the Board and its members, in particular Governor Tarullo, have acted to fulfill the supervisory and regulatory responsibilities conferred on the Board by Congress and to provide testimony to Congress regarding these efforts. With respect to its supervisory and regulatory authorities, the Board oversees a variety of financial institutions and activities with the goal of promoting a safe, sound, and stable financial system that supports the growth and stability of the U.S. economy. The Board takes seriously these responsibilities. Following the crisis, the Board has focused on strengthening regulation and overhauling our supervisory framework to improve consolidated supervision as well as our ability to identify potential threats to the stability of the financial system. We have also worked to implement the reforms contained in the Dodd-Frank Act.

Q.2. With respect to the Federal Reserve’s supervisory authority of community banks, consolidations, mergers, and simple bank failures are certainly some reasons for the decline in the number of these institutions. But the regulatory requirements stemming from Dodd-Frank have played a big part in this decline as well. I have no doubts that compliance with these new regulations simply became too much to bear for many small banks. One consequence of this decline is that the bank holding companies absorbing these smaller institutions fall under greater regulatory thresholds due to their increasing asset size. These small bank holding companies are increasingly exposed to the current $500 million threshold under the Federal Reserve’s Small Bank Holding Company Policy Statement.
For example, a small bank holding company located in Kansas has seven branches. These branches are located in rural communities where they are, in some instances, one of the only remaining businesses located on Main Street. But since a small bank holding company brought those small banks under its purview and kept a branch open for these small communities, that same holding company is now in excess of that $500 million threshold. As I understand it, the Federal Reserve has the discretion to alter the Small Bank Holding Company Policy Statement and has exercised that discretion in raising the threshold in the past. I have introduced legislation along with Sen. Tester and Sen. Kirk along with an additional 34 of our Senate colleagues as cosponsors. Section 3 of the CLEAR Relief Act, S.1349, would require the Federal Reserve to raise that threshold. This seems to me a commonsense reform we could make that would ensure that small communities across the country will maintain access to hometown banking services. This is only one example of a regulatory burden the Federal Reserve could lift for the betterment of community banking and it is consistent with some of your public comments since you became Chair of the Federal Reserve. Would you please outline your specific plan as to how you will go about reducing the regulatory burden on small banks, utilizing the Federal Reserve’s discretionary regulatory framework, so that communities in Kansas will still have access to a hometown bank? If you are unable or unwilling to commit to altering the Small Bank Holding Company Policy Act, would you please outline the specific regulatory relief measures you would advocate for consistent with your past recognition of the unique qualities of community banks?

A.2. Community banking institutions play a critical role in the economy, and the Board is committed to putting in place regulatory capital rules that strike the right balance between achieving our safety and soundness goals and minimizing regulatory burden for smaller banking organizations. As you know, in December 2014, Congress enacted Public Law 113-250 which directed the Board to make certain changes related to its Small Bank Holding Company Policy Statement (policy statement). Consistent with the statute, in January 2015, the Board issued a rulemaking that immediately excludes noncomplex savings and loan holding companies (SLHCs) under $500 million from the Board’s regulatory capital rules, effectively placing them on equal footing with similar-sized bank holding companies. The Board also issued a notice of proposed rulemaking that would increase the policy statement’s threshold level from $500 million to $1 billion in total consolidated assets, and expand its scope to also include SLHCs. The comment period on the proposal ends on March 4th, and the Board will work to finalize it as quickly as possible.

The Board also took related action to reduce the regulatory reporting burden for holding companies that have less than $1 billion in total consolidated assets that meet the qualitative requirements of the policy statement, permitting them to reduce the amount and frequency of their regulatory reporting. The Board has filed a request with the Office of Management and Budget to make these changes effective beginning with reports filed for the period ending
March 31, 2015, while it completes the notice and comment process.

We are committed to promoting a stable financial system in a manner that does not impose a disproportionate burden on community banking institutions. To help us achieve these goals, we will continue to seek the views of the institutions we supervise and the public as we further develop regulatory and supervisory programs to preserve financial stability at the least cost to credit availability and economic growth.

Q.3. A growing concern that many of my colleagues and I are following involves the Financial Stability Board’s (FSB’s) possible effort to impose European-style insurance capital standards on U.S. property/casualty insurers that have not been designated as systemically important, but rather are just “internationally active.” It is my understanding that if an insurer is not a SIFI or a savings and loan holding company, then the insurer would remain subject to the risk-based capital standards of the States. I have received responses from recent Fed nominees that mainly state that these Basel-generated rules would not have any legal effect in the U.S. Those responses seem to ignore the reality that European regulators are pressing for these standards to apply to non-SIFI U.S. insurers, and that those same regulators have any number of ways to force our insurers that do business in Europe to comply with new standards. We need to revisit this specific issue. Do you have any thoughts on how international capital standards for property casualty insurers will be received in the marketplace?

A.3. A goal of the international capital standard (ICS) being developed by the IAIS is to achieve greater comparability of the capital requirements of internationally active insurance groups (IAIGs) across jurisdictions at the groupwide level. This should promote financial stability, provide a more level playing field for firms and enhance supervisory cooperation and coordination by increasing the understanding among groupwide and host supervisors. It should also lead to greater confidence being placed on the groupwide supervisory analysis. The standards under development by the IAIS are not contemplated to replace existing insurance risk-based capital standards at U.S. domiciled insurance legal entities. Any IAIS capital standard would supplement existing legal entity risk-based capital requirements by evaluating the financial activities of the firm overall rather than by evaluation of individual legal entities.

It is important to note that neither the Financial Stability Board, nor the IAIS, has the ability to implement requirements in any jurisdiction. Implementation in the United States would have to be consistent with U.S. law and comply with the administrative rule-making process.

RESPONSES TO WRITTEN QUESTIONS OF SENATOR COBURN FROM JANET L. YELLEN

Q.1. In a response to a question for the record following your February testimony regarding the Fed’s use of forward guidance, you stated that “the Committee’s forward guidance is intended to provide the public with a better understanding of how it will conduct monetary policy in the future, but the guidance has consistently
been expressed in terms of what policy would be appropriate in the future given the committee’s current outlook for future economic conditions.” Of course, there will always be an inherent amount of uncertainty in predicting future economic conditions. But the Fed’s discretionary policy, even when expressed in terms of forward guidance, adds an additional layer of uncertainty for businesses and market participants to interpret how the Fed will react to the range of potential future economic conditions.

Can you describe what benefits this additional layer of uncertainty via a discretionary policy, even with forward guidance, provides to the economy versus implementing a rules-based approach? What are the advantages and risks of a discretionary monetary policy?

A.1. Similar to the basic principle underlying simple monetary policy rules, the Federal Open Market Committee (FOMC) follows a systematic approach in which it adjusts the stance of monetary policy in response to changes in the economic outlook. In its statement on “Longer-Run Goals and Policy Strategy”, the FOMC clearly indicated how it interprets and measures the longer-run goals for monetary policy—maximum employment and stable prices—established by the Congress. Moreover, the statement notes that in conducting monetary policy, the FOMC seeks to minimize deviations of employment and inflation from these long-run objectives over time, by following a balanced approach. The Federal Reserve’s policy actions over recent years have been fully consistent with this general approach to policy. Thus, while monetary policy does not follow a simple mathematical rule, the FOMC adjusts the stance of monetary policy in a systematic way in response to changes in the economic outlook. This approach to policy along with detailed FOMC communications regarding the likely path of short-term interest rates and the Federal Reserve’s asset purchases helps the public to better understand the FOMC’s “reaction function,” enhancing the effectiveness of monetary policy and providing the public with greater clarity about the FOMC’s policy outlook and intentions.

Of course, the FOMC regularly reviews the prescriptions of standard monetary policy rules for each meeting. While these rules are very useful in informing policy discussions, no simple policy rule could begin to capture the full range of complexities associated with determining the appropriate monetary policy response to the financial crisis and its aftermath. Indeed, there is no consensus among policymakers or economists about a particular monetary policy rule that would be appropriate across a wide variety of circumstances. Partly for these reasons, no central bank in the world sets policy simply by adhering to the prescriptions of a simple monetary policy rule.

Q.2. The Bank of International Settlements (BIS) 2014 annual report warned of the consequences of a long-term biased trend in central bank policymaking that tends to avoid tampering excesses during booms but remains highly accommodative during busts. The annual report states that central bank “policy does not lean against

---

the booms but eases aggressively and persistently during busts. This induces a downward bias in interest rates and an upward bias in debt levels, which in turn makes it hard to raise rates without damaging the economy—a debt trap.” Relatedly, in an interview you gave to the New Yorker last month, you indicated that the Federal Reserve will maintain “unusually accommodative” monetary policy even after the economy recovers.

Do you agree with the BIS’s concern of uneven monetary policy approaches to booms and busts and the potential consequences on interest rates and debt levels? Would you agree that your stated plans to leave “unusually accommodative” policies intact even after the economy fully recovers could be indicative of BIS’s contention of that central banks generally err towards easing?

A.2. As described in the FOMC’s statement on “Longer-Run Goals and Policy Strategy”, the FOMC conducts monetary policy so as to achieve its Congressionally established objectives of stable prices and maximum employment, taking a balanced approach to achieving both objectives over time. In the statement released after the September FOMC meeting, the FOMC indicated that it “. . . currently anticipates that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target Federal funds rate below levels the FOMC views as normal in the longer run.” The FOMC first added this language to its postmeeting statement after the March FOMC. The minutes of the March meeting note that meeting participants cited several reasons for their expectation that a lower-than-normal Federal funds rate may be necessary to achieve its dual mandate over time: “ . . . higher precautionary savings by U.S. households following the financial crisis, higher global levels of savings, demographic changes, slower growth in potential output, and continued restraint on the availability of credit.”

While several of these reasons are the consequence of the financial crisis, the FOMC’s expectation that the Federal funds rate may need to be lower than normal for some time after inflation and employment return to mandate-consistent levels is not indicative of a bias toward easier policy over time. When asset price booms or excessively easy credit have in the past contributed to aggregate demand that was, or threatened to be, above levels consistent with achieving the dual mandate, the FOMC has tightened monetary policy in response. Indeed, if the FOMC were to conduct policy with a bias toward accommodation, then over time inflation would rise. Instead, inflation has fluctuated in a range around 2 percent—the FOMC’s objective—for the past 25 years.

Q.3. Interest payments on the debt are only slightly above the same levels they were 15 years ago in nominal terms ($415 billion in 2013 versus $363 billion in 1998), despite the fact that our national debt is more than three times the size. Moreover, Fed remittances to the Treasury reduced the deficit by $77.7 billion last year,
a figure that the Fed has projected could fall all the way to zero and deferring potential losses thereafter.

Is there a medium to long term risk created by Fed policy untethering Treasury rates from natural market forces, allowing Congress to escape the true reality of the fiscal problems facing our country? Moreover, does the enormous size of our public debt have any influence on the Fed’s interest rate policy or balance sheet size to hold down the Federal Government’s external debt servicing costs. If it is not a current consideration, do you believe there is a possibility that the level of interest payments on the national debt could impact FOMC policy decisions in the future?

A.3. The Federal Reserve’s accommodative policy is expressly designed to fulfill the dual mandates of maximum employment and price stability set for us by the Congress. Low interest rates are currently needed to help our economy grow at a faster rate and to provide support for a faster return to full employment than would otherwise occur.

As interest rates rise, the Federal Reserve’s net income, and thus its remittances to the Treasury, will decline from the unusually high levels seen in recent years. It is not likely that our remittances will fall to zero. However, that could happen if future economic conditions require appreciably larger or more rapid increases in interest rates than now seem likely. That said, it is highly likely that on average over time Federal Reserve remittances will be higher, not lower, as a result of our asset purchase programs.

The goal of our monetary policy has been to foster outcomes consistent with our dual mandate, not to make gains on our balance sheet. We believe our policies have provided broad benefits to Americans—including higher employment and incomes—that are likely to dwarf any gains or losses on our portfolio. Moreover, while the direct fiscal impact of our purchases is likely to be modest, the fiscal impact of a stronger economy benefits all Americans.

The responsibility for fiscal policy lies with the Administration and the Congress. The country does face important and serious fiscal challenges, but those challenges are primarily long-run in nature, and current interest rates should not be a major fiscal policy consideration as rates will certainly rise as the economic recovery continues. Prematurely raising interest rates could risk choking off the economic recovery and causing the Federal budget-deficit to deteriorate in the near term.

Q.4. There is evidence that the Basel II capital requirements helped fuel the European sovereign debt crisis by weighting sovereign debt as less risky than private debt. Citing concerns that European banks assess their home country’s debt more favorably than they otherwise should and that in the aggregate banks assign a zero risk weight to more than half of their sovereign debt holdings, the Basel committee is reportedly considering a change in calculating the risk weighting of sovereign debt.

Do you believe that current Basel III risk-weighting rules appropriately treat sovereign debt? Do you believe the existence of any security or instrument with a zero risk weighting for capital standards promotes a sound global financial system? Does the favorable
regulatory capital treatment of sovereign debt act as a subsidy to Governments to live outside their means?

**A.4.** The U.S. banking agencies’ regulatory capital rules (capital rules) enhance the ability of banking organizations to consistently function as financial intermediaries, particularly during periods of economic and financial stress. The capital requirements under the capital rules were designed to reflect banking organizations’ risk profiles.

With regard to sovereign exposures, the treatment under the Basel Accord is to assign risk weights between zero and 150 percent based on either the (a) external credit ratings assigned by a credit rating agency (e.g., Standard & Poor’s), or (b) credit assessments assigned by an export credit agency (e.g., the Organization for Economic Cooperation and Development (OECD)). There is international work underway in which the United States participates that seeks to reduce mechanistic reliance on credit ratings. Overreliance on credit ratings was shown to be a major contributor to the financial crisis, as credit rating agencies underestimated the risk of certain asset categories, including sovereigns, and banks did not possess a full understanding of the risk profile of the assets they owned.

Domestically, in response to the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) requirement to remove external credit ratings from U.S. Federal regulations, the U.S. banking agencies developed alternatives to credit ratings for certain types of exposures, including exposures to sovereigns. The capital rule’s standardized approach provides for a risk sensitive treatment of sovereign debt that is based on the Country Risk Classification (CRC) assigned by the OECD.

Under the capital rules, only the sovereign debt of certain high-income and OECD member countries, such as Japan, Singapore, Germany, and the United Kingdom, receive a zero percent risk weight. The sovereign debt of other countries can receive risk weights between 20 and 150 percent, depending on their CRC rating. The sovereign debt of countries that have defaulted or restructured their debt within the last 5 years (e.g., Argentina and Greece), receive the more punitive risk weight of 150 percent.

In addition, the U.S. banking agencies’ capital rules require that banking organizations meet a minimum leverage ratio under which all assets are effectively risk weighted at 100 percent. The leverage ratio requirement complements the risk-based capital standards and ensures that the agencies’ overall capital framework assesses capital against all assets.

**Q.5.** The June FOMC minutes indicate the Fed is still contemplating how to handle the rolling over of maturing securities following the completion of QE3. When do you anticipate the FOMC will discontinue the rollovers and what factors will go into the Fed’s reinvestment policy decision?

**A.5.** As discussed in the September FOMC statement on “Policy Normalization Principles and Plans”, the FOMC intends to reduce the Federal Reserve’s securities holdings in a gradual and predictable manner primarily by ceasing to reinvest repayments of principal on securities held in the System Open Market Account
(SOMA) portfolio. The FOMC expects to cease or commence phasing out reinvestments after it begins increasing the target range for the Federal funds rate; the timing will depend on how economic and financial conditions and the economic outlook evolve. All of the FOMC’s policy actions are directed toward fostering its macroeconomic objectives of maximum employment and stable prices. In judging the appropriate timing of various aspects of its normalization strategy including the decision to cease reinvestments, the FOMC will, as always, review a wide range of information on labor market conditions, inflation developments, and conditions in financial markets.

Q.6. The Federal Reserve Office of Inspector General has issued two reports detailing concerns with the management and associated costs of the Martin Building project. During the more than 10 years of planning and design, this project has had an alarming number of delays and cost increases prior to even reaching the construction phase. As of September 2012, the Martin Building project is expected to cost $280.4 million dollars, including $179.9 million for the renovation of the Martin Building and the construction of a visitors’ center and conference center. Can you please provide the following information related to the Martin Building project:

1. A copy of all of the contracts and modifications associated with the design and construction for the building that have been awarded to date, as well as a copy of the deliverables provided under each one.
2. A specific and detailed time line of all the Board’s actions related to the Martin Building project through the anticipated completion date.
3. The total amount of fees incurred by modifications to the original design contract.
4. An update of the total claims paid by the Board to Karn Charuhas Chapman & Twohey (KCCT) for the increased costs in the hourly labor rates incurred due to extending the A/E contract from the originally anticipated July 12, 2007, completion date to the now expected completion date of April 2015 (included on p. 4 of OIG Report No. 2013-AA-B-007).
5. The most recent cost projection for the Martin Building project, with a break out of the construction cost and square footage estimates for each of the components associated with the project (the Martin Building renovation, the visitors’ center, and the conference center).
6. All documents related to the analysis and final decision of “a range of options for the approach to the Martin Building renovations proposed by the Board’s project team” initiated in October 2011 that was cited on p. 3 in OIG Report No. 2013-AA-B-007.
7. The basis for the $76.7 million line-item for leased space in the September 2012 Martin project cost projection and factors that will be considered when seeking temporary lease space.
8. A comprehensive plan for the Board to mitigate similar cost overruns during the construction phase of the Martin Building project.
A.6. **Response to Question 6, parts 1–8.**

As you know, the Federal Reserve Board (Board) is planning a complete renovation of the William McChesney Martin, Jr., building (Martin building). The project will also include construction of visitor screening and conference center additions to the building. The Martin building was constructed in 1974 and has not undergone significant renovation since its construction. The building is structurally connected to the Board's historic Marriner S. Eccles building (Eccles building). Normal wear-and-tear, equipment obsolescence, changes in building code, and accessibility issues have resulted in a backlog of deficiencies that require a comprehensive building renovation. In particular, the existing heating, ventilation, and air conditioning system can no longer provide effective and energy efficient temperature and humidity control. Additionally, the plumbing, mechanical, and electrical systems are not compliant with current code and need updating to fully support current information technology, life safety, and security requirements. The project will also include the removal of asbestos. The renovation is unique in that a number of significant security updates will be included within the scope of the project in response to vulnerability assessments provided to the Board. For instance, a security screening center will be added that will centralize, improve, and increase efficiency and effectiveness of security screening of those entering both the Eccles and Martin buildings. The conference center additions will reduce reliance on onsite, nonsecure, leased conference facilities. The conference center will also include a press briefing room to accommodate the Chair's press conferences, which have unique security needs and are an integral part of the Board's ongoing transparency initiative.

The Board had internal discussions regarding the concept for this renovation in 2001, and researched the potential scope and cost estimates for a renovation in the years following 2001. However, the Board did not begin design work for the renovation until late 2006, when the Board competitively awarded a contract to an architectural/engineering firm, Karn Charuhas Chapman & Twohey (KCCT), to design only a visitor screening and conference center for the building. At this point in time the Board was not considering renovating the entire building. Starting in 2007, Board staff visited various Federal Reserve Banks to investigate how they had designed and utilized visitor screening and conference centers in order to inform the Board's design. Shortly thereafter, events related to the financial crisis began to arise. During the crisis and for the next several years, the Board and its senior staff shifted their focus away from the building renovation towards addressing the matters raised by the financial crisis and its aftermath. Some elements of the conceptual design for the visitor screening and conference center did progress amidst the crisis, such as conducting the required National Environmental Policy Act (NEPA) study for the space and seeking the required approvals from the National Capital Planning Commission (NCPC) and the U.S. Commission of Fine Arts (CFA). However, the overall pace of the design process slowed significantly in light of the financial crisis.
Following the Board’s determination that a full renovation would be more cost effective than continuing to incrementally repair the building’s aging structure and systems, in February 2011, the Board modified its contract with KCCT to include the design for a full renovation of the Martin building.

As the Board began planning for the renovation, it became clear that integrating plans to address the long-term needs for the building with plans to make broader organizational changes was necessary to make the design and renovation process as economical and practical as possible. Thus, the Board addressed its full building needs as part of its strategic plan. This process revealed, for example, that the Board’s operations would be more efficient and resilient if the Board’s data center was relocated out of the Martin building. The Board expects to complete the construction work related to the data center relocation by the end of 2014. In addition, the Board is planning to complete the design process for the renovation of the Martin building by mid-2015. The Board intends to solicit and competitively award a general construction contract for the renovation in the third quarter of 2015. The Board’s target is to substantially complete construction in the second half of 2018.

The Board appreciates that it is undertaking a substantial project and has implemented a variety of cost management measures to control the renovation expenses. For example, the Board is going to hire a qualified, competent general contractor (GC) for construction of the renovation project who is well experienced in projects of similar scope, size, and complexity. This will help ensure that the project stays on budget and on schedule. A multistep, best value solicitation and competitive award process is planned for selecting the GC on a firm-fixed-price basis. Technical qualifications will be solicited from various GC firms as a first step. The GCs will be required to demonstrate extensive experience in projects of similar scope, size, and complexity. The GCs will also be asked to provide details regarding schedule achievement, change order and claims history, and any cost overruns in their prior projects. A selection panel comprised of personnel from the Board’s space planning, construction management, budgeting, and procurement teams will evaluate the GCs’-technical qualification materials. Finally, the Board will retain the right to issue separate contracts for discrete elements of the project, where it could be favorable for the Board to manage a separate contract from a procurement, cost, schedule, or management perspective.

The GC will be required to provide a 1-year warranty on the construction work performed. This will be in addition to any extended warranty periods for systems and products identified in the contract documents. Ten months after final completion of the renovation project, a comprehensive walk-through will be conducted, including participation by Board staff, KCCT, and the Board’s construction administrator and commissioning agent, to verify that all building systems are functioning properly. A final list of any required corrective actions will be provided to the GC for correction prior to the expiration of the GC’s warranty period.

The Board also has several internal oversight committees in place to supervise specific aspects of the renovation based on the staffs’ relevant areas of expertise. These committees are comprised
of senior staff from the Board’s procurement, facilities, and financial management functions, all of whom report to, and are overseen by, the Board’s Chief Operating Officer and Administrative Governor.

On the design side, KCCT’s firm-fixed-price contract requires them to design the renovations in a manner that does not exceed the cost limit for the project established under the design contract. KCCT must also develop design alternatives if their original design does not meet the Board’s stated cost limit. These alternatives will afford the Board flexibility to adjust the project scope of work to align with the Board’s cost limit should bid results differ from cost estimate expectations. In developing the Board’s cost limit for the project, the Board and KCCT each retained consultants to provide independent professional cost estimates for the renovation. These two consultants have both verified that the project can be constructed within the cost limit set by the Board.

The Board announced a budget of $280.4 million for the renovation project in its Annual Performance Report 2012. This budget includes a $76.7 million line-item for the estimated cost to lease swing space, as further discussed below. The Board is in the process of undertaking its contracting for the renovation project and is striving to achieve a total project cost that is less than the budgeted amount.

Due to the extent of the renovations, the Board determined that it will be more cost effective to relocate Board employees to swing space during the renovation project rather than to undertake the project on a floor-by-floor or other similar phased basis. The Board’s project budget, established in 2012, includes a $76.7 million line-item for the estimated cost to lease space for up to 5 years to accommodate the relocated employees during the renovation. This estimated cost of leasing space includes rent, furniture and equipment, security, information technology, moving expenses, and depreciation related to the interior construction within the leased space. The Board actually negotiated a lower rental rate for the swing space than originally budgeted and now anticipates that the costs for the leased swing space during the renovation project will be approximately $72.6 million. The Board will begin moving personnel into the leased space in early 2015. The Board considered many factors in seeking temporary leased space, such as the ability to meet the Board’s space requirements, proximity to the Board’s current owned buildings and leased spaces, proximity to public transportation (e.g., commuter buses, subway, rail), the financial comparison of different leased space options and scenarios on a net present value (NPV) basis, the financial impacts to the Board’s current and future operating budgets, and contiguity of floors and spaces available.

You have also asked for information regarding modifications to the Board’s design contract with KCCT. As noted in the time line above, the Board initially contracted with KCCT in 2006 for the design of only a visitor screening and conference center for the building, and not for a full renovation of the building. When the Board determined that renovation of the entire building was needed, the Board modified its contract with KCCT in 2011 to reflect the substantial increase in the scope of the design work. This was a sig-
significant contract modification and accounts for the largest increase in the contract fees. The decision to proceed with the full building renovation also resulted in the need to extend the term of KCCT’s contract to reflect the completion of design in 2015. A table which provides detail on all modifications to the KCCT contract, including the total costs incurred, is attached.

You also requested copies of several documents, such as a copy of all contracts issued to date for the Martin building design and construction and the documents related to the “range of options for the approach to the Martin building renovations proposed by the Board’s project team” initiated in October 2011. These documents are enclosed. Some portions of the enclosed documents have been withheld because they contain sensitive information regarding security features that, if disclosed in this public response, would jeopardize the security features they are intended to provide. Other portions have been redacted to avoid competitive harm, either to a party who holds an existing contract with the Board (the economic details of which, if made public, would allow competitors to gain an unfair advantage into the party’s business practices) or to the Board’s competitive bid process (as noted previously, a contract has not yet been awarded for the construction of the renovations). Unredacted copies of these documents are available for inspection here at the Board. Finally, please note that the documents related to the “range of options for the approach to the Martin building renovations proposed by the Board’s project team” reflect staff analysis and were prepared at the staff level in order to assist the Governors as they considered whether or not the Board should go forward with the full building renovation. Thus, this document does not necessarily reflect the views of the Board members.

We will make all other documents available for your inspection here at the Board. The deliverables under the design contracts contain sensitive information regarding security features. The contract deliverables also include architectural and engineering drawings which are quite voluminous and not easily reproduced.
Documents Provided by the Board of Governors of the Federal Reserve System in Response to Question 6 from Senator Coburn Requesting Additional Information Related to the Martin Building Renovation

October 21, 2014


<table>
<thead>
<tr>
<th>Contract &amp; Authorization</th>
<th>Base Contract</th>
<th>Amendment</th>
<th>Yearly Capital Charge Contract</th>
<th>Score Change</th>
<th>Regulatory Impact</th>
<th>Project Status/Recipient</th>
<th>Estimated Completion Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/13/2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>New design services for various viewing and conference center</td>
</tr>
<tr>
<td>01/23/2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>New design services for various viewing and conference center</td>
</tr>
<tr>
<td>06/08/2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>New design services for various viewing and conference center</td>
</tr>
<tr>
<td>08/02/2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>New design services for various viewing and conference center</td>
</tr>
<tr>
<td>10/29/2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>New design services for various viewing and conference center</td>
</tr>
</tbody>
</table>

**Total Estimated Cost:** $1,467,138

**Total Yearly Capital Charge Contract:** $106,000

**Total Estimated Completion Date:** 2015

**Estimated Final Amount:** $1,573,138

1. Modifications not routed to the contract. The modifications are not routed to the contract, resulting in the total contract amount being $1,573,138.
Contract for architectural and engineering design services between the Board of Governors of the Federal Reserve System and Karn Charuhas Chapman & Twohey, PC dated October 23, 2006
SECTION B

COST/PRICE PROPOSAL FORM

Pricing data shall only be submitted after Offeror is notified of proceeding to Phase 2.

B.1 SERVICES TO BE PROVIDED

Offerors shall submit in their proposals the prices to provide the goods or services set forth in Section C, the Statement of Work, of this Solicitation. Offerors shall use the forms included in this Section B when submitting their Cost/Price Proposals.

B.2 ESTIMATED QUANTITIES – N/A

B.3 INDEFINITE QUANTITY – N/A

B.4 PAYMENT OF PREVAILING WAGE: DAVIS-BACON ACT – N/A

B.5 FUNDING

While funding for the design of this facility has been approved, funding for the construction of such a facility has not yet been granted. Therefore, the services associated with the actual construction phase of the Visitor Center will only be required upon final funding and approval of the construction by the Board of Governors.
## Case Summary

<table>
<thead>
<tr>
<th>Case</th>
<th>Description</th>
<th>Value ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Case Details

- **Company Name:** [Name]
- **Authorized Signature:** [Signature]
- **Date:** [Date]
- **Status:** [Status]

### Case Breakdown

1. **Name:** [Name]
   - **Legal Firm:** [Firm]
   - **Address:** [Address]
   - **Telephone:** [Phone]
   - **Fax:** [Fax]

2. **Case Summary:**
   - **Description:** [Description]
   - **Value:** [Value]

3. **Case Status:**
   - **Status:** [Status]
   - **Date:** [Date]

### Case Administration

- **Case Administration:** [Administration]
- **Contact Information:** [Information]

### Case Documents

- **Case Documents:** [Documents]

---

Please note that this document contains confidential information and should be treated as such.
### West View/Southwestern View Option

**Conceptual Design**

<table>
<thead>
<tr>
<th>Architectural Design</th>
<th>Project Manager</th>
<th>Client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Site Plan</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Structural Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>MEP Engineering</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Lighting Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Vertical Transportation</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Parking Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Fire Protection</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Site Plan</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Site Plan</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Vertical Transportation</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Parking Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Fire Protection</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
</tbody>
</table>

**Total**

- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100

### East View/Northeast View Option

**Conceptual Design**

<table>
<thead>
<tr>
<th>Architectural Design</th>
<th>Project Manager</th>
<th>Client</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Site Plan</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Structural Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Civil Engineering</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>MEP Engineering</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Lighting Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Vertical Transportation</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Parking Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Fire Protection</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Site Plan</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Site Plan</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Vertical Transportation</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Parking Design</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
<tr>
<td>Fire Protection</td>
<td>Team Leader</td>
<td>Team</td>
</tr>
</tbody>
</table>

**Total**

- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100
- **Conceptual Design (CD)**
  - $100

---

*Note: The above costs are estimates and do not include taxes, G&A, and profit.*
SECTION C

STATEMENT OF WORK

C.1 INTRODUCTION

The Board of Governors of the Federal Reserve System (Board) located at 20th and C Streets NW, Washington, DC 20551, would like to retain the professional services of an Architectural/Engineering firm (A/E) in order to provide full design services, as indicated in C.2 (SCOPE OF SERVICES) below. The intention of this acquisition is to secure the design services and construction documents that lead to the successful construction of a new Visitor Center, as per the Board’s program, schedule, and budget. Registered/licensed architects and engineers must provide the services detailed in this Solicitation.

The new Visitor Center will become the official entrance for both the Eccles and Martin buildings. One of the objectives for building a Visitor Center is to expand the visitor holding and screening area(s) to better implement new security measures. The new Visitor Center must also accommodate the public, who may enter to pick up requested public documents and leave without passing through security screening. The visitor holding area(s) might be used as an exhibition area for the function, history, and goals of the Federal Reserve System.

The design will maintain the architectural character of the existing buildings and the surroundings. The design is to include state-of-the-art technology for the mechanical, electrical, security, and information technology systems required for the center.

C.2 SCOPE OF SERVICES

The selected A/E firm will provide the following services at no additional cost to that set forth in its cost/prize proposal:

C.2.1 Project Administration

2. The A/E shall manage the architectural and engineering services as they specifically relate to the project for the A/E and all its subcontractors and consultants. The A/E shall consult with the Board, research applicable design criteria, attend project meetings, and issue progress reports at intervals designated by the Contracting Officer’s Technical Representative (COTR).
The A/E shall prepare a project schedule that identifies milestones for design services, Board review periods, completion of documentation, commencement of construction, and substantial completion of the work. The A/E's schedule should reflect the desired dates as follows: completed schematic design documents no later than May 5, 2006, completed design development documents no later than July 28, 2006, and completed construction documents no later than December 15, 2006.

c. The A/E shall consider the value of alternate materials, building systems and equipment, together with other considerations based on program, budget and aesthetics in developing the design for the project.

d. The A/E will make presentations to the Board to explain the design.

e. The A/E will submit preliminary design documents for evaluation and approval by the Board.

f. The A/E will assist the Board with filing documents to obtain the necessary approvals or permits from government authorities that have jurisdiction over the project, utility companies, or any other entity the Board deems necessary to proceed with the project. The A/E will be responsible for compliance with National Capital Planning Commission (NCPC) and Commission of Fine Arts (CFA) requirements in order to obtain these authority's approvals. This assistance shall include, at a minimum, attending meetings, preparing presentation documents, and conducting and participating in presentations.

C.2.2 Construction Cost Estimate

a. The A/E shall prepare a preliminary construction cost estimate when the project requirements have been sufficiently identified. This estimate may be based on cost data, cost data, cost data, or similar conceptual estimating techniques. As the design progresses, the A/E shall update the construction cost estimate by providing more detailed cost information. The estimate shall be broken down into divisions in accordance with the Construction Specifications Institute (CSI), and it will include quantities and unit prices for each item. The estimate shall be updated, at a minimum, with the Design Development (DD) progress reports at 35 percent, 50 percent, and 100 percent completion of DD documents. The final cost estimate should be prepared at the completion of the construction documents (CD).
b. The A/E is permitted to 1) include in its construction cost estimate contingencies for design, bidding, and price escalation (the design contingency shall only pertain to design changes and adjustments requested by the Board, not errors and omissions on the part of the A/E); 2) determine what materials, equipment, component systems, and types of construction are to be included in the CDs; and 3) include in the CDs alternate bids as may be necessary to adjust the cost estimate to meet the Board’s budget.

c. When the Board solicits proposals from prospective general contractors (GCs) and the lowest responsive and responsible offer for the construction exceeds the A/E’s cost estimate, the Board may:

1. rebid or negotiate the project within a reasonable time with the GC, or
2. cooperate with the A/E to reduce the scope of work as necessary to reduce the cost estimate.

d. If the Board decides to proceed with the option described in c.1. above, the A/E will assist the Board with the rebid or negotiation consistent with its responsibilities under this Section C.

If the Board decides to proceed with the option described in c.2. above, the A/E shall modify the CDs per the Board’s instructions to comply with the construction cost estimate.

For either of the options c.1. or c.2., there shall be no additional cost to the Board for the A/E’s assistance or its modification of the CDs.

C.2.3 Evaluation and Planning Services

The A/E shall provide a preliminary evaluation of the following information to determine if the information is consistent with the project requirements:

1. Project objective
2. Project budget
3. Schedule requirements
4. Project site
C.2.4 Design Services

a. The design services shall include schematic design documents, DD documents, and CDs. The fees for these design services shall include structural, mechanical, and electrical engineering services and the services of all additional consultants needed to complete the scope of work. The services and fees shall include, but not be limited to, security consultants with experience in facility security.

b. The A/E will perform or have performed the required investigation of existing conditions, including destructive investigation, in order to assure that the construction document will be inclusive of existing conditions.

c. The Board requires study models, perspective sketches, and electronic modeling. The A/E shall include these services in the base bid.

d. The design services will include answering formal and informal questions regarding design whether referred to as “Requests for Information” (RFI) or not. The Board may require answers in writing, by drawing, or other method, and the A/E shall provide such answers without additional cost to the Board. In addition, the A/E shall provide corrections to drawings and specifications that arise from these questions at no additional cost to the Board.

e. During the DD phase, the A/E is required to submit DD documents evidencing its progress. Specifically, the A/E shall provide for the Board's review and approval the DD documents at 35 percent, 50 percent, and 100 percent completion. The submittals will include the project specifications. Submittals shall be in both paper and electronic format.

f. During the CD phase, the A/E is required to submit CD documents evidencing its progress. Specifically, the A/E shall provide for the Board's review and approval the CD documents at 50%, 90% and 100% completion. The submittals will include the project specifications. Submittals shall be in both paper and electronic format.

g. The construction of the new Visitor Center will take place while the buildings are occupied. The design scope will include phasing and coordination considerations required in order to maintain the Board's
operations with minimal, if any, disruption. This information must be reflected on the drawings so it can be communicated with the prospective GC bidders.

b. The A/E will assist the Board with the development of a prospective bidder list for the construction work.

d. The A/E will provide the Board with ten copies of the CDs for distribution to the prospective GCs.

ej. Upon request of the Board, the A/E will participate in any pre-proposal conferences related to the Visitor Center construction project. During the conferences, the A/E will take detailed notes and will work with the COTR to issue an amendment to the GC solicitation documents if necessary.

k. The A/E will work with the COTR to answer questions from prospective GCs that will be issued as an amendment to the solicitation.

l. Upon receipt of proposals from the prospective GCs, the A/E shall, if the Board requests, assist in the validation and evaluation of responsive proposals and participate in selection interviews with prospective GCs.

C.2.5 Optional Services: Construction Contract Administration Services (CCA)
The services in this section C.2.5 shall be priced separately as an option that the Board may exercise at any time after the Board awards a contract for the construction of the Visitor Center facility. If the Board exercises this option, the A/E shall perform CCA services as required in this section C.2.5.

a. The A/E shall provide administration services to support the contract between the Board and the GC as set forth in this paragraph C.2.5.

b. The A/E shall review and respond to RFIs submitted by the Board, regardless of whether the RFIs are prepared by the Board or the GC. The A/E shall respond to these RFIs in a manner appropriate to provide clarification including the preparation of supplemental drawings and specifications if necessary. As with the other requirements under Section C.2 of this Contract, there shall be no additional charge for such supplemental drawings and specifications.
c. If the COTR so requests, the A/E shall assist the COTR in helping make
decisions on claims, disputes, or other matters in question between the
Board and the GC.

d. The A/E shall visit the construction site at intervals appropriate to the
stage of the GC's work, as agreed to by the COTR and the
A/E. These intervals shall be frequent enough to the A/E can 1) keep the
COTR informed of the progress and quality of the work completed, 2)
help protect the Board against defects and deficiencies in the work, and 3)
determine if the GC is performing the work in accordance with the CDs.

e. The A/E shall inform the COTR of any known deviations from the CDs
and from the most recent construction schedule submitted by the GC.

f. The A/E may recommend to the COTR to reject any work performed by
the GC that does not conform to the CDs.

g. The A/E shall review the GC's invoices for the COTR's approval. The
A/E's review is to verify that the amounts billed correspond to the work
completed.

h. The A/E shall review and approve or take other appropriate action on the
GC's submittals such as Shop Drawings and Product Data Samples, to
ensure they conform to the CDs. The A/E will review the GC submittals
within fifteen calendar days of receiving them.

i. The A/E shall maintain a submittals log and copies of all the GC's
submittals.

j. The A/E shall review requests from the COTR and the GC for changes in
any of the work related to the design or construction of the project.

k. The A/E shall assist the COTR in preparing change orders and
construction change directives. If necessary, the A/E shall prepare,
reproduce and distribute drawings and specifications to describe the work
to be added, deleted or modified.

l. The A/E and the COTR shall examine the GC's work to determine
conformance of the work with the requirements of the CDs and to develop
a punch list of items for the GC to complete or correct.
C.3 PROJECT PARAMETERS

The project usage and goals are listed below:

C.3.1 Entrance Requirements:

- A single main entrance to the complex that is appropriate to the Board's function and mission.
- An entrance that is designed as a secure structure built with 
- The Visitor Center's preferred location is the 

- While a diagrammatic concept drawing will be provided, it is not meant to be a limiting factor or a requirement. Actual design may vary depending on the selected AE firm's study and approach.

C.3.2 Visitors Requirements

- A visitors’ entrance that is separate from the employees' entrance.
- A pre-screening holding area for 
- visitors provided with restroom facilities for visitors waiting for their escorts.
- The holding area(s) for visitors may be used as an exhibition area for the Board.
- A limited number of lockers, for travel luggage, to be located in the post-screening visitor holding area. These lockers will be accessible to visitors, for collecting their luggage, as they exit the building without going back into either of the holding areas.

C.3.3 Employees Requirements

- An "Employee Entrance" with separate circulation from the visitors.
- Employees will use their badges in order to pass through secure revolving doors as per Board standards.

C.3.4 Security Requirements

- A security screening process more efficient than the Board's present practice, for both visitors and employees of the complex that integrates security requirements into the architectural design.
C.3.5 Additional Requirements

- A “Courier Packages Receiving and Screening” area that is accessible to couriers from outside the center. The usage of canine service will be coordinated with security.
- A fire control station that is accessible from the facility entrance. Security officers must have access to this station.
- Vertical transportation in the Visitor Center from 1) the street level entrance to the podium level and 2) from the street level to the concourse level. The current entrance to the Eccles building from C Street will be removed.
- Relocate the current “Publications Circulation Area” to the new Visitor Center. This area will facilitate access to official releases and other publicly available information.
- The scope of work shall include the renovation of the Martin Building elevator lobby at the podium level (about 1700 sq. ft.), the elevator lobby at the concourse level, including the tunnel (about 1970 sq. ft.), and the area on garage level 1 (G) that is expected to be used for vertical transportation (about 1760 sq. ft.). The renovation is to be integrated with the interior design of the Visitor Center. It will address the relevant code issues that may be corrected in conjunction with the scope of work (See URS Study dated June 4, 2004 for the renovation of Martin Building).
- The A/E will provide a pedestrian traffic plan (ingress/egress) to and from the Martin building podium during the construction of the Visitor Center.

C.3.6 Building Design Requirements
The Visitor Center must be accessible and in compliance with ADA guidelines and applicable codes.

It is the Board's goal to achieve a sustainable design, with the highest possible Leadership, Energy, and Environmental Design (LEED) designation.

At least one secondary means of egress to the exterior side of the building should be provided for emergency evacuation of the Visitor Center. The study of the egress patterns from the podium level, before and after the construction of the Visitor Center, must be included.

Floor finishes and wall coverings should be used to attenuate background noise.

The Visitor Center should have a redundant source of primary electric service, such as a secondary primary feeder, to provide continuous dependable service to the Visitor Center. Power should be backed-up and UPS supported for emergency conditions.

Piping (with the exception of fire-protection sprinkler piping and in accordance with the codes) should not run above sensitive equipment in the ceiling space of the Visitor Center. Vertical pipe risers must be fully enclosed by shaft construction with appropriate maintenance access panels.

Lighting should be designed to minimize glare on the face of CCTV monitors and other security equipment.

The design will include the installation of pathway and conduit for all cabling required for the project. Cable conduits, trays, consoles, and racks should be consistent with TIA/EIA Standard 568. Pathways should be provided end-to-end from the gang box to Intermediate Distribution Frames (IDFs). The Board's Information Technology (IT) Division will be responsible for the installation of all data, voice, and fiber optic cabling.

The design of IT systems (for example, telephone systems, closed circuit surveillance, cabling type and installation requirements, space, mechanical and electrical requirements for IT equipment closets, and so on) is to be coordinated with the Board's IT division.

A secondary air conditioning unit should be installed to provide cooling in the event of failure of the primary air conditioning unit. CRV filters are to be used for the heating, ventilation, and air condition (HVAC) system of the Visitor Center.

The Visitor Center should be equipped with a mechanical control system for HVAC
C.3.7 Podium Level Exterior

This project includes redesigning the exterior walls of the podium level of the Martin Building. Reconstruction of the exterior walls, however, may not occur at the same time that the Visitor Center is constructed. The purpose of the renovation of the exterior walls of the podium level is to improve security. The exterior walls, when

C.4 APPLICABLE DOCUMENTS AND PREVIOUS STUDIES

The following is an exhaustive list of documents and studies that are applicable to the A/E's design requirements:

A. District of Columbia and International Building Codes: The Board intends to comply with applicable building codes, accessibility codes, and life safety codes.
B. Americans with Disabilities Act (ADA)
D. Security and CBR Threat Assessment Study, Dated February 15, 2002 by URS Corporation
E. National Capital Planning Commission (NCPC) applicable Guidelines such as The National Capital Urban Design and Security Plan (October 2002)
F. Guidelines/criteria set by the Commission of Fine Arts (CFA)
May 2, 2006

RE: Full Service A/E Services for Design of a New Visitor Center
for the Federal Reserve Board, Solicitation Number 256548
Phase II Submittal

Memorandum to the Selection Committee:

The architectural design firm of Kam Chervin Chapman & Twomey (KCC&T) is pleased to submit these additional qualifications for the Federal Reserve Board. This submittal contains the following volumes:

Vol. I – Cover Letter
Vol. II – Technical Proposal
Vol. III – Cost Proposal

We have developed a preliminary architectural concept for the Visitor Center and Optional Provisions that addresses all of the project’s objectives. We have given careful consideration to the architectural composition to ensure that the new structures are integrated with the site, and in harmony with the composition and character of the existing buildings, particularly the Martin Building.

We have endeavored to produce a concept that would eminently resolve all of the critical functional requirements of the project, and one in which the initial design of the Visitor Center would not preclude the implementation of the Optional Provisions if the Federal Reserve decided to build them later.

In fact, all of the requirements for security and circulation for visitors and employees have been resolved and the Option could be implemented with minimal disruption to an initial Visitor Center structure.

We trust that you will consider our selection.

Enrique A. Bellini, AIA, LEPI
KCC&T Principal
IDENTIFICATION OF EXCEPTIONS

Other Direct Costs - GDCs

The following costs have not been included:

- Reproduction of drawings, specifications and reports for official submission to the Federal Reserve, for coordination with agencies requiring review and approval, and for internal consultant coordination.
- Travel by our consultant on blast protection from Vicksburg, Mississippi to Washington, DC.

These costs can be determined more accurately once a final program is established with the client, thereby insuring a greater measure of control by the Federal Reserve, and eliminating unnecessary risk or expenses for both the A/E and the client.

Digital Modeling

We have included the cost for three digital renderings under the Visitor Center section of Volume III. The views planned include one exterior and one interior view of the Visitor Center, and a view of the Concourse Level. Views of the West and East Pavilions have not been included; they can be added at the appropriate time, or some of the above views could be substituted for views of the pavilions.

Fee Proposal

Our fee proposal assumes the following:

- If the Federal Reserve decides to proceed with the design of the Option Pavilion, it will do so within a year by May 2007.
- If the Option for the Pavilion is exercised, it will include both the East and West Pavilions in the MIP for the Visitor Center the following is not included:
  - Modifications to the mechanical and electrical systems beyond the area affected by the installation of the Visitor Center.
  - Modifications to the existing general ventilation scheme for the building.
  - Modification to upgrade to the existing power systems or the existing distribution systems beyond that necessary to connect the proposed Visitor Center.

Budget Cost Estimates

The following have been assumed in the budget cost estimate submitted with this proposal:

- Confidential - security
Proposed Cost Estimates

We will provide five cost estimates as follows: 1) At the completion of Schematic Design, 2) At the completion of Design Development (80% of design), 3) At the completion of 38% Construction Documents, 4) At the completion of 90% Construction Documents, 5) At the Completion of 100% Construction Documents.
Small Business Subcontracting Plan in Accordance with FAR Clause 52.219-9
for the Architectural Firm of Kari Cherubas Chapman & Twohey (KCCIT)
May 1, 2018

The architectural firm of Kari Cherubas Chapman & Twohey (KCCIT) is committed to using
subcontractors that fall into the special categories of small business, small disadvantaged business,
women-owned small business, veteran-owned small business, service-disabled veteran-owned small
business and SDVOSB small business in the process of working for the Federal Reserve System. It
is our policy to take positive steps to ensure that all special categories are represented in our
design team.

Goals, In Terms of Percentages of Total Planned Subcontracting Dollars
The goal of KCCIT is to ensure that we offer opportunities to subcontractors who fall into the
special categories of small, small disadvantaged, women-owned small, veteran-owned small,
service-disabled women-owned small and SDVOSB small businesses.

Based on the established cost proposal for this solicitation, KCCIT anticipates the following
subcontracting distribution in terms of percentages:

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Business</td>
<td>26.38%</td>
</tr>
<tr>
<td>Small Disadvantaged Business</td>
<td>24.45%</td>
</tr>
<tr>
<td>Woman-owned Small Business</td>
<td>2.57%</td>
</tr>
<tr>
<td>Total for All Categories of Small Businesses</td>
<td>53.40%</td>
</tr>
</tbody>
</table>

Description of Services
The following is a list of subcontractors on the design team with KCCIT for the Federal Reserve
System and the special categories into which they belong:

- Mechanical/Electrical Plumbing Engineering: Small Business
- Structural Engineering: Small Disadvantaged Business
- Civil Engineering/ Landscaping: Women-owned Small Business
- Cost Estimation: Small Business
- Code Analysis: Small Business
- Audiovisual / Telecommunications: Small Business
- Acoustical Design: Small Business
- Food Service: Small Business
- Traffic Coordination: Small Business

KCCIT is aware that our current team of consultants does not include veteran-owned small
businesses, service-disabled veteran-owned small businesses and SDVOSB small businesses. In
order to meet all of the subcontracting categories, KCCIT is actively seeking these additional
groups.

Efforts of Offerors to Ensure Equitable Opportunities for Subcontractors
For all new solicitations from the Federal Reserve System, KCCIT will review the requirements for
the work, and then make the utmost effort to use subcontractors that fall into the special small
business categories. We will evaluate existing company records and actively seek new
subcontractors through outreach, specifically local offices of the state employment service system,
networking and on-line sources, in order to provide the best quality services while meeting all of
our subcontracting goals.
MANAGEMENT PLAN

Key Personnel
Karn Charitas Chapman & Twibey (KCCT) will lead a team of highly qualified consultants in response to the Federal Reserve Board's request for qualifications for full service A/E services at design a new visitor center. Since our inception in 1953, we have specialized in the design, renovation and additions to public buildings for government and institutional clients, including the U.S. Department of State (DOS) and their Office of Overseas Building Operations (OBO), the General Services Administration (GSA), the Federal Bureau of Investigation (FBI), and many others. We have selected a team eminently qualified consultants, consisting of core and specialty consultants. The following factors were considered in the selection of our team:

- Experience with the Federal Reserve Board and other similar agencies
- Experience in renovation/expansion/new construction of public facilities for government clients
- Expertise in Anti-Terrorism/Fire Protection (ATFP)
- Experience in sustainable design and USGBC LEED
- Expertise in coordination with review agencies such as NTC, SHPO, Commission of Fine Arts, and MNEPPC

Team Responsibilities
The responsibilities of our Design Team are as follows:

- Karn Charitas Chapman & Twibey
- E.K. Fox
- John & Phobia
- Hughes Associates, Inc.
- Wiles & Menoch Corporation
- Project Management Services, Inc.
- Van Deusen & Associates
- Food Strategy
- Technology Design Resources
- Wells & Associates, LLC

- Project, Architect, Programming, Interior
- MEP Engineers
- Structural Engineers
- Fire Protection
- Civil Engineering / Landscape
- Cost Estimating, Scheduling
- Security / Blast Protection
- Vertical Transportation
- Food Service
- Communications
- Traffic Coordination
Enrique A. Bellini, AIA EFI
Architectural Principal

Ms. Bellini has 12 years of experience in all phases of architecture with special expertise in renovation of public buildings for government clients, and preservation of historic structures. Her experience covers a broad range of building types including office buildings, libraries, museums, court buildings, food service, conference facilities and security projects. Her many successful projects are well documented by letters from our satisfied clients.

Mr. Bellini has served as managing principal for three Indefinite Quantity Indefinite Delivery Contracts (IQID) with the General Services Administration in Washington, DC and one IQID for the FBI. He has also worked as principal and project manager in projects for other agencies such as the U.S. Department of State, the Washington Metropolitan Area Transit Authority (WMATA), and Georgetown University. Many of his projects for the General Services Administration have been recognized by GSA’s Design Excellence Program, the American Institute of Architects (AIA) and others.

The following is a selected list of Washington area government and institutional projects in which he had a principal role:

Federal Bureau of Investigation Projects
- FBI J. Edgar Hoover Building Tow Modernization, Washington, DC
- Renovation of the J. Edgar Hoover Building, Washington, DC
- Renovation of Building No. 9, FBI Academy, Quantico, VA
- AMD Rehabilitation and Prototype Study, Washington, DC

General Services Administration Projects
- Department of State William S. Tyrrell, Washington, DC
- Department of State Museum of Diplomacy and Visitors Center, Washington, DC
- US Department of State "Old State" Modernization, Washington, DC
- New Building Facades, IRS Building, Washington, DC
- Acel Ronn Federal Building, Tandem Completion, Washington, DC
- National Building Museum Modernization, Washington, DC
- US Court of Appeals for the Armed Forces, Washington, DC
- US Geological Service Interior Renovation, Baton, VA
- Federal Triangle Metro Station, Handicapped Access Passageway, Washington, DC
- Columbus Plaza Calhoun and Cohler, Washington, DC
- Columbus Plaza Office Renovation, Washington, DC
- OM City Hall/DC Courthouse Modernization Study, Washington, DC
- Department of State Briefing Room and Studio, Washington, DC

Architect of the Capital Projects
- LOC Concept Design for Creative America Center, Washington, DC
- Service Directorate, US Capital Police Headquarters, Washington, DC
- Roof Full Protection, IRS Supreme Court Building, Washington, DC
- Roof System Replacement Study, US Supreme Court Building, Washington, DC
- Roof Improvement, Skylight Replacement, Hart Senate Office Building, Washington, DC
John W. Chapman, AIA CSI
Quality Assurance / Quality Control

Mr. Chapman has 32 years of design and management experience on a variety of major white projects. His expertise includes feasibility studies, surveys and investigations, master planning, design, construction administration and post-construction support. Mr. Chapman serves as Principal in Charge of Quality Control. He manages Indefinite Quantity Contracts for OBO, Main State, and the Department of Defense as well as individual projects. Following is a list of representative projects in which he has served as principal architect:

Pentagon Renovation and Related Projects, Arlington, VA

Six Office Renovations, space planning and interior design involving 213,000 sf of space and 1,099 work stations including the Defense Telecommunications Service and the Defense Communications Agency.

General Services Administration Projects, Washington DC

Renovation and improvements to nine Federal properties (six historic landmarks) including the IRS Building, the Justice Department, the Pension Building, and the US Court of Military Appeals.

US Department of State (OBO Projects)

Managed over 200 task orders related to more than 80 projects worldwide. Projects include:

- US Embassy Renovation, New Delhi, India
- US Embassy Renovation and PUC Upgrade, London, England
- US Embassy Renovation, Bratislava, Slovakia
- Annex Office Building Renovation, Bratislava, Slovakia
- US Embassy Renovation, Zagreb, Croatia
- New Annex Office Building, Nicosia, Cyprus
- US Embassy OIC and OOB Renovation, Warsaw, Poland
- Comprehensive Renovation Plan for US Embassy, Budapest, Hungary
- New Consular Office Building, Ille-De-France City, Vietnam
- Embassy Main Residence Renovation, Manila, Philippines
- Embassy Main Residence Renovation, Vilnius, Lithuania
- Principal Officer’s Residence Renovation, Hanoi, Vietnam
- Design and Testing of a Prototype Oblique Blast Resistant Window
- CIA 1 Blast Window Replacement, Cairo, Egypt
- OSCE Office Consolidation, Vienna, Austria
- New Embassy Compound, Luanda, Angola
- U.S. Consulate Renovation, Sao Paulo, Brazil

Exterior Door Upgrade, U.S. Capital Complex

- $2,200,000 project to upgrade approximately 300 exterior doors and doorways throughout the complex.
E. Mitchell Buck
Project Manager

Mr. Buck has over 35 years of experience in all aspects of architecture. He has specialized experience in the design of new office buildings and technical facilities, and in building renovation and historic structures. Mr. Buck has completed many projects that required a close interface with the user and a detailed knowledge of building systems, programming, space planning, interiors, and construction phasing. He has extensive experience in term contracts for government agencies including the Federal Bureau of Investigation (FBI), the General Services Administration (GSA), the Department of State/OBO, the Department of Defense and Department of State.

Mr. Buck complements his work in the United States with an international experience that includes projects in the Middle East and Asia. Many of these short and long term assignments required his supervision of technical and professional personnel in the host countries.

The following is a representative list of individual projects for various agencies and institutions in which Mr. Buck held a significant role:

**Federal Bureau of Investigation Projects**
- Clarksville Federal Facility, Clarksville, VA
- Clarksville Electrical Reliability Study, Clarksville, VA
- Clarksville Traffic Patterns Study, Clarksville, VA
- ERIT Facility, San Juan, Puerto Rico
- FBI Vulnerability Studies, Washington, DC
- New Technical Support Center, Quantico, VA
- DSM Relocation and Prospectus Study, Washington, DC

**General Services Administration Projects**
- New Building Facades, BIS Building, Washington, DC
- New Federal Building, Fawcett Complex, Washington, DC
- National Building Museum Exhibit, Washington, DC
- National Building Museum Exterior Landscaping, Washington, DC
- US Court of Appeals for the Armed Forces, Washington, DC
- US Geological Service Interior Renovation, Houston, TX
- Federal Triangle Metron Station, Headquarter Access Passageway, Washington, DC
- Columbia Plaza Cafeteria and Cafeteria, Washington, DC
- Columbia Plaza Office Renovation, Washington, DC
- DC Courthouse Renovation Study, Washington, DC
- Department of State Briefing Room and Studio, Washington, DC

**US Department of Defense Projects**
- Office of the Undersecretary of Defense/ Acquisition, The Pentagon, Arlington, VA
- Navy Reserve Affairs, Office Renovation and Video Conferencing Room, The Pentagon, Arlington, VA
- GSA/AF Office Renovation and Interior, The Pentagon, Arlington, VA

**US Department of State/OPM Projects**
- Information Management State Annex Facility Study, National Capital Region, Washington, DC
- Information Management Reorganization Space Plan, Washington, DC
- Bureau of the Western Hemisphere, Washington, DC
M. Kevin Clark, AIA
Senior Architect

Mr. Clark has 13 years of experience in the practice of architecture on large commercial and governmental projects with a focus on construction documentation, contract administration, and client relationship. His projects include commercial office interiors, build out, commercial office base building and government projects.

At ICCCT, Mr. Clark has specialized in the management of the FBI Tour project, with its complex exhibit design fabrication/installation working to make it a unique project.

The following is a representative list of individual projects for various agencies and institutions in which Mr. Clark held a significant role:

FBI
- FBI J. Edgar Hoover Building Tour Modernization, Washington, DC

General Services Administration Projects
- US Department of State “Old State” Modernization, Washington, DC
- US Department of State/Perimeter Security, Washington, DC

Architect of the Capitol Projects
- 1,000Concepts Design for Creative America Center, Washington, DC
- Service Elevator; US Capitol Police Headquarters, Washington, DC
- Roof System Replacement Study, US Supreme Court Building, Washington, DC

Individual Projects
- Association of Public Health Laboratories, Washington, DC
- Association of State and Territorial Health Officials, Washington, DC
- National Alliance of State and Territorial AIDS Directors, Washington, DC
- George Washington University Health Plan Administrative Offices, Bethesda, MD
- American Association for Marriage and Family Therapy, Washington, DC
- Information Industry Association, Washington, DC
- Monocor: US Council on Textile and Investments, Washington, DC
- Pierce Office Building with adjoining garage for The West Group, Vienna, VA
- McKeeley Office Building with adjoining garage for The West Group, Vienna, VA
- Liberty Center II for The Mark Winkler Company, Chantilly, VA
- Liberty Center III for The Mark Winkler Company, Chantilly, VA
- E. Barrett Prettyman Courthouse, Washington, DC -CA, construction of the exterior skin
- The Pennings, Arlington, VA – Tenant shell coordinator
Jamie Leclerc, ASID
Director of Interiors

Jamie Leclerc has over 35 years experience in interior design and in a wide range of project types, both public and private. She has served as project manager for both renovation and construction projects of SCIT facilities. As Director of Interior Design, she currently provides design direction and technical oversight of interior projects at SCIT.

Ms. Leclerc has a strong programming background based on a position previously held at CRS. She refined these skills through her career by improving software and developing questionnaires and interview techniques to enhance our understanding of the client’s unique cultural and business requirements.

Ms. Leclerc has extensive experience in space planning, interior architecture, construction documents, construction administration as well as FF&E (Furniture, Fixtures & Equipment), Kitchens Planning and Facilities Management. Her design sense and thoughtful selection of materials result in an enhanced interior while, at the same time, providing value.

Ms. Leclerc is a licensed interior designer and has been active in advancing the profession through ASID and other industry efforts.

General Services Administration Projects
- President Bush’s Executive Office, Houston, TX
- US Department of State, Briefing Room and Studio, Washington, DC
- US Department of State, Columbus Plaza Child Care, Washington, DC
- US Department of State, Dveloping Lamina, Washington
- US Department of State, Diplomatic Center, Washington, DC
- US Department of State, Multi Media Services, Medical & FARA, Washington, DC
- US Department of State, 504 State Renovation, Washington, DC
- US Food and Drug Administration, Office of Ocular Issues, Washington, DC
- US Secret Service, James R. Rowley Training Center, Muster Plan, Laurel, MD
- US Secret Service, 1724 F Street, 2nd floor build-out, Washington, DC

Federal Bureau of Investigation Projects
- J. Edgar Hoover Building, Renovation & Rebuild, Washington, DC
- J. Edgar Hoover Building, SECC Renovation, Washington, DC
- J. Edgar Hoover Building, 5th Floor Renovation, Washington, DC
- J. Edgar Hoover Building, Records Management Division Project, Washington, DC
- FBI Academy, Building No. 3, Quantico, VA
- FBI Legal, Site A, Undisclosed Location
- FBI Legal, Site B, Undisclosed Location

Department of State/Real Property Management Projects
- Bureau of African Affairs, Washington, DC
- Bureau of Asian Affairs, Washington, DC
- Bureau of Near Eastern Affairs, Washington, DC
- Bureau of Near Eastern Affairs, Washington, DC
- Bureau of Political Military Affairs, Washington, DC
- Bureau of Public Affairs, Washington, DC
- Bureau of South Asian Affairs, Washington, DC
- Federal Management Office, National Foreign Training Center, Arlington, VA
- Office of Counter Terrorism, Washington, DC
- Organization of American States, Washington, DC

Years Experience
- With SCIT 5
- With Other Firms 30

Education
- BFA 1971 / Interior Design / University of Kansas

Registrations
- Interior Design / Alabama
- California / Secret
Kevin Fallin, PE, LEED
Senior Mechanical Engineer

Mr. Fallin is the Director of Technical Operation and a Senior Mechanical Engineer for E.K. Fox & Associates, Ltd. As a Director of Technical Operation, Mr. Fallin is responsible for engineering studies, design and drafting work performed by the mechanical and electrical departments. He directs the firm's project scheduling. In EKFRA's multi-discipline practice, Mr. Fallin is responsible for supervising the completion of all projects. He meets with clients, determines their needs, and works closely with the Project Managers and Department Heads to assure that projects flow smoothly, and that quality assurance and inter-disciplinary coordination occurs between the mechanical, electrical and plumbing departments of the firm, as well as with the other professional advancement of departmental staff. His role as Director of Technical Operations assures project coordination with the commitment the firm has made to the client, and that the projects are technically accurate and completed within the allocated period of time.

The following is a representative list of individual projects where Mr. Fallin was principal-in-charge and project manager:

**General Services Administration Projects**
- NPS Ellipse Park Rehabilitation, Washington, DC
- The White House New Media Area, Washington, DC

**Federal Bureau of Investigation**
- FBI Criminal Justice Information Systems Mechanical Reliability Improvement, Clarksburg, VA
- FBI HQ, J. Edgar Hoover Bldg. 3rd & 10th Floor Realignment, Washington, DC
- FBI San Juan Office Relocation, Fajardo Resident Agency, San Juan, PR

**US Department of State**
- New Embassy Compound, Luanda, Angola
- San Juan ERT Facility, San Juan, PR

**Other Government Projects**
- Pentagon Athletic Center, Arlington, VA

**Commercial Buildings**
- TASC II, Sterling, VA
- Westpark Corporate Center, McLean, VA
- TASC V Office Building, Sterling, VA
- North Buregaurd Office Building, Alexandria, VA

Years Experience
- With E.K. Fox 51
- With Other Firms 6

Education
- BS (1992) Mechanical Engineering

Registrations
- Mechanical Engineering, Virginia, Maryland

Clearance
- Top Secret
David Pelgrin, PE
Senior Electrical Engineer

Mr. Pelgrin has participated in the preparation of engineering studies in both mechanical and electrical disciplines. He has conducted field investigations of existing systems in conjunction with the production of feasibility studies and design documents. He has completed design of system upgrades and rehabilitation projects, including cost estimation studies. Mr. Pelgrin has been involved in the design of electrical power, lighting, communication, security, access control, automated HVAC controls, specialized grounding systems, RF shielding systems, specialized data handling systems, emergency generation and life safety systems for numerous U.S. Government owned facilities throughout the world.

The following is a representative list of individual projects where Mr. Pelgrin was project manager and/or senior electrical engineer:

**General Services Administration Projects**
- The White House Underground Utilities Assessment, Washington, DC
- The Ellipse Park Rehabilitation, Washington, DC

**Federal Bureau of Investigation**
- FBI GCT Mechanical System Reliability Improvements, Cheekburg, WV
- FBI HQ, 1st & 4th Floor Renovation, Washington, DC
- FBI Criminal Justice Information Systems Reliability Improvement, Washington, DC

**US Department of State Renovated Office/Embassy Buildings**
- Abuja, Nigeria
- Belgrade, Serbia
- Brasilia, Brazil
- Bratislava, Slovakia
- Bamako, Mali
- Brussels, Belgium
- Bucharest, Romania
- Budapest, Hungary
- Cairo, Egypt
- Chandigarh, India
- Colombo, Sri Lanka
- Dubai, United Arab Emirates
- Dhaka, Bangladesh
- Doha, Qatar
- Durban, South Africa
- Kuala Lumpur, Malaysia
- Kuwait, Kuwait
- Luxemburg, Luxembourg
- Munich, Germany
- Mumbai, India
- New Delhi, India
- Paris, France
- Prague, Czech Republic
- Rio de Janeiro, Brazil
- Riga, Latvia
- Sant'Angelo, Italy
- Sharm El-Sheikh, Egypt
- Singapore, Singapore
- Stockholm, Sweden
- Tbilisi, Georgia
- Tenerife, Spain
- Teheran, Iran
- Thessaloniki, Greece
- Tirana, Albania
- Tunis, Tunisia
- Warsaw, Poland
- Yerevan, Armenia

**US Department of State Physical and Technical Access Control Systems**
- Belgrade, Serbia
- Bihać, Bosnia
- Bicol Region, Philippines
- London, England
- Minsk, Belarus
- New Delhi, India
- Phnom Penh, Cambodia
- Skopje, Macedonia
- Wiesbaden, Germany
Eric R. Rosenbaum, PE  
Fire Protection Engineer

Eric Rosenbaum is a licensed fire protection engineer in the District of Columbia with extensive experience in the renovation and modernization of federal buildings. As the Director for A/E projects at Hughes Associates, Inc., Mr. Rosenbaum performs fire protection, life safety, fire hazard, and smoke management analysis. He designs fire detection, alarm, suppression, and voice communication systems. In the area of life safety, Mr. Rosenbaum performs detailed occupant analysis and uses computer modeling to evaluate occupant safety and fire safety within a given tenant. He has extensive experience in identifying code requirements and reviewing designs for compliance. His work also includes specialized code issues including: high-security, multiple hazards, atriums and other unique features or designs. Mr. Rosenbaum also has experience with the application of performance-based codes and specifications, and their development.

General Services Administration Projects
- Department of State, Old State Modernization, Washington, DC
- Metra: West Building Modernization, Baltimore, MD
- Arthur Ashe Building, Washington, DC
- FDA Headquarters Consolidation, College Park, MD
- DEA Building Renovation, Washington, DC
- GSA National Laboratories & ATF F.I.R.E. Center, Beltsville, MD

Government Buildings
- Pentagon Reservation, Washington, DC
- USAFRED, Ft. Detrick, MD
- NNM, Clinical Center Complex, Bethesda, MD
- NNM, National Neuroscience Research Center, Bethesda, MD
- NIH, National Library of Medicine Expansion, Bethesda, MD
- National Audio-Visual Conservation Center, Culpepper, VA
- Smithsonian National Museum of the American Indian, Washington, DC

Historical Preservation
- Library of Congress Complex, Washington, DC & Ft. Meade, MD
- U.S. Capitol Visitor Center, Washington, DC
- National Gallery of Art, Washington, DC
- Renwick Galleries, Smithsonian, Washington, DC
- National Museum of African American History and Culture, Washington, DC
- District of Columbia, Washington, DC

Commercial Buildings
- Towers Crescent, Tysons Corner, VA
- Hyatt Cambridge Resort, Cambridge, MD
- Baltimore Marriott Inner Harbor, Baltimore, MD
- Hippodrome Performing Arts Center, Baltimore, MD
- Kimmel Center for the Performing Arts, Philadelphia, PA
- Johns Hopkins University Engineering & Applied Sciences Building, University of Maryland

Years Experience
- With GSA 13
- With Other Firms 7

Education
- BS 1985 Fire Protection Engineering, University of Maryland
- MS 1987 Fire Protection Engineering, University of Maryland

Registrations
- Fire Protection Engineer (Maryland)
- District of Columbia

Clearance
- Secret
Kiransinh C. Bhatia, PE
Principal Structural Engineer

Mr. Bhatia has over 31 years of experience in project management, structural design, investigation, consultation, field services, feasibility, load studies and blast upgrades for a multitude of structures such as office buildings, warehouses, parking structures, educational facilities, multi-residential structures, hospitals, embassies, consulates and ambassadors' residences.

Following is a list of representative projects in which he has served as project manager:

Federal Bureau of Investigation
- Alignment and Backfill Project, Washington, DC
- FBI Tour Renovation, Washington, DC

General Services Administration
- Renovation, Maxine Steiner, Harry S. Truman Building
- Renovation, Federal Bureau of Investigation, J.E. Hoover Building
- Renovation, National Court Building
- Renovation, Old U.S. Courthouse Building
- Renovation, National Building Museum
- Renovation, US Department of Interior
- Renovation, IRS Building
- Renovation, US Department of Justice
- Renovation, Auto Law Federal Building

US Department of State (DO) Projects
Project Manager for over 400 task orders related to more than 200 projects worldwide. Projects include:
- Interior Office Building Renovation, U.S. Consulate, Sao Paulo, Brazil
- US Embassy Renovation, New Delhi, India
- US Embassy Renovation, Bratislava, Slovakia
- US Embassy Renovation, Moscow, Russia
- Annex Office Building Renovation, Bratislava, Slovakia
- US Embassy Renovation, Zagreb, Croatia
- US Embassy GBC and OBEX Renovation, Warsaw, Poland
- Comprehensive Renovation Plan for US Embassy, Budapest, Hungary
- New Consular Office Building, New Delhi, India
- New Embassy Compound, Luanda, Angola
- US Embassy Renovation, Hanoi, Vietnam
- US Embassy Renovation, Chisinau, Moldova
- US Embassy Renovation, Montevideo, Uruguay
- US Embassy Renovation, Post A, Paris, Haiti
- US Embassy Renovation, Mexico City, Mexico
- US Embassy Renovation, Belgrade, Yugoslavia
- New Embassy Compound, Somalia, Mogadishu
- Warehouse Renovation, US Embassy, Jakarta, Indonesia
- New MSQ, Zambia, Zambia

Years Experience
- With MAB 22
- With Other Firm 2

Education
- BS / 1999 / Civil Engineering / India
- MS / 1971 / Kansas State University

Registrations
- Professional Engineer / District of Columbia, Virginia, Maryland

Clearance
- Top Secret
Eugene J. Collins, PE
Senior Structural Engineer

Mr. Collins has over 35 years of experience with project management, structural design, investigation, consultation, field services, feasibility, load studies, and plant upgrades for a multitude of structures such as office buildings, warehouses, parking structures, educational facilities, multi-residential structures, hospitals, embassies, churches, and ambassador's residences.

Following is a list of representative projects in which he has served as project manager:

US Department of State OBO Projects
Project Engineer and/or supervised field investigations, design and/or renovations. Projects include:
- US Consulato, Mumbai, India
- US Embassy, New Delhi, India
- US Consulate, Chennai, India
- US Embassy, Harare, Zimbabwe
- US Embassy, Riyadh, Saudi Arabia
- US Consulate, Chengdu, China
- US Embassy Lima Peru
- US Consulate, Jeddah, Saudi Arabia
- US Embassy, Islamabad, Pakistan
- US Consulate, Karachi, Pakistan
- US Consulate, Niamey, Niger
- US Embassy, Rome, Italy
- US Embassy, Brasilia, Brazil
- US Embassy, Colombo, Sri Lanka
- US Consulate, Marseilles, France
- US Embassy, Rabat, Morocco
- US Embassy, Tel Aviv, Israel
- US Consulate, Jerusalem, Israel
- US Consulate, Yekaterinburg, Russia
- US Embassy, Caracas, Venezuela
- US Embassy, Nairobi, Kenya
- US Embassy, Kampala, Uganda
- US Consulate, Ciudad Juarez, Mexico
- US Consulate, Rio De Janeiro, Brazil

New Office Buildings
- 1201 M Street, NW, Washington, DC
- 1801 L Street, NW, Washington, DC
- Cross Keys Parking Structure, Columbia, Maryland
- Cross Keys Hotel, Columbia, Maryland
- 1801 L Street, NW, Washington, DC
- 1800 L Street, NW, Washington, DC
- 1550 Wilson Blvd, Arlington, Virginia
- 1220 L Street, NW, Washington, DC
- Bethesda Marriott Center, Bethesda, Maryland
- 1700 Connecticut Avenue, NW, Washington, DC
- Square 29, Washington, DC
Joseph P. Mensch, PE
Principal Civil Engineer

Mr. Mensch is the Managing Partner in Charge of the engineering operations for Woes Mensch Corporation. Over the past 17 years, he has been involved with civil engineering projects throughout the Washington DC Metropolitan area and across the country. As a consultant, Mr. Mensch has worked for developers, architects, contractors, local and national government agencies, associations, charities, churches, park services, and schools.

Initial studies, from feasibility and master plans on large-scale developments throughout the United States and abroad, have allowed Mr. Mensch to blend creative site concepts with the technical aspects of construction. His field construction experience provides an element of continuity between the concept and completion. Mr. Mensch has had technical responsibility for most site design issues including: earthwork, paving, thermoset management facilities, utility systems, sediment controls, retaining structures and subsurface drainage. Mr. Mensch has provided expert planning and testing services in Virginia, Maryland, and the DC area.

General Services Administration Projects
- CIA Visitors Center Damage Improvement Survey & Design, Washington, DC
- Secret Service - James J. Rowley Training Center (IDOC), Beltsville, MD
- Alcohol Tobacco & Firearms - National Laboratory & Fire Research Center, Beltsville, MD
- DC Courthouses - Renovation and Parking Garage, Washington, DC
- New Census Bureau Headquarters Office Complex (Design/Build), Suitland, MD

Government Buildings
- George P. Schurz National Foreign Affairs Training Center, Arlington, VA
- Arts & Industries Building Renovation, Smithsonian, Washington, DC
- National Museum of the American Indian, Washington, DC
- National Audio Visual Conservation Center (NAVVC), Culpeper, VA
- Bureau of Engraving and Printing, Washington, DC
- Embassy of Luxembourg, Washington, DC
- Department of State - Trumans Building Survey & Security Improvement, Washington, DC
- Helsinki U.S. Embassy, Helsinki, Finland
- U.S. Embassy Angola (IDOC), Luanda, Angola
- U.S. Embassy Vietnam (IDOC), Ho Chi Minh City, Vietnam

Department of Defense
- Rolling Air Force Base Civil Engineering Complex (Design/Build), Washington, DC
- Rolling Air Force Base Reeve Round Dorm and Training Facility (Design/Build), Washington, DC
- Ft. McNair Physical Fitness Center, Washington, DC
- Quantico Physical Fitness Center (Design/Build), Quantico, VA
- Sugar Grove Bachelor Enlisted Quarters Motel Hall (Design/Build), Sugar Grove, WV
- Walter Reed Army Medical Center Guest House (Design/Build), Washington, DC
Leonard K. Blakley, RLA, ASLA
Senior Landscape Architect/Planner

Mr. Blakley has been a consultant and design team member for land development planning, advising on zoning and development regulations; site and engineering design, as well as landscape design for various projects ranging from large master-planned office and residential developments to single lot commercial and residential sites.

As a senior designer he has been responsible for the preparation and coordination of project design including feasibility and conceptual plans; preliminary plans of subdivisions; final site development plans; grading plans; storm water, paving and storm drainage plans; erosion and sediment control plans; construction staging plans; landscape planting and "hardscape" design.

Other work includes: wetland protection practices and mitigation designs; specimen tree and woodland preservation practices; feature landscape and garden design with special interest in Japanese landscape design principles, water garden, and tropical landscapes and ornamental pond and water feature design and construction.

He is also experienced in coordination with clients, consultants, and local government agencies for various residential, commercial, and institutional projects. He has also been an expert witness and client representative.

**Government Buildings**
- Ellipse Rehabilitation, Washington, DC
- Helsinki U.S. Embassy, Helsinki, Finland

**Department of Defense**
- Quantico BRAC / Academic Instruction Building (Design/Build), Quantico, VA
- DC Marine Barracks, Base Support Facility, Parking Garage & Athletic Fields (Design/Build), Washington, DC

**University**
- George Mason University Parking Garage (Design/Build), Fairfax, VA

**Commercial Buildings**
- Fort Totten (Riggs Plaza) FUB, Washington, DC
- Shady Grove Executive Center, Montgomery County, MD
- Rock Spring Plaza, Bethesda, MD
- Marriott Corporation International Headquarters Expansion, Bethesda, MD

**Public Sector**
- American Red Cross National Headquarters, Washington, DC
- Bethesda Neon House Elder Housing at St. Barsoleswig's Catholic Church, Montgomery County, MD
- MicroBiological Associates Headquarters Expansion at Shady Grove Life Sciences Center, Montgomery County, MD
- Randolph Village Elderly Housing, Germantown, MD

**Years Experience**
- With WMC 13
- With Other Firms 23

**Education**
- BS / 1975 / Urban Geography / University of Maryland

**Registrations**
- Landscape Architect / Maryland

**Citizenship**
- United States

---

119
Benson Kwong, PE, CCE, CVS, CEM, CLEP
LEED Consultant, Cost Estimator, VE Facilitator

As Senior Engineer, Mr. Kwong is responsible for managing energy conservation and sustainability design coordination, preparing multi-year project cost estimates and schedules, participating in value engineering workshops as team leader, mechanical engineer, electrical equipment team leader, or cost estimator. He has more than 25 years of experience in the A/E industry.

Mr. Kwong has facilitated Value Engineering workshops, particularly in issues such as HVAC and power systems reliability, energy conservation, indoor air quality, environmental security, and physical security.

Mr. Kwong has coordinated sustainability design effort using the LEED certification method. He has also coordinated energy design compliance to ASHRAE 90.1 and CFR415.

Periodically since 1995, Mr. Kwong has worked on a team assisting GSA in developing the Interagency Security Criteria for Long Term Construction. His most recent contribution includes research and studies on issues related to environmental security and recommendations criteria for protection against chemical and biological contaminants.

Mr. Kwong’s design experience includes central systems, fire protection systems, fuel systems, and power plants. He has performed design review from conceptual engineering through facility startup including drawings, specifications, as-built diagrams, O&M manuals and start-up procedures.

Mr. Kwong is directly responsible for completing cost estimating tasks from project start to finish. His responsibilities include:

- Participate in kick-off and project review meetings.
- Review design plans, specifications, studies, reports, and other documentation.
- Participate in development of project phasing schedules.
- Produce mechanical and electrical estimates at the concept, schematic, design development and working drawing phases.
- Review project budgets and schedules on a day-to-day basis.
- Prepare life-cycle cost analyses, including energy cost models.

Mr. Kwong has worked on the following FBE projects in the past five years:

- Bum District ERT Facility, Puerto Rico - new 1,500 m² facility
- Records Management Division Archives - $100 million facility
- Academy Building 6 - 12 million food service alternative location study
- Chemical Storage Information Systems Design, Cherokeee, MD - O/S failure mitigation strategies
- Washington Metro Field Office - new $14 million note field office in Washington, DC

Publications:

James T. Brokaw  
Senior Engineer, Director, Security Engineering  

Mr. Brokaw is a senior blast engineer with 15 years of experience in the areas of dynamic numerical analyses, explosion, weapon effects and computer modeling/simulation. Since joining ARA, Mr. Brokaw has served as the lead blast consultant for numerous projects of national significance. Among these are:  

- the blast resistant designs of the US Mission to the United Nations, several US embassies for the Administrative Office of the Courts, numerous US embassies for the US Department of State, and the assessments of several federal facilities including the Washington Monument and the Smithsonian Institution’s buildings on the National Mall. He has also been instrumental in the assessment and protection of US airports having conducted more than 50 blast assessments since September 11, 2001. Mr. Brokaw is leading teams in the assessment and retrofit of 31 facilities for the US Environmental Protection Agency and several dozen facilities for the US General Services Administration. He is the co-developer of the computer program WINWAVE and ATILLAE. Mr. Brokaw has also assisted in the development of the GSA’s “Progressive Collapse Analysis and Design Guidelines for New Federal Office Buildings and Major Modernization Projects”.  

Relevant project experience includes:  

- Assisted the General Services Administration (GSA) in developing upgrades to the walls/windows of their facilities. These design services were used to assist the Design Team in meeting the requirements of the ISC and DOD Security Criteria.  
- Performed an on-site assessment of the blast resistant windows of the Craphic Tower on the US Mint campus for the U.S. Department of State under contract with KCEC. Assisted the blast capacity of the existing buildings and proposed renovation alternatives.  
- Assisted the US State Department in the design of embassies worldwide for explosive effects. He has performed threat vulnerability studies and provided blast resistant design services, developed and modified project specifications, and assisted in the implementation of those designs overseas.  
- Conducted vulnerability assessments of three standard FAA control tower designs subjected to explosive loads. This assessment included the estimation of induced shock loads on the control tower equipment, and the estimation of damage to the control tower structures for a range of explosive devices.  
- Assisted or conducted vulnerability assessments of U.S. airports for explosive effects. These assessments included determination of the major vulnerabilities in the airport facilities, an estimation of the extent of damage to people and property, and recommendations on most effective remediation measures for reducing risk from terrorist events (Palm Beach International Airport, John Wayne International Airport, Richmond International Airport, San Francisco International Airport, Denver International Airport, St. Louis International Airport, Washington National Airport, and Mariel international).  
- Developed, constructed, and tested full scale prototypes of a hardened baggage restraint for the FAA. These designs included a hybrid container with an aluminum frame attached to a composite shell. These containers are designed to withstand explosive blast forces in order to enhance the survivability of aircraft subject to terrorist attacks.  

- Assisted the U.S. General Services Administration (GSA) in evaluating the requirements for protection of the new FBI Metropolitan Washington Field Office and the new US Secret Service Headquarters Building.  
- Analyzed and designed blast resistant windows, doors, and doors for commercial windows of special forces blast resistant products (Nonshield, Ross Technology Corp.).  
- Performed reliability analysis including Monte Carlo simulations on several Corps of Engineers structures to assess the reliability as a function of time and implement this information into an economic analysis.  
- Routinely conducts finite element analysis of structural systems and their response to dynamic loads. Mr. Brokaw has used both commercial and non-commercial E.E. codes and processors including, DYNASD, ANSYS, ABAQUS, ADINA, RASTRAN, PATRAN, IDEAS, and STARDYN.  
- Co-authored a special purpose 3D finite element program for analysis and design of structures subjected to blast loads based on the ABAQUS 3D finite element code. Also developed unique spreadsheets and programs to assist in blast environment determination and structural response.
Dr. Gene McKeown
Director, Health Effects and Medical Response

At Applied Research Associates (ARA), Dr. McKeown, Director of Health Effects and Medical Response, specializes in the effects of biological, chemical, radiological, and nuclear (CBRN) environments on humans. He is recognized both nationally and internationally for his contributions to analysis and modeling for CBRN defense and medical planning.

Dr. McKeown has a 23-year history of support to the Defense Threat Reduction Agency (DTRA) and its predecessor in the phenomenology of weapons of mass destruction. During much of that time, he has led a team as the development of basic modeling techniques and software simulations for assessing the human response to various radiation exposures and to biological and chemical agent exposure. Dr. McKeown has a 15-year history of support to Health Care Operations of the US Army Office of the Surgeon General (USAG). He has led efforts for the estimation battle casualties from nuclear, biological and chemical (NBC) attacks in support of U.S. and NATO medical defense plans and was Program Manager for the development of the medical NBC Casualty and Resource Estimation Support Tool (NBC CREST) for medical planning.

At General Dynamics Advanced Information Systems (GDAS), Dr. McKeown’s group incorporated NBC human response algorithms into the Impact Module for DTRA’s Hazard Prediction and Assessment Capability (HPAC) and into the Consequence Assessment Tool Set (CATS).

In support of OTSG, Dr. McKeown led the team providing the human response methodology and the evaluation and biologic explosion tables for Allied Medical Publication 8 (AMEDP-8), Medical Planning Guide for the Estimation of NBC Battle Casualties, published by NATO’s NBC Medical Working Group in February 2001. In addition, he led the team that developed NBC CREST to enable medical deliberate planning for operations involving NBC attack.

At Livermore, Dr. McKeown was the Livermore representative for a team of LLNL engineers and scientists assessing the potential of foreign energy technologies to DOE in the International Energy Technology Assessment Program (1990-1991). As a target designer in the Laser Fusion Program (1979-1980), he designed laser targets with the computer simulation code NASH, provided specifications for target fabrication, and analyzed data from subsequent laser shots.

At the University of Maryland, Dr. McKeown was an Assistant Professor of Physics (1973-1977). From 1977 through 1982 he was a Research Associate in the High Energy Physics Group. In addition to his teaching and administrative responsibilities, Dr. McKeown conducted elementary particle experiments at large accelerators, analyzed particle data with a computer-controlled optical scanner, and analyzed large data sets by computer. He did extensive work with nuclear particle detectors, pulsed high voltage systems, electronic counting, and computer interfacing.
OFFEROR'S EXPERIENCE

KCCF has been in the practice of architecture for over 25 years. In that time, we have worked on 17 IDIQ contracts with Federal Agencies. Over the last ten years, these contracts have included over 100 general renovations in the National Capital region and more than 100 internationally.

KCCF is intimately qualified in general renovation projects, including security offices, auditoriums, conference centers, museums, food service and historic preservation. Approximately 90% of our work comprises these types of projects. Relevant projects performed under Open End Task Order Contracts include such as programming, space planning, office and advanced computer facilities, educational and training facilities; building management systems; security systems; emergency power generation systems; building energy conservation, and specific experience with the General Services Administration, the Department of State, the FBI and the Architect of the Capitol. The following is a summary of our experience with our 17 IDIQ contracts.

<table>
<thead>
<tr>
<th>CONTRACT NAME</th>
<th>YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/E Pentagon Renovation Project, DOD</td>
<td>1997-1999</td>
</tr>
<tr>
<td>A/E IDIQ Contract, Department of State (GBO)</td>
<td>1993-1995</td>
</tr>
<tr>
<td>A/E IDIQ Contract, Department of State (GBO)</td>
<td>1992-1997</td>
</tr>
<tr>
<td>A/E IDIQ Contract, Department of State (RPM)</td>
<td>1994-2000</td>
</tr>
<tr>
<td>A/E IDIQ Contract, Department of State (GBO)</td>
<td>1997-2002</td>
</tr>
<tr>
<td>A/E IDIQ Contract, Department of State (RPM)</td>
<td>2000-2004</td>
</tr>
<tr>
<td>A/E IDIQ Contract, Federal Bureau of Investigation (FBI)</td>
<td>1999-Ongoing</td>
</tr>
<tr>
<td>Design Build Contract, Department of State through Parsons Corp.</td>
<td>2001-2002</td>
</tr>
<tr>
<td>A/E IDIQ Contract, Department of State Security Improvements</td>
<td>2002-Ongoing</td>
</tr>
<tr>
<td>A/E IDIQ Contract, Department of State (RPM)</td>
<td>2005-2009</td>
</tr>
<tr>
<td>GSA Furniture Schedule</td>
<td>2003-2010</td>
</tr>
</tbody>
</table>
Projects Completed for GSA, National Capital Region:

- Blunt Protection Study – AV Bryan Courthouse
- Blunt Protection Study – Eisenhower Executive Office Building
- Blunt Protection Study – Federal Trade Commission
- Blunt Protection Study – FOB 10B
- Blunt Protection Study – James Whitman Building
- Blunt Protection Study – Mary Switzer Building
- Blunt Protection Study – National Courts
- Blunt Protection Study – Veterans Administration Building
- Blunt Protection Study – Cohen Building
- Blunt Protection Study – Department of Agriculture South
- Chris Hartman Building Museum
- Clara Barton Building Stabilization
- Columbia Parks Child Care Expansion
- Columbia Plaza Corporate Facility
- Columbia Plaza Food Service Facility
- Columbia Plaza Office Complex Modernization
- Department of Education New Entrances
- Department of Energy Restroom Renovation
- Department of Energy Roof Replacement
- DOS ACDA Corporate Facility
- DOS Blunt Protection Final Design
- DOS Blunt Protection Study
- DOS Briefing Room and Studio Renovation
- DOS Bureau of African Affairs Renovation
- DOS Delegate Lounge Renovation
- DOS MMS Renovation
- DOS New State Kitchen Study
- DOS Old State Build-out
- DOS Old State Demolition
- DOS Old State Infrastructure Redesign
- DOS Old State Programming
- DOS Old State Space Planning
- DOS Suite B-258 Fire Protection System
- DOS Suite B-204 Renovation
- DOS Visitor Center & Diplomacy Museum Conceptual Design
- DOS Visitor Center & Diplomacy Museum Master Plan
- Department of the Interior South Terrace Renovation
- Eisenhower Executive Office Building Elevator Upgrade
- Federal Triangle New Façade and ADA Elevator
- National Building Musuem Galleries Climate Control
- National Building Musuem Improvement Program
- National Building Museum New Stairs
- National Courts Window Replacement
- National Foreign Affairs Training Center Classroom Renovation
- National Foreign Affairs Training Center Main Bldg. Exterior Repair
- National Gallery of Art Fuel Tank Replacement
- Old Fellows Building Facade Renovation
- Old City Hall Courthouse Modernization Study
- Old City Hall/DCC Courthouse Parking Study
Projects Completed for the DOS RPM

- U.S. DOS, Bureau of Arms Control
- U.S. DOS, Bureau of Non-Proliferation
- U.S. DOS, Bureau of Political-Military Affairs
- U.S. DOS, Bureau of Public Affairs Renovation
- U.S. DOS, Physical Security Upgrades
- U.S. DOS, Renovation and Integration Projects

Projects Completed for the U.S. DOS OBO Worldwide

- EOQ Moscow East and West Roof Replacement, Moscow, Russia
- New Consulate Office Building, Ho Chi Minh City, Vietnam
- New U.S. Embassy Compound, Luanda, Angola
- Principal Officer's Residence Renovation, Havana, Cuba
- U.S. Consulate Renovation, Bombay, India
- U.S. Consulate Renovation, Chennai, Zimbabwe
- U.S. Consulate Security Upgrade Surveys, China
- U.S. Consulate Telecommunications Design, Chand, Zimbabwe
- U.S. DOS/OBO Planning Surveys, India
- U.S. Embassy Chancery Renovation, New Delhi, India
- U.S. Embassy Elevator Upgrade, Bogota, Colombia
- U.S. Embassy Expansion/Renovation, Tirana, Albania
- U.S. Embassy OS OBO Warehouse Upgrade, Bogota, Colombia
- U.S. Embassy Mazar Plan, Niamey, Niger
- U.S. Embassy Modernization, Bratislava, Slovakia
- U.S. Embassy Perimeter Security Upgrade, Uzhgorod, Ukraine
- U.S. Embassy Physical Security Upgrade, Bratislava, Slovakia
- U.S. Embassy Rehabilitation, Warsaw, Poland
- U.S. Embassy Renovation, London, England
- U.S. Embassy Renovation, Pristina City, Kosovo
- U.S. Embassy Security Upgrade, Port-au-Prince, Haiti
- U.S. Embassy, New General Service Annex, Algiers, Algeria
- USSS Space Planning, Mumbai, India

Projects Completed for the FBI

- Building No. 9 Modernization Space Plan, FBI Academy, Quantico, VA
- Elevated Work Platform Design, CJS Division, Charleston, WV
- Utility Infrastructure Reliability Assessment, CJS Division, Charleston, WV
- Columbian Protection System for Underground Gasoline Storage Tank, CJS Division, Charleston, WV
- Computer Classroom 214 and 314 Renovation, FBI Academy, Quantico, VA
- Design of SRT Facility, San Juan, Puerto Rico
- FBI Headquarters Building Wide Protection Feasibility Study, Washington, DC
- Technical Support Center Site Analysis, FBI Academy, Quantico, VA
- Records Management Division Relocation Prospectus, Washington, DC
DEMONSTRATED EXPERIENCE IN PHYSICAL SECURITY DESIGN

Almost all projects KCCCT has designed for the U.S. government, including the Department of State, require a detailed understanding of the principles of multi-layer physical security design. The following is a summary of significant projects:

Marine Security Guard Upgrades, Tbilisi, Georgia; Baku, Azerbaijan; Yerevan, Armenia; and Ashgabat, Turkmenistan
- Upgrade building perimeter for Forced Entry
- New Public Access Controls (PACs)
- New Port 1 and react rooms

Security Upgrade of Existing Compound, U.S. Embassy, Phnom Penh, Cambodia
- New perimeter wall
- New Compound Access Control
- New consulate barriers and buffers
- New Public Access Controls (PACs)
- Physical security upgrade of newly acquired building

Security Upgrade of Two Existing Compounds, U.S. Embassy Manila, Philippines
- New perimeter walls
- New Compound Access Control
- New consulate barriers
- New Public Access Controls (PACs)
- Technical security systems

Security Upgrade of Existing Chancery, U.S. Embassy Port Moresby, Papua New Guinea
- New static vehicle barriers
- New hydraulic vehicle barriers
- Expansion of existing barriers
- Security Upgrade of Existing Chancery

Large Government Training Facility, Virginia
- New visitor control center
- New service entrance
- Perimeter fencing and vehicle barriers
- Technical security systems

U.S. Capitol Exterior Door Upgrade, Washington, DC
- Survey and safety/security upgrade of 250 exterior doors in 11 buildings within the Capitol Complex
- Coordination of classified security hardware
- Perimeter Security Upgrade

Large Government Office Building, Northern Virginia
- Survey and vulnerability assessment
- Design of new static vehicle barriers
- Perimeter Security Upgrade

Large Government Office Building, Washington, DC
- Survey and vulnerability assessment
- New public access control (PACs)
- Design new perimeter fences, gates and vehicle barriers
- New security vestibule
DEMONSTRATED EXPERIENCE IN BLAST PROTECTION

During the past 10 years, the KCCT design team has completed more than 40 projects involving vulnerability assessments and blast resistant design. The following projects best demonstrate our expertise in blast design:

U.S. Embassy Tirana, Albania
KCCT designed a blast resistant consular annex. Due to limited roof setback and the high design charge weight, the building is the second most blast resistant building ever designed for the Department of State.

Cairo, Egypt Tower I Blast Resistant Windows
KCCT surveyed and developed a blast resistant window replacement design for windows in the Cairo tower. The original windows displayed serious degradation including cracking, crazing and delamination. The most severely degraded windows were removed and blast tested. KCCT prepared construction documents for three replacement options.

Operable Blast Resistant Windows
The KCCT team developed prototype designs for operable blast resistant windows for the State Department. This work examined the design of numerous alternative window types, the effects of still pressures on occupants, and operational, architectural and cost considerations of operating blast resistant windows.

Vulnerability Analysis, U.S. Diplomatic Facilities in Egypt
The KCCT team conducted a one-month survey trip to Egypt to determine the blast vulnerability of more than 20 diplomatic facilities.

Vulnerability Analysis, U.S. Embassies in Guatemala and Honduras
The KCCT team conducted a survey trip to Guatemala City and Tegucigalpa to determine the blast vulnerability of Embassy compounds.

U.S. Embassy, Budapest, Hungary
KCCT conducted a Vulnerability Assessment and created a Blast Resistant Design for cost evaluation.

Blast Consulting Services: New Consular Annex, Beirut, Lebanon
The KCCT team is providing the blast resistant design for a new consular Annex building.

Unidentified Diplomatic Facility, Bosnia-Herzegovina
The KCCT team provided blast resistant design services to the U.S. Government without a site survey.

U.S. Embassy Luanda, Angola
KCCT designed the U.S. Department of State’s new blast resistant embassy building.

Study of Claying Blast Protection, U.S. General Services Administration
A vulnerability assessment and blast-resistant window design for 13 buildings, including 12 federal office buildings (FOB) and three courthouses. Thirteen of these buildings are historic structures (HS) in the Washington, DC area.

- Federal Trade Commission (HS)
- Mary E. Saliter FOB (HS)
- Wilbur Cohen FOB (HS)
- Department of Agriculture South (HS)
- James L. Whelan FOB (HS)
- The Veteran Administration (HS)
- Eisenhower Old Executive Office Building (HS)
- U.S. Department of State (HS)
- Federal Office Building HA
- National Courts (HS)
- GSA Regional Office Building (HS)
- U.S. Department of Commerce (HS)
- Barlow Partnership Courthouse (HS)
- The Martin V. Bedient Courthouse
DEMONSTRATED EXPERIENCE IN CHEMICAL / BIOLOGICAL / EMANATIONS SECURITY DESIGN

The KCCT team is familiar with the current standards for Chemical/Biological filtration. Given that building indoor air quality is a function of appropriate quantities of outside air introduced into the building, the outside air intake represents a potential source for introduction of contaminants. These contaminants can be naturally occurring or introduced by terrorism.

The Lamuda Embassy project was designed recently to comply with the current Department of State standards. The system included rooftop outside air intakes (screened difficulty for unauthorized access), outdoor air filtration (including HEPA and activated carbon) and a heat recovery system to extract energy from the building exhaust air. KCCT also prepared a study of the cost of upgrading the Lamuda filtration system to meet various higher levels of performance.

Another example of a robust air filtration system was employed in the Mexican City Embassy (DVAC) upgrade project design. Due to an abundance of various local airborne pollutants (carbon monoxide, sulfur dioxide, ozone, dust, etc.), the building was sealed to prevent infiltration of outside air and code compliant ventilation air was filtered and mechanically delivered to maintain positive building pressures. The roof mounted filtration system was a cascade of low, medium and high efficiency particulate filters in series with chemical (photocatalytic pretreatment) and activated carbon filters. The filter components were sized and positioned to remove the identified pollutants and provide safe, clean air to the building.

KCCT is currently participating in the design of chemical and biological security upgrades for the Department of State OBO in Bangkok, Dhaka, Kuwait, San Jose and Singapore.

New Standard Embassy Design projects comply with current U.S. Department of State criteria for chemical and biological filtration. KCCT has completed design of three SED projects with high performance chemical bio systems.
DEMONSTRATED EXPERIENCE IN TECHNICAL SECURITY DESIGN

The ICCI team has coordinated with owners, the design of technical security systems for over 40 new innovation projects. The following projects are complex in which one team was responsible for the entire technical security design:

Security Upgrade of Existing Chancery, U.S. Embassy Buenos Aires, Argentina
- Survey and development of scope for security upgrade
- New compound access control and vehicle barriers
- Expansion of exterior hardline
- Technical security systems

Security Upgrade of Existing Building, U.S. Consulate, Recife, Brazil
- Survey and development of scope for security upgrade
- New compound access control
- New hydraulic vehicle barriers
- Expansion of exterior hardline
- Technical security systems

Security Upgrade of Two Existing Campuses, U.S. Embassy Manila, Philippines
- Engineering Survey
- Technical Security Systems

Security Upgrade of Existing Chancery, U.S. Embassy Port Moresby, Papua New Guinea
- Engineering Survey
- Technical Security Systems

Security Upgrade of Existing Chancery, U.S. Embassy, Kohima, Federated States of Micronesia
- Survey and development of scope for security upgrade
- Technical security systems

Security Upgrade of Existing Chancery, U.S. Embassy, Korea, Pyeong
DEMONSTRATED EXPERIENCE IN SUSTAINABLE DESIGN

Our Design Team is proud of its continued effort to incorporate waste reductions and energy efficiency in facility design. This concern for lower costs and improve environmental quality is a fundamental aspect of our professional practice. In recent years, our most notable successes have occurred through a strategic effort between the architectural, exhibit design, mechanical and electrical disciplines to achieve a sustainable design.

Approach to Sustainable Design

Sustainable design concepts relate to the design and construction of a building to produce a more environmentally and socially conscious project, within the constraints of budget and schedule. This includes the manufacture and transportation of building materials, its siting and land use, its interception of energy, and its contribution to the environment over time.

Our Design Team approaches sustainable design with the following objectives:

- Minimize pollution output from material fabrication, construction, and operations.
- Optimize resources, materials, and energy in an efficient manner.
- Design buildings for long-term reliability, and flexibility over time.
- Design buildings to be simple to operate and maintain.
- Design for a long-world life expectancy.
- Create a healthy environment for the building occupants.

During conceptual design, our Team develops energy and environmental concepts for the architectural form and orientation, mechanical systems, electrical systems, natural and artificial lighting, water and fuel systems, and building automation. These concepts can be tested or simulated for energy efficiency, environmental impact, comfort, and life-cycle cost.

Our Design Team also evaluates design decisions such as traffic generation, transport energy, manufacturing energy, recycled materials content, reusable materials content, water management, water conservation, reduced maintenance, and land conservation.

During the contract document phase, environmental concepts are evaluated against other design parameters such as the client's progress and budget limitations. Choices are made and documented, and these are incorporated into the project through drawings and specifications. Decisions are verified and maintained throughout construction using the Quality Assurance and Value Engineering processes.

The pre-occupancy commissioning phase of the project is a critical period for interior environmental quality. A pre-occupancy commissioning of the building is necessary to ensure proper housekeeping and the long-term quality of the interior environment.

Concepts to Achieve Energy Efficiency

To achieve energy efficiency, our Design Team considers the following at the inception of every project:

- Integration of energy conservation methods into every phase of our design process.
- Use of mass thermal storage in older building envelopes. In temperate climates, operable windows should be preserved and mechanical systems should operate in economy mode. Night-purge cooling, and water and air side economization cycles reduce energy consumption.
- Use of indigenous materials, when possible, to minimize transport energy and associated pollution.
- Diversification of appropriate R-values and detailing for windows, roofs and walls to reduce heat losses and gains.
- Sizing of HVAC equipment to ensure efficient energy use.
Design of new systems and retrofit existing mechanical and plumbing systems with equipment that will work efficiently at lower load levels, including variable frequency drive motors for fans and pumps, high efficiency motors with high turn-down ratios and chillers that work with low energy input.

Sizing of piping and ductwork with low to moderate velocities, to reduce transportation losses.

Evaluation of existing systems to identify and eliminate design and operational inefficiencies and expenses.

Addition of waste heat recovery devices such as heat exchangers and heat reclaim chillers.

Selection of energy efficient lighting fixtures and low-cost high quality fluorescent lamps, include photo-electric sensors for daylight compensation and infrared occupancy sensors to reduce consumption.

Design of systems that participate in electrical utility peak load curtailment incentive programs where emergency generators are called into service by the utility company when peak demand requires it. This assists the utility company in averting possible rolling brownouts.

Conduct power quality studies and harmonic analysis to determine if a building’s existing electrical infrastructure is causing the facility to use unnecessary electricity.

Examples of Energy Efficient Design

The following are selected examples of our Design Team’s energy efficient facility designs:

- Design of the New U.S. Embassy in Port-au-Prince, Haiti for high compliance with LEED standards.
- Design of the New U.S. Embassy in Monrovia, Liberia and Kinshasa, DRC to maximize compliance with LEED standards.
- Design of New Office Annex (NOX) for U.S. Embassy in Bamako, Mali & Accra, Ghana to maximize compliance with LEED standards.
- Design of New U.S. Embassy in Luanda, Angola using grey water recycling systems.
- Blast Resistant Windows research was commissioned by the U.S. Department of State to develop the energy efficient functional blast resistant glazing designs incorporated in the windows for the U.S. Embassy in Cairo, Egypt.

Examples of Indoor Environmental Quality in Building Design

In addition to minimizing energy consumption and promoting environmentally sound operations, we seek to create healthy indoor work environments which enhance the productivity of occupants.

Our objectives regarding indoor environmental quality include:

- Maximize the quality of indoor air.
- Provide glare-free, high quality low intensity lighting in work areas.
- Provide access to natural light and views for biological reasons.
- Provide sound thermal and moisture control which minimizes occupant comfort.
- Minimize exposure to electromagnetic fields.
- Maximize acoustic control.

To address increasing public concern over the creation of sick or potentially unhealthy indoor building environments, our Design Team has developed primary and remedial procedures to promote healthy work environments.

A constant renewal of fresh air within the building is the best approach to good air quality. Our Design Team carefully locates intakes into the prevailing winds and away from potential sources of pollutants such as busy streets, parking structures, and exhaust from adjacent buildings. Fresh air is drawn freely through occupied areas and exhausted through areas with potential sources, such as restrooms, storage rooms and shops. Our designs meet or exceed ASHRAE standards for air exchange.
Our Design Team selects interior finishes in part on the basis of their ability to minimize emissions of volatile organic compounds, formaldehyde, and other contaminants. Materials which are capable of shedding fibers or particulates are minimized or treated to control air contaminations.

Construction procedures are specified to minimize the absorption and potential release of airborne contaminants. In planning plans we specify that products with high emissions such as painting, composition flooring, carpeting, and asbestos be installed early in the construction process. This procedure allows the materials to off-gas before more absorptive materials are installed. Prior to occupancy we advise owners to ventilate the building with 100% fresh air for up to 90 days if feasible to decrease accumulated gases from finishes and furnishings.

We emphasize acoustic control in the design of office facilities. We acoustically compartmentalize functional areas of the building. For example, in communications and executive offices we restrict our sound transmission criteria for privacy.

Occupants of the building are separated from diesel engine operated equipment such as emergency generators and fire pumps by acoustical enclosures up to STC 50. Our Design Team has designed elaborate acoustic enclosures for diesel generators for many specific projects in urban sites including Monterey, Mexico; Bratislava, Slovakia; and Budapest, Hungary. These facilities have included duct silencers, acoustic hangers, isolation shear for equipment, and interior acoustic wall and ceiling panels mounted on acoustic isolators.

Examples of the Use of Recycled or Recovered Materials
Our Design Team specializes in the preservation and renovation of buildings. We regard our practice as recycling at a grand scale. The ultimate in energy conservation and waste reduction in building design is the continued use of viable existing buildings through a process of good maintenance, renovation, and continued use. The potential energy generated by not demolishing and rebuilding an existing site can compensate for decades of less efficient operation.

At a more modest scale, our Design Team has pursued the use of recovered and recycled materials in government facilities for several years.

- We have used recycled and reusable wood floor and ceiling panels in projects for U.S. Embassy renovations in Kiev, Minsk, and Budapest.
- KKCT has promoted the use of insulation, a composite fiber material made of jean, wood and cork flour, mineral oil, and finely ground limestone, and geologically acceptable pigments over more common vinyl composition floor finishes.
- In Phase II of the Pavilion at the Old Post Office, KKCT designed a new foundation of composted recycled concrete, saving the owner more than $100,000 over its conventional pile foundations.

Recent Recognition for Sustainable Design
This year we received recognition from the United States Bureau of Overseas Building Operations. A Certificate of Appreciation for our work in sustainable design reads as follows:

"For the Design-Build Team's performance, superb teamwork, and exceptional dedication in making the New Embassy Compound (NEC) in Prague, Czech Republic, a success in sustainable design, The Team's expertise in integrating the project's site and building system make the project a green building model for future OBO projects."
DEMONSTRATED CAPABILITIES TO MEET PERFORMANCE SCHEDULES

Our Design Team has never failed to submit a project on time. We have consistently demonstrated our ability to understand and deliver quality products on unexpressed time schedules. We have a high level of confidence that our team will continue to successfully deliver all project services on time.

We pride ourselves on our responsiveness to clients and our ability to perform all project services on time. Our performance record with agencies is excellent as demonstrated by the following examples. These schedules were developed with the client and incorporated into contracts. They represent very tight time frames, and in each case we delivered fully completed and coordinated packages on schedule.
DEMONSTRATED EXPERIENCE IN COST CONTROL

Our experience in government projects leads us to put great emphasis on cost control. KCCI recognizes that the Federal Reserve Board considers cost control to be a vital measure of our performance. At the inception of a project, the established budget will be reviewed and compared to the project scope. Any differences between the scope and the budget will be immediately brought to the client's attention and resolved. The cost targets will then be broken into budgets for each discipline, and each member of the design team will be required to prepare their respective budgets. We review costs in detail at each scheduled submission.

Below is a partial list of projects illustrating our ability to provide cost control on similar work for government agencies and private clients.

<table>
<thead>
<tr>
<th>Project</th>
<th>Design to Budget</th>
<th>Final Estimate</th>
<th>Award</th>
<th>Final Cost</th>
<th>Change Order Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Poland, IRS Building, Washington, DC</td>
<td>competitive term</td>
<td>3.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uni Realty-Plymo Complex, Washington, DC</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: General Services Administration</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Public Affairs, Washington, DC</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Department of State</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dewey Building, Washington, DC</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Washington Metropolitan Transit Authority</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Park at Old Post Office, Washington, DC</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Post Office Pavilion</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Javits Transportation Center, Jersey City, NJ</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: City of Jersey City</td>
<td>competitive term</td>
<td>0.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hamburg Transportation Center, Hamburg, PA</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Hamburg Transportation Authority</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US Embassy, Prague, Czech Republic</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Department of State, Overseas Buildings Office</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Cambodia, Ho Chi Minh City, Vietnam</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Department of State, Overseas Buildings Office</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embassy Roof Replacement, Moscow</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Department of State, Overseas Buildings Office</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Building Museum, Washington, DC</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: General Services Administration</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Building Museum, Galleries, Phase 2, Washington, DC</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: General Services Administration</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal Operations Center, Silver Spring, MD</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Washington Metropolitan Transit Authority</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. Embassy, London, England</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Department of State, Overseas Buildings Office</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computer Science Research Library</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: George Mason University</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Supply Facility, Fort Leonard, MO</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: Washington Metropolitan Transit Authority</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Interior, Office of the Chief Information Officer</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client: General Services Administration</td>
<td>competitive term</td>
<td>2.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Additional equipment was installed by client in the subsequent revision made after construction contract was awarded.
**Additional equipment was installed by client after construction contract was awarded.
DEMONSTRATED QUALITY OF WORK BY CLIENT SATISFACTION

XCT prides itself on its responsiveness to clients. Our numerous letters of satisfaction from our clients are the best measure of our firm’s overall performance.

The following letters demonstrate our past performance in terms of quality of work as measured by client satisfaction.
Certificate of Appreciation
United States Department of State
Bureau of Overseas Buildings Operations

Presented to:
Project Management Services, Inc.
Reason: Planning Team for the US Embassy, Port-au-Prince, Haiti

Certified by:
Steve Smith
President, Project Management Services, Inc.

Awarded to:
OSD Outstanding Design-Build Team 2010

The design-build team’s performance, innovative approach, and superior execution in delivering the new Embassy Compound (EMC) in Port-au-Prince, Haiti, results in sustainable design.

The team’s expertise in integrating the project’s site and building envelope results in a green building model for future EMC projects.

Signed:
[Signature]
November 2010

[Stamp: Project Management Services, Inc.]
May 15, 2001

Mr. Horace Bellini

YK & Chapman & Dewey
1500 Connecticut Avenue NW, Suite 1200
Washington, DC 20005

Dear Mr. Bellini:

On behalf of the Department of State, I would like to express our appreciation for the truly outstanding design and the successful implementation of the newly renovated Delegates Lounge in the Harry S Truman Building. The completed project has transformed an aged and unattractive setting into a highly functional and distinctively elegant facility, that reflects the dignity of the Department of State.

As a result of your personal efforts, as well as your entire team’s design sensibility, expertise, and attention to detail, the finished project has been applauded by the Secretary of State, senior management officials, diplomats, and employees, as a restored asset that will assist the Department in carrying out its important mission.

Congratulations on a job well done.

Sincerely,

Vincent J. Cassetti
Deputy Assistant Secretary
For Operations
United States
Department of State

Certificate of Appreciation
awarded to
Karn Charutas Chapman & Twohey

In appreciation for extraordinary service to the United States Department of State in the successful completion and occupancy of the Columbia Plaza Building Alterations and Cafeteria.

Karn Charutas Chapman & Twohey's design expertise and timely support in completing these important renovation projects on schedule, within budget, and in a quality manner was a valued asset in meeting Department of State goals.

November 2000

[Signature]

Director, Facilities
Office of Administration
February 4, 2002

Mr. Anthony C. Diaz
General Services Administration
National Capital Authority
715 12th Street, SW, 5th Floor
Washington, DC 20407

Dear Tony:

It is my understanding that the GSA selected the architectural firm of Cesar Pelli and

designed by ECI/LTM as the preferred one for the renovation of the National Building Museum.

For over ten years, ECI/LTM has been actively involved in a variety of projects at the Museum. Our

expertise in the design of both modern and historic buildings, our extensive knowledge of historic building issues, and our

positive relationship with the GSA, NMAH and the public, have all contributed to the successful completion of the National

Building Museum renovation.

Some examples of ECI/LTM's work at the Museum include:

- In 1998, ECI/LTM designed the new visitor entry project and work for the exterior of the

  Museum. The work included new brick walls, doors, and a new awning.
- In 1999, ECI/LTM designed and constructed the installation of a climate control system for the 20 galleries.
- The design featured a state-of-the-art climate control system that ensures stable conditions for the collection.
- The design also includes a state-of-the-art climate control system for the 20 galleries.
- Engineering. The new facility was completed in 2000.
- In 2001, additional work was completed to meet the Museum's new requirements.
- Scheduled for completion in September 2001, the new facility will be fully operational by that time.

From a client perspective, ECI/LTM provides a comprehensive and professional service. Our

knowledge of the design and engineering aspects of historic buildings is extensive, and we would recommend that they be

selected to perform work here at the Museum. If you have any questions, please feel free to contact me.

[Signature]

Stacy Beaton, GSA

President

[Address]
Mr. T. J. Keen
Keen, Flannery, Napier & Bosley
820 16th St. N.W., Suite 113
Washington, D.C. 20006

Dear Mr. Keen:

With the contractually fixed close to time passed, I wish to take this opportunity to express our thanks to you, the contractor, and to your good company for the efficient manner in which you carried out the entire project. You no doubt faced many problems both before and during construction, and we are grateful that you were able to handle them so well.

I agree with your analysis that the old building could not possibly be stabilized as especially during the winter months, we had been warned by a number of experts that the building was in such a condition that the addition of new structures might only increase its propensity for collapse. I appreciate the cooperation you have extended to us in this regard.

For the same reason, I am sure that any new construction would have been extremely expensive and would probably have to be undertaken at a later date. The decision to go ahead with the construction of the new buildings, although involving a substantial outlay of money, was made with the approval of the higher authorities. The new buildings will not only increase the beauty of the surroundings but also the prestige of the town.

I would like to acknowledge the services of your company in this project and to assure you of our continued confidence in your work. We are looking forward to receiving the report of the finished buildings in the near future.

Sincerely yours,

[Signature]
Robert S. Kendall
President and Director

[Stamp]
General Services Administration
The Washington Chapter of The American Institute of Architects

In accordance with the Bylaws of its Bylaws, presents the

MERIT AWARD

Ariel Rios Federal Building Façade Completion

Washington, D.C.

Outstanding Achievement in Historic Resources

ARCHITECT
Kern Charlebois, Chapman & Yockey

OWNER
General Services Administration, National Capital Region

CONTRACTOR
Gensler Construction

November 11, 2009
OFFEROR'S APPROACH TO REQUIREMENTS

Introduction

KCCCT and its Design Team specialize in the renovation and additions to monumental public buildings, security and historic preservation. Our Team has completed over 26 security projects in prominent Washington DC public buildings, and worked on security projects in over 100 countries for the Department of State. We have recently completed the modernization of the Department of State, Old State Building, including a 350 seat auditorium, a Conference Center, and blueprints for the entire building. We have also completed a comprehensive master plan approved by NCPC and the Commission of Fine Arts for the Department of State Precedent Security Plan, including five Security Entrance Pavilions, and are currently implementing final design for this plan. Three projects are particularly relevant to the requirements for Federal Reserve Visitor Center and Pavilion Option.

We believe that our experience makes our Design Team appreciate the need for the Federal Reserve to establish a New Visitor Center and Pavilion Option that will address the following requirements:

- Provide an efficient entrance to the Federal Reserve
- Provide building and screening areas appropriate to the new security measures mandated by current laws
- Accommodate the public, who may enter to pick up requested public documents and leave without passing through security screening
- Accommodate package drop-off and pick-up areas
- Establish an exhibition area
- Provide an Option for West Pavilion with fixed seating or as a multi-purpose space, and an East Pavilion mostly unfinished in the interior

We will endeavor to maintain the architectural character and unity of the existing building while providing state-of-the-art technology for the mechanical, electrical, security, and information technology systems required for the Center and Pavilion Option. Architectural Concept Sketches have been included as part of Project Parameters where we discuss design issues in detail.

Scope of Services (Section C.2)

Project Administration (Section C.2.1)

KCCCT will perform the following services:

- Manage, as prime, A/E services for entire Design Team
- Consult with the Board, research applicable criteria, attend project meetings, and issue progress reports as required by the COTR
- Prepare a project schedule identifying milestones for design, Board reviews, commencement of construction and substantial completion. A preliminary schedule has been included as part of this volume, in Section B, Part 3.
- Consider alternatives for materials, building systems and equipment
- Submit presentations to the Board to explain the design
- Submit preliminary design documents for evaluation and approval by the Board
- Assist the Board with filing documents necessary to obtain approvals or permits
- Design in compliance with NCPC and CPA requirements, and obtain their approval
Construction Cost Estimate (Section C.2.2)
We will prepare the following construction cost estimates in accordance with the directions of the Construction Specification Institute (CSI):
- A preliminary estimate at the completion of Schematic Design
- Update preliminary estimate at completion of Design Development (DD)
- Update estimate at completion of 50% CD
- Update estimate at completion of 90% CD
- Final estimate at completion of construction documents (100% CD)
- Estimates will include contingencies for design, bidding and escalation
- Estimates may include alternate bids, as may be necessary to adjust the cost estimate to meet the Board’s budget
- A/E will, at no additional cost to the Board, cooperate with the Board to realign or resequence the project if it exceeds the A/E’s cost estimate, or reduce the scope as necessary to meet the budget

Evaluation and Planning Services (Section C.2.3)
We will conduct a preliminary evaluation of the following to determine if they are consistent with the project requirements:
- Project Objectives
- Project Budget
- Schedule Requirements
- Project Site

Blast Protection Study
Subsequent to the confirmation of project requirements above, we will conduct a blast protection analysis as the basis for the structural design.

Design Services (Section C.3.4)
Design Services will include Schematic Design, Design Development (DD) and Construction Documents (CD). DD documents will be submitted for review and approval of the board at the 35%, 50% and 100% completion. CD documents will be submitted for review and approval of the Board at the 30%, 60% and 100% completion. The submittals will include the project specifications and will be in both paper and electronic format. The Design Services will include the following:
- Engineering and other consultant services needed to complete the scope of work including structural, mechanical, electrical, and security with architectural, landscape, civil, chemical, mechanical, electrical, and security and landscape consultants
- Our Design Team will perform the required surveys and investigations of existing conditions in order to ensure that the construction documents will be inclusive of existing conditions
- We will provide models, sketches and electronic modeling
- We will respond to in-service, and by drawing when required, to formal and informal questions from the Board, and modify design documents to reflect these questions at no additional cost to the Board
- Construction documents will take into consideration the need to include planning as part of the project in order to assure minimal interference with the Board’s operations during construction
- Our Team will assist the Board in identifying prospective bidders for the construction work, provide copies of documents for distribution to bidders, participate in pre-proposal conferences and issue amendments to the GC solicitation documents if necessary
Optional Services: Construction Contract Administration (Section C.2.5)

We will provide administration services to the support the contract between the Board and the GC, including the following:

- We will provide clarifications to RFIs submitted by the Board or the GC and issue modifications to the construction documents such as supplemental drawings, as required, at no additional charge to the Board.
- If requested, we will assist the COTR in claims and disputes on matters between the Board and the GC.
- We will visit the site at appropriate intervals to ensure that the project is being constructed according to the construction documents, and we will keep the COTR informed of the progress and quality of the work completed.
- We will inform the COTR of any known deviations from the CDs, and we will inform the COTR of any work performed by the GC that was not in conformity with the CDs.
- We will review the COTR's invoices, and verify that the amounts billed correspond to the work completed.
- We will review and approve Shop Drawings and Product Samples and ensure that they are in conformance with the CDs, and maintain a submittal log and copies of the GC's submittals.
- We will review requests from the COTR and the GC for changes in any of the work related to the design or construction of the project.
- We will assist the COTR in the preparation of change orders and distribute the necessary documents to describe the required work.
- We will assist the COTR in the examination of the GC's work to determine conformance with the CDs and develop a punch list of items to be completed by the GC.

Optional Services: Design of Pavilion/Conference Center (Sections C.2.6 - C.2.6.9)

As an option, we will design and construct the pavilion to the public level of the Martin Building. The West Pavilion consists of a conference center with full access to the outdoor plaza and multi-purpose option. The East Pavilion will contain a restaurant area in support of the conference center and an extension of the building which will remain unfinished. The price for the option will be divided into a conceptual design (10% complete), and a full design. The following will be included:

- The West Pavilion will include a state-of-the-art audio visual and sound system, appropriate for lecture, stage, theater, and individual events. The facility should be suitable for use as a recording studio.
- Conference/Meeting/Boardroom Rooms will utilize movable partitions whenever possible to ensure flexibility.
- The side-conference room will be accessible to the outdoor plaza and shall be soundproofed and acoustically treated and soundproofed and acoustically treated for an optimal environment.
- The pavilion will support large, above-ground, and underground, and reception, but food preparation will remain in the kitchen located in the Terrence level of the Martin Building.
- Appropriate storage will be provided in the conference center.
- Conference/meeting/security
- Conference/meeting/security
- Restrooms will be expanded and renovated to serve the increased population.
Project Parameters (Section C.3)

We have developed a preliminary architectural concept for the Visitor Center and Pavilions Option that addresses all of the project’s objectives. It is illustrated in six sketches numbered A0—A5. We have given careful consideration to the architectural composition to ensure that the new structure is integrated with the site, and in harmony with the composition and character of the existing buildings, particularly the Martin Building. We have endeavored to produce a concept that would sufficiently resolve all of the critical functional requirements of the project, and one in which the initial design of the Visitor Center would not preclude the implementation of the Pavilions Option if the Federal Reserve decided to build them later. In fact, all of the requirements for horizontal and vertical circulation for visitors and employees have been resolved and the Option could be implemented with minimal disruption to an initial Visitor Center structure. The following is a description of our concept:

Entrance Requirements (Section C.3.1) - Sketch A0

- The proposed Visitor Center is located on the south facade of the Martin Building. It is centered on the existing main entrance and in axis with the entrance to the Ficus Building across C Street.
- It is a secure structure housing all of the required visitor screening functions.
- Access is provided at a single main entrance appropriate to the Board’s function and mission.

Visitors’ Requirements and Circulation (Section C.3.2) - Sketches A1 and A4

- Visitors enter the Center through a single main entrance, as required, then proceed through a separate corridor to the information/publication desk and the pre-screening holding area, with capacity for at least 60 visitors.
- A limited number of lockers, for travel luggage, are located in the post-screening visitor area. These two-way lockers will be accessible to visitors, for collecting their luggage, as they exit the building after going back into either of the holding areas.
- After passing through the screening area, visitors will proceed to the secure waiting area until their events arrive and then move through entry control gates.
- Visitors will proceed to escalators and elevator located on the east side up to the Podium or down to the Concourse.
- At Concourse level, they will arrive at an ample lobby, an extension of the existing elevator lobby, and from there proceed to the Ficus Building through the tunnel.
- Visitors will exit through escalators on the west side down from the Podium and up from the Concourse. They will pass through exit control gates and proceed along a perimeter corridor to the entrance.

Employees’ Requirements and Circulation (Section C.3.3) - Sketches A5/A4

- Employees enter the Center through a single main entrance, as required, then proceed through a separate entrance from the visitors.
- Employees will use their badges in order to pass through two secure revolving doors per Board standards.
- Employees will proceed to escalators and elevator located on the east side up to the Podium or down to the Concourse.
- At Concourse level, they will arrive at an ample lobby, an extension of the existing elevator lobby, and from there proceed to the Ficus Building through the tunnel.
- Employees will exit through escalators on the east side down from the Podium and up from the Concourse. They will pass through exit control gates and proceed along a perimeter corridor to the entrance.
Building Design Requirements (Section C.3.6)

- The Visitor Center Mechanical Systems will include the following:
  - The proposed Visitor Center shall be divided into three air pressure zones as shown in Attachment M-1.
  - Confidential - security

  - Confidential - security

  - Confidential - security

  - Confidential - security

  - Confidential - security

- A redundant chilled water air handling unit shall provide back-up the primary unit described above. Unit shall be identical to unit as described above.
- New air handling units (see Attachment M-2) shall be located in mechanical room as shown in Attachment M-3.
  - Confidential - security
  - Confidential - security
  - Confidential - security
  - Confidential - security
  - Confidential - security

- Air distribution shall be rectangular sheet metal in accordance with SMACNA standards.
Federal Reserve System, New Visitor Center
Volume II, Part A, Management Plan, Officer's Approach to Requirements

- East Pavilion Mechanical Systems will include the following:
  - East Pavilion Conference Rooms
    - The typical space and skin loads shall be addressed by the chilled water air handling unit that serves the West Pavilion Conference Rooms. Terminal boxes shall be same as described for West Pavilion Conference Rooms.
  - East Pavilion Multi-Purpose Room
    - confidential - security

- Air Handling Units
  - confidential - security

- Chiller Units:
  - The existing Data Center, the conference center AHUs and the Visitor Center AHUs shall be supported by 104 tons of additional chiller capacity.
  - New chillers shall be an air-cooled screw compressor unit (McCarty AGZ-505B) with nominal 50-ton capacity each.

- Miscellaneous:
  - Existing return air fans RA-1 (30HP) and RA-1 (60HP) are located in the existing penhouse and shall be retro-fit with variable frequency drives and high-efficiency motors.

Electrical Load Criteria

The overall Visitor Center (initial phase) contains approximately 9000 SF of floor space. The estimated electrical demand calculated per NEC is around 225 Kva. With including approximately 10% open capacity for future growth, a 400kW, 480/277V, 3-phase, 4-wire service distribution switchboard will be required.

The overall Visitor Center with conference options contains approximately 30,000 SF of floor space. The estimated electrical demand calculated per NEC is around 500 Kva. With including
approximately 10% spare capacity for future growth, a 1000 amp, 480/277V, 3-phase, 4-wire service distribution switchboard will be required.

The mechanical upgrading option will require additional 1200 amps, 480/277V, 3-phase, 4-wire service motor control center (MCC).

Electrical Service to the spaces

The electrical power serving area of work under initial plans would be provided from a switchboard installed in existing space (one breaker for each floor). If there is no space exists in switchgear, tapping from existing bus would be used. The feeder tap would be terminated in a fused ROMO molded case circuit breaker power.

Preliminary, we anticipate the new electrical feeds to areas of work consist of multiple sets of 500 KVar installed in multiple sets of 4-inch conduits.

Electrical Distribution System

The feeders would be terminated in a 1200 amp, 480/277 volt, 3-phase, 4-wire switchboard with an amperes interrupting capacity (AIC) estimated rating of 600000 located in the electrical room. The switchboard will consist of several sections to house a center-connected metering, a Terminal Voltage Regulator Suppressor (TVSS), a main circuit breakers and a distribution section. All main and branch circuit breakers shall be molded case type. Main circuit breaker shall be 100% full duty rated, electrically operated and furnished with integral ground fault protection to coordinate with main service ground fault.

The switchboard’s distribution sections will consist of distribution branch circuit breakers sized to provide power to the following loads; (refer to Power Factor Diagram)

Secondary distribution voltages will be provided throughout the building as follows:

a. 480 V, 3-phase, 4-wire, grounded for motor control centers, power panelboards, motors rated 500 or more horsepower and larger, and other heavy loads greater than 3360 watts (W).

b. 277 V, single-phase, 2-wire, grounded for fluorescent and high intensity discharge lighting.

c. 120/240 V, single-phase, two-wire, grounded for receptacles, transformers and low voltage lighting, motors 30 horsepower and smaller; and other small appliance loads.

Step-down transformer will be provided to step down voltages from 6900V to 208V/120V. Transformers will be dry type epoxy-resin insulated transformer. Transformers will be placed in separate transformers fed by the electronic load shall be K-15 rated insulated type. All transformers will be floor mounted in the electrical equipment room. Transformers will be sized for the estimated demand load plus 25% spare capacity.

Panelboards will be provided to supply power to lighting fixtures, receptacles, and miscellaneous loads. Panelboards will be fully rated for the available short circuit current. These panelboards will not be used. Panelboards will be fully rated to accommodate future circuit breakers. Panelboards serving electronic load will be equipped with TVSS. Panelboards will be provided with main circuit breakers (when served from transformers) and space for forty-two single pole breakers. Panelboards will be provided with 25% spare bus capacity with 10% for spare breakers and 15%
for future breakers. Panelboards serving high harmonic loads will have 200% rated neutrals and isolated ground bus in addition to the normal equipment ground bus. Panelboards will be dead front with bolt-on circuit breakers and rated as follows:

1. Power panelboards:
   - Lighting panelboards:
   - Standard Receptacle panelboards:
   - Panelboards for harmonic loads:

Interior Electrical Installations And Branch Circuit Wiring:

Pedestal Level Estimator (Section C.3.7)

- Confidential - security
REFERENCES

KCCIT has worked continuously for GSA and the Department of State for over 15 years, and for the FBI for the past five years. The following pages include a concise summary of eight significant current projects that our Project Teams are doing for these three government agencies. These projects have been selected for their relevance to the requirements of this contract. KCCIT was Prime and managed all eight projects. The majority of our key consultants have worked on all of these projects.

The projects include the Department of State Personnel Security Upgrade; the Modernization of the Department of State, “Old State” Building; the Concept Design for the Department of State National Visitor Center and Museum of American Diplomacy; the Interior Compound Renovation, U.S. Consulate, Sao Paulo, Brazil, New Embassy Compound, U.S. Embassy, Port-au-Prince, Haiti, New Embassy Compound, U.S. Embassy, Astana, Kazakhstan; the FBI User Renovation Study, J. Edgar Hoover Building, Washington, DC; and the U.S. Embassy Compound, Lusaka, Zambia.
The Department of State Security Improvement Plan is the culmination of ongoing design efforts and studies to improve security at the lowery 3 renovation Building. The building is located in the Northwest quadrant of Washington, D.C., and occupies nearly 11,500 square feet. The plan’s objectives are to secure the building, protect employees and visitors, and improve the aesthetic by creating a more attractive environment for pedestrians and neighbors. Work includes:

- Security updates at each of the five building entrances
- Additional steps and protective fence increased building perimeter
- The truck inspection area redesigned
- Access control updated
- Ramp from L Street reconfigured and traffic will be limited to U.S. traffic at L Street
- C Street medians and to restricted traffic to
- New guard booths
- Parking/Engineering Study
- Conceptual Design
- Programming/Space Planning
- Construction Documents
- Construction Phase Support
- Perimeter Security Design
- Building Automation
- Visitor Center Incorporation
- LEED Consideration

Cost: $5,000,000

Client Reference: Matt Rutherford, DOJ, 202-447-1435
The Department of State Visitor Center and Museum of American Diplomacy is planned to be a new and exciting addition to the current attractions and educational center in Washington, D.C. KCCI is developing the new 20,000 sf museum at the Department of State, with possibilities for multiple expansions, as a place of learning and inspiration, dedicated to exploring the work and mission of the Department of State, and the history, policies, and international challenges of American diplomacy. The museum will feature a central exhibit to the Visitor Center, state-of-the-art interactive exhibits, and a theater. The practice of diplomacy will be described in the stories of how, why, and where diplomacy takes place and the ways in which diplomacy influences our lives.

- Planning/Engineering Studies
- Conceptual Design
- Programming/Space Planning
- Construction Documents
- Construction Phase Support
- Parametric Security Design
- Real Estate
- Visitor Center Incorporation
- LEED Consideration

Cost: $6,000,000

Client Reference
Matt Budaevsky, DOI, 303-647-7413

Client Reference
Dave Lack, APC, Program Manager
Cell: 429-903-5000
New Embassy Compound, United States Embassy, New Delhi, India

Under a contract with the Embassy Contractor ICIC, the design-build project is being carried out in two phases. The first phase involves the design and construction of the new embassy compound, which will be completed in 2012. The second phase involves the design and construction of additional facilities, including a new mission compound, which will be completed in 2013.

The project is being managed by the ICIC, and the design team is led by a team of architects and engineers. The project is expected to cost $1.5 billion.

Client Reference

Client Reference

[Contact Information]
The new Visitor Services facility is located in the rear of the F.B.I. headquarters building. It is designed according to the most recent criteria for construction and detail and is constructed of a combination of materials that provide structural support and high-quality finishes. The building provides a welcoming and efficient environment for visitors, with accessible facilities and visitor services. The design incorporates sustainable practices and materials, and the building is LEED certified. The construction and design of the new facility were managed by a team of experts, including architects, engineers, and construction professionals. The completed project has received positive feedback from visitors and staff alike.
CORPORATE QUALIFICATIONS

Kari Chariton Chapman & Twomley (KCCT) is a full service architecture, planning and interior design firm located in Washington, DC. Formed in 1983, the firm is dedicated to providing clients with the highest quality professional services through innovative designs, accurate construction documents, and thorough construction administration, completed on time and within budget.

KCCT provides complete professional design services including:

- Architectural design and contract documents
- Historic preservation
- Project management
- Master planning and urban design
- Programming
- Interior design and space planning
- Security planning and design
- Building surveys and diagnostic investigations
- Facility management
- Value engineering
- Construction administration

With professional organizations in the United States and overseas, KCCT has completed over 250 projects in the United States and has been a major participant in projects in more than forty countries. In addition, KCCT has staffed project design offices in eighteen countries including the United Kingdom, Iraq, South Korea, Israel, Thailand, Philippines, Taiwan, and Malaysia. Since its founding in 1983, KCCT has designed more than three billion dollars of construction. The firm has received over twenty-five professional awards for design excellence.

KCCT is structured to provide the competitive service of a small firm while offering the full-service design expertise typical of larger projects. The staff consists primarily of registered architects and interior designers serving as design managers, specification writers, and construction administration supervised by designers and CADD specialists. Staff members have an average of sixteen years professional experience. The principals of the firm actively participate in each project. Our personal approach to achieving excellence in design has proven successful on the many complex and challenging projects in which we have been involved.

To complement the expertise of our staff, KCCT continually develops professional working relationships with nationally and internationally recognized specialty consultants. We strive to ensure the most experienced and appropriate design team for each specific project.

KCCT emphasizes a balance of government, private, and international clients. We promote long-term relationships with established clients in the design, historic preservation, security planning, construction and renovation of buildings and urban infrastructure. KCCT is dedicated to quality building design, carefully managed to meet the specific goals of each individual client.
IMPLEMENTATION PLAN

The process used by KCCT in the implementation of a renovation, historic restoration and expansion project follows recommended AIA practices. Additionally, as the majority of our work is performed under government contracts, we have tailored our contract management, office procedures, and staff to effectively and efficiently respond to client requests.

The Project Manager and the Project Architect are points of responsibility for design and management to assure the successful delivery of the project on time and within budget. As the owner of the project, they establish guidelines for clear and regular communications between team members, plan regular coordination meetings, and establish staffing standards and document formats for the Project Team. In a typical rehabilitation project, we are likely to have the following tasks:

Project Schedule, Staffing and Kick-off Meeting

Within a week of receiving the Notice to Proceed (NTP), the Project Team finalizes the staffing requirements for the project and KCCT produces an updated detailed project schedule for the Federal Reserve's review. The schedule shall reflect the modifications developed with the Federal Reserve and include: a) the duration of each phase of the project; b) submission dates of documents by consultants to KCCT for review and coordination, prior to submittal to client; c) submission dates to the client, and periods of client review. The schedule shall include reviews by other groups or agencies such as NCPD and the Commission of Fine Arts. The schedule shall also include the anticipated dates for informal coordination, as well as the dates for official submission and presentation.

Once the schedule is established, a kick-off meeting with the Federal Reserve is held to introduce all key staff and establish communications, protocols and administrative procedures between the Federal Reserve and the Project Team.

Existing Conditions Survey and Drawings

Existing Conditions Survey

We consider verification of existing conditions to be essential in developing accurate construction documents. The Project Team shall review existing drawings and reports and, upon completion of the review, perform an existing conditions survey.

Existing Conditions Drawings

The Project Team shall produce drawings to reflect the existing conditions recorded during the existing conditions survey.

Programming

Initial Orientation Meeting Survey

Members of the Project Team, consisting of the project manager, the project architect and an experienced programmer shall meet with representatives of the Federal Reserve to review the programming process.

Programming Process

Perceived, functional requirements and space requirements are defined in this task. KCCT has developed special questionnaires and computer programs to analyze personnel and space requirements and establish projections. Program interviews shall be performed by an experienced programmer and the project architect, and a detailed program shall be developed. In this task, we also identify possible planning. Planning is a critical aspect of this project and requires careful consideration to maintain operations and avoid unnecessary disturbance to occupants and visitors.
Draft Program Submission and Review Meetings

Based upon data gathered during program interviews, and subsequent consultation and analysis, a complete and detailed program shall be presented to the client for review. Subsequently, the programming team shall meet with the Federal Reserve to discuss their comments and resolve any programming issues. Following this meeting the comments from the meeting shall be incorporated in the final program shall be submitted.

Blast Study and Report

Evaluation of Building Systems

The project team shall conduct an evaluation of various building systems including mechanical, electrical, fire protection, fire safety, to ensure adequate capacities for the new work. This type of evaluation is initiated and coordinated during the programming or concept design phase. A report shall be issued for the Federal Reserve’s review. The Federal Reserve’s concerns shall be discussed and incorporated into a final report.

Schematic Design, Code Analysis, Agency Review and Schematic Cost Estimates

Based upon the approved program, the team shall develop the Schematic Design with the participation of the Federal Reserve. We prefer to have active client participation in discussions that explore creative solutions. The Schematic Design shall be informally presented to the NOC and CPA for review. Their comments shall be incorporated into the design and then presented for formal approval. With this approval the project moves into the Design Development Phase. During the Schematic Design process a complete code analysis shall be developed, which is used throughout the remainder of the design process. Based upon the approved Schematic Design a Schematic Cost Estimate is developed.

Space Planning

Space Plan

Based upon the approved program and concept the project team shall review with the Federal Reserve space standards for various types of spaces, such as offices and conference rooms, which reflect program requirements. Following this review the project team shall develop typical layouts that take into account the structural module, infrastructure needs, and fenestration of the building. Generic furniture shall be shown to ensure proper fit and adequate circulation. Preliminary coordination shall also be initiated with engineering disciplines. The initial space plans shall be submitted to the client for review. Comments by the client shall be discussed and incorporated into the final space plan.

Design Development

Design Development Phase (DDP)

The Design Development Phase shall have three submittals, 55, 90 and 100 percent. The Project Team shall define the general appearance of the project delimiting the envelope of the building, including the exterior materials, fenestration and roofing, as well as, the precise location of walls, doors and other major elements including reflectors ceiling plans, interior elevations, one line duct diagrams, electrical floor plans, panel boards, including mechanical and electrical utility load charts. A quality control review shall be made prior to submitting these drawings to the client for review and approval.
Architectural Finishes
The Project Team shall select architectural materials and colors and prepare finish schedules and finish boards for review and approval by the Federal Reserve.

Specifications
The Project Team shall develop specifications at each submission for the required sections of the project and shall provide cut sheets for recommended items including architectural, structural, electrical and plumbing equipment. The Project Team shall also provide calculations to support engineering design.

Cost Estimates
Construction Cost Estimates shall be submitted at each submission for review and approval by the Federal Reserve. Each estimate shall include assumptions, design contingencies and escalation.

Review Meetings and Comments
Upon review of the documents by the Federal Reserve, the Project Team shall attend a review meeting with the Federal Reserve to discuss the project, answer questions, and respond to suggestions. Following this meeting, the Project Team shall respond in writing to comments and incorporate the necessary changes into the next phase of documents.

Construction Documents
Construction Document Phase
Based upon the approved Design Development documents, the Project Team shall develop the final Construction Documents. This phase shall have three submittals: 90, 90 and 180 percent. At the completion of each submission, the documents shall be submitted for review and approval by the Federal Reserve. Each submission shall contain the appropriate level of detail and information to define the components of the project and shall consist of drawings, specifications, and calculations.

Cost Estimates
A fixed cost estimate shall be prepared for the 100% submission and delivered within two weeks of the completion of each submission.

Review Meetings and Comments
Upon review of documents by the Federal Reserve for each submission, the Project Team shall attend a review meeting with the client and discuss the project, and answer questions. Following each meeting, the Project Team shall respond in writing to comments, and make the necessary changes to the documents prior to the next submission.

Final Construction Document Deliverables
Project Team shall provide construction document packages to the Federal Reserve for distribution to the prospective general contractor for bidding.

Assistance During Bidding
The Project Team shall assist the Federal Reserve during the bidding process responding to Requests for Information (RFI's), reviewing contractor's qualifications, etc.

(Optional Services) Construction Contract Administration Services (CCA)

Shop Drawing Review
The Project Team shall review shop drawings and attend regular progress meetings with the contractor.

Contract Support
At the request of the Federal Reserve, the Project Team shall assist in helping make decisions and claims, disputes or other matters in question between the Board and the general contractor.
Site Visits
The Project Team shall visit the construction site at intervals appropriate to the stage of the GC's work, or as otherwise agreed to by the COTR and the project team. These intervals shall be frequent enough so that the Project Team can keep the COTR informed of the progress and quality of the work completed, help prevent the spread of defects and deterioration in the work, and determine if the GC is performing the work in accordance with the CDs.

Construction Administration
• The Project Team shall inform the COTR of any known deviations from the CD's and from the most recent construction schedule submitted by the GC. If necessary the Project Team may recommend to the COTR to reject any work performed by the GC that does not conform to the CD's.
• The Project Team shall review the GC’s invoices for the COTR’s approval and verify that the amounts billed correspond to the work completed.
• The Project Team shall review and approve or take other appropriate action on the GC’s submittals such as Shop Drawings and Product Data Sheets, to ensure that they conform to the CD’s. This review shall be kept within a fifteen calendar day period. A record of the submittals shall be logged and copies of all the GC’s submittals shall be kept on file.
• The Project Team shall review requests from the COTR and the GC for changes to any of the work related to the design or construction of the project. If required assist the COTR in preparing change orders and construct change directives. If necessary, prepare, expedite and distribute drawings and specifications to describe the work to be added, deleted or modified.
• The project team and the COTR shall examine the GC’s work to determine compliance of the work with the requirements of the CD’s and to develop a punch list of items for the GC to complete or correct.

Operations and Training Manuals
The Project team shall verify that all operations and training manuals are provided.
FEDERAL RESERVE SYSTEM
20TH AND C STREETS, NW
WASHINGTON, DC

NEW VISITOR CENTER PROJECT
CONSTRUCTION BUDGET
COST ESTIMATE

For
Kael Charahat Chapman & Tweedie
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

By
Project Management Services, Inc.
PO Box 4313
Rockville, MD 20840-4313
301-340-0527

APRIL 28, 2006
FEDERAL RESERVE SYSTEM
20TH AND C STREETS, NW
WASHINGTON, DC

NEW VISITOR CENTER PROJECT
CONSTRUCTION BUDGET
COST ESTIMATE

APRIL 28, 2006

TABLE OF CONTENTS

• Introduction
• Summary
• New Visitor Center Estimate Detail
• Concours Level Renovations Estimate Detail
• West Pavilion (Fixed seating) Estimate Detail
• East Pavilion (Pantry & Shell) Estimate Detail
• Mechanical Systems Upgrade Estimate Detail
• West Pavilion (Multi-purpose space option) Estimate Detail
INTRODUCTION

The Federal Reserve System is planning a renovation to add a new visitor center and other

The estimated construction cost for the base contract is:

The estimated construction cost for the Alternate work (with an auditorium) is:

The work breakdown structure for the estimate is Uniformat – level 3. The prices in the detailed

Escalation is calculated to an assumed mid-point of construction in October, 2008 at an annual

The estimate is based on drawings and narrative information provided by KCCT.

The estimate is based on the following assumptions:

- All work will be completed at one time with no phasing.
- The work will be accomplished during normal working hours.
- Security clearances will not be required for workers.
The following items are not included in the estimate:

- District of Columbia building permit fees
- Design fees are not included
- Quality control costs are not included
- Construction management costs are not included
- There is no equipment or furnishings allowance included (other than fixed seats in auditorium option).

This estimate is based on the project being bid with at least four qualified contractors responding.

Project Management Services, Inc. has no control over the cost of labor, materials, equipment, market escalation or deflation, contractors' or subcontractors' methods of determining prices, competitive bidding or market conditions. Its opinions of probable construction cost contained herein are made on the basis of PMSI's qualifications and experience. These opinions represent its best judgments made on the basis of familiarity with the construction industry and experience as professional construction consultants. However, PMSI cannot and does not guarantee that bids, proposals, or construction cost will not vary from estimated costs.
### Federal Reserve System

**BASE CONTRACT - NEW VISITOR CENTER AND RENOVATIONS**

**AND OPTION ALTERNATES**

**ESTIMATE SUMMARY**

<table>
<thead>
<tr>
<th>VISITOR CENTER (BASE CONTRACT) Work-Scope</th>
<th>VISITOR CENTER AND PODIUM LEVEL RENOVATIONS</th>
<th>CONCOURSE LEVEL RENOVATIONS</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Cost Sub-Total from Estimate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Contractor Overhead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Contractor Profit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escalation (Assumed Mid-Point of October 2008)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Construction Cost Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEST PEAVILION (Fixed Seating Option) and East Pavilion</th>
<th></th>
<th>PUBLIC WORKS</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Cost Sub-Total from Estimate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Contractor Overhead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Contractor Profit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escalation (Assumed Mid-Point of October 2008)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Construction Cost Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEST PEAVILION (Multi-Purpose Space Option) and East Pavilion</th>
<th></th>
<th>PUBLIC WORKS</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Cost Sub-Total from Estimate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Contractor Overhead</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Contractor Profit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sub-Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escalation (Assumed Mid-Point of October 2008)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Construction Cost Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building System</td>
<td>Quantity</td>
<td>SF</td>
<td>Unit Cost</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------</td>
<td>-----</td>
<td>-----------</td>
</tr>
<tr>
<td>Foundations</td>
<td>10,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superstructure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade existing floor structure including reinforcing of existing and new columns as necessary</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Roof structure supporting power roof</td>
<td>3,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Exterior Closure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stone finish on visitor center concourse walls</td>
<td>34,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Stone finish on podium level concourse walls</td>
<td>5,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Renovations at North side of podium level (basement)</td>
<td>4,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Double glass entrance doors (confidential - security)</td>
<td>1,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Single exit doors (confidential - security)</td>
<td>2,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Interior Construction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Convey</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partitions &amp; doors including 5 minute barrier at screening area</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Finishes</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Specialties including signage and information desk</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Renovations in Existing Building</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partitions and libraries</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Finishes</td>
<td>5,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Specialties including signage and information desk</td>
<td>5,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Heating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof covering</td>
<td>3,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Conveying</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevator - 3 steps</td>
<td>1,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Escalators</td>
<td>1,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plumbing</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>HVAC (confidential - security)</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Chilled Water Filtration</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Fire Protection</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service &amp; Distribution</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Lighting Systems</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Power Branch Wiring</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Telecom/Control &amp; Their (confidential - security)</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Video System Conduits</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowance for utility relocations</td>
<td>500</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Demolish existing walls</td>
<td>7,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Demolish and remodel planters</td>
<td>10,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Demolish existing structure at podium level</td>
<td>11,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Demolish in existing building at podium level</td>
<td>4,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Green roof on visitor center</td>
<td>3,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Allowance for site work</td>
<td>1,000</td>
<td>SF</td>
<td></td>
</tr>
<tr>
<td>Direct Costs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total:**
### Concourse Level Renovations and Finishes Upgrade Estimate Detail

<table>
<thead>
<tr>
<th>Building System</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Superstructure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural alterations</td>
<td>5500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concourse level renovations</td>
<td>5500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finishes upgrade area</td>
<td>6000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conveying</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheelchair lift on existing stairs</td>
<td>1 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concourse level renovations</td>
<td>5500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finishes upgrade area</td>
<td>6000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Electrical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concourse level renovations</td>
<td>5500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finishes upgrade area</td>
<td>6000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment allowance</td>
<td>11500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sitework</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demolition for renovations area</td>
<td>5500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demolition of finishes</td>
<td>6000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Direct Cost Total</strong></td>
<td></td>
<td></td>
<td></td>
<td>5500 SF</td>
</tr>
<tr>
<td>Building System</td>
<td>Quantity</td>
<td>UM</td>
<td>Unit Cost</td>
<td>Total</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>----------</td>
<td>-----</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td>Superstructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade existing floor structure</td>
<td>3000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowance for shear walls in lower levels</td>
<td>7500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof structure supporting green roof</td>
<td>2500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sloped auditorium floor</td>
<td>2500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stage</td>
<td>600 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doors</td>
<td>12400 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior Closure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stone veneer on concrete walls</td>
<td>7500 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New exterior steel for door</td>
<td>300 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single exit doors</td>
<td>1 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plaques</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finishes</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialties</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roofing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof covering</td>
<td>5000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conveying</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevator</td>
<td>1 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevator 2 steps</td>
<td>2 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plumbing</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Protection</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service &amp; Distribution</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting System</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Branch Circuits</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Special Electrical</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed auditorium seating</td>
<td>1000 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auditorium AV system</td>
<td>1 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference room AV systems</td>
<td>1 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telecom for teleconference room</td>
<td>1 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sitework</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convert existing office space</td>
<td>10000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reconfigure plasters and vents as required for new exits</td>
<td>5 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New ADA ramp including seating</td>
<td>180 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green roof</td>
<td>5000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Cost Total</td>
<td>25000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## FEDERAL RESERVE SYSTEM
### EAST PAVILION - PANTRY AND SHELL FOR FUTURE SPACE
#### ESTIMATE DETAIL

<table>
<thead>
<tr>
<th>Building System</th>
<th>Quantity</th>
<th>U/M</th>
<th>Unit Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Superstructure</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upgrade existing floor structure including reworking of existing and new columns as necessary</td>
<td>14000 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>confidential - security</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allowance for shear walls in lower levels</td>
<td>6336 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>confidential - security</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>confidential - security</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof structure over multipurpose room supporting green roof</td>
<td>5700 SF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>confidential - security</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| **Exterior Closure** |          |     |           |       |
| Glass storefront | 1271 SF |      |           |       |
| Steel panel on concrete walls | 6350 SF |      |           |       |
| **confidential - security** |          |     |           |       |
| **confidential - security** |          |     |           |       |
| Double glass entrance doors | 2 PR |      |           |       |
| Double steel entrance doors | 4 PR |      |           |       |
| Single exit door | 1 EA |      |           |       |

| **Interior Construction** |          |     |           |       |
| partitions | 18600 SF |      |           |       |
| Shell space finishes (perimeter walls & columns only - drywall painted) | 16800 SF |      |           |       |
| Catering kitchen finishes | 2000 SF |      |           |       |
| Cabinets & counters | 600 LF |      |           |       |

| **Mechanical** |          |     |           |       |
| Roof covering | 3700 SF |      |           |       |

| **Plumbing-Rough-in Two Toilet Rooms** |          |     |           |       |
| Plumbing pantry | 5500 SP |      |           |       |
| HVAC-shell | 18800 SP |      |           |       |
| Fire Protection-shell | 18800 SP |      |           |       |

| **Electrical** |          |     |           |       |
| Service & Distribution-shell | 18800 SF |      |           |       |
| Lighting System - shell | 18800 SF |      |           |       |
| Power Branch Wiring - shell | 18800 SF |      |           |       |
| Other Special Electrical | 18800 SF |      |           |       |

| **Equipment** |          |     |           |       |
| Equipment in pantry including hook-ups | 2002 SP |      |           |       |

| **Sitework** |          |     |           |       |
| Elevator podium office space | 8800 SP |      |           |       |
| Demo existing exterior stairs & landing at East end of building | 1 LS |      |           |       |
| Demo planters at East end of building | 1 LS |      |           |       |
| Record room planters and vents as required for new walls | 2 EA |      |           |       |
| New stair and entrance stairs & landings at multipurpose room | 3500 SF |      |           |       |
| Green roof | 5700 SF |      |           |       |

| **Direct Cost Total** | 188000 SF |     |           |       |
PROJECT SCHEDULE

Project Schedule Summary

The Project Team shall prepare a project schedule that identifies milestones for design services, Board Review periods, completion of documentation, commencement of construction and substantial completion of the work. The Project Team’s schedule should reflect the desired dates as follows:

- Comp Schematic Docs: NLT August 31, 2006
- Comp Design Dev. Docs: NLT January 9, 2007
- Comp Construction Docs: NLT July 12, 2007
SECTION E

INSPECTION AND ACCEPTANCE

E.1 INSPECTION AND ACCEPTANCE

The COTR will inspect and accept the goods and services at intervals that he/she specifies.

E.2 REDELIVERY OF WORK

If any of the services delivered by the Contractor under this Contract do not conform with the descriptions contained in Section C, the Statement of Work, the Contracting Officer may direct the Contractor to deliver the services again, in conformity with Section C, and the Contractor shall not invoice the Board for such rework. When defects in services cannot be corrected by re-delivery, as determined by the COTR, the Contracting Officer may require the Contractor to (1) take actions to assure the Board that future deliveries will conform to contract requirements, and (2) reduce the future amounts invoiced by the Contractor to reflect the reduced value of the nonconforming services.

If the Contractor again fails to deliver conforming services after attempting to re-deliver, or to take the actions necessary to ensure future conformance with contract requirements, the Board may (1) by contract or otherwise, engage a third party to perform and deliver the services in place of the Contractor and charge to the Contractor any charges incurred by the Board that are directly related to this third-party performance, or (2) terminate this Contract for default in accordance with the General Contract Provisions.

Notwithstanding any of the foregoing provisions, at any time, the Contracting Officer may require the Contractor to remedy by correcting or replacing the Contractor’s personnel, without cost to the Board, any failure by the Contractor to comply with the requirements of this Contract if failure is due to (1) fraud, lack of good faith, or willful misconduct on the part of any of the Contractor’s personnel, or (2) the conduct of one or more of Contractor’s personnel selected or retained by the Contractor after the Contractor’s management had grounds to believe that its personnel are unqualified or habitually careless.
SECTION F

CONTRACT DELIVERABLES

F.1. DELIVERABLES

The Contractor shall submit the deliverables listed below in both electronic and print format.

- Project schedule
- Schematic (preliminary) design documents
- Construction cost estimate
  - Preliminary
  - Updated with 35% DD
  - Updated with 50% DD
  - Final
- Design Development Documents
  - 35% completion
  - 50% completion
  - 100% completion
- Construction Documents
  - 50% completion
  - 90% completion
  - 100% completion
  - 10 copies of completed documents

F.2 [RESERVED]

F.3 REPORTS

The Contractor shall submit reports, which may include draft and final reports in both electronic and print format.

F.4 INSURANCE CERTIFICATES

The Contractor shall provide the Board with insurance certificates for each policy required to be in effect throughout the performance period.

F.5 MANUALS – N/A
SECTION G

INQUIRIES

G.1 POINT OF CONTACT

The Board's contact person responsible for providing additional information and answering inquiries about this Solicitation is the Senior Contract Specialist, Kimberly Prince.

a. The Offeror shall submit all communications, such as requests for clarification and/or information concerning this Solicitation, in writing via electronic mail followed up by postal mail to the following address:

Federal Reserve Board
Procurement Section, Mail Stop 128
20th and C Streets, NW
Washington, DC 20551
Attention: Kimberly Prince
RE: Solicitation 250548

Telephone (202) 452-2527/Fax (202) 728-5826/E-mail kimberly.m.prince@frb.gov

b. Inquiries shall be submitted in writing no later than August 22, 2005.

c. The Senior Contract Specialist will provide answers to questions to potential Offerors giving due regard for the proper protection of proprietary information.

The Senior Contract Specialist will not provide information concerning this Solicitation or requests for clarification in response to Offeror-initiated telephone calls. The Offeror shall make all such requests in writing via e-mail followed up by postal mail to the above address. Questions shall identify the specific area of this Solicitation, citing the particular section and paragraph of this Solicitation in which clarification is desired. The Senior Contract Specialist will provide questions and answers to all prospective Offerors. Sources of questions will not be identified.

Note: Offerors are instructed specifically to contact only Kimberly Prince in connection with any aspect of this requirement prior to the Contract’s award. The Offeror shall submit proposals and all correspondence relating to this document to Ms. Prince.
SECTION II

KEY PERSONNEL

H.1 APPROVAL OF KEY PERSONNEL

Offerors shall submit resumes with their Offer Qualifications (Phase I) a list of those persons that are essential for the performance of the goods or services described in Section C, the Statement of Work, and who will be assigned to the resulting Contract (Key Personnel). The Contractor shall not remove or replace Key Personnel without prior notification to and approval by the COTR. Approval of Key Personnel will not be unreasonably withheld.

H.2 PERSONNEL QUALIFICATIONS

Offerors shall indicate in their Technical Proposals how their Key Personnel will direct or perform the work as described in Section C. In addition, Offerors shall explain the procedures for training Key Personnel. Letters of commitment shall be included in the Technical Proposals for all Key Personnel.
SECTION I
EVALUATION AND AWARD PROCESS

1.1 EVALUATION OF PROPOSALS - PRICE AND TECHNICAL POINTS

Offerors' proposals will be submitted and reviewed in three phases. Submission requirements for each phase are detailed below. Each response to this Solicitation shall be subject to the same review and assessment process described below.

1.1.1 REQUIREMENTS

a. Phase 1, Offeror Qualifications

1. Invited A/E firms will provide information about the firm that includes:
   • Information about the staff involved
   • Project types and size
   • Similar projects
   • Published work
   • References

2. Documents:
   • Standard Form SF 254
   • Standard Form SF 255 (Resume of Key Personnel to include consultants)
   • References
   • Additional Information (for example, marketing materials, sample designs of similar projects, reprints of published works, and other information that may be relevant to determine an offeror's qualifications).

3. Schedule:
The Board will review information from invited firms within three weeks, and will produce a short list of top ranked firms.

b. Phase 2, Cost and Technical Proposals:

Short listed firms will be invited to participate in Phase 2. Each Offeror that has been notified of being eligible to move on to Phase 2 shall submit technical and cost/pricing proposals according to the guidelines presented in this Section I and in Section 1.1.3. In addition, the Offeror shall submit the
1. Technical Proposal

   Each Offeror shall submit five copies of its technical proposal. Each technical proposal shall be bound and shall include, at a minimum, the following items:

   a. A schedule of construction document production and phased deliverables.

   b. Written information that will explain the Offeror’s approach, ideas, and studies.

   c. A preliminary cost estimate for the construction cost.

   d. The information requested in Sections 1.2 and 1.13.

Optional, but highly recommended:

(1) Drawings: Produced in 11”x17” size and folded to fit in an 8½”x11” binder.

(2) Presentation Boards: Floor plans, elevations, sections, perspectives, photos and additional information regarding proposed systems, diagrams, etc. shall be presented on a 30” x 48” presentation board. One set of the presentation boards is sufficient.

2. Cost Proposal

   Each Offeror shall submit three bound copies of its cost proposal in a sealed package separate from its technical proposal. The cost proposal shall contain a lump sum figure for each of the following:

   a. Design, as defined in Section C, the Statement of Work, including pre-design, design development, construction documents, mechanical, electrical, life safety, security, and building permits and approvals. The approvals shall include meeting time needed in order to obtain approval by NCPC,
Board of Governors of the Federal Reserve System

Solicitation, Offer, and Award 250588

CFA, and other meeting time required for presentation to the Board, and/or coordination with utilities authorities/companies.

b. Digital modeling, including 3D walkthrough for the interiors.

c. Sealed exterior model (1:200), to match existing model.

d. Construction contract administration.

e. Redesign of the exterior walls of the Martin Building's podium.

f. Hourly rates of all expected project staff.

3. Schedule:

Offerors will be given no more than two months from the date of notification of being included on the short list to submit their cost and technical proposals. A written notification will be issued with the proposal due dates. The Board will attempt to complete the selection of the top three firms in one month from the date of proposal submission.

4. Additional Information:

Shortlisted firms will be expected to visit the site, attend a mandatory pre-design meeting, and review related documents.

c. Phase 3:

The top three ranked firms will be invited to meet with the technical evaluation committee for interviews and oral presentations. The interviews will be conducted within two weeks of the announcement by the Board regarding the top three firms. The Board will aim to make a contract award within one month after the completion of the interview process.

I.1.2 EVALUATION

In Phase 1, each proposal will be examined to determine if the Offeror is qualified (see I.1.1.a.). Phase 1 proposals may receive up to three hundred qualification points. These proposals in the competitive range will advance to Phase 2. Proposals that advance to Phase 2 will first be examined to determine if the Offeror is responsible (see I.2.a. through e.) and if the proposal meets all mandatory requirements set forth in Section C, Statement of Work. If any mandatory requirement is not met, the proposal will be
rejected and will receive no further consideration. In Phase 2, technical proposals that meet all mandatory requirements qualify for further evaluation and will receive up to two hundred fifty technical points. In addition, these proposals will receive three hundred cost points in inverse proportion to the ratio of their cost to that of the lowest proposal. The three offers with the highest combined qualification, technical, and cost points will be invited to participate in Phase 3. Offers advancing to Phase 3 will be awarded up to one hundred fifty points for their oral presentation and interviews regarding their design and project management approach. All points – qualification, technical, cost, and Phase 3 points – will be combined to determine who will be awarded the contract.

a. Offerer Qualification (Phase 1)

Factor No. 1: Key Personnel, 50 points
This factor involves an evaluation of the Offerer's Key Personnel. Specific aspects of this factor may include years of relevant experience, specific licenses and certifications and past experience with similar projects.

Factor No. 2: Past Experience with Similar Projects, 50 points
This factor involves an evaluation of the size, type and complexity of similar projects.

Factor No. 3: Past Performance References, 50 points
The Offerer shall demonstrate satisfactory past performance under prior contracts for similar project services.

Factor No. 4: Demonstrated Knowledge in Security Designs and CBR Protection, 150 points
This factor involves an evaluation of the Offerer's experience as it specifically relates to designing facilities to help protect against current threats including, but not limited to, blast, ballistic, chemical, biological and radiological threats.

b. Technical Proposal (Phase 2)

Factor No. 1: Overall Strategy, Technical and Design Approach, and Methodology, 150 points
This factor involves evaluation of the data submitted with the offer that explains the Offerer's procedures for completing the solicitation requirements. The Offerer is encouraged to submit diagrams, drawings, sketches, and other visual presentations.
Factor No. 2: Detailed Implementation Plan, 100 points
This factor involves evaluation of how thorough the Offeror explains and outlines the work plan and schedule for completion of the construction document production.

c. Cost/price proposal (Phase 2)
A Board price evaluation team will use the same review process to evaluate each Offeror's cost/price proposal as formatted according to Section B. Offerors are reminded that they must use the format set forth in Section B in submitting their cost/price proposals. The price evaluation team will evaluate the cost/price proposals for price reasonableness, realism, risk, and any other criteria set forth in Section B. The price evaluation team may reject unrealistically low or materially unbalanced offers. The lowest price, acceptable proposal will be awarded number three hundred points, and higher priced bids will get points in an inverse proportion.

d. Phase 3: Oral Presentation/Interviews, 150 points
Offerors that move forward to Phase 3 will have the opportunity to present their design approach and project management plan, introduce key personnel, discuss past performance of similar projects, and share specific ideas for the design of the Visitor Center Project.

II.2 FACTORS TO DETERMINE A RESPONSIBLE OFFEROR

a. The Offeror shall provide financial statements for its two most recently completed fiscal years.

b. The Offeror shall disclose any actions pending before any body competent to rule on, adjudicate, or referee any legal dispute, including labor or workers' compensation controversies, or bankruptcy filings.

c. The Offeror shall possess, as of the date of release of this Solicitation, all required licenses and/or permits to conduct business both in the jurisdiction in which their main offices are located, and in Washington, DC. The Offeror shall indicate the type(s) of licenses and/or permits that have been issued to them, and the names of the issuing jurisdictions. The Offeror shall provide copies of such licenses and/or permits if requested. The Offeror shall keep current all required licenses and permits.
The Offeror shall certify, as of the date of release of this Solicitation, that it has paid all taxes due, withholding or otherwise, and that it is not a party to any action by any taxing jurisdiction or authority to collect overdue or back taxes.

e. If an Offeror has financial statements that are weak, has any actions pending, has not obtained or retained the required licenses and/or permits, has any outstanding taxes, or fails to provide any other information required by this Solicitation, the Offeror shall fully explain such action or deficiency so that the Contracting Officer may have sufficient information to determine whether the Offeror is a responsible Offeror.

f. The Offeror’s past performance (see Factor No. 3 of the Offeror Qualification evaluation) will be evaluated as follows:

1. Quality of product or service. This refers to compliance with contract requirements, accuracy of reports, and technical excellence.

2. Timeliness of performance. This refers to whether the Offeror met interim milestones, was reliable and responsive to technical direction, completed the project on time, including wrap-up and contract administration, and to liquidated damages.

3. Cost control. This refers to the budget and cost efficiencies, and also whether the invoices were accurate and complete, and there were no overruns.

4. Business relations. This refers to effective management, effective small and small disadvantaged-business subcontracting programs, reasonable and cooperative behavior, flexible effective Contractor-recommended solutions, and business-like concern for the organization’s interest.

5. Customer satisfaction. This refers to end user satisfaction with the Contractor’s service.

1.3 PROTESTS

Any actual or prospective Contractor who is aggrieved in connection with the solicitation or award of a contract may submit a written protest consistent with the provisions of Section M.23.
SECTION J
CONTRACT ADMINISTRATION

1. CONTRACT TYPE

It is contemplated that the board will award a firm-fixed-price type contract to the successful Offeror.

2. PERIOD OF PERFORMANCE

Unless the Board exercises its option as described in 2.1, the period of performance under the contract will be from the date of contract award through the date that a Visitor Center construction contract is actually awarded to a GC. (Currently, the projected date of contract award of a construction contract to a GC is estimated to be March 30, 2007. This date may change, however, based on the agreed upon project schedule and any other circumstances such as those set forth in section C.2.2.d.)

2.1 OPTION TO EXTEND FOR CONSTRUCTION CONTRACT ADMINISTRATION SERVICES

The Board may exercise its option to have the A/E provide the CCA services detailed in Section C.2.5 by giving written notice of the A/E in any time prior to actual award of a Visitor Center construction contract to a GC.

Should the Board decide to exercise its option to purchase the CCA services, the period of performance shall extend through final completion of the Visitor Center’s construction.

3. INVOICES AND PAYMENTS

The Contractor shall submit invoices in arrears and on a thirty-day (30) cycle or in accordance with Clause 6, Payments, of the General Contract Provisions. The terms are net 30/prompt payment. All invoices shall show the contract number and modification number, if issued.

The Contractor shall submit invoices via electronic mail to MGT-Accounts-Payable@Fh. gov or by facsimile to (202) 432-6496. If the Contractor does not have access to electronic mail or facsimile equipment, it may also submit the invoice by postal mail in duplicate (original and one copy).
Board of Governors of the Federal Reserve System

Solicitation, Offer, and Award 253540

Federal Reserve Board
Accounting Section, Mail Stop 152
17th and C Streets, NW
Washington, DC 20551

If any travel is authorized under this Contract, the Contractor shall attach to the invoice all documentation for travel expenses. The Contractor shall be reimbursed according to the Board’s travel policy in effect on the date of travel.

The Board will make payment by electronic funds transfer. Notification will be provided by facsimile to the Contractor on the date of payment.

1.4 CONTRACT MANAGEMENT

Contract management is as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marsha Reidell</td>
<td>Contracting Officer</td>
</tr>
<tr>
<td>Michael Kelly</td>
<td>Procurement Manager</td>
</tr>
<tr>
<td>Kimberly Prince</td>
<td>Senior Contract Specialist</td>
</tr>
<tr>
<td>Magdy Ibrahim</td>
<td>COTR</td>
</tr>
</tbody>
</table>

1.5 COTR FUNCTIONS AND LIMITATIONS

Magdy Ibrahim is designated the cognizant COTR who represents the Contracting Officer in administering technical details within the scope of the Contract and in inspecting and accepting. The COTR is not otherwise authorized to make any representations or commitments of any kind on behalf of the Contracting Officer or the Board. The COTR does not have the authority to alter the Contractor’s obligations or change the terms and conditions of the Contract. If, as a result of technical discussions, it is desirable to alter or change contract terms and conditions, changes will be issued in writing and signed by the Contracting Officer or higher authorized representative.

Some of the types of actions within the scope of the COTR’s authority are:

a. To assure compliance of the Contractor’s performance with Section C, the Statement of Work.
b. To perform or cause to be performed those inspections necessary to determine the Contractor's compliance with the technical requirements and the Statement of Work.

c. To maintain both oral and written communications with the Contractor concerning those aspects of this Contract within his/her purview.

d. To monitor the Contractor's performance and to advise the Board's Senior Contract Specialist of any deficiencies.

e. To coordinate the availability of Board-furnished property and services and to provide entry to the work area for the Contractor's personnel, as required.

f. To obtain the Contractor's proposal for a change order and to relay the information in a memo to the Senior Contract Specialist.

g. To review invoices and, based on satisfactory performance of the terms and conditions of the Contract, to notify the Accounting Section that a payment should be made pursuant to the Contract.

h. To determine final acceptance of services provided under this Contract.
SECTION K

REPRESENTATIONS AND OTHER STATEMENTS OF OFFEROR

The Offeror shall include one copy of Section K, Representations and Other Statements of Offeror, in Volume 1 (Offer). To make the offer binding, the Offeror shall complete all blanks of Section K, as required, type in the name of the authorized signing official in the space reserved for his/her signature, and sign the form on that space.

1. Small business concern
2. Regular dealer-manufacturer
3. Quotation acceptance period
4. Contingent fee
5. Type of business organization
6. Persons authorized to conduct negotiations for Offeror
7. Previous contracts and compliance reports
8. Affirmative action compliance
9. Equal employment compliance
10. Intended place(s) of performance or other establishment(s) from which the supplies are to be furnished or services are to be performed
11. Acknowledgment of amendments
12. Acknowledgement of duties, responsibilities, and authority
REPRESENTATIONS AND OTHER STATEMENTS OF OFFEROR

K.1 Small Business Concern
The Offeror ( ) has (X) not a small business concern. If the Offeror is a small business concern and is not the manufacturer of the supplies offered, it also represents that all supplies to be furnished hereunder ( ) will, ( ) will not be manufactured or produced by a small business concern in the United States, its possessions or Puerto Rico.

K.2 Regular Dealer-Manufacturer (applicable only to supply contracts exceeding $10,000)
The Offeror is (X) regular dealer in ( ) manufacturer of the supplies offered.

K.3 Quotation Acceptance Period
This quotation is valid for 60 days from: May 2, 2016

K.4 Contingent Fee (applicable only to supply contracts exceeding $10,000)
   a. The Offeror ( ) has (X) has not employed or retained any company or person (other than a full-time bona fide employee working solely for the Offeror) to solicit or secure this Contract; and
   b. The Offeror ( ) has (X) has not paid or agreed to pay any company or person (other than a full-time, bona fide employee working solely for the Offeror) any fee, commission, percentage, or brokerage fee contingent upon or resulting from the award of this contract; and
   c. The Offeror agrees to furnish information relating to (a) and (b) above, as requested by the Contracting Officer.

If the Offeror, by checking the appropriate box, has represented that it has employed or retained a company or a person (other than a full-time, bona fide employee working solely for the Offeror) to solicit or secure this Contract, or that it has paid or agreed to pay any fee, commission, percentage or brokerage fee to any company or person contingent upon or resulting from the award of this contract, the Offeror shall provide a statement that:

1. Provides the full name and business address of any or all company(ies) or person(ies) employed or retained to solicit or obtain this contract and indicates whether such is an individual, a partnership or a corporation;
2. Describes the relationship of the Offeror to each person or entity (for instance, sales or purchasing representative, broker, on employee, or a corporate officer or principal and;
3. Indicates whether a written contract or agreement exists regarding such relationship. If a contract exists, the Offeror must provide a copy of such contract; otherwise, it must state in detail the terms of such arrangement including the amount and the method of compensation of compensation and expenses.

1 A small business concern for the purpose of government procurement is a concern, including its affiliates, which is independently owned and operated, not dominant in the field of operation in which it is quoting, or government contracts, and are further qualified under the criteria concerning number of employees, average annual receipts, or other criteria, as prescribed by the Small Business Administration. (See Code of Federal Regulations, Title 13, Part 121, as amended, which contains detailed industry definitions and related procedures.)
The Offeror shall submit two copies of this statement, each signed by an authorized principal. If the Offeror has previously submitted a completed statement to the office issuing this Solicitation, the Offeror may accompany its quotation with a signed statement: (i) indicating when it previously submitted such completed form, (ii) identifying by number the previous solicitation or contract, if any, in connection with which it submitted such form, and (iii) representing that the statement in such form is applicable to this quotation.

K.5 Type of Business Organization
The Offeror operates as: ( ) an individual, ( ) a partnership, ( ) a nonprofit organization, ( ) a corporation incorporated under the laws of the District of Columbia.

K.6 Persons Authorized to Conduct Negotiations for Offeror shall be the Following:
Name(s)/Title(s)          Phone No(s)
Enrique A. Belini, AIA, Principal         202-659-5600

K.7 Previous Contracts and Compliance Reports
(NOTE: Applicable only to contracts or subcontracts that are not exempt from the equal opportunity compliance clause.)
The Offeror represents that:
a. ( ) It has not participated in a previous contract or subcontract subject to the Equal Opportunity Compliance clause herein or the clause originally contained in Section 3(h) of Executive Order No. 11246, dated March 6, 1965, or the clause contained in Section 201 of Executive Order No. 11444, dated June 23, 1969;
b. ( ) It has not filed all required compliance reports; and
c. It shall obtain representations indicating submission of required compliance reports, signed by proposed subcontractors, prior to subcontract award(s).

K.8 Affirmative Action Compliance
The Offeror represents that it has not not complied or maintained at each of its establishments a written affirmative action compliance program policy.

K.9 Equal Employment Compliance
By submission of this offer, the Offeror represents that:
a. To the best of its knowledge and belief, except as noted below, up to the date of this offer, written notice such as a show cause letter, a letter indicating probable cause, or any other written notification citing specific deficiencies, has been received by the Offeror from any Federal government agency or representative that the Offeror or any of its divisions or affiliates, or known for-tender subcontractors, is in violation of (i) any of the provisions of Executive Order 11246 of September 24, 1965, as amended, or (ii) the rules and regulations of the Secretary of Labor and specifically as to not having an acceptable Affirmative Action Compliance Program or being in noncompliance with any other aspect of the Equal Employment Opportunity Program.
b. Should there be any change (i) in the Offeror's status or circumstances between this date and the date of expiration of this offer or any extension thereof, or (ii) during
any Contract’s performance period or examining items resulting from this solicitation, the Offeror will promptly notify the Contracting Officer.

K. 10 Intended Place(s) of Performance or Other Establishment(s) from Which the Supplies are to be Fulfilled or Services are to be Performed

The Offeror shall stipulate in its offer the following: the plant(s) where the work is to be performed, the street address(es), and the name(s) and address(es) of the owner(s) and operator(s) if other than the Offeror. If more than one plant is specified, information must be submitted as to the percentage and the extent of the work that is to be done in each plant listed.

Company Name: **NOT APPLICABLE**

Street Address: 

City/County/State/Zip Code

NOTE: If additional space is needed, attach an addendum.

K. 11 Acknowledgment of Amendments

<table>
<thead>
<tr>
<th>Amendment No.</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8/25/2005</td>
</tr>
<tr>
<td>2</td>
<td>4/22/2006</td>
</tr>
<tr>
<td>3</td>
<td>11/17/2005</td>
</tr>
<tr>
<td>4</td>
<td>2/24/2006</td>
</tr>
<tr>
<td>5</td>
<td>3/17/2006</td>
</tr>
<tr>
<td>7</td>
<td>4/13/2006</td>
</tr>
</tbody>
</table>

K. 12 Acknowledgment of Duties, Responsibilities and Authority

The undersigned acknowledges his/her company’s understanding that:

a. The Board’s Contracting Officer is the only person authorized to sign contracts or contract modifications on behalf of the Board.

b. The Board’s Contracting Officer is the only person authorized to issue change orders to Board contracts. The Contracting Officer will only issue changes in accordance with the changes clause of the General Contract Provisions.

c. A person designated in any Board contract as a representative of the Contracting Officer to inspect and accept products or services on behalf of the Contracting Officer or to provide technical oversight during contract performance, does not have the authority to make changes to the contract terms and conditions for any reason whatsoever. Such person may have the designation of COTR or Contracting Officer’s Representative, or any other designation.

d. As a Contractor for the Board, any services performed or products delivered not specifically required under the Contract terms and conditions shall be provided at the Contractor’s own expense and the Contractor shall not file any claims for reimbursement from the Board.
This acknowledgment is a material representation of fact upon which reliance will be placed by the Board in any contract agreed to as a result of this solicitation.

Kurt Clower, Christopher & Twomey, PC
1120 Connecticut Avenue, NW, Suite 1250
Washington, DC 20036

Company Name and Address (Typed)

Enrique A. Bellín, AIA, EI, Principal
Name and Title (Typed)

May 2, 2006
Date

[Signature]
SECTION L

GENERAL INSTRUCTIONS AND INFORMATION

L.1 GENERAL INSTRUCTIONS

a. A Solicitation, Offer, and Award form, completed and signed by the Offeror, constitutes
the Offeror’s acceptance of the terms and conditions of this solicitation. The Offeror
shall sign in the name of the authorized signing official in Block 15 of the Solicitation,
Offer, and Award form. The form shall be executed by a representative of the Offeror
who is authorized to commit the Offeror to contractual obligations.

b. The Offeror is expected to examine the entire solicitation document. Failure to do so
shall be at the Offeror’s own risk.

c. Each Offeror shall furnish all information required by this Solicitation. The Offeror shall
also fill in all blocks of Section K as required, and shall enter in the name of the
authorized signing official in the space reserved for his/her signature.

L.2 DEFINITIONS

The following terms shall have the meaning as set forth below for this Solicitation:

Board means the Board of Governors of the Federal Reserve System.

Contract means this Solicitation, Offer, and Award after execution of the Award section
of the Solicitation, Offer, and Award form by the Contracting Officer.

Contracting Officer’s Technical Representative means the person designated to represent
the Contracting Officer in administering the technical details of this Solicitation as more
fully described in paragraph 1.5 of Section I.

Contractor means the Offeror who is awarded a Contract under this Solicitation.

Offeror means those persons to whom the Board sent a Solicitation.

Solicitation means this Solicitation, Offer, and Award document initially issued by the
Board seeking proposals from Offerors.
L.3 QUALIFICATION OF PROSPECTIVE CONTRACTOR

The Board will consider proposals only from Offerors who are regularly established in the business called for, and who are financially responsible and able to show evidence of their reliability, capability, and experience. The Offeror shall have the equipment, facilities, and personnel directly employed or supervised by it to render prompt and satisfactory performance at the time of award. If the Offeror intends to subcontract any portion of the operation, it shall be so stated in its proposals. The qualifications of the identified subcontractor(s) will then be considered along with those of the prime Contractor.

L.4 CONDITIONS

a. This Solicitation does not commit the Board to pay any cost incurred in the preparation or submission of any proposal. The Board is not liable for any costs incurred in anticipation of a contract award. The Contracting Officer, at his/her sole discretion, may allow those costs that if incurred after contract award would be allowable.

b. This Solicitation in no way obligates the Board to award a contract(s), and the Board reserves the right to reject any and all offers for any reason that the Contracting Officer determines.

c. The Board reserves the right to award to other than the low-cost Offeror.

d. The Board reserves the right to award a contract(s), after receipt of proposals, without further discussion. Therefore, it is emphasized that all proposals should be submitted initially on the most favorable terms from a cost and technical standpoint that the Offeror can submit to the Board.

e. The proposal shall be signed by an official authorized to commit the Offeror to a contract.

f. The Offeror will guarantee its prices for a minimum of ninety days from the due date of its Phase 2 proposal.

L.5 FORBIDDEN CONTACT

Offerors are cautioned against discussing the preparation of proposals or technical questions with Board technical personnel. The circumstances of any unauthorized contact, when verified, may result in disqualification of the Offeror’s proposal. Discussions with Board technical personnel concerning the specifications, the documents incorporated by reference, pricing, or any other technical matters are strictly forbidden.
L.6 INTERPRETATION OF CONTRACT REQUIREMENTS

No interpretation of any provision of this Solicitation, including applicable specifications, shall be binding on the Board unless furnished or agreed upon in writing by the Contracting Officer or his/her designated representative authorized to make such interpretation.

L.7 INSURANCE

The selected Offeror shall obtain all insurance coverage such as workers' compensation or employer's liability coverage, general liability insurance, including commercial general liability, completed operations, and any other coverage that may be required by law, regulation, or ordinance, or is otherwise carried as common industry practice.

The insurance referred to above shall protect the Offeror, as named insured, up to the respective policy limits with respect to claims for damages for injury to persons or property arising out of or in connection with any act or omission of the Offeror or any agent of the Offeror or of anyone directly or indirectly employed or retained by any of them with respect to the performance of services hereunder. The Offeror shall furnish the Board with evidence, in a form satisfactory to the Board, from its insurance companies showing that the above insurance is in force, stating policy numbers, effective dates, expiration dates, and limits of liability thereunder. All policies providing the above insurance shall be endorsed to provide that the insurance company shall notify the Board, in writing, thirty (30) days prior to any cancellation or change in the above insurance. Compliance by the Offeror with the foregoing requirements to carry insurance shall not relieve the Offeror from liability assumed hereunder. The Board shall be named as an additional insured on said insurance policies.

L.8 EXCEPTIONS AND/OR DEVIATIONS

Offerors are cautioned that any exceptions or deviations taken to any provision of this Solicitation may result in that Offeror's entire proposal being declared unacceptable. It is the Board's intent that an Offeror satisfactorily meet each and every requirement as stated in this Solicitation. Should the Offeror request exceptions and/or deviations from any requirement of Section C, the Statement of Work, and/or any other clauses, provisions, or terms and conditions of this Solicitation, such request will be held to the highest standard of justification. Offerors shall identify in Volume 1 each requirement, clause, provision, or term and condition for which it requests exceptions and/or deviations. Each exception and/or deviation identified shall be fully explained including sufficient justification as to technical advantage, cost savings, and/or benefits to the Board so that the Board can thoroughly evaluate the Offeror's input and determine if it is in the best interest of the Board. If the Offeror's explanation is not acceptable to the
Board of Governors of the Federal Reserve System

Solicitation, Offer, and Award 290548

Board, the exception and/or deviation will not be allowed, and, unless the original requirement is met, the Offeror's proposal may be found unacceptable.

L.9 MULTIPLE PROPOSALS

Offerors may submit more than one proposal in response to this Solicitation provided that each proposal addresses and meets all requirements specified herein. If multiple proposals are submitted, each proposal shall be clearly labeled and identified on the cover page of each separate document, and the reason for each additional proposal and its comparative benefits shall be explained. Each page of each proposal shall identify the proposal to which it belongs. Each proposal shall be a complete offer in and of itself. Each proposal submitted will be evaluated on its own merits. The Board will not accept or evaluate proposals for requirements other than those identified in this Solicitation.

L.10 FOCUSED ALTERNATIVES

Alternate proposals aimed at satisfying specific elements of the Board's overall requirements in a unique or alternative manner will be permitted if accompanied by and fully cross-referenced to a fully compliant proposal. Each such proposal will be evaluated on its focused proposal solutions and the common solutions of the responsive proposal that accompanies it. Proposals that do not address all requirements (either directly or by cross-reference) may be deemed unacceptable.

L.11 IDENTIFICATION OF RESTRICTED RIGHTS IN COMPUTER SOFTWARE

Offerors are cautioned of the requirement that any restrictions on the use or disclosure of computer software that was developed at private expense and is to be delivered under the Contract must be set forth in an agreement to be negotiated prior to award and made a part of the Contract. Therefore, the Offeror shall identify in its proposal, to the extent feasible, any computer software that was developed at private expense and upon which it desires to negotiate restrictions, and shall state the nature of the proposed restrictions. A listing of such software shall be attached to and included as part of the Technical Proposal. If no such software is identified in the proposal, the Board assumes it has unlimited rights. Offerors will be deemed to have given a warranty by the signing of the proposal section of the Solicitation, Offer, and Award Form (Section A) that software rights are not limited.

L.12 LATE PROPOSALS, MODIFICATIONS OF PROPOSALS, AND WITHDRAWALS OF PROPOSALS

a. Any proposal received by the office designated in this Solicitation after the exact time specified for receipt will not be considered unless it is received before award is made; and
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 256548

1. It was sent by registered or certified mail not later than the fifth calendar day prior to the date specified for receiving offers (for instance, an offer submitted in response to a solicitation requiring receipt of offers by the twentieth of the month shall have been mailed by the fifteenth or earlier).

2. It was sent by mail, and it is determined by the Board that the late receipt was due solely to mishandling by the Board after receipt at the Board; or

3. It is the only proposal received.

b. Any revision of an Offeror's proposal, except a revision resulting from the Contracting Officer's request for best and final offer, is subject to the same conditions as in a.1. and a.2. above.

c. A revision to an Offeror's proposal resulting from the Contracting Officer's request for best and final offer received after the time and date specified in the request will not be considered unless received before award and the late receipt is due solely to mishandling by the Board after receipt at the Board's installation.

d. The only acceptable evidence to establish:

1. The date of mailing of a late proposal or modification sent either by registered or certified mail is the US or Canadian Postal Service postmark on the wrapper or on the original receipt from the US or Canadian Postal Service. If neither postmark shows a legitimate date, the proposal or modification of the proposal shall be deemed to have been mailed late.

2. The time of receipt at the Board is the Board's time stamp on the proposal wrapper or other documentary evidence of receipt maintained at the Board.

e. Notwithstanding the above, a late revision of an otherwise successful proposal, which makes its terms more favorable to the Board, will be considered at any time it is received and may be accepted.

f. Proposals may be withdrawn by written notice received at any time prior to award. Proposals may also be withdrawn in person by an Offeror or its authorized representative.

---

3The term postmark means a printed, stamped, or otherwise placed impression, exclusive of a postage meter impression, that is readily identifiable without further action as having been supplied and affixed on the date of mailing by employees of the U.S. or Canadian Postal Service. Therefore, Offerors should request the postal clerk to place a bull’s-eye, that is, a hard-stamped cancellation or postmark, on both the receipt and the envelope or wrapper.
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 250548

provided that the identity of this person is made known and that he/she signs a receipt for
the proposal prior to award.

L.13 PROPOSAL SUBMISSION

a. Proposals shall set forth full, accurate, and complete information.

b. Offerors shall submit proposals by mail or messenger to the following address:

Federal Reserve Board
Procurement Section, Mail Stop 128
20th and C Streets, NW
Washington, DC 20551
Attention: Kimberly Prince
RE: Solicitation 250548

c. The Board will accept proposals at the above address until the time and date specified
below. Proposals received after this time and date will be processed as specified in
section L.12 above.

Closing date for Phase 1: August 26, 2005

Closing date for Phase 2: November 7, 2005

Closing time for Phases 1 and 2: 2:00 pm (Washington, DC time)

d. Proposals shall be typed on paper no larger than 8-1/2 by 11 inches, using one side only.

Expensive paper or elaborate artwork and bindings are neither necessary nor desired.

e. Information requested in this Solicitation shall be furnished completely in compliance
with instructions. The information requested and the manner of submission are essential
to permit prompt evaluation of all proposals, and on a fair and uniform basis.

Accordingly, the Board reserves the right to decline as nonresponsive, and to reject any
proposals in which material information requested is not complete.

f. Proposals submitted in response to this Solicitation may contain technical data, trade
secrets, and commercial or financial information that is privileged and confidential and
that the Offeror does not want disclosed or used for any purpose other than evaluation of
the proposal by the Board. The Offeror may restrict the disclosure or use of such data or
information by identifying specific pages on the proposal as "RESTRICTED DATA" and
by marking the cover sheet of the proposal with the legend below:

Page 49 of 93
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 250548

TECHNICAL DATA, TRADE SECRETS, COMMERCIAL AND/OR FINANCIAL INFORMATION CONTAINED IN PAGES _____ OF THIS PROPOSAL NO. 250548, AND MARKED "RESTRICTED DATA" SHALL NOT BE DISCLOSED OR USED OTHER THAN FOR PROPOSAL EVALUATION PURPOSES BY THE BOARD, EXCEPT THAT SUCH RESTRICTED DATA MAY BE USED IN ACCORDANCE WITH THE PROVISIONS OF ANY CONTRACT AWARDED AS A RESULT OF, OR IN CONNECTION WITH, THIS PROPOSAL. THIS RESTRICTION DOES NOT LIMIT THE BOARD'S RIGHT TO DISCLOSE OR USE SUCH DATA OR INFORMATION IF OBTAINED FROM ANOTHER SOURCE WITHOUT SUCH RESTRICTIONS.

The above restriction shall not be construed as altering or limiting in any way the Board's obligation under the Freedom of Information Act (5 U.S.C. § 552), or any other applicable law or rule, court order or Congressional requirement, or any other right reserved by the Board.

The Board assumes no liability for disclosure or use of unmarked technical data, trade secrets, and commercial and financial information, and may disclose or use such data or information for any Board purpose.

g. Nonresponsive proposals will be identified and will be eliminated from further consideration. A proposal that is nonresponsive is one that:

1. Does not address itself to the mandatory requirements of this Solicitation;

2. Contains major deficiencies, omissions, or out-of-line costs.

h. Offerors are cautioned that an award may be made without further discussion or negotiations, or a request for best and final offer.

i. Proposals shall consist of one complete original and the number of copies as stated below. Proposals shall be submitted in three volumes, each separate and complete in itself in order that evaluation of one may be accomplished independently of, and concurrently with, evaluation of the others. Each volume shall be titled and submitted as follows:

Volume I Cover Letter. Submit one original. Volume I shall consist of the following:

Part A – Identification of Exceptions
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 256548

The Offeror shall provide identification and explanation of any exceptions or deviations taken or conditional assumptions made with respect to the Offeror's proposal versus the requirements of this Solicitation. Any exceptions taken shall contain sufficient amplification and justification to permit evaluation. All benefits to the Board shall be explained for each exception taken. Such exceptions will not, of themselves, automatically cause a proposal to be deemed unacceptable unless they fail to provide sufficient benefits to the Board, or result in material deviations from the requirements of Section C, the Statement of Work.

Part B  Signed Certification and Representation (Section K)
Part C  Vendor Information Form (Section N)
Part D  Solicitation, Offer and Award Form (Section A)
Part E  The information requested in paragraph 1.2 of section I
Part F  Subcontractor plan (if required)

Volume II Technical Proposal. Submit one original and five copies. Volume II shall be termed the “technical proposal,” and shall be prepared in accordance with the instructions provided in paragraph below. The technical proposal shall not contain any reference to price. The technical proposal shall be presented in a concise and straightforward manner.

Part A Management Plan

In this part, the Offeror shall provide a detailed description of its approach to meeting the requirements of this Solicitation. To facilitate evaluation of the Management Plan, the order of presentation should follow the sequence set forth below.

1. Key personnel. The Offeror shall provide resumes of key personnel and other information as set forth in Section H.

2. Offeror’s experience. The Offeror shall provide a description of its experience in providing services of the type and complexity required in this Solicitation to the federal government, or to the Federal Reserve System, or to other clients of similar-sized workforces. Detailed information shall be provided, including years in business and references as required in Section C, the Statement of Work.
3. Offeror's approach to requirements. The Offeror shall narrate its approach to meeting or exceeding the requirements indicated in Section C, the Statement of Work.

Part B: References and Corporate Qualifications

1. References. Offerors shall submit at least six references consisting of present or past clients, within the past five years, who are capable of verifying the following:

   a. Four references documenting the Offeror's ability to manage projects comparable (as close as possible in size, complexity, and scope) to the Solicitation resulting from this acquisition.

   b. Two references, for itself and for all major subcontractors, capable of documenting that, in combination, the Offeror and subcontractors have provided, operated and managed contracts comparable (as close as possible in size, complexity, and scope) to those required under this Solicitation.

The Offeror shall provide the following information on each client reference:

   a. Total contract value
   b. Contracting Officer name, address, and telephone number
   c. Brief description of the services, size, and scope of services
   d. Information on whether the Offeror is currently providing services under the Contract

2. Corporate qualifications. Offerors shall submit material describing their general corporate capabilities and qualifications.

3. Implementation plan. The Offeror shall provide a detailed work plan and schedule for implementing the program.

Volume III Cost/Price Proposal. Submit one original and two copies.

Volume III shall be termed “cost/price proposal.” This volume shall consist of completed cost proposal forms in the format set forth in Section B. The cost proposal form shall be sealed in a separate envelope marked “Cost/Price Proposal for Solicitation 255348.”
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 250548

L.14 INDEMNIFICATION

By signing the Proposal section of the Solicitation form, the Offeror agrees to save and hold harmless the Board, its members, officers, and employees from liability of any kind or nature, including cost and expenses to which they might become subject, arising or resulting in whole or in part from the negligent performance of the Offeror upon award of a contract to the Offeror under this Solicitation including action or failure to act by its owners, directors, officers, employees, agent or subcontractors.

L.15 NOTICES

All notices required to be sent under this Solicitation shall be sent certified mail, return receipt requested, overnight deliver (using a service that verifies receipt of delivery), or messenger service (using a service that verifies receipt of delivery).

Notices to the Board shall be sent to:

Federal Reserve Board
Procurement Section, Mail Stop 128
20th and C Streets, NW
Washington, DC 20551
Attention: Michael Kelly, Procurement Manager
RE: Solicitation 250548

Notices to the Contractor will be sent to the person and address set forth in Section 12. of the Representations And Other Statements Of Offeror (Section K).

L.16 SECURITY

a. General. The Contractor shall require its personnel and those of its subcontractors and suppliers to comply with all Board security standards and procedures. Such personnel will be briefed on the Board’s security standards and procedures, and will be provided with written documentation of these standards and procedures.

b. Personnel access. All personnel of the Contractor and its subcontractors, suppliers and associates who require access to Board property must be cleared in advance by the Board’s Security Department. The Contractor shall provide the Board with a list of all personnel requiring access to the site, which shall include legal names, dates of birth, and social security account numbers. This list shall be continuously updated. The Contractor shall notify the Board immediately, in writing, of any changes to the list, including any personnel who are no longer employed by Contractor or its subcontractors, suppliers and associates.
c. Access badges. The Board denies access to its premises to any individual who does not possess a valid access badge issued by the Board. Access badges issued by other organizations are not valid at Board facilities. The Board issues two types of badges to non-Board personnel. The first is a paper "Escort Required" badge, which is valid only on the day on which it is issued. An individual who holds only a daily "Escort Required" badge must be escorted by authorized personnel. The second type of badge is a laminated photo-identification badge. holders of photo-identification badges are authorized access to Board property without requiring an escort, and are also authorized to escort holders of "Escort Required" badges.

Generally, personnel who work on Board premises for any extended period of time will be issued photo-identification badges, provided that the results of their security checks are satisfactory. Personnel who require only short-term or occasional access to the Board facilities will be issued "Escort Required" badges on a daily basis, and it shall be contractor's responsibility to ensure that such personnel are properly escorted by a person or persons possessing a valid Board photo-identification badge.

1. Lost or stolen badges. Laminated photo-identification badges should be turned into the Board Security Administration office whenever the job status of the person holding the badge changes, for instance, resignation, assignment to another project, project completion. The Security Administration office shall be notified immediately in the event that a photo-identification badge is lost or stolen. There is a fee for replacing lost badges.

d. Security checks. The Board will check the names of all Contractor, subcontractor and supplier personnel who require access to Board facilities through the FBI National Crime Information Center (NCIC). Personnel requiring an "Escort Required" badge will be screened by name and social security account number. The screening typically takes less than a day. Personnel who require a laminated photo-identification badge will be screened not only by name and social security account number, but also by their fingerprints. This check is conducted by submitting the individual's fingerprints to the Office of Personnel Management (OPM), which forwards them to the FBI. It normally takes 3-5 days for the Board to receive a response.

1. Results of security checks. The determination as to the suitability of any employee or associate of the Contractor or its subcontractors or suppliers to enter the Board's premises shall be made by the Board at its sole discretion. The Board may, as a result of the fingerprint security check described above, deny access to a person who had previously been granted temporary access based on a name and social security account number check.
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 259548

e. Security alert system. The Board has a security alert system that somewhat models the National Alert System. The Board normally operates at the Code Yellow level. Individuals in possession of a valid Board photo-identification badge are granted uncontrolled access to Board facilities and free movement within the premises (except for certain restricted areas) during Code Yellow conditions, while holders of "Escort Required" badges are required to be screened with magnetometers and their bags and packages must be x-rayed. During Code Orange conditions, all persons entering Board facilities are required to be screened with magnetometers, and all bags and packages must be x-rayed. All vehicles entering Board garages are searched during Code Orange conditions. When Code Red conditions are in effect, Contractor personnel are not allowed on the Board's premises, unless specific exceptions are granted by the Board Security Administration office.

l. Special circumstances. Notwithstanding its condition at any particular time with respect to the Board's security alert system, the Board reserves the right to screen individuals and bags, packages or vehicles at any time as a precondition to granting such individuals access to Board premises.

L.17 PUBLICITY

The Contractor shall not release any publicity or advertising regarding this Contract or the work to be performed hereunder and shall not use the name or insignia of the Board or of the Federal Reserve System, or any variation or adaptation thereof, for any commercial, advertisement, promotional or endorsement purposes, unless the Contractor has obtained the prior written consent of the Staff Director for Management of the Board or his authorized representative in such matters.

L.18 PREPROPOSAL CONFERENCE

a. A preproposal conference will be conducted as indicated in the Solicitation cover letter.

b. The Offeror shall submit in writing to the Contract Specialist any questions it has concerning this Solicitation, in accordance with Section L.16 above. Written responses to questions submitted in writing prior to the preproposal conference will be provided during or after the conference.

c. Offerors are specifically cautioned that verbal discussion, questions, and replies regarding this solicitation shall not change the terms or provisions of this Solicitation.

d. The purpose of this conference is to provide a briefing on this Solicitation, the scope of work, and the specifications. The Board considers attendance at this conference essential...
to preparing a competitive and cost-effective offer, and to understanding the total result desired by the Board. For building security purposes, please fax in the names of the attendees with their social security numbers and dates of birth at least 24 hours in advance of the preproposal conference.
SECTION M

GENERAL CONTRACT PROVISIONS

1. Definitions
2. Inspection
3. Assignment of claims
4. Federal, state, and local taxes
5. Board-furnished property
6. Payments
7. Exports
8. Non-disclosure
10. Notice and assistance regarding patent and copyright infringement
11. Covenant against contingent fees and conflict of interest
12. Grants
13. Anti-kickbacks procedures
14. Interpretation of contract requirements
15. Charges
16. Pricing of adjustments
17. Board delay of work
18. Excusable delays
19. Stop work order
20. Termination for convenience of Board
21. Default
22. Disputes
23. Protests
24. Competition in subcontracting
25. Small business and small disadvantaged business
26. Equal opportunity
27. Employment of persons with disabilities
28. Affirmative action for special disabled and Vietnam era veterans
29. Walsh-Healey Public Contracts Act
30. Service Contract Act of 1965
31. Buy American Act
32. Contract Work Hours and Safety Standards Act – Overtime compensation
33. Privacy Act
34. Paperwork Reduction Act
SECTION M
GENERAL CONTRACT PROVISIONS

M.1 DEFINITIONS

As used throughout this contract, the following terms shall have the meaning as set forth below:

Board identifies the Board of Governors of the Federal Reserve System.

Contract means all types of agreements and orders, including purchase orders for the procurement of supplies, services, printing, and/or equipment. It includes amendments and supplemental agreements with respect to any of the foregoing.

Contractor means an individual, partnership, corporation, or other entity responsible for the execution of a contract to provide goods and/or services at a certain price or rate.

Contracting Officer means the person executing this Contract on behalf of the Board or his/her successor or successors.

M.2 INSPECTION

a. All work under this Contract shall be subject to inspection and test by the Board at the extent practicable, at all times (including the period of performance) and places, and in any event prior to acceptance. The Board, through any authorized representative, may inspect the premises of the Contractor or any subcontractor engaged in the performance of this Contract.

b. The Board may reject any work that is defective or otherwise not in conformity with the requirements of this Contract. If the Contractor fails or is unable to correct or to replace such work within the delivery schedule or such later time as the Contracting Officer may authorize, the Contracting Officer may accept such work at a reduction in price which is equitable under the circumstances.

c. If any inspection or test is made by the Board on the premises of the Contractor or a subcontractor, the Contractor shall provide, without additional charge, all reasonable facilities and assistance for the safety and convenience of the Board inspectors in the performance of their duties. If the Board inspection or test is made at a point other than the premises of the Contractor or subcontractor, it shall be at the expense of the Board. All inspections and tests by the Board shall be performed in such a manner so as not unduly to delay the work. Final inspection and acceptance or rejection of the work shall
be made as promptly as practicable after delivery except as otherwise provided in this
Contract, but failure to inspect and accept or reject the work shall neither relieve the
Contractor from responsibility for such work as is not in accordance with the Contract
requirements nor impose liability on the Board therefore.

d. The inspection and test by the Board of any work shall not relieve the Contractor from
any responsibility regarding defects or other failures to meet the contract requirements
which may be discovered prior to acceptance. Except as otherwise provided in this
Contract, acceptance shall be conclusive except as regards to latent defects, fraud, or such
gross mistakes as amount to fraud.

e. The Contractor shall provide and maintain an inspection system acceptable to the Board
covering the work hereunder. Records of all inspection work by the Contractor shall be
kept complete and available to the Board during the performance of this Contract and for
such longer period as may be specified elsewhere in this Contract.

M.3 ASSIGNMENT OF CLAIMS

a. Pursuant to the provisions of the Assignment of Claims Act of 1940, as amended (31
U.S.C. Section 3727, 41 U.S.C. Section 15), if this Contract provides for payments
aggregating $1,000 or more, claims for monies due or to become due the Contractor from
the Board under this Contract may be assigned to a bank, trust company, or other
financial institution, including any federal lending agency, and may thereafter be further
assigned and reassigned to any such institution. Any such assignment or reassignment
shall cover all amounts payable under this Contract not already paid, and shall not be
made to more than one party, except that any such assignment or reassignment may be
made to one party as agent or trustee for two or more parties participating in such
financing.

b. In no event shall copies of this Contract or of any plans, specifications, or other similar
documents relating to work under this Contract, if marked "Top Secret," "Secret," or
"Confidential" be furnished to any assignee of any claim arising under this Contract or to
any other person not entitled to receive the same. Nevertheless, a copy of any part or all
of this Contract so marked may be furnished, or any information may be disclosed, to
such assignee upon the prior written authorization of the Contracting Officer.

M.4 FEDERAL, STATE, AND LOCAL TAXES

a. Except as may be otherwise provided in this Contract, the contract price includes all
applicable federal, state, and local taxes and duties.
b. Nevertheless, with respect to any federal excise tax or duty on the transaction or property covered by this Contract, if a statute, court decision, written ruling, or regulation takes effect after the contract date, and

1. results in the Contractor being required to pay or bear the burden of any such federal excise tax or duty or increase in the rate thereof which would not otherwise have been payable on such transactions or property, the Contract price shall be increased by the amount of such tax, duty, or rate increase, provided that the Contractor, if requested by the Contracting Officer, warrants in writing that no amount for such newly imposed federal excise tax, duty, or rate increase was included in the contract price as a contingency reserve or otherwise;

2. results in the Contractor not being required to pay or bear the burden of, or in its obtaining a refund or drawback of, any such federal excise tax or duty which would otherwise have been payable on such transactions or property or which was the basis of an increase in the Contract price, the Contract price shall be decreased by the amount of the refund, credit or drawback, or that amount shall be paid to the Board as directed by the Contracting Officer. The Contract price shall be similarly decreased if the Contractor, through its fault or negligence or its failure to follow instructions of the Contracting Officer, is required to pay or bear the burden of or does not obtain a refund or drawback of any such federal excise tax or duty.

e. No adjustment pursuant to paragraph (b) above shall be made under this Contract unless the aggregate amount thereof is or may reasonably be expected to be more than two hundred and fifty dollars ($250).

d. As used in paragraph (b) above, the term "contract date" means the date set for the bid opening or, if this is a negotiated Contract, the date of this Contract. As to additional supplies or services procured by modification to this Contract, the term "contract date" means the date of such modification.

e. Unless there does not exist any reasonable basis to sustain an exemption, the Board, upon request of the Contractor, without further liability, agrees, except as otherwise provided in this Contract to furnish evidence appropriate to establish exemption from any tax which the Contractor warrants in writing was excluded from the contract price. In addition, the Contracting Officer may furnish evidence to establish exemption from any tax that may, pursuant to this clause, give rise to either an increase or decrease in the contract price. Except as otherwise provided in this Contract, evidence appropriate to establish exemption from duties will be furnished only at the discretion of the Contracting Officer.
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 250548

1. The Contractor shall promptly notify the Contracting Officer of matters which will result in either an increase or decrease in the Contract price, and shall take action with respect thereto as directed by the Contracting Officer.

M.5 BOARD-FURNISHED PROPERTY

No material, labor, or facilities will be furnished by the Board unless otherwise provided for in the Solicitation.

M.6 PAYMENTS

The Contractor will be paid upon the submission of proper invoices and vouchers, the prices stipulated herein for supplies delivered and accepted or services rendered and accepted, less deductions, if any, as herein provided. Unless otherwise specified, payment will be made on partial deliveries accepted by the Board when the amount due on such deliveries so warrants; or, when requested by the Contractor, payment for accepted partial deliveries shall be made whenever such payment would equal or exceed either one thousand dollars ($1,000) or fifty (50) percent of the total amount of this Contract. All payments shall be made by electronic funds transfer (EFT), and to receive payment, the Contractor must submit the form titled Vendor Information.

M.7 EXTRAS

Except as otherwise provided in this Contract, no payment for extras shall be made unless the Contracting Officer authorizes such extras and the price is in writing.

M.8 NONDISCLOSURE

The Contractor acknowledges that all information and material related to (a) the security arrangements and strategies of the Board; (b) economic data; (c) financial, statistical, and personnel data pertaining to Federal Reserve Banks or other financial institutions; and (d) financial, statistical, personnel, planning, and similar information relating to past, present or future activities of the Board, which has or will come into the possession or knowledge of Contractor or its agents or employees in connection with this Agreement or the performance hereof, shall be considered to be confidential and proprietary; the disclosure of which to third parties will be damaging to the Board. The Contractor, therefore, agrees to use such information only for the Board’s benefit and will use the same effort to avoid publication or dissemination of such information as it employs with respect to the Contractor’s own confidential information. The Contractor agrees to require each of its agents or employees assigned to perform services for the Board under this Agreement, by means or appropriate written agreements, to keep any such information obtained by them while performing such services confidential in the same manner as, and using the same discretion required of, such persons with respect to confidential...
information of Contractor and not to disclose such information to any person (other than a Contractor’s employee requiring such information in connection with the performance of services hereunder) without the Board’s prior written consent. Notwithstanding any of the foregoing, the Contractor shall not be required to keep confidential or limit its use of any ideas, concepts, know-how or techniques related to data processing that the Board intentionally discloses in writing at any time to the Contractor or developed by either party, and if developed by the Board intentionally disclosed by the Board in writing, during the course of this Agreement. The Board by this Agreement does not agree to give Contractor any rights to any third party ideas, concepts, know-how or techniques. The Contractor shall have no obligation of any kind with respect to any information which: (a) is already in the possession of the Contractor except that which has been received under another confidentiality agreement with the Board; (b) is rightfully received by the Contractor from a third party; (c) is independently developed by or for the Contractor; or (d) is or becomes publicly available.

M.9 BOARDS OFFICE OF THE INSPECTOR GENERAL (OIG)

a. This clause is applicable to any Contract regardless of the amount of the contract entered into.

b. The Contractor agrees that the Board’s OIG shall, until expiration of three (3) years after final payment under this Contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this Contract.

c. The Contractor further agrees to include in all its subcontracts hereunder a provision to the effect that the subcontractor agrees that the Board’s OIG shall have the same rights to the subcontractor as specified in paragraph (a) above.

d. The periods of access and examination described in (b) and (c) above, for records which relate to (1) litigation or the settlement of claims arising out of the performance of this Contract, or (2) costs and expenses of this Contract as to which exception has been taken by the Board’s OIG, shall continue until such litigation, claims, or exceptions have been disposed of.

e. The Contractor and any subcontractor agrees to make notification to all Contractor and subcontractor employees the Board’s OIG hot line telephone number, 1-800-827-3340, to report any suspected “waste, fraud, or abuse” transactions related to the performance of this Contract.
M.10 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT

Note: This clause is applicable to all contracts exceeding one hundred thousand dollars ($100,000).

a. The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this Contract of which the Contractor has knowledge.

b. In the event of any claim or suit against the Board on account of any alleged patent or copyright infringement arising out of the performance of this Contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Board, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Board except where the Contractor has agreed to indemnify the Board.

c. This clause shall be included in all subcontracts in the amount of fifty thousand dollars ($50,000) or more.

M.11 COVENANT AGAINST CONTINGENT FEES AND CONFLICT OF INTEREST

The Contractor warrants that no person or agency has been employed or retained to influence, solicit, or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, contingent fee, or special interest, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the Board shall have the right to annul this Contract without liability, or in its discretion to deduct from the Contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

M.12 GRATUITIES

a. The Board may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this Contract if it is found, after notice and hearing, by the Board or its duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor or any agent or representative of the Contractor to any officer or employee of the Board with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or the making of any determination with respect to the performance of such Contract, provided that the
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 250548

existence of the facts upon which the Board or its duly authorized representative makes such findings shall be an issue and may be reviewed in any competent court.

b. In the event this Contract is terminated as provided in paragraph (a) hereof the Board shall be entitled to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the Contract by the Contractor.

c. The rights and remedies of the Board provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

M.13 ANTI-KICKBACK PROCEDURES

Note: This clause is applicable to all contracts over one hundred thousand dollars ($100,000).

a. The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations of the Anti-Kickback Act (41 U.S.C. 51-58) in its own operations and direct business relationships.

b. The Anti-Kickback Act prohibits any person from (1) providing, or attempting to provide, or offering to provide any kickback; (2) soliciting, accepting, or attempting to accept any kickback; or (3) including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

c. When the Contractor has reasonable grounds to believe that a violation of the Anti-Kickback Act may have occurred, the Contractor shall promptly report in writing the possible violation to the Board's Office of the Inspector General.

d. The Contractor shall cooperate fully with any federal agency investigating a possible violation of the Anti-Kickback Act.

e. The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c), but excepting subparagraph (a) in all subcontracts under this Contract exceeding one hundred thousand dollars ($100,000).

M.14 INTERPRETATION OF CONTRACT REQUIREMENTS

No interpretation of any provision of this Contract, including applicable specifications, shall be binding on the Board unless furnished in advance and agreed to in writing by the Contracting Officer or his designated representative.
M.15 CHANGES

a. The Contracting Officer may, at any time, without notice to the Contractor, by written change order, make any change in the work within the general scope of the Contract, including but not limited to changes (1) in the specifications (including drawings and designs); (2) in the method or manner of performance of the work; (3) in the Board-furnished facilities, equipment, materials, services, or site; or (4) directing acceleration in the performance of the work.

b. Any other written order or an oral order (which terms as used in this paragraph (b) shall include direction, instruction, interpretation, or determination) from the Contracting Officer, which causes any such change, shall be treated as a change order under this clause, provided that the Contractor gives the Contracting Officer written notice stating the date, circumstances, and source of the order and that the Contractor regards the order as a change order.

c. Except as herein provided, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment hereunder.

d. If any change under this clause causes an increase or decrease in the cost of the work under this Contract, whether or not changed by any order, an equitable adjustment shall be made and the contract modified in writing accordingly, provided, however, that except for claims based on defective specifications for which the Board is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with such defective specifications.

e. If the Contractor intends to assert a claim for an equitable adjustment under this clause, it must, within thirty (30) days after receipt of a written change order (a) above or the furnishing of a written notice under (b) above, submit to the Contracting Officer a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the Board. The statement of claim hereunder may be included in the notice under (b) above. No claim by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this Contract.

M.16 PRICING OF ADJUSTMENTS

When costs are a factor in any determination of a contract price adjustment pursuant to the Changes clause (Clause 15) or any other provision of this Contract, such costs shall be allowed
to the extent they are reasonable and allocable. In ascertaining what constitutes a cost, any
generally accepted method of determining or estimating costs that is equitable and consistently
applied may be used.

M.17 BOARD DELAY OF WORK

a. If the performance of all or any part of the work is delayed or interrupted by an act of the
Contracting Officer in the administration of this Contract, which act is not expressly or
impliedly authorized by this Contract or by his failure to act within the time specified
in this Contract or within a reasonable time if no time is specified, an adjustment
(excluding profit) shall be made for any increase in the cost of performance of this
Contract caused by such delay or interruption, and the Contract modified in writing
accordingly. Adjustment shall be made also in the delivery or performance dates and any
other contractual provision affected by such delay or interruption. No adjustment,
however, shall be made under this clause for any delay or interruption (1) to the extent
that performance would have been delayed or interrupted by any other cause, including
the fault or negligence of the Contractor, or (2) for which an adjustment is provided or
excluded under any other provision of this Contract.

b. No claim under this clause shall be allowed (1) for any costs incurred more than twenty
(20) days before the Contractor shall have notified the Contracting Officer in writing of
the act or failure to act involved, and (2) unless the claim, in an amount stated, is asserted
in writing as soon as practicable after the termination of such delay or interruption, but
not later than the date of final payment under the Contract.

M.18 EXCUSABLE DELAYS

Except with respect to default of subcontractors, the Contractor shall not be in default by reason
of any failure in performance of this Contract in accordance with its terms (including any failure
by the Contractor to make progress in the prosecution of the work hereunder which endangers
such performance) if such failure arises out of causes beyond the control and without the fault
or negligence of the Contractor. Such causes may include, but are not restricted to acts of God
or of the public enemy, acts of the Board in either its sovereign or contractual capacity, fires,
floods, epidemics, quarantine restrictions, strikes, freight embargoes, or unusually severe
weather, but in every case the failure to perform must be beyond the control and without the fault
or negligence of the Contractor. If the failure to perform is caused by the failure of a
subcontractor to perform or make progress and if such failure arises out of causes beyond the
control of both the Contractor and the subcontractor and without fault or negligence of either, the
Contractor shall not be deemed to be in default unless (a) the supplies or services to be furnished
by the subcontractor were obtainable from other sources, (b) the Contracting Officer ordered
the Contractor to procure such supplies or services from such other sources, and (c) the
Contractor failed to comply reasonably with such order. Upon request of the Contractor, the
Board of Governors of the Federal Reserve System

Solicitation, Offer, and Award 296648

Contracting Officer shall ascertain the facts and extent of such failure, and if he/she determines that any failure to perform was occasioned by any one or more of the said causes, the delivery schedule shall be revised accordingly, subject to the rights of the Board under the clause herein entitled "Termination."

Note: As used in this clause, the terms "subcontractor" and "subcontractors" means subcontractor(s) at any tier.

M.19 STOP WORK ORDER

a. The Contracting Officer may, at any time, by written order to the Contractor, require the Contractor to stop all, or any part, of the work called for by this Contract for a period of ninety (90) days after the order is delivered to the Contractor, and for any further period to which the parties may agree. Any such order shall be specifically identified as a stop work order issued pursuant to this clause. Upon receipt of such an order, the Contractor shall forthwith comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of ninety (90) days after a stop order is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, the Contracting Officer shall either (1) cancel the stop work order, or (2) terminate the work covered by such order as provided in the "Default" or the "Termination for Convenience" clauses of this Contract.

b. If a stop order issued under this clause is canceled or the period of the order or any extension thereof expires, the Contractor shall resume work. An equitable adjustment shall be made in the delivery schedule or contract price or both, and the Contract shall be modified in writing accordingly, if

1. the stop work order results in an increase in the time required for, or in the Contractor's cost properly allocable to the performance of any part,

2. the Contractor asserts a claim for such adjustment within thirty (30) days after the end of the period of work stoppage; provided that, if the Contracting Officer decides the facts justify such action, it may receive and act upon any such claim asserted at any time prior to final payment under this Contract.

c. If a stop work order is not canceled and the work covered by such order is terminated for the convenience of the Board, the reasonable costs resulting from the stop work order shall be allowed in arriving at the termination settlement.
Board of Governors of the Federal Reserve System
 Solicitation, Offer, and Award 250548

   d. If a step work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the step work order.

M.20 TERMINATION FOR CONVENIENCE OF THE BOARD

The Contracting Officer, by written notice, may terminate this contract in whole or in part, when it is in the Board’s interest. To the extent that this contract is for service and is so terminated, the Board shall be liable only for payment in accordance with the payment provisions of this Contract for services rendered prior to the effective date of termination. If the Board terminates this Contract under this paragraph, the Contractor must immediately take all actions necessary to minimize the cost of termination settlement to the Board.

M.21 DEFAULT

   a. The Board may, subject to the provisions of paragraph (c) below, by written notice of default to the Contractor, terminate the whole or any part of this Contract in any one of the following circumstances:

   1. if the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof, or

   2. if the Contractor fails to perform any of the other provisions of this Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of ten (10) days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure.

   b. In the event the Board terminates this Contract in whole or in part as provided in paragraph (a) of this clause, the Board may procure, upon such terms and in such manner as the Contracting Officer deems appropriate, supplies or services similar to those so terminated, and the Contractor shall be liable to the Board for any excess costs for such similar supplies or services; provided that the Contractor shall continue the performance of this Contract to the extent not terminated under the provisions of this clause.

   c. Except with respect to default of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to, acts of God or of the public enemy; acts of the Board in either its sovereign or contractual capacity; fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather, but in every case the failure to perform...
must be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and subcontractor and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.

d. If this Contract is terminated as provided in paragraph (a) of this clause, the Board, in addition to any other rights provided in this clause, may require the Contractor to transfer title and deliver to the Board, in the manner and to the extent directed by the Contracting Officer, (1) any completed supplies, and (2) such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (hereinafter called "manufacturing materials") as the Contractor has specifically produced or specifically acquired for the performance of such part of this Contract as has been terminated; and the Contractor shall, upon direction of the Contracting Officer, protect and preserve property in possession of the Contractor in which the Board has an interest. Payment for completed supplies delivered to and accepted by the Board shall be at the Contract price. Payment for manufacturing materials delivered to and accepted by the Board and for the protection and preservation of property shall be in the amount agreed upon by the Contractor and Contracting Officer. The Board may withhold from amounts otherwise due the Contractor for such completed supplies or manufacturing materials such sum as the Contracting Officer determines to be necessary to protect the Board against the losses because of outstanding liens or claims of former lienholders.

e. If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of the clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the termination for convenience provisions of this Contract.

f. The right and remedies of the Board provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

g. As used in paragraph (c) of this clause, the terms "subcontractor" and "subcontractors" mean subcontractor(s) at any tier.

M.22 DISPUTES

a. Any claim by the Contractor seeking payment of money in a sum certain, the adjustment or interpretation of Contract terms, or other relief arising under or relating to the Contract must be submitted in writing to the Contracting Officer. Upon receipt of such a claim,
the Contracting Officer or his/her representative will contact the claimant and attempt to negotiate a mutually acceptable resolution.

b. Upon the failure to reach such a resolution, the Contracting Officer shall issue a written determination after reviewing the pertinent facts and consulting with legal and other advisors. The written determination shall be issued within a reasonable time, but not less than sixty (60) days after receipt of a written request from the claimant for a written determination. The written determination shall contain (1) a description of the claim or dispute; (2) reference to the pertinent contract terms; (3) a statement of the factual areas of agreement and disagreement; (4) a statement of the Contracting Officer’s decision, with supporting rationale; and (5) a statement that the Contracting Officer’s decision is final and that the claimant may appeal the decision to the Board’s Staff Director for Management. The Contracting Officer’s decision will be furnished by certified mail, return receipt requested, or by any other method that provides evidence of receipt.

c. Failure of the Contracting Officer to issue a written determination within sixty (60) days of a written request for such determination shall be deemed to be a denial of the claim, which may be appealed to the Board’s Staff Director for Management. Any appeal to the Board’s Staff Director for Management must be made in writing within ninety (90) days from the date the claimant receives the Contracting Officer’s written decision.

d. The Board will pay interest on the amount found due and unpaid from (1) the date that the Contracting Officer receives the claim, or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. Simple interest on claims will be paid at the rate fixed by the Secretary of the Treasury pursuant to Pub. L. 92-41 (85 Stat. 97), which is applicable to the period during which the Contracting Officer receives the claim.

M 23 PROTESTS

a. Protests may be submitted by actual or prospective Offerors to the manager of the Procurement Sections as follows: Procurement Manager, Management Division, 20th and C Streets, NW, Washington, DC 20551. Protests on alleged improprieties in a solicitation that are apparent prior to the closing date for receipt of bids or proposals shall be filed prior to that date. In all other cases, protests shall be filed not later than ten (10) calendar days after the basis of the protest is known or should have been known, whichever is earlier. Protests shall include (1) the name, address, and telephone number of the protestor; (2) the solicitation or contract number; (3) a detailed statement of the legal and factual grounds for the protest, including copies of relevant documents; (4) a request for a ruling by the Board; and (5) a statement of the form of relief requested.
b. If the Procurement Manager receives a protest prior to award, an award will not be made until the protest on the protest is issued, or the matter is otherwise resolved unless the Procurement Manager first determines, in writing, that (1) the supplies or services to be contracted for are urgently required, (2) delivery in performance will be unduly delayed by failure to make award promptly, or (3) a prompt award will otherwise be advantageous to the Board. If the award is to be delayed pending resolution of the protest, the other Offerors shall be notified of the protest; and, if appropriate, those Offerors should be requested to extend the time for acceptance to avoid the need for resolicitation.

c. If a protest is received after award, the contract performance will not be suspended unless it appears likely that an award may be invalidated and a delay in receiving the supplies or services is not prejudicial to the Board's interest.

d. The Procurement Manager will furnish a copy of the written protest ruling to the protestor by certified mail, return receipt requested, or by any other method that provides evidence of receipt. The protestor may appeal the ruling of the Procurement Manager to the Chief Acquisition Officer. Any appeal to the Chief Acquisition Officer must be made within ten (10) calendar days from the date the protestor receives the Procurement Manager's written ruling. If the Chief Acquisition Officer has a conflict, then the director of the Management Division will decide the appeal.

M.24 COMPETITION IN SUBCONTRACTING

The Contractor shall elect subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the Contract.

M.25 SMALL BUSINESS AND SMALL DISADVANTAGED BUSINESS

a. The Board has a policy of assisting small businesses and disadvantaged small businesses in participating in the performance of Board contracts.

b. The Contractor shall comply with this policy in the awarding of subcontracts to the fullest extent consistent with the efficient performance of this Contract. The Contractor further agrees to furnish to the Board information demonstrating the Contractor's compliance with this clause upon request by the Board.

c. As used in this Contract, the term "small business" means a business qualifying as a small business concern under section 3 of the Small Business Act (15 U.S.C. Section 632) and rules and regulations promulgated pursuant thereto, and the term "disadvantaged small business" means a small business.
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 25548

1. at least 51 percent owned by one or more socially and economically
disadvantaged individuals; or, in the case of any publicly owned business, at least
51 percent of the stock of the business is owned by one or more socially
disadvantaged individuals; and

2. whose management and daily business operations are controlled by one or more
such individuals. The Contractor shall ensure that socially and economically
disadvantaged individuals include African Americans, Hispanic Americans,
Native Americans, Asian Pacific Americans, and other minorities, or any other
individual found to be disadvantaged by the Small Business Administration
pursuant to section 8(a) of the Small Business Act.

d. Contractors acting in good faith may rely on written representations by their
subcontractors regarding their status as either a small business or a socially and
economically disadvantaged small business.

M.26 EQUAL OPPORTUNITY (See Attachment No. 1)

M.27 EMPLOYMENT OF THE PERSONS WITH DISABILITIES

Note: This clause is applicable to contracts and subcontracts in excess of ten thousand dollars ($10,000).

a. The Contractor shall not discriminate against any employee or applicant for employment
because of a physical or mental disability in regard to any position for which the
employee or applicant for employment is qualified. The Contractor shall take affirmative
action to hire, place, and advance qualified persons with disabilities who are physically
or mentally disabled. The Contractor shall not discriminate against persons with
disabilities in employment practices such as the following: employment, upgrading,
demotion, transfers, recruitment, advertising, layoff or termination, rates of pay or other
forms of compensation, and selection for training, including apprenticeship programs.

b. The Contractor shall comply with the rules, regulations, and relevant orders of the
Secretary of Labor issued pursuant to the Rehabilitation Act of 1973, as amended (29
U.S.C. Section 793) (the "Act").

c. In the event of the Contractor's noncompliance with the requirements of this clause, the
Board may take such actions of noncompliance as may be taken in accordance with the
rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the
Act.
d. The Contractor shall post in conspicuous places, available to employees and applicants for employment, notices in a form prescribed by the Director, Office of Federal Contract Compliance Programs, Department of Labor. Such notices shall state (1) the Contractor's obligation under the law to take affirmative action to hire, place, and advance in employment qualified persons with disabilities, and (2) the rights of applicants and employees.

e. The Contractor shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract of understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to hire, place, and advance in employment qualified persons with physical and mental disabilities.

f. The Contractor shall include the provisions of this clause in every subcontract or purchase order in excess of ten thousand dollars ($10,000), unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 503 of the Act.

M.28 AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS

Note: This clause is applicable to all contracts and subcontracts of twenty-five thousand dollars ($25,000) or more.

a. Definitions.

"Appropriate office of the state employment service system", as used in this clause, means the local office of the federal-state national system of public employment offices assigned to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

"Openings that the Contractor proposes to fill from within its own organization", as used in this clause, means employment openings for which no one outside the Contractor's organization (including any affiliates, subsidiaries, and the parent companies) will be considered, and includes any openings that the Contractor proposes to fill from regularly established "recall" lists.

"Openings that the Contractor proposes to fill under a customary and traditional employer-union hiring arrangement", as used in this clause, means employment openings that the Contractor proposes to fill from union halls under their customary and traditional employer-union hiring relationship.
Board of Governors of the Federal Reserve System
Solicitation, Offer, and Award 230548

"Suitable employment openings", as used in this clause.

1. Includes, but is not limited to, openings that occur in jobs categorized as (i) production and nonsupervisory; (ii) plant and office; (iii) laborers and mechanics; (iv) supervisory and nonsupervisory; (v) technical, and (vi) executive, administrative, and professional positions compensated on a salary basis of less than twenty-five thousand ($25,000) a year; and

2. Includes full-time employment, temporary employment of over three (3) days, and part-time employment, but not openings that the Contractor proposes to fill from within its own organization or under a customary and traditional employer-union hiring arrangement, but not openings in an educational institution that are restricted to students of that institution.

b. General.

1. Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against the individual because the individual is a special disabled or Vietnam era veteran. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified special disabled and Vietnam era veterans without discrimination based upon their disability or veterans' status in all employment practices such as (i) employment; (ii) upgrading; (iii) promotion or transfer; (iv) recruitment; (v) advertising; (vi) layoffs or terminations; (vii) rates of pay or other forms of compensation; and (viii) selection for training, including apprenticeship.

2. The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Vietnam Era Veterans Readjustment Assistance Act of 1972 (the Act), as amended (38 U.S.C. Section 2022).

c. Listing openings.

1. The Contractor agrees to list all suitable employment openings existing at Contract award or occurring during Contract performance, at an appropriate office of the state employment service system in the locality where the opening occurs. These openings include those occurring at any Contractor facility, including ones not connected with performing this Contract. An independent contractor affiliate is exempt from this requirement.
2. State and local government agencies holding federal contracts of twenty-five thousand dollars ($25,000) or more shall also list all their suitable openings with the appropriate office of the state employment service.

3. The listing of suitable employment openings with the state employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans and non-veterans. This listing does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive Orders or regulations concerning nondiscrimination in employment.

4. Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the state employment service system, in each state where it has establishments, of the name and location of each hiring location in the state. As long as the Contractor is contractually bound to these terms and has so advised the state system, it need not advise the state system of subsequent contracts. The Contractor may advise the state system when it is no longer bound by this contract clause.

5. Under the most compelling circumstances, an employment opening may not be suitable for listing, including situations when (i) the Government's needs cannot reasonably be supplied, (ii) listing would be contrary to national security, or (iii) the requirement of listing would not be in the Government's interest.

d. Applicability.

1. This clause does not apply to the listing of employment openings which occur and are filled outside the fifty states, the District of Columbia, Puerto Rico, Guam, the Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

2. The terms of paragraph (c) above of this clause do not apply to openings that the Contractor proposes to fill from within its own organization or under a customary and traditional employer-union hiring arrangement. This exclusion does not apply to a particular opening once an employer decides to consider applicants outside of its own organization or employer-union arrangement for that opening.

e. Postings.

1. The Contractor agrees to post employment notices stating (i) the Contractor's obligation under the law to take affirmative action to employ and advance in
employment of qualified special disabled veterans and veterans of the Vietnam era,
and (ii) the rights of applicants and employees.

2. These notices shall be posted in conspicuous places that are available to
employees and applicants for employment. They shall be in a form prescribed by
the Director, Office of Federal Contract Compliance Programs, Department of
Labor (Director), and provided by or through the Contracting Officer.

3. The Contractor shall notify each labor union or representative of workers with
which it has a collective bargaining agreement or other contract understanding,
that the Contractor is bound by the terms of the Act, and is committed to take
affirmative action to employ, and advance in employment, qualified special
disabled and Vietnam era veterans.

f. Noncompliance. If the Contractor does not comply with the requirements of this clause,
appropriate actions may be taken under the rules, regulations, and relevant orders of the
Secretary issued pursuant to the Act.

g. Subcontracts. The Contractor shall include the terms of this clause in every subcontract
or purchase order of twenty-five thousand dollars ($25,000) or more unless exempted by
rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the
Director to enforce the terms, including action for noncompliance.

M.29 WAlSH-HEALEY PUBLIC CONTRACTS ACT

If this Contract is for the manufacture or furnishing of materials, supplies, articles, or equipment
in an amount which exceeds or may exceed ten thousand dollars ($10,000), and is otherwise
subject to the Walsh-Healey Public Contracts Act, as amended (41 U.S.C. Section 35-45), these
clauses are incorporated by reference all representations and stipulations required by said Act and
regulations issued thereunder by the Secretary of Labor, such representations and stipulations
being subject to all applicable rulings and interpretations of the Secretary of Labor which are
now or may hereafter be in effect.

M.30 SERVICE CONTRACT ACT OF 1965 (See Attachment 2)

M.31 BUY AMERICAN ACT

a. The Buy American Act (41 U.S.C. Section 10) provides that preference should be given
to domestic end products.

"Components", as used in this clause, means those articles, materials, and supplies
incorporated directly into the end products.
Board of Governors of the Federal Reserve System  
Solicitation, Offer, and Award 250348

"Domestic end product", as used in this clause, means (1) an unmanufactured end product mined or produced in the United States, or (2) an end product manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind as the products referred to in subparagraphs (b)(2) or (b)(3) of this clause shall be treated as domestic. Scrap generated, collected, and prepared for processing in the United States is considered domestic.

"End products", as used in this clause, means those articles, materials, and supplies to be acquired for public use under this Contract.

b. The Contractor shall deliver only domestic end products, except those:

1. for use outside the United States;

2. that the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality;

3. for which the Board determines that domestic preference would be inconsistent with the public interest; or

4. for which the Board determines the cost to be unreasonable.

M.32 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT – OVERTIME COMPENSATION

This Contract, to the extent that it is of a character specified in the Contract Work Hours and Safety Standards Act (40 U.S.C. Section 327-330), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder.

a. Overtime requirements. No Contractor or subcontractor shall require or permit any laborer, mechanic, apprentice, trainee, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of forty hours in such workweek on work subject to the provisions of the Contract Work Hours and Safety Standards Act unless such laborer, mechanic, apprentice, trainee, watchman, or guard receives compensation at a rate not less than one and one-half times his/her basic rate of pay for all such hours worked in excess of forty (40) hours in such workweek.

Page 77 of 93
b. Violation, liability for unpaid wages, and liquidated damages. In the event of any violation of the provisions of paragraph (a), the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his/her unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, apprentice, tailor, watchman, or guard employed in violation of the provisions of paragraph (a) in the sum of ten dollars ($10) for each calendar day on which such employee was required or permitted to be employed on such work in excess of the standard workweek of forty (40) hours without payment of the overtime wages required by paragraph (a).

c. Withholding for unpaid wages and liquidated damages. The Contracting Officer may withhold from the Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph (b).

d. Subcontracts. The Contractor shall insert paragraphs (a) through (d) of this clause in any subcontract exceeding one hundred thousand dollars ($100,000), and shall require their inclusion in all subcontracts of any tier.

e. Records. The Contractor shall maintain payrolls and basic payroll records during the course of contract work for a period of three (3) years from the completion of the Contract. Such records shall be available for inspection by authorized representatives of the Board and the Department of Labor. The Contractor shall permit such representatives to interview employees during working hours on the job. The payroll records shall contain the name and address of each employee, the social security number, the correct classification, the hourly rates of wages paid, the daily and weekly number of hours worked, the deductions made, and the actual wages paid.

M.33 PRIVACY ACT

e. The Contractor agrees:

1. to comply with the Privacy Act of 1974, 5 U.S.C. Section 552a, and the rules and regulations promulgated thereunder and applicable to the Act, in the design, development, and operation of any system of records on individuals in order to accomplish a Board function, when the Contract specifically identifies (i) the system or systems of records, and (ii) the work to be performed by the Contractor in terms of any one or combination of the following: (A) design, (B) development, or (C) operations;
2. to include the Privacy Act notification contained in this Contract in every solicitation and resulting subcontract and in every subcontract awarded without a solicitation, when the statement of work in the proposed subcontract requires the design, development, or operation of a system of records on individuals to accomplish a Board function.

3. to include this clause, including this paragraph (3), in all subcontracts awarded pursuant to this Contract which require the design development, or operation of such a system of records.

b. In the event of violations of the Privacy Act, a civil action may be brought against the Board when the violation concerns the design, development, or operation of a system of records on individuals to accomplish a Board function and criminal penalties may be imposed upon the officers or employees of the Board when the violation concerns the operation of a system of records on individuals to accomplish a Board function. For purposes of the Act, when the contract is for the operation of a system of records on individuals to accomplish a Board function, the Contractor and any employee(s) of the Contractor are considered to be employee(s) of the Board.

c. The terms used in this clause have the following meanings:

"Operation of a system of records" means performance of any of the activities associated with maintaining the system of records including the collection, use, and dissemination of records.

"Record" means any item, collection, or grouping of information about an individual that is maintained by the Board and/or Government agency, including but not limited to, his/her education, financial transactions, medical history, and criminal or employment history and that contains his name or an identifying number, symbol, or other identifying particular assigned to the individual, such as a finger or voice print or a photograph.

"System of records" on an individual means a group of any records under the control of any agency from which information is retrievable by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual.

M.34 PAPERWORK REDUCTION ACT

Information collection requirements contained in this solicitation have been approved by the Office of Management and Budget under the provisions of 44 U.S.C. Section 3501 et seq. and have been assigned OMB No. 7100-0140.
EQUAL OPPORTUNITY CLAUSE

Note: The following clause is applicable unless this Contract is exempted under the rules, regulations, and relevant orders of the Secretary of Labor (41 CFR Ch. 60).

(a) If, during a 12-month period (including the 12 months preceding the award of this Contract), the Contractor has been or is awarded nonexempt federal contracts and/or subcontracts that have an aggregate value in excess of one thousand ($10,000), the Contractor shall comply with subparagraphs (b)(1) through (b)(7) below. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(b) During performance of this Contract, the Contractor agrees as follows:

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this Equal Opportunity clause.

(2) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(3) The Contractor shall send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or...
understanding, a notice, to be provided by the Contracting Officer, advising the labor union or workers' representative of the Contractor's commitments under this

Equal Opportunity clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Contractor shall comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The Contractor shall furnish to the Board all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and shall permit access to his books, records, and accounts by the Board or the Office of Federal Contract Compliance Programs for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Contractor's noncompliance with this Equal Opportunity clause or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further Board contracts in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The Contractor shall include the provisions of paragraph (b)(1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or Contractor. The Contractor shall take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or Contractor as a result of such direction by the Board, the Contractor may request the Board to enter into such litigation to protect the interests of the Board.

(a) Nonsegregated Facilities. Note: This clause is applicable to Contracts exceeding ten thousand dollars ($10,000) that are not exempt under Clause (a) above. By acceptance of this Contract, the Contractor represents that he does not and will not maintain nor provide for his employees any segregated facilities at any of his establishments, and that he does not permit his
employees to perform their services at any location under his control where segregated facilities are maintained. The Contractor agrees that a breach of his representation is a violation of the Equal Employment Opportunity clause of this Contract. As used herein the term "segregated facilities" means any waiting rooms, work areas, rest rooms, wash rooms, restaurants (and other eating areas), time clock, locker rooms, storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, religion, color, age, or national origin, because of habit, local custom, or otherwise. Contractor further agrees that (except where subcontractors have similarly certified for specific time periods) he shall obtain identical representations from proposed subcontractors prior to award of subcontracts exceeding ten thousand dollars ($10,000) which are not exempt from the provisions of the Equal Employment Opportunity clause, that he will retain such representations in his files, and that he will provide the following notification to proposed subcontractors (except where the proposed subcontractors have submitted identical representations for specific time periods) as follows:

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR NONSEGREGATED FACILITIES. A Statement of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding ten thousand dollars ($10,000) that is not exempt from the provisions of the Equal Opportunity clause. The statement may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semianually, or annually). Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. Section 1001.

(d) Affirmative Action Program. If this Contract is for an amount of $50,000 or more, Contractor by acceptance of this Contract certifies that he has, or will within one hundred and twenty (120) days from the date of this Contract, develop and maintain at each of his establishments Affirmative Action Programs, pursuant to 41 CFR Sections 60-1 and 60-2.

(e) Preaward on Site Equal Opportunity Compliance Review. An award in the amount of one million dollars ($1,000,000) or more will not be made unless the Contractor and each of his known first-tier subcontractors (to whom he intends to award a subcontract of one million dollars ($1,000,000) or more are found on the basis of a compliance review to be able to comply with the provisions of the Equal Opportunity Clause of this contract.
SERVICE CONTRACT ACT OF 1965
AS AMENDED (MAY 1989)

Note: This Contract, to the extent that it is of the character to which the Service Contract Act of 1965 (41 U.S.C. Section 351 et seq.) applies, is subject to the following provisions and to all other applicable provisions of the Act and regulations of the Secretary of Labor thereunder.

(a) Definitions. As used in this clause, means the Service Contract Act of 1965, as amended (41 U.S.C. 351, et seq.).

Contractor, as used in this clause or in any subcontract, shall be deemed to refer to the subcontractor, except in the term Government Prime Contractor.

Service employee, as used in this clause, means any person engaged in the performance of this contract other than any person employed in a bona fide executive, administrative, or professional capacity, as those terms are defined in part 541 of title 29, Code of Federal Regulations, as revised. It includes all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

(b) Applicability. This contract is subject to the following provisions and to all other applicable provisions of the Act and regulations of the Secretary of Labor (29 CFR part 4). This clause does not apply to contracts or subcontracts administratively exempted by the Secretary of Labor or exempted by 41 U.S.C. 356, as interpreted in subpart C of 25 CFR part 4.

(c) Compensation. (1) Each service employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wages and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor, or authorized representative, as specified in any wage determination attached to this contract.

(2)(i) If a wage determination is attached to this contract, the Contractor shall classify any class of service employee which is not listed therein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination) so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed class of employees shall
be paid the monetary wages and furnished the fringe benefits as are determined pursuant to the procedures in this paragraph (c).

(ii) This conforming procedure shall be initiated by the Contractor prior to the performance of contract work by the unlisted class of employee. The Contractor shall submit Standard Form (SF) 1444, Request for Authorization of Additional Classification and Rate, to the Contracting Officer no later than thirty (30) days after the unlisted class of employee performs any contract work. The Contracting Officer shall review the proposed classification and rate and promptly submit the completed SF 1444 (which must include information regarding the agreement or disagreement of the employees' authorized representatives or the employees themselves together with the agency recommendation), and all pertinent information to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor. The Wage and Hour Division will approve, modify, or disapprove the action or render a final determination in the event of disagreement within thirty (30) days of receipt or will notify the Contracting Officer within thirty (30) days of receipt that additional time is necessary.

(iii) The final determination of the conformity action by the Wage and Hour Division shall be transmitted to the Contracting Officer who shall promptly notify the Contractor of the action taken. Each affected employee shall be furnished by the Contractor with a written copy of such determination or it shall be posted as a part of the wage determination.

(iv)(A) The process of establishing wage and fringe benefit rates that bear a reasonable relationship to those listed in a wage determination cannot be reduced to any single formula. The approach used may vary from wage determination to wage determination depending on the circumstances. Standard wage and salary administration practices which rank various job classifications by pay grade pursuant to point schemes or other job factors may, for example, be relied upon. Guidance may also be obtained from the way different jobs are rated under Federal pay systems (Federal Wage Board Pay System and the General Schedule) or from other wage determinations issued in the same locality. Basic to the establishment of any conformable wage rate(s) is the concept that a pay relationship should be maintained between job classifications based on the skill required and the duties performed.

(B) In the case of a contract modification, an exercise of an option, or extension of an existing contract, or in any other case where a Contractor succeeds a contractor under which the classification in question was previously conformly determined pursuant to paragraph (c) of this clause, a new conformed wage rate and fringe benefit may be assigned to the conform classification by indexing (i.e., adjusting) the previous conform rate and fringe benefit by an amount equal to the average (most) percentage increase (or decrease, where appropriate) between the wages and fringe benefit specified for all classifications to be used on the contract which are listed in the current wage determination, and those specified for the corresponding classifications in the
previously applicable wage determination. Where conforming actions are accomplished in accordance with this paragraph prior to the performance of contract work by the unlisted class of employees, the Contractor shall advise the Contracting Officer of the action taken but the other procedures in subdivision (c)(2)(ii) of this clause need not be followed.

(C) No employee engaged in performing work on this contract shall in any event be paid less than the currently applicable minimum wage specified under subsection 6(a)(1) of the Fair Labor Standards Act of 1938, as amended.

(v) The wage rate and fringe benefits finally determined under this subparagraph (c)(2) of this clause shall be paid to all employees performing in the classification from the first day on which contract work is performed by them in the classification. Failure to pay the unlisted employees the compensation agreed upon by the interested parties and/or finally determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract.

(vi) Upon discovery of failure to comply with subparagraph (c)(2) of this clause, the Wage and Hour Division shall make a final determination of conformity of classification, wage rate, and/or fringe benefits which shall be retroactive to the date such class or classes of employees commenced contract work.

(3) Adjustment of Compensation. If the term of this contract is more than one (1) year, the minimum monetary wages and fringe benefits required to be paid or furnished thereunder to service employees under this contract shall be subject to adjustment after one (1) year and not less often than once every two (2) years, under wage determinations issued by the Wage and Hour Division.

(d) Obligation to Furnish Fringe Benefits. The Contractor or subconactor may discharge the obligation to furnish fringe benefits specified in the attachment or determined under subparagraph (c)(2) of this clause by furnishing equivalent charitable donations of bona fide fringe benefits, or by making equivalent or differential cash payments, only in accordance with subpart D of 29 CFR part 4.

(e) Minimum Wage. In the absence of a minimum wage attachment for this contract, neither the Contractor nor any subcontractor under this contract shall pay any person performing work under this contract (regardless of whether the person is a service employee) less than the minimum wage specified by subsection 6(a)(1) of the Fair Labor Standards Act of 1938. Nothing in this clause shall relieve the Contractor or any subcontractor of any other obligation under law or contract for payment of a higher wage to any employee.
Board of Governors of the Federal Reserve System

(f) Succeeding Contract. If this contract succeeds a contract subject to the Act under which substantially the same services were furnished in the same locality and service employees were paid wages and fringe benefits provided for in a collective bargaining agreement, in the absence of the minimum wage attachment for this contract setting forth such collectively

bargained wage rates and fringe benefits, neither the Contractor nor any subcontractor under this contract shall pay any service employee performing any of the contract work (regardless of whether or not such employee was employed under the predecessor contract), less than the wages and fringe benefits provided for in such collective bargaining agreement, to which such employee would have been entitled if employed under the predecessor contract, including accrual wages and fringe benefits and any prospective increases in wages and fringe benefits provided for under such agreement. The Contractor or subcontractor under this contract may be relieved of the foregoing obligation unless the limitations of 29 CFR 4.1(b) apply or unless the Secretary of Labor or the Secretary's authorized representative finds, after a hearing as provided in 29 CFR 4.10 that the wages and/or fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality, or determines, as provided in 29 CFR 4.11, that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations, Where it is found in accordance with the review procedures provided in 29 CFR 4.10 and/or 4.11 and parts 6 and 8 that notice or all of the wages and/or fringe benefits contained in a predecessor Contractor's collective bargaining agreement are substantially at variance with those which prevail for services of a character similar in the locality, and/or that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arm's length negotiations, the Department will issue a new or revised wage determination setting forth the applicable wage rates and fringe benefits. Such determination shall be made part of the contract or subcontract, in accordance with the decision of the Administrator, the Administrative Law Judge, or the Board of Service Contract Appeals, as the case may be, irrespective of whether such issuance occurs prior to or after the award of a contract or subcontract (53 Comp. Gen. 401 (1973)). In the case of a wage determination issued solely as a result of a finding of substantial variance, such determination shall be effective as of the date of the final administrative decision.

(g) Notification to Employees. The Contractor and any subcontractor under this contract shall notify each service employee commencing work on this contract of the minimum monetary wage and any fringe benefits required to be paid pursuant to this contract, or shall post the wage determination attached to this contract. The poster provided by the Department of Labor (Publication WH 1331) shall be posted in a prominent and accessible place at the workplace. Failure to comply with this requirement is a violation of section 2(a)(4) of the Act and of this contract.
(b) Safe and Sanitary Working Conditions. The Contractor or subcontractor shall not permit any part of the services called for by this contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor that are unsanitary, hazardous, or dangerous to the health or safety of the service employees. The Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR part 1925.

(i) Records. (1) The Contractor and each subcontractor performing work subject to the Act shall make and maintain for three (3) years from the completion of the work, and make them available for inspection and transcription by authorized representatives of the Wage and Hour Division, Employment Standards Administration, a record of the following:

(a) For each employee subject to the Act—

(A) Name and address and social security number;

(B) Correct work classification or classifications, rate or rates of monetary wages paid and fringe benefits provided, rate or rates of pay rates in lieu of fringe benefits, and total daily and weekly compensation;

(C) Daily and weekly hours worked by each employee; and

(D) Any deductions, rebates, or refunds from the total daily or weekly compensation of each employee.

(ii) For those classes of service employees not included in any wage determination attached to this contract, wage rates or fringe benefits determined by the interested parties or by the Administrator or authorized representative under the terms of paragraph (c) of this clause. A copy of the report required by subdivision (c)(2)(ii) of this clause will fulfill this requirement.

(iii) Any list of the predecessor Contractor's employees which had been furnished to the Contractor as prescribed by paragraph (a) of this clause;

(2) The Contractor shall also make available a copy of this contract for inspection or transcription by authorized representatives of the Wage and Hour Division.

(3) Failure to make and maintain or to make available these records for inspection and transcription shall be a violation of the regulations and this contract, and in the case of failure to produce these records, the Contracting Officer, upon direction of the Department of Labor and notification to the Contractor, shall take action to cause suspension of any further payment or advance of funds until the violation ceases.
(4) The Contractor shall permit authorized representatives of the Wage and Hour Division to conduct interviews with employees at the worksite during normal working hours.

(i) Pay Periods. The Contractor shall unconditionally pay to each employee subject to the Act all wages due free and clear and without subsequent deduction (except as otherwise provided by law or Regulations, 29 CFR part 4), rebate, or kickback on any account. These payments shall be made no later than one pay period following the end of the regular pay period in which the wages were earned or accrued. A pay period under this Act may not be of any duration longer than semimonthly.

(k) Withholding of Payments and Termination of Contract. The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor under this or any other Government contract with the Prime Contractor such sums as are necessary to pay underpaid employees employed by the Contractor or subcontractor. In the event of failure to pay any employees subject to the Act all or part of the wages or fringe benefits due under the Act, the Contracting Officer may, after authorization by the Department of Labor and written notification to the Contractor, take action to suspend any further payment or advance of funds until such violations have ceased. Additionally, any failure to comply with the requirements of this clause may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional cost.

(i) Subcontracts. The Contractor agrees to insert this clause in all subcontracts subject to the Act.

(m) Collective Bargaining Agreements Applicable to Service Employees. If wages in job or fringe benefits to be furnished any service employees employed by the Government Prime Contractor or any subcontractor under the contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the contract is being performed, the Government Prime Contractor shall report such fact to the Contracting Officer, together with full information as to the application and accrual of such wages and fringe benefits, including any prospective increases, to service employees engaged in work on the contract, and a copy of the collective bargaining agreement. Such report shall be made upon commencing performance of the contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance such agreements shall be reported promptly after negotiation thereof.

(a) Seniority List. Not less than ten (10) days prior to completion of any contract being performed at a Federal facility where service employees may be retained in the performance of
the succeeding contract and subject to a wage determination which contains vacation or other benefit provisions based upon length of service with a Contractor (and its successors) or successor (29 CFR § 4.173), the incumbent Prime Contractor shall furnish the Contracting Officer a certified list of the names, of all service employees on the Contractor's or subcontractor's payroll during the last month of contract performance. Such list shall also contain anniversary dates of employment on the contract either with the current or predecessor Contractors of each such service employee. The Contracting Officer shall turn over such list to the successor Contractor at the commencement of the succeeding contract.

(e) Rulings and Interpretations. Rulings and interpretations of the Act are contained in Regulations, 29 CFR part 4.

(f) Contractor's Certification. (1) By entering into this contract, the Contractor and officials thereof certifies that neither it (nor he or she) nor any person or firm who has a substantial interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of the sanctions imposed under section 5 of the Act.

(2) No part of this contract shall be subcontracted to any person or firm ineligible for award of Government contracts under section 5 of the Act.


(g) Variations, Tolerances, and Exemptions Involving Employment. Notwithstanding any of the provisions in paragraphs (b) through (e) of this clause, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to section 4(b) of the Act prior to its amendment by Pub. L. 92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business.

(1) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical or mental deficiency or injury may be employed at wages lower than the minimum wages otherwise required by section 2(a)(1) or 2(b)(1) of the Act without diminishing any fringe benefits or cash payments in lieu thereof required under section 2(a)(2) of the Act, in accordance with the conditions and procedure prescribed for the employment of apprentices, student-learners, handicapped persons, and handicapped clients of authorized workshops under section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator (29 CFR parts 520, 521, 524, and 525).

(2) The Administrator will issue certificates under the Act for the employment of apprentices, student-learners, handicapped persons, or handicapped clients of authorized workshops not subject to the Fair Labor Standards Act of 1938, or subject to different minimum
rates of pay under the two acts, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations (issued under the Fair Labor Standards Act of 1938 (29 CFR parts 520, 521, 524, and 525).

(3) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in 29 CFR parts 525 and 528.

(c) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed and individually registered in a bona fide apprenticeship program registered with a State Apprenticeship Agency which is recognized by the U.S. Department of Labor, or if no such recognized agency exists in a State, under a program registered with the Bureau of Apprenticeship and Training, Employment and Training Administration, U.S. Department of Labor. Any employee who is not registered as an apprentice in an approved program shall be paid the wage rate and fringe benefits contained in the applicable wage determination for the journeyman classification of work actually performed.

The wage rates paid apprentices shall not be less than the wage rate for their level of progress set forth in the registered program, expressed as the appropriate percentage of the journeyman’s rate contained in the applicable wage determination. The allowable ratio of apprentices to journeymen employed on the contract work in any craft classification shall not be greater than the ratio permitted to the Contractor as to his entire work force under the registered program.

(d) Tips. An employee engaged in an occupation in which the employee customarily and regularly receives more than thirty dollars ($30) a month in tips may have the amount of these tips credited by the employer against the minimum wage required by section 2(a)(1) or section 2(b)(1) of the Act, in accordance with section 3(m) of the Fair Labor Standards Act and Regulations 29 CFR part 531. However, the amount of credit shall not exceed $1.34 an hour beginning January 1, 1981. To use this provision—

(1) The employer must inform tipped employees about this tip credit allowance before the credit is utilized;

(2) The employees must be allowed to retain all tips (individually or through a pooling arrangement and regardless of whether the employee elects to take a credit for tips received);

(3) The employer must be able to show by records that the employee receives at least the applicable Service Contract Act minimum wage through the combination of direct wages and tip credit, and
(4) The use of such tip credit must have been permitted under any predecessor collective bargaining agreement applicable by virtue of section 4(c) of the Act.

(i) Disputes Concerning Labor Standards. The U.S. Department of Labor has set forth in 29 CFR parts 4, 6, and 8 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with these procedures and not the Dispute clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
(End of clause)
[54 FR 19828, May 8, 1989]
Attention Offerors:

This serves to notify all Offerors that SOA-250548 is hereby amended to include the questions submitted by Offerors and the Board’s official responses.

Offerors must acknowledge receipt of this Amendment in the Offer section of the Solicitation, Offer and Award Form (Section A) and in Paragraph 11 of the Representations and Other Statements of Offeror (Section K) when they submit their Phase 3 proposal.

Question: The Cost Table, pages 1 through 8 – is it available online?
Answer: The cost table is available as an electronic file and will be forwarded by e-mail to each Offeror’s main point of contact.

Question: Exhibition Area – on page 14 of RFP, the Statement of Work mentions an Exhibition Area - is the design of the Exhibition Area to be included in our scope of services, or will the FRB engage a separate consultant for its design?
Answer: The Exhibition Area is included in this project’s scope of services. The selected A/E firm will provide the design work as part of their services.

Question: Construction process – on page 18 of RFP, the RFP mentions prospective GC bidders – Will the delivery process be a traditional design-bid-build? Will it be a single prime GC process?
Answer: It is a traditional Design-Bid-Build.
Solicitation, Offer and Award 250048

Amendment 1

Question: Renovation of the Martin Building - on page 21 of 93, under C.3.5, the Statement of Work mentions the renovation of the Martin Building. What is the status of the renovation? Will this work be done parallel with the new Visitor Center work?

Answer: The renovation of the Martin Building is referring to the future work expected in conjunction with the Visitor Center. The renovation of these areas are to be integrated with the design of the Visitor Center as one project. Construction Documents of the Visitor Center shall include the renovation information for such locations. (Refer to Sketch 2 and Sketch 3).

Question: LEED Certification - on page 22 of 93, reference is made to “the highest possible” LEED designation. Does the Board require a minimum designation? If so, what is that minimum?

Answer: No minimum LEED designation is required at this point. The new material, system design and the process is to consider the most economic and efficient approach.

Question: IT systems design - on page 22 of 93, the Statement of Work narrative states that the design of IT systems is to be coordinated with the Board’s IT division. Please clarify the Design Professional’s scope of work relative to IT systems design.

Answer: The design Professional’s scope of work will follow the project program as a complete design work. The statement on page 22 does NOT imply that the Board’s IT division will perform any design work. The listed items are examples of items the Board’s IT division must review in order to ensure the design and specifications comply with existing standards, installation, and functions.

Question: The Security and CBR Threat Assessment Study, dated February 15, 2002 (page 23 of 93) – is it available for review prior to the February (the Board assumes you mean August) 26, 2003 Phase 1 submission?

Answer: The above referenced study and other sensitive material will be provided in a later stage of the process to demystified firms and may require the signing of a non-disclosure agreement.

Question: Will the pre-proposal meeting occur before the submission of phase 1 proposal?

Answer: No.

Question: Your RFP shows 6,500 SF and 8,200 SF as the square footage for the Visitor Center, which is correct?

Answer: The 6,500 SF is the proposed area of the Visitor Center. The 8,200 SF is the area of the Podium level to be remodeled in conjunction with this project, including the 6,500 SF of the Visitor Center. See Sketch #2.
Solicitation, Offer and Award 250548
Amendment 1

Question: You ask that we provide information on key personnel. For the sake of easy evaluating across all submittals, what discipline categories do you consider key personnel? Do you want resumes on everyone on our team including sub, or is the Project Manager, the lead Architectural designer, interior designer and Security specialist sufficient?

Answer: The following positions shall be considered "Key Personnel":

- Principle-in-Charge
- Project Manager
- Project Architect/Engineer

Offerors shall submit resumes for the "Key Personnel" positions listed above that will be assigned to this project, and for all disciplines involved.

Question: In reading your solicitation, I notice you highly recommend that the Phase 2, Technical Proposal be in an 8-1/2" x 11" binder. Do you also desire/require our Phase 1 Qualifications to be in the same 8-1/2" x 11" binder format?

Answer: Yes. It is recommended but not mandatory.

Question: Do you desire a portrait or a landscape orientation for binders?

Answer: No preference.

Question: Regarding the Martin Building, Exterior walls – all around the building or just the front facing C Street?

Answer: Yes, the redesign of the Martin Building exterior walls includes all walls around the building.

Question: Do you anticipate any civil engineering?

Answer: Yes, the Board will make available the recent survey, and available existing-condition data to the selected firm.

Question: Are there any requirements regarding SBA or SDWA?

Answer: There are no set percentages for utilization of small and small disadvantaged business concerns, however, the Board encourages utilizing these firms. Offerors are reminded that subcontractor qualifications will be evaluated along with those of the prime contractor.
Solicitation, Offer and Award 250548
Amendment 1

Question: How many copies of the Phase I proposals are required?

Answer: Please submit one original and five copies of the Phase I proposals.

All other terms and conditions of the Solicitation, Offer and Award remain unchanged.

Sincerely,

[Signature]
Kimberly M. Prince, CPM
Senior Contract Specialist
Procurement Section, Management Division
Attention Offerors:

This serves to notify all Offerors that SOA-258548 is hereby amended as follows:

- The closing date for Phase 2 inquiries is 5:00 p.m., Wednesday, October 19, 2005.

Offerors must acknowledge receipt of this Amendment in the Offer section of the Solicitation, Offer and Award form (Section A) and in Paragraph 11 of the Representations and Other Statements of Offeror (Section K) when they submit their proposal.

All other terms and conditions of the Solicitation, Offer and Award remain unchanged.

Sincerely,

[Signature]

Kimberly M. Prince, C.P.M.
Senior Contract Specialist
Procurement Section, Management Division
Attention Offerors:

This serves to notify all Offerors that SOA-259548 is hereby amended to include the following clarifications and changes and to provide the questions submitted by Offerors and the Board's official responses.

Clarifications and Changes

1. As discussed during the pre-proposal conference, specific documents referenced in Section C.4 of the SOA will be provided after contract award and not during the Contractor selection process because of the sensitive nature of their contents. Any vendor that may have a copy of referenced documents because of a prior or separate business relationship with the Board or Federal Reserve Banks is instructed not to use such information in the preparation of its proposal for this SOA. All vendors are also reminded that the documents referenced in Section C.4 of the SOA but not provided are not necessary for the preparation of their proposals.

2. The Phase 2 proposal submission date is changed to 2:00 p.m., December 8, 2005.

3. The last sentence in Section C.3.4, Security Requirements that reads: "If security is deleted.

4. Offerors must acknowledge receipt of this Amendment in the Offer section of the Solicitation, Offer and Award form (Section A) and in Paragraph 11 of the Representations and Other Statements of Offeror (Section K) when they submit their Phase 2 proposal.

Questions and Answers

1. Question:
We would like to schedule another site visit in the near future. If possible, we would like to be able to take photographs at the site visit.
Answer: Times have been set with all interested Phase 2 Offerors.

2. Question:
In order to develop a cost proposal we would like to know what the estimated construction budget of the project will be. If a budget has not been identified we would like to have an assumption for construction cost that fees can be based on. The RFP states that we are to include a preliminary cost estimate. Should we base our fee on this estimated construction amount?

Answer:
The Board desires that the design be based on our operational needs and compatibility with the existing facilities architecture and not be based on a budget.

3. Question:
The cost table includes the category of "Architect Principal". Is this category the "Principal in Charge"?

Answer:
Yes.

4. Question:
On page 51, Part F states to include the "Subcontractor Plan". What information are you looking for here that is not included in Part B "Signed Certification and Representations"?

Answer:
Completion of the "Signed Certification and Representation (Section K)" does not refer to subcontracting you may do to fulfill requirements of an awarded contract. If we have misinterpreted this portion of the question, please provide additional clarification.

In general, the subcontractor plan shall explain how the prime contractor and subcontractors will interact. The subcontractor plan will specifically discuss what items subcontractors will be responsible for, a plan on how their role will be integrated into the overall plan and how the prime will manage the subcontractors. If none of the work is subcontracted, a plan is not necessary.

5. Question:
What is the intended relationship, both functionally and operationally, between the existing Mail Facility and the proposed "Courier Packages Receiving and Screening" area requirements?

Answer:
6. Question:
   Confidential - security
   
   Answer:
   Confidential - security

7. Question:
   What type and level of security requirements must be achieved while the construction of the New Visitor Center is taking place?
   
   Answer:
   The Martin and Eccles buildings are occupied and the safety of the employees must be insured.
   Confidential - security

8. Question:
   What is the security level required for ballistic and blast threats for exterior walls and windows (as confidential - security)
   
   Answer:
   Confidential - security

9. Question:
   Confidential - security

   Answer:
   Confidential - security

10. Question:
   Will there be any environmental interaction between this Visitor Center and any existing FRB structure?
11. Question:
What is the maximum occupancy at any single time of the Visitor Center for visitors and staff within the center’s main hall, the holding area, and any additional space?

Answer:
The solicitation document states 100 pre-screening and 75 post-screening.

12. Question:
What is the anticipated CBR insult to the Visitor Center?

Answer:
Confidential - security

13. Question:
Is an attack on the FRB by commercial chemical compounds anticipated?

Answer:
Confidential - security

14. Question:
What is the projected maximum time that both visitors and staff will be detained within the center after a CBR attack?

Answer:
Confidential - security

15. Question:
Within the Visitor Center, where is the “safe haven” anticipated to be located?

Answer:
See answer to question 14

16. Question:
Will the existing FRB medical staff be utilized at the Visitor Center in the event of a CBR attack?
17. Question:
Will casualty decontamination areas be required?

Answer:

18. Question:
Will controlled ingress/egress facilities for personnel and emergency equipment be required?

Answer:

19. Question:
Will back-up emergency electrical service be sufficient to power the Visitor Center ventilation system such that the CBR filtering will be maintained at the required levels?

Answer:

20. Question:
Page 20 of 29

All other terms and conditions of the Solicitation, Offer and Award remain unchanged.

Sincerely,

[Signature]
Kimberly M. Peck
Senior Contract Specialist
Procurement Section, Management Division
February 24, 2006

SOLICITATION, OFFER AND AWARD 250548
AMENDMENT 4

Attention Offerors:

This serves to notify all Offerors that SOA-250548 is amended as follows:

1. A third site visit is scheduled for 10:00 a.m. on Thursday, March 2, 2006 at the Board's Martin building. Attendance at this site visit is not mandatory, but is considered essential to aid in the preparation of a competitive and cost-effective offer and to understand the total result desired by the Board. For building security purposes, please fax or e-mail the full names, dates of birth and social security numbers of all attendees at least twenty-four hours in advance of the site visit to Ms. Kim Price.

2. Attachment 1 is the revised Section B. Cost/Price Proposal Form. Please discard the original cost tab in its entirety and use Attachment 1 for submission of Phase 2 cost/price data. In addition, Offerors shall include a detailed cost narrative with their cost/price proposal. This narrative will include information on assumptions made and quantities or items included (for example, the items included in the presentation materials for NCPC). The price evaluation team will evaluate the total price as if all optional design services are purchased.

3. Section C.5.2.1.b is amended to read: "The A/E shall prepare a project schedule that identifies milestones for design services, Board review periods, completion of documentation, commencement of construction, and substantial completion of the work. The schedule for design services shall not exceed eighteen months."

4. Please add the language below as a new section titled, "Section C.5, Rights of Ownership":

"Drawings, sketches, calculations, descriptions, narratives, specifications, and any other data related to or developed during the performance of work hereunder shall become the sole and exclusive property of the Board. No information gathered or generated in the performance of the work shall be disclosed to any third party without the written consent of the Board."

5. Amend Section F.1 to read: "The Contractor shall submit the deliverables listed below in both electronic and print format. Typically these deliverables will include drawings, sketches, calculations, bill of materials, schedules, estimates, and specifications suitable for a competitive

Page 1 of 2
construction award process.

6. Section 1.2 is amended to read "Unless the Board exercises its option as described in 1.2.1, the period of performance under the Contract will be from date of contract award through the date that a Visitor Center construction contract is actually awarded to a GC. The actual dates are dependent on the agreed upon project schedule the COTR approves or other circumstances such as those set forth in section C.2.2.d.

7. Section 1.4 (and where appropriate 3.5) is amended to change the Contracting Officer from Marsha Reischill to Elaine Boutilier and the COTR from Magdy Ibrahim to Keith Bains.

8. Attachment 2 includes Addendum 1 to Section C which adds paragraph C.6. adding optional services to the scope of this Solicitation.

9. For purposes of this Solicitation and any resultant contract, Attachment 3 of this Amendment defines specific terms as interpreted by the Board.

Offerors must acknowledge receipt of this Amendment 4 in the Offer section of the Solicitation, Offer and Award form (Section A) and in Paragraph 11 of the Representations and Other Statements of Offerer (Section K) when they submit their Phase 2 proposal.

Pertinent dates associated with this Amendment are:

Closing date for Phase 2 Inquiries: March 13, 2006
Site Visit (for additional scope): March 2, 2006; 10:00 a.m., Martin Building
Submission of Phase 2 proposals: April 24, 2006; 2:00 p.m., Washington, DC time

Except as amended herein, all other terms and conditions of the Solicitation, Offer and Award remain unchanged.

Sincerely,

Kimberly M. Crane
Senior Contract Specialist
Preparation Section, Management Division

Attachments
Attachment 1 - Section B, Cost/Price Proposal Form
Attachment 2 - Section C, Addendum 1
Attachment 3 - Definition of Key Terms
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Visitor Center</td>
</tr>
<tr>
<td></td>
<td>Design Phase</td>
</tr>
<tr>
<td></td>
<td>Digital Modeling</td>
</tr>
<tr>
<td></td>
<td>Scaled Exterior Model</td>
</tr>
<tr>
<td></td>
<td>Redesign of Exterior Wall of Pavilion</td>
</tr>
<tr>
<td></td>
<td>Total Visitor Center</td>
</tr>
<tr>
<td></td>
<td>Optional - Construction Contract Administration</td>
</tr>
<tr>
<td>B</td>
<td>West Pavilion (First Option)</td>
</tr>
<tr>
<td></td>
<td>Conceptual Design</td>
</tr>
<tr>
<td></td>
<td>Full Design</td>
</tr>
<tr>
<td></td>
<td>Total West Pavilion - First Option</td>
</tr>
<tr>
<td></td>
<td>Optional - Construction Contract Administration</td>
</tr>
<tr>
<td>C</td>
<td>West Pavilion (Multi-purpose Space Option)</td>
</tr>
<tr>
<td></td>
<td>Conceptual Design</td>
</tr>
<tr>
<td></td>
<td>Full Design</td>
</tr>
<tr>
<td></td>
<td>Total West Pavilion - Multi-purpose Space</td>
</tr>
<tr>
<td></td>
<td>Optional - Construction Contract Administration</td>
</tr>
<tr>
<td>D</td>
<td>East Pavilion</td>
</tr>
<tr>
<td></td>
<td>Conceptual Design</td>
</tr>
<tr>
<td></td>
<td>Full Design</td>
</tr>
<tr>
<td></td>
<td>Total East Pavilion</td>
</tr>
<tr>
<td></td>
<td>Optional - Construction Contract Administration</td>
</tr>
</tbody>
</table>

*Please note that items B-D are optional services that may or may not be included in the same time as item A or completed at all.*
<table>
<thead>
<tr>
<th>Labor Cost Summary (all Phases) with Construction Coordination</th>
<th>Total</th>
<th>Hourly</th>
<th>Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager/Architect Principal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD/BIM Operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (to be detailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Hourly labor rate should include base pay plus all overheads, G&A, and profit.
<table>
<thead>
<tr>
<th>Visitor Center Design Phase</th>
<th>Total Hours</th>
<th>Rate $/h</th>
<th>Estimated Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager/Architect/Principal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (list in detail)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The hourly labor rate should include base rate plus all overhead, G&A, and profit (from Table X).

Cost: Table 3
<table>
<thead>
<tr>
<th>Visitor Center</th>
<th>Total</th>
<th>Hourly</th>
<th>Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Modeling</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Hourly</th>
<th>Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(A)</td>
<td>(B)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>(C) = (A x B)</th>
</tr>
</thead>
</table>

**Project Manager/Architect Principal**

- Registered Architect

- Mechanical Engineer
  - Senior Level (Registered)
  - Mid Level
  - Junior Level

- Electrical Engineer
  - Senior Level (Registered)
  - Mid Level
  - Junior Level

- Civil Engineer
  - Senior Level (Registered)
  - Mid Level
  - Junior Level

- Structural Engineer
  - Senior Level (Registered)
  - Mid Level
  - Junior Level

- CAD Draftsman
  - Senior Level
  - Mid Level
  - Junior Level

- Interior Design
  - Senior Level (Certified)
  - Mid Level
  - Junior Level

- Others (not listed)
  - Senior Level
  - Mid Level
  - Junior Level

**Total Cost**

$5

*Note: Hourly labor rates should include base rate plus all overhead, G&A, and profit.*

(From Table 4)
### Design of a New Visitor Center and Pavilion Architectural and Engineering Services

<table>
<thead>
<tr>
<th>Position</th>
<th>Total Hours</th>
<th>Hourly Rate ($)</th>
<th>Total Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager/Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (list in detail)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The hourly labor rate should include base rate plus all overhead, G&A, and profit. (From Table 65)
<table>
<thead>
<tr>
<th>Position</th>
<th>Total</th>
<th>Hourly</th>
<th>Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Redesign of Exterior Wall (Martin Building's Podium)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager/Architect Principles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Abbreviated)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\( C = (A \times B) \)

*The hourly rate should include base rate plus overhead, G&A, and profit (from Table 3).*
<table>
<thead>
<tr>
<th>Visitor Center</th>
<th>Total</th>
<th>Hourly</th>
<th>Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Contract Adminstrators</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Project Manager/Architect Principles

Registered Architect

### Engineering Staff

**Mechanical Engineer**
- Senior Level (Registered)
- Mid Level
- Junior Level

**Electrical Engineer**
- Senior Level (Registered)
- Mid Level
- Junior Level

**Civil Engineer**
- Senior Level (Registered)
- Mid Level
- Junior Level

**Structural Engineer**
- Senior Level (Registered)
- Mid Level
- Junior Level

**CAD Draft Operator**
- Senior Level
- Mid Level
- Junior Level

### Interior Design
- Senior Level (Certified)
- Mid Level
- Junior Level

### Others (list in detail)
- Senior Level
- Mid Level
- Junior Level

### Total Cost:
- $5

* The Hourly labor rate should include base rate plus all overhead, G&A, and profit (from Table 3).
<table>
<thead>
<tr>
<th>Project Manager/Architect Principal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Architect</td>
</tr>
<tr>
<td>Mechanical Engineer</td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
</tr>
<tr>
<td>Mid Level</td>
</tr>
<tr>
<td>Junior Level</td>
</tr>
<tr>
<td>Electrical Engineer</td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
</tr>
<tr>
<td>Mid Level</td>
</tr>
<tr>
<td>Junior Level</td>
</tr>
<tr>
<td>Civil Engineer</td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
</tr>
<tr>
<td>Mid Level</td>
</tr>
<tr>
<td>Junior Level</td>
</tr>
<tr>
<td>Structural Engineer</td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
</tr>
<tr>
<td>Mid Level</td>
</tr>
<tr>
<td>Junior Level</td>
</tr>
<tr>
<td>CAD Operator</td>
</tr>
<tr>
<td>Senior Level</td>
</tr>
<tr>
<td>Mid Level</td>
</tr>
<tr>
<td>Junior Level</td>
</tr>
<tr>
<td>Interior Designer</td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
</tr>
<tr>
<td>Mid Level</td>
</tr>
<tr>
<td>Junior Level</td>
</tr>
<tr>
<td>Others (list in detail)</td>
</tr>
<tr>
<td>Senior Level</td>
</tr>
<tr>
<td>Mid Level</td>
</tr>
<tr>
<td>Junior Level</td>
</tr>
<tr>
<td>Total Cost</td>
</tr>
</tbody>
</table>

Note: The hourly labor rate should include base rate plus all overhead, G&A, and profit.
<table>
<thead>
<tr>
<th>West Pavilion (Fixed Seating Option) Conceptual Design</th>
<th>Total Hours</th>
<th>Rate</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager/Architect Principal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exterior Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (please detail)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: The hourly labor rate should include base rate plus all overhead, G&A, and profit.*
<table>
<thead>
<tr>
<th>West Pavilion (Fixed Seating Option)</th>
<th>Total Hours</th>
<th>Hourly Rate ($)</th>
<th>Total Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Design</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Role</th>
<th>Level</th>
<th>Hours</th>
<th>Rate ($)</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager/Architect Principal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Architect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Operator</td>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Certified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (List in Detail)</td>
<td>Senior</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The hourly labor rates should include base rate plus all overhead, G&A, and profit.
<table>
<thead>
<tr>
<th>Project Manager/Architect Principal</th>
<th>Total</th>
<th>Hourly</th>
<th>Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registered Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD/BIM Operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (See in detail)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The Hourly labor rate should include base rate plus all overhead, G&A, and profit.*
<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Hourly</th>
<th>Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours</td>
<td>Rate</td>
<td>Cost</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$A$</td>
<td>$B$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$(A) 	imes (B)$</td>
<td></td>
</tr>
</tbody>
</table>

Project Manager/Architect Principle

Registered Architect

Mechanical Engineer
  - Senior Level (Registered)
  - Mid Level
  - Junior Level

Electrical Engineer
  - Senior Level (Registered)
  - Mid Level
  - Junior Level

Civil Engineer
  - Senior Level (Registered)
  - Mid Level
  - Junior Level

Structural Engineer
  - Senior Level (Registered)
  - Mid Level
  - Junior Level

CAD Operator
  - Senior Level
  - Mid Level
  - Junior Level

Interior Design
  - Senior Level (Certified)
  - Mid Level
  - Junior Level

Other (list in detail)
  - Senior Level
  - Mid Level
  - Junior Level

Total Cost

The hourly labor rates should include base rate plus all overhead, G&A, and profit.
<table>
<thead>
<tr>
<th>Team Position</th>
<th>Level</th>
<th>Rate ($/hr)</th>
<th>Total Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager/Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td>Senior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td>Senior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td>Senior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td>Senior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Draft Operator</td>
<td>Senior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td>Senior Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mid Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Junior Level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the hourly rate includes base rate plus all overhead, G&A, and profit.
<table>
<thead>
<tr>
<th>Position</th>
<th>Total Hours</th>
<th>Base Rate</th>
<th>Extended Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager/Architect Principal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (Not in Detail)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The hourly labor rates should include base rate plus all overhead, G&A, and profit.
<table>
<thead>
<tr>
<th>Full Design</th>
<th>Total Hours</th>
<th>Hourly Rate</th>
<th>Extended Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager/Architect Principle</td>
<td>(A)</td>
<td>(B)</td>
<td>(C) = (A x B)</td>
</tr>
<tr>
<td>Regulated Architect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD Operator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (list in detail)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior-Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The hourly rates should include base rate plus all overhead, G&A, and profit.*
<table>
<thead>
<tr>
<th>Position</th>
<th>Total</th>
<th>Hours</th>
<th>Rate</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager/Architect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Architect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Registered)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD/BIM Operator</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Designer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level (Certified)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (list in detail)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mid Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The hourly labor rate should include base rate plus all overhead, G&A, and profit.*
Solicitation, Offer and Award 259548, Amendment 4
Attachment 2
Section C, Statement of Work
Addendum 1

C.2.6 Optional Services: Design of Pavilions/Conference Center

C.2.6.1 Summary

The Board is considering the feasibility of adding additional structures (to be referred to as “Pavilions”) on the east and west sides of the Martin building on the podium level to be used for a conference center and other ancillary uses. This would, by necessity, also include a major renovation of the existing podium level. These Pavilions would need to complement and be coordinated with the design of the already proposed Visitor’s Center. The Board is now interested in considering this new alternative as part of the overall project so that if a decision is made to proceed with construction of the Pavilions, then the design of the structures would be consistent with the design of the Visitor Center and presentations to the appropriate reviewing agencies will be comprehensive and include all of the work planned for the area.

The costs for this work shall be proposed as a separate additional cost to the existing Visitor Center design project. The Contractor shall provide two cost figures, one for a conceptual design of the additional scope (10 percent) and a second for full design services (10 percent to completion) to provide construction drawings and documents suitable for bidding.

The new structures shall occupy some of the existing upper plaza on the east and west sides of the Martin building. The West Pavilion and the podium west of the existing lobby would become a conference center. The existing podium east of the lobby shall include a pantry area to support the conference center. The remainder of the area east of the lobby that is not used as a pantry and the East Pavilion shall be left unfinished on the interior for future build-out. The Contractor should consider the feasibility of using the exterior glass walls on the existing podium out to the edge to match the upper floor entrance footprint.

The conference center would consist of conference rooms, tele-conference room(s), training rooms, break out rooms, areas for circulation, appropriate complimentary storage rooms, areas for between meeting lounging and communications (telephones and internet), and restrooms. The West Pavilion, at the conceptual stage, should be presented in two versions. One version shall be as an auditorium with fixed seating; the
second version shall be as a multi-purpose space which could be broken down into smaller rooms or used for events such as receptions and dinners and still be suitable for larger meetings. If practical, consider if the pavilion(s) could be used as a multi-purpose conference room and the upper story for smaller meeting rooms and other complimentary uses.

This additional work shall include a review of the existing HVAC and electrical infrastructure of the complex and adding or modifying systems as needed. The Contractor shall also provide for moving outside

C.2.6.2 West Pavilion (Auditorium / Multi-purpose room)

The West Pavilion shall include a state-of-the-art audio visual system to include the projection of computer presentations, slides, laser disks, video tapes, and other media. The facility shall include a sound system appropriate for lecturing, stage quality lighting, and acoustical treatments. The facility shall be suitable for media recording of live speeches and discussions. The room may also serve as overflow for public meetings held in the Board-room of the Eccles building and audio visual equipment should be provided to allow for intensive discussions with remote facilities including the Board-room, Eccles building, and other affiliate locations. Other equipment should include electronic white boards with projection capabilities and all other equipment typically used to support all conference center functions.

C.2.6.3 Conference/Training/Breakout Rooms

Movable partitions shall be utilized whenever possible to ensure the greatest possible flexibility in conference, training, and breakout room configurations. Rooms are to be provided with white boards, data ports, data projection, dimmable lighting, and soundproofing.

C.2.6.4 Tele-conferencing room

The tele-conferencing room is to be soundproofed and provided with acoustical treatments and lighting to provide the optimal environment. The facility will double as a studio for media events such as pre-recorded speeches.

C.2.6.5 Pantry
Food will normally be prepared on the Terrace level of the Martin building. The pantry will be used to support breaks, working lunches, sit-down lunches, dinners, and receptions. It shall include sinks, refrigerators, ice making machines, microwave ovens, warming ovens, and storage for linens, china, and other equipment typically needed for this type of facility. The pantry needs to be co-located with the freight elevator.

C.2.6.6 Storage

Storage shall be provided for reconfiguration of conference and breakout rooms. Storage areas should have appropriate space for storage of chairs, tables, and other equipment typically used in a conference center.

C.2.6.7 East Pavilion and Podium

HVAC, plumbing, and electrical services in the unfinished areas shall be sized for either a larger conference center or office space, which ever requires the greatest level of infrastructure support.

C.2.6.8 Security

Elevators and stairwells shall be protected with security portals and other appropriate devices to ensure that visitors to the conference center do not access any other portion of the building(s) without authority and/or an authorized escort. Arrangements of floor plans shall take into account these security considerations along with fire exits, ADA, and all appropriate codes and regulations. All exterior glazing and walls on the podium and in the pavilions shall provide confidential security (see Federal Reserve Systems Facility and Security Guidelines, Volume II-Minimum Design Criteria for Security and Construction, June 2002).

Overall plans shall allow for visitors to proceed to the podium conference center directly from the Visitor Center screening area (after screening) without the opportunity to access any other portion of the building(s).

The design shall include security system modifications to ensure proper monitoring and detection of unauthorized access to the facility from the conference area as well as general monitoring of visitors.

C.2.6.9 Restrooms

Increase the quantity of restrooms and remodel the existing restrooms for the anticipated visiting populations as appropriate.
x. We anticipate that the conference center cooling requirements will exceed what is currently available. We intend to not only provide mechanical services for the new conference center but to also correct deficiencies that currently exist in the general facility. Specifically, the chilled water capacity is currently marginal, air volume on the Martin building floors is deficient, etc.

The Contractor shall review existing conditions and make changes and additions to the electrical and mechanical plants to support the new facility. The Martin and Eccles buildings’ mechanical work will include modifications to the mechanical plant to include additional considerations listed below. If required, new space may be available by expansion on the existing roof or a second Penthouse level. The Contractor shall conduct site surveys, review existing documents, interview staff, and perform any other non-destructive investigations as necessary for the work. They shall perform whatever calculations are required to insure the proper cooling and ventilation can be achieved throughout the Martin building. The project is to include, but not be limited to, cooling load, heating load, ventilation, electrical load, calculations for sizing equipment and structural calculations. The Contractor shall include recommendations for free cooling and other energy reduction measures associated with this work. (Note: the Martin and Eccles buildings share chilled water production and both buildings need to be considered in the calculations.)

b. This project will accomplish a number of our short and long term goals. Our intent is to address the following:

- Increase our cooling capacity to satisfy increased cooling demand.
- Provide free cooling ability using condenser water.
- Enable the change out of the electric motor control centers without losing power to the complex.
floors and the pavilions are not in the scope of this project. This addendum does not impact the design of the Visitor Center HVAC system(s.)

c. The Contractor is to consider as a minimum the design for the construction and/or installation (or provide alternatives) for the following in the Martin building:

- Install new electrical service to the west Penthouse for new fans.
- Replace motor control center 4 in the east Penthouse and provide for new chillers.
- Build out Penthouse machine room.
- Install new AC's 5 and 10 to serve the Terrace and 4th floor levels in the Penthouse.
- Re-align AC 4 ductwork to supply second floor.
- Install new AC 7 and 9 air handlers in the Penthouse for 3rd, 4th and Terrace levels.
- Replace AC 14 for kitchen make-up air.
- Install heat wheel or exchanger to capture heat from exhaust hood for make-up air.
- Install outside air fans and ducts to provide outside makeup air from roof tops to the plant.
- New air handlers should have true HEPA filtering capabilities.
- Install magnetic bearing high speed turbine chillers with dry coolers (no need for water to operate) for new AC chillers. The intent is to provide for cooling of the Data Center and other critical locations in the event water is unavailable. Contractor should consider locating some or all of these chillers in the Penthouse.
- Install variable frequency drives on RA-1 and RA-2 so return air can be balanced.
- Install additional freight vertical transportation between the 1G level, the podium, the Terrace, and the Penthouse to support the podium pantry and to move mechanical equipment and bulk items including carts of chairs and tables between those floors. Contractor should consider using the deserted mail conveyor shaft.
- Provide operating sequences of mechanical and electrical systems in final design.
- Design to make provision for mechanical commissioning services based on ASHRAE, LEEDS, and AEE mechanical systems commissioning recommended practices.

C.2.6.11 General Considerations

Visitors to the conference facility may represent foreign countries, leaders in governments, business, and industry, or the general public. The facility should be
291

representative of the status of the Board of Governors of the Federal Reserve System.

The Board has a sizable collection of artwork; consideration should be given to the display of the collection.

The facility may be used for receptions and other social events. Accommodations should be included for these events.

Provide office space for the five (5) coordinating personnel.

C.2.6.12 Other

All provisions of the base contract apply and include but are not limited to:

- Number and quality of documents
- Providing interface with the National Capital Planning Commission and the Fine Arts Commission
- Providing estimates and all other documents at the same intervals
- Construction services (both pre-award services to select a GC and the optional construction administration services) as outlined in the base statement of work
- It is our intent to execute all new construction to LEEDS standards.
Definition of Key Terms

Design Development Documents (DD): A set of submissions and meeting that will finalize the selection of type, size and other material characteristics of all systems. Systems are not only structural, mechanical, fire protection and electrical, but all other building components such as envelope (wall, window and roof), interior (flooring, ceiling, and partitions), toilet and service rooms, elevators, etc. The submission will consist of a combination of drawings, narrative and calculations.

Construction Documents (CD): A set of detailed and coordinated submissions that become the basis of a construction contract. They should be produced in a general fashion that any construction contractor nationwide can understand. Designs shall be illustrated to distinguish between existing construction and new work, and be clear enough to result in a single interpretation of a specific set of data or facts. Language used in the specifications should be consistent and complementary to notes on the drawings. The documents should avoid using terms that the design specialist may know, but which have nothing to do with the purchase and installation of a product.

Specifications: Specifications should be organized according to CSI format, fully edited, typed and bound.
July 21, 2006

SOLICITATION, OFFER AND AWARD 250548
AMENDMENT 5

Attention Offerors:

This serves to notify all Offerors that SOA-250548 is amended to include the following clarifications and changes and to provide the questions submitted by Offerors and the Board’s official responses:

1. The deadline for Offeror inquiries is extended to March 27, 2006.

2. Offerors must acknowledge receipt of this Amendment 5 in the Offer section of the Solicitation, Offer and Award Form (Section A) and in Paragraph 11 of the Representatives and Other Statements of Offeror (Section K) when they submit their Phase 2 proposal.

Questions and Answers

1. Question
   The requirements of the RFP will require a considerable amount of design labor in addition to marketing time to provide the required response to the RFP.

   Answer:
   The Board will not pay any stipends or any costs associated with the submission of Offeror proposals.

2. Question
   Can we receive a copy of MPE drawings for the existing system?

   Answer:
   Yes, copies of mechanical drawings are included with this Amendment. If Offerors need to review additional drawings, arrangements can be made through the Procurement office for on-site review of electronic drawings.

3. Question
   Is it the intent of the redesign of the exterior wall of the podium to include the new partition(s)
4. Question
How do we identify major renovation costs for the existing podium level?

Answer:
The podium requires renovation no matter what design options we procure. If we have misunderstood the question, please resubmit.

5. Question
Please define “unfinished,” as it relates to the East Pavilion.

Answer:
In the unfinished Pavilion we do not expect: ceiling, interior walls or partitions, finishes, carpet/flooring, light fixtures, terminal air devices, restrooms, or electrical/data distribution. However, we do expect: construction level lighting, enough HVAC controls to insure the space will not freeze in winter or mildew in the summer; induct duct work designed for the worst of the two scenarios presented; rough-in restroom piping for the worst-case scenario, sprinklers laid out for an empty space, electrical load distribution centers (breaker boxes) for the worst case scenario, telephone/data closet, exhaust ducts for potential restrooms.

In summary, we want a big empty room with enough utilities to expedite a future build out. We want the building to have safety features to keep the building safe until the completion of a build out, even if some of those features have to be altered in a build out.

6. Question
What are the acoustical levels required for conference rooms, meeting rooms where moveable partitions are required? Soundproofing standards?

Answer:
For the conference room designated as having a secondary mission of “Video Conference Room Studio” we expect a Noise Coefficient (NC) between 15-20. For the remaining spaces we expect an NC of no more than 35. (see "Architectural Graphic Standards", tenth edition, "Recommended Background Noise Criteria for Typical Occupancies")

7. Question
What are the pantry requirements re: full kitchen, warming kitchen, and satellite kitchen?

Answer:
The pantry will operate as a satellite kitchen.
8. **Question**
What is the intended seating capacity of the fixed seating auditorium?

**Answer:**
The intended seating capacity for the fixed seating auditorium option is around 300 people.

9. **Question**
What is the intended seating capacity of the Podium and Pavilion’s exterior plaza?

**Answer:**
confidential-security

10. **Question**
Deliveries to the pantry should be processed/screened how and where?

Currently, food deliveries are screened on the street and processed either in the Terrace Kitchen or the 1-G level kitchen store room (directly outside and to the right of the freight elevator on the 1st garage level). We expect the added elevator/dumb waiter in the Statement of Work addendum to have direct access to the new room. The recommended shelf is convenient to this room.

11. **Question**
Are cooling load, heating load, ventilating, electrical load and structural calculations required as part of this submission?

**Answer:**
The calculations listed above are not required as part of the proposal submission. These calculations are required as part of the design services.

12. **Question**
What LEED standard is required and/or desired?

**Answer:**
Our primary goal is to conserve energy while being socially responsible, not to receive an award. We feel the “silver” level of LEEDS is consistent with our goal and is attainable. If the final construction of the Vinter Center and/or Pavilion qualified for any award we would pursue it. All this must be tempered with the Board being financially responsible.

13. **Question**
Are the east and west pavilions to be considered Options in the consumption documents (Full Design)? This would allow the contractor to break out the job and build only what the budget would allow.

**Answer:**
The design of the East and West Pavilions is an option in and of itself. If the option is exercised...
to design the East and West Pavilions, we will first exercise the option for the conceptual design phase. After reviewing the conceptual designs and the cost estimates, the Board will decide what options of the project to pursue if any.

The design of the Pavilions is an additional option to the design of the Visitor Center (the proposed southern structure). The option includes any modifications to the Podium not required for the addition of the Visitor Center.

14. Question
The questions and answers from the original walkthrough state the level of protection to be a
Answer: confidential - security

15. Question
Answer: confidential - security

16. Question
We assume the freight elevator is to be a food service elevator only, is this correct?
Answer: Correct, the added elevator (or dumb waiter as space permits) would be devoted to food services. Its duties may also include transporting stored kitchen supplies from the 1-2 kitchen storage room/freezers.

17. Question
Answer: confidential - security

18. Question
Since the new Pavilions are to be designed for blast, will a new blast report be performed to determine the blast forces on the new Pavilions?

Answer:
We don't understand the intent of this question. Please restate and resubmit.

20. Question
Is the existing slab opening to be used for the new freight elevator the correct size and location, or will the slab opening have to be increased in size and or relocated?

Answer:
There are currently slab openings on every floor from the 2G level to the 4th floor. The size of the opening on the Martin building consists is 4Ft x 5Ft. The size of the opening may vary some from floor to floor. These openings used to have a "mail conveyer" running in them. It was basically a small pallet conveyer. Its' location is immediately south of the freight elevator. New openings will be required on the Terrace and the penthouse levels. Our review of the drawings do not show any reason that these openings could not be placed on the Terrace (there is currently a stove room in that location). The penthouse is more problematic.

21. Question
Is there a population target for West Pavilion (Auditorium/Multi-purpose room)? This not only affects the mechanical system, but also how the fire egress will be addressed.

Answer:
Please refer to question 9.

22. Question
To suggest "studio" level acoustics as a requirement is too broad. Can you be more specific? Is it to be a professional-grade studio?

Answer:
Please refer to question 6.

23. Question
The SOW requires the project to "...also correct deficiencies that currently exist in the general facility." We know about the inadequate cooling of the Martin Hall. Also, we would like to know the following: Is there a listing of what the existing deficiencies are?
Answer:

Yes we have a list of deficiencies for the building that is a result of a study completed in 2004. This list will only be released to the successful Offeror.

24. Question

Is it the intent of this contract to correct all of the known (and as yet unknown) deficiencies?

Answer

No it is not intended to correct all of the known or unknown deficiencies. We know that we cannot maintain the temperatures in the Martin building due to the lack of supply air volume on the floors. We hope to alleviate this issue. Confidential - security

We know that on the worst cooling days in the summer we run the chiller plant near capacity. The work in the SOW addendum may push us past our limits. This needs to be considered. If we need to add capacity for the project we want to add enough to give us spare capacity for growth and allow more flexibility in future operations.

None of the other deficiencies of the Martin building are in the scope of work. We will share the list of deficiencies with the successful Offeror, if the successful Offeror feels there is any useful information they might glean from the study.

25. Question

Given that there is a single central plant serving the Martin and the Eccles buildings, is it anticipated that issues with the Eccles building will be investigated?

Answer

There are no significant heating or cooling issues with the Eccles building. The extent of any design that includes the Eccles building would be to ensure we continue to acceptably service the building from the central plant as it is now.

26. Question

Please clarify the requirement of the fourth bullet item under paragraph C.2.6.10.b, ("Enable the change out of the electric motor control centers without losing power to the complex"). Is this intended to describe routine maintenance or some other scenario?

Answer:

Our facility executes work vital to the economy of the United States. Many of our employees work weekends as well as evenings. The Data Processing Center operates twenty-four hours a day seven days per week. During the construction of this project there cannot be electrical outages during normal working hours. Any electrical work associated with this project needs to incorporate a construction strategy that will allow replacement or adding load centers with minimal disruptions to the complex. These disruptions will only be tolerated during weekends. Even weekend outages are an issue, and need to be as few as possible. And, yes we would also like the electrical system designed so that maintenance on the system would minimize future disruptions.
27. Question

Answer

28. Question

What level of LEEDS certification is desirable? To require the 'highest' level is an approach that will allow for significant variation in proposal responses.

Answer

Please refer to question 12.

29. Question

Are there specific environmental requirements for the art collection?

Answer

We are an office environment, which the art work compliments. Fortunately, the ASHRAE parameters for a comfortable and healthy office environment are compatible with the requirements of our Art Director. We would caution that a significant amount of UV light is not acceptable.

30. Question

Is the client certain of the desire for a second primary power feed to the Visitor's Center?

Answer

There is no need for a second feeder because the complex has sufficient alternate power sources.

31. Question
32. Question
It would appear that Amendment 4 requires the upgrade of the entire HVAC system for the Martin Building. Is this correct?

Answer:
No, a better term would be to supplement the Martin HVAC system. We have no desire at the current time for widespread replacement of the Martin building HVAC systems.

33. Question
How much of the existing building conditions relative to egress are to be evaluated? Discharge of existing exits will be affected by the new construction.

Answer:
We address this in the original SOW. As part of a 2004 study, the study will be shared with the successful Offeror.

34. Question
Section C.3.5 of the RFP mandates the provision for a fire control station at the main entrance. Is it the intent to monitor the existing fire alarm systems in both buildings? Would control of the systems be required at this location?

Answer:
We desire a fire control station that would monitor and control both buildings. It is our intent to
make the complex meet current building standards, regulations, and codes as closely as their age
and proctorial permits. We consider and operate the Eccles and Martin buildings as if they are
one entity.

35. Question
Are any modifications to the existing fire alarm systems, beyond the need for additional devices
for the new areas of work, envisioned as part of the scope of services (e.g., an upgrade from a
conventional to an addressable fire alarm system required)? Please clarify.

Answer
Our fire alarms and sprinklers have just been updated to the most recent technology. (Confidential - security)
At this time we see no need to upgrade.

There is the requirement in the original SOW for the fire control station. It might be appropriate
to install something on the order of the confidential - system in this room.

36. Question:
Would you please clarify applicable codes? We presume the IBC (2003) will be adopted in the
future by DCRA.

Answer
We follow the Washington DC codes and regulations even though our facilities are exempt from
the DC codes. We use the DC codes and regulations as a guideline to provide a safe environment
for our employees.

37. Question:
Will DCRA permitting be required?

Answer
DCRA permitting is typically not required. Washington DC government does not have
enforcement authority in our facilities. However, any work that impacts public space may require
a permit(s).

38. Question
Please confirm that NFPA #101 is being used to calculate fire egress.

Answer
Yes, the Board follows the current version of NFPA 101.

39. Question
Please identify any egress modifications to be made other than maintaining stair discharge
directly to the outside at grade via stair discharge passageways.

Answer
We believe that the proposed alterations to the stairs to allow direct egress to the outside will
satisfy our most serious egress issues.

If the new Visitor Center allows for a more direct emergency egress from the Concourse level this would be a bonus, but is not a requirement.

40. Question
We will assume that the separation of egress for conferencing center patrons and Federal Reserve employees for security purposes will be required. Is this correct?

Answer

All other terms and conditions of the Solicitation, Offer and Award as amended remain unchanged.

Sincerely,

Kimberly M. Price, C.P.M.
Senior Contract Specialist
Procurement Section, Management Division
April 5, 2016

SOLICITATION, OFFER AND AWARD 250548
AMENDMENT 6

Attention Offerors:

This serves to notify all Offerors that SOA-250548 (Design of a New Visitor Center and Pavilion) is amended to include the following clarifications and changes and to provide the questions submitted by Offerors and the Board’s official responses.

Offerors must acknowledge receipt of this Amendment 6 in the Offer section of the Solicitation, Offer and Award form (Section A) and in Paragraph 11 of the Representations and Other Statements of Offeror (Section K) when they submit their Phase 2 proposals.

Offerors are reminded that Phase 2 proposals are due by 2:00 p.m., Washington DC time, on Monday, April 24, 2016.

Questions and Answers

1. Question
What are the existing foundations? If this is unknown, are drawings available for us to review prior to our proposal submission?

Answer:
Yes, there are drawings you can review. Please work with Ms. Kim Prince, Senior Contract Specialist to arrange a date and time to visit the Board to review the drawings.

2. Question
SOW requirement C.2.6.10 (c) Bullet Item #1 requires new electric service to penthouse for fans and Bullet Item #2 requires service for new chillers. It was stated during the March 10th visit that the power distribution would be addressed by another contract. Which is correct?

Answer:

Confidential - Not for Public Release
3. Question
The existing Data Center is located on which level?
Answer:

4. Question
The requirement for "confidential - security" would suggest a segregated system, as opposed to support for the existing system. Is this correct?
Answer:

5. Question
No water-side economizer function exists at present. Is this correct?
Answer:
Correct.

6. Question
"confidential - security"
Answer:

7. Question
Modification to the existing horizontal air distribution on the existing floors (including ductwork, air volume boxes and controls) is not part of this contract. Is this correct?
Answer
Correct, new horizontal ducts on the office floors (1st floor to Terrace) are not in the scope of this project. However, included in the Addendum to the Statement of Work is a requirement to supply new ducts as needed for the Podium (conference center).

The proposed new air handlers should be sized to support the floors they serve.

8. Question
If additional air handling units are installed in the penthouse and the existing air handling units are maintained in the lower mechanical level, what is your intent for the existing return air fans?

Answer

9. Question
Please elaborate on the desired chiller configuration. Are new chillers to just add capacity to support the new penthouse air handling units and the water-less operation of the Data Center?

Answer

10. Question
Please clarify the requirement for the Motor Control Center and what power upgrade project(s) are anticipated beyond this contract.

See Question and Answer 2 above.

11. Question
Under which category should the A/E fees for the work described in Paragraph C.2.6.10 HVAC/Electrical (page 4 of Amendment 4) be provided - Visitors Center, West Pavilion (both options), or East Pavilion? Or should they be submitted separately?

Answer
The work specifically described in Paragraph C.2.6.10 should be included on the appropriate cost table for the specific area being priced. For example, all HVAC/Electrical design work for the West Pavilion should be detailed in the cost table for the West Pavilion (for both options). Similarly, the HVAC/Electrical design work for the East Pavilion (limited to what is described in Paragraph C.2.6.7) should be detailed in the cost table for the East Pavilion.
Solicitation, Offer and Award 25956B
Amendment 6

Except as otherwise amended herein, all other terms and conditions of the Solicitation, Offer and Award as previously amended remain unchanged.

Sincerely,

Kimberly M. Pruner, C.P.M.
Senior Contract Specialist
Procurement Section, Management Division
April 12, 2006

SOLICITATION, OFFER AND AWARD 250548
AMENDMENT 7

Attention Offerors:

This serves to notify all Offerors that SOA-250548 (Design of a New Visitor Center and Pavilions) is amended to include the following clarifications and changes and to provide the questions submitted by Offerors and the Board’s official responses.

Offerors must acknowledge receipt of this Amendment 7 in the Offer section of the Solicitation, Offer and Award form (Section A) and in Paragraph 11 of the Representations and Other Statements of Offeror (Section K) when they submit their Phase 2 proposal.

The Phase 2 proposal submission date is extended to 2:00 p.m. Washington, DC time on Tuesday, May 2, 2006.

Questions and Answers:

1. Question:
If the Visitor Center is built as the initial phase of the project, do you want employees and escorted visitors to be able to go to the podium and the concourse level, or only to the concourse level?

Answer:
If the Visitor Center is built as the initial phase of the project, employees and escorted visitors will need to be able to get to the podium and the concourse level.

2. Question:
If the West and East pavilions are constructed, we presume that you will have two levels of visitors for security reasons. (redacted — security)
Solicitation, Offer and Award 251561
Amendment 1

Answer:

confidential - security

Except as otherwise amended herein, all other terms and conditions of the Solicitation, Offer and Award as previously amended remain unchanged.

Sincerely,

Kimberly M. Price, C.P.M.
Senior Contract Specialist
Procurement Section, Management Division
CONTRACT 250548
MODIFICATION 1

Karen Churkas Chapman & Tweddy, PC
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System hereby modifies Contract 250548 to provide incremental funding for other direct costs as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursables (i.e., reproduction of drawings, specifications and reports)</td>
<td>$0.00</td>
<td>$5,000</td>
</tr>
<tr>
<td>Travel</td>
<td>$0.00</td>
<td>$10,000</td>
</tr>
<tr>
<td>Total Not-to-exceed</td>
<td>$0.00</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

As a result of this modification, the Contract value increases from $1,677,720.05 by $15,000.00 to $1,692,722.05.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

[Signature]
Kimberly M. Prince, C.P.M.
Contract Management Analyst
Procurement Section
CONTRACT 250548
MODIFICATION 2, Corrected

Kari Chrisman, Chapman & Twibey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System hereby modifies Contract 250548 as follows:

1. Add services to the Programming Phase to include data collection, data assessment, and data compilation as detailed in KCCT’s fee proposal dated February 12, 2007 (hereby incorporated by reference) for a firm-fixed price of $74,641.90.

2. Add services to perform a survey of the interstitial space between the Podium level and the first floor of the Martin building as detailed in KCCT’s fee proposal dated February 12, 2007 for a firm-fixed price of $38,622.11.

As a result of this modification, the Contract value increases from $1,692,722.65 by $133,256.01 to $1,825,986.66.

The reference “Modification 2 to Contract 250548” shall appear on all invoices and other contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

[Signature]
Kimberly M. Price, C.P.M.
Contract Management Analyst
Procurement Section
February 12, 2007

Ms. Kimberly Prince
Board of Governors of the Federal Reserve System
20th & C Street, NW
Washington, DC 20551

RE: Contract No.: 25034B, Federal Reserve System, New Visitor Center
KCC1 Project No.: 21009206.00 – Modification 1

Dear Ms. Prince:

Pursuant to our January progress meeting and subsequent discussions during the programming interviews, we respectfully submit the attached two proposals for your review and consideration. The proposal covers the following additional services:

1. Additional Services for the Programming Phase:
   a. Data Collection during the Program Phase
   b. Data Assessment during the Program Phase
   c. Data Compilation during the Program Phase

Per your direction, we have expanded the programming phase to (1) include requisite disciplines and (2) produce a full report. Our proposal includes a credit for the allocated programming hours in our original proposal which was limited to a numeric tabulation (Space Requirements Report) and not a full report.

2. Additional Services for Survey / Concept Phase:
   a. Survey of the Interstitial Space between the Podium Level and First Floor
   b. Concept Development of the Interstitial Space
   c. Concept Development of the East Pavilion

The original RFP did not express any requirements for the renovation of the interstitial space between the Podium Level and the First Floor. This space currently supports the mechanical systems of the Podium Level; therefore, it must be integrated into the design of the new pavilions. In addition, we have been directed to study the possibility of its use in providing access improvements to meet current fire codes.

During the interview process, it became obvious that the FRB will require a fully developed concept for the East Pavilion. The necessary A/E services for this concept development are included in this proposal.
We look forward to providing the FRB with the best solutions to meet its current programming needs. Should you have any questions or require additional information, please do not hesitate to call Jim Dudley or me.

Sincerely,

KAREN CHAPMAN & TWOHEY

Enrique A. Bellini, AIA, EFI
Principal
### Additional Services 1 - Summary

<table>
<thead>
<tr>
<th>PHASE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming</td>
<td></td>
</tr>
<tr>
<td>A Data Collection</td>
<td>0</td>
</tr>
<tr>
<td>B Data Assessment</td>
<td>0</td>
</tr>
<tr>
<td>C Data Compilation</td>
<td>0</td>
</tr>
<tr>
<td>Programming SUBTOTAL</td>
<td>0</td>
</tr>
<tr>
<td>Less 12% Overhead</td>
<td>0</td>
</tr>
<tr>
<td>Net Programming TOTAL</td>
<td>0</td>
</tr>
<tr>
<td>competitive hours</td>
<td>0</td>
</tr>
<tr>
<td>Program TOTAL</td>
<td>0</td>
</tr>
<tr>
<td>Survey</td>
<td></td>
</tr>
<tr>
<td>A Interest Survey</td>
<td>0</td>
</tr>
<tr>
<td>Survey SUBTOTAL</td>
<td>0</td>
</tr>
<tr>
<td>competitive hours</td>
<td>0</td>
</tr>
<tr>
<td>Survey TOTAL</td>
<td>0</td>
</tr>
<tr>
<td>Additional Services 1 TOTAL</td>
<td>112,366.01</td>
</tr>
</tbody>
</table>

**Notes:**

- Competitive hours are calculated based on actual hours worked.
- The net programming total is the gross programming total minus any overhead or interest hours.

**Date:** 15 Feb 27
Kern, Chambers, Chapman & Twomey, PC
1120 Connecticut Avenue, NW
Suite 1230
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System hereby modifies Contract 250548 as follows:

1. To provide incremental funding for other direct costs.

<table>
<thead>
<tr>
<th>Description</th>
<th>From</th>
<th>By</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursables (i.e., reproduction of drawings, specifications and reports, Subcontractor travel and mainframe computer time)</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$10,000</td>
</tr>
<tr>
<td>Travel</td>
<td>$10,000</td>
<td>$0</td>
<td>$10,000</td>
</tr>
<tr>
<td>Total Not-to-exceed</td>
<td>$15,000</td>
<td>$5,000</td>
<td>$20,000</td>
</tr>
</tbody>
</table>

2. To add $20,183 in funds to cover the labor cost for KCCT staff to travel to Federal Reserve Bank Visitors Centers and Conference Centers to incorporate features into the Board's design.

As a result of this modification, the Contract value increases from $1,865,986.06 by $20,183 to $1,886,169.06.
Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

[Signature]

Kimberly M. Prince, C.P.M.
Contract Management Analyst
Procurement Section
Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System hereby modifies Contract 250548 as follows:

- Additional services for the Programming Phase to add program interviews, comprehensive block floor plans, tour photos, a “lessons learned” narrative, and preliminary draft program requirements for a firm-fixed price of $65,263.

As a result of this modification, the Contract value increases from $1,831,169.06 by $65,263.00 to $1,896,432.06.

The reference "Modification 4 to Contract 250548" shall appear on all invoices and other contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

[Signature]
Kimberly M. Prince, C.P.M.
Contract Management Analyst
Procurement Section
BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, DC 20551

CONTRACT 250548
MODIFICATION 5, CORRECTED

Karin Charulhas Chapman & Twobey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

- Add services to prepare a stand-alone concise report that discusses the base program requirement and three options as detailed in KCCT's June proposal dated August 16, 2007 (hereby incorporated by reference) for a firm-fixed price of $71,319.43.

As a result of this modification, the Contract value increases from $1,896,432.06 by $71,319.43 to $1,967,751.49.

The reference "Modification 5 to Contract 250548" shall appear on all invoices and other contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

[Signature]

Kimberly M. Prince, C.P.M.
Contract Management Analyst
Procurement Section
August 16, 2007

Ms. Kimberly Price
Board of Governors of the Federal Reserve System
2100 C Street, NW
Washington, DC 20551

RE: Contract No. 205546, Federal Reserve System, New Visitors Center
XCCIT Project No. 200926.00 – Modification 5

Dear Ms. Price,

Pursuant to your recent request, we are pleased to submit our proposal for the above referenced modification. Please note that this proposal supersedes the previous one submitted yesterday, August 15, 2007 due to an omission of meeting time for our Board of Directors.

Per Mr. Keith Black’s instructions, the scope of our proposal consists of the following:

- A stand alone exercise report that discusses the following options identified by the FRS:

  1. Base Option: Consists of the scheme presented in the program of requirements.

  2. Option One: Includes the Visitors Center plus existing Pavilion expanded out to the new wall line, with all of the Pavilion space used as a Conference Center. The East and West Pavilions will be converted and the mechanical air links will not be relocated.

  3. Option Two: Includes the Visitors Center, the expanded Pavilion, and the West Pavilion. The West Pavilion and the West Side of the expanded Pavilion will be developed into a Conference Center. The East Side of the expanded Pavilion will be developed for offices. The East Pavilion will be converted.

  4. Option Three: Includes the Visitors Center, the expanded Pavilion, and the West Pavilion. The West Pavilion and the entire expanded Pavilion will be developed into a Conference Center. The East Pavilion will be converted.
We suggest that the Base Option be the point of departure for the report since it is the only option that fulfills the Program of Requirements. For each subsequent option, our narrative will address the main elements contained in the scheme, and those that have been eliminated or significantly modified including HVAC.

Under the Base Option we will include the Footprint Plan and the Block Plans for each level. In the subsequent options we will include the Footprint Plan and the Block Plan for the Visitors Center/Podium only since the garage and Concourse floors remain the same for all options. A cost estimate will be developed for each option.

We anticipate having three working meetings with the FRB. Please advise if a presentation would also be required; we have not included one at this time.

The planning portion of our report could be completed in two weeks. An additional two weeks will be required to complete the cost estimates.

We look forward to working with you on this study. Please do not hesitate to call Jim Doherty or me should you have any questions or require additional information.

Sincerely,
KARN CHAREHAS CHAPMAN & TWOHEY

Enrique A. Belli, AIA, FFI
Principal

Cc: Keith F. Bates
<table>
<thead>
<tr>
<th>TASKS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPTION 1 - KCCT</td>
<td></td>
</tr>
<tr>
<td>OPTION 2 - KCCT</td>
<td></td>
</tr>
<tr>
<td>OPTION 3 - KCCT</td>
<td></td>
</tr>
<tr>
<td>REPORT COMPILATION</td>
<td></td>
</tr>
<tr>
<td>MEETINGS</td>
<td></td>
</tr>
<tr>
<td><strong>KCCT SUBTOTAL</strong></td>
<td></td>
</tr>
<tr>
<td>OPTION 1 - EXFex</td>
<td></td>
</tr>
<tr>
<td>OPTION 2 - EXFex</td>
<td></td>
</tr>
<tr>
<td>OPTION 3 - EXFex</td>
<td></td>
</tr>
<tr>
<td><strong>EXFex SUBTOTAL</strong></td>
<td></td>
</tr>
<tr>
<td>Base Scheme - PMSI</td>
<td></td>
</tr>
<tr>
<td>OPTION 1 - PMSI</td>
<td></td>
</tr>
<tr>
<td>OPTION 2 - PMSI</td>
<td></td>
</tr>
<tr>
<td>OPTION 2 - PMSI</td>
<td></td>
</tr>
<tr>
<td><strong>PMRI SUBTOTAL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CONSULTANTS SUBTOTAL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CONSULTANTS TOTAL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL</strong></td>
<td>$71,306.43</td>
</tr>
</tbody>
</table>
BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, DC 20551

CONTRACT 250548
MODIFICATION 6

Karen Chinhus Chapman & Twobey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

- Additional conceptual design services for the Visitors Center and the Interstitial Space as detailed in KCCT’s fee proposal dated October 25, 2007 (hereby incorporated by reference) for a firm-fixed price of $60,279.16.

As a result of this modification, the Contract value increases from $1,967,751.49 by $60,279.16 to $2,028,030.65.

The reference “Modification 6 to Contract 250548” shall appear on all invoices and other contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

[Signature]

Kimberly M. Prince, C.P.M.
Contract Management Analyst
Procurement Section
October 25, 2007

Ms. Kimberly Prinz
Board of Governors of the Federal Reserve System
20th & C Streets, NW
Washington, DC 20551

RE: Contract No. 150548, Federal Reserve System, New Visitors Center
KCC Project No.: 200926.00 - Modification & proposal

Dear Ms. Prinz:

We are pleased to submit, for your review, our proposal for additional services for Conceptual Design of the Visitors Center. This proposal is intended to cover an additional level of effort associated with the increase in size and scope of the Visitors Center and Intertial Space that became evident at the conclusion of our program phase. Our proposal includes only the Conceptual Design phase of the Visitors Center, and the areas of the Intertial Space required to support the mechanical units serving the Visitors Center. The additional work will address the following:

- An increase of approximately 30% in the size of the Visitors Center and, consequently, a similar increase in the area of the Podium and the garage impacted by the Visitors Center. This increase is the result of more complex security screening procedures and circulation demands. It also involves the modification of about one third of the west foyers/shaft to accommodate ticketing for visitors.

- At present the Intertial Space houses various HVAC units that serve the Podium Level. The layout of those units is constrained by the existing structure, such that every other bay is unusable for equipment due to structural cross-bearing. The original intent for the mechanical design of the Visitors Center included equipment rooms on the roof deck of the Visitors Center. Given the nature of the ChernoBiyl Situation characterized by the program requirement of redundancy, the space needed for these units is significant. The requirement for locating this equipment has now shifted overhead in the Intertial Space. To successfully accommodate them, considerable coordination and detailing will be necessary. In addition to coordinating with the existing structural elements, equipment, and fire protection serving the Podium Level, design efforts will be required to provide adequate access for equipment service and maintenance. The ChernoBiyl filter media is very heavy and appropriate storage and/or hold system will be needed to allow personnel to move the filter media safely. Finally, if the Podium Level is not removed, the Visitors Center HVAC equipment will be located above existing office spaces and sound attenuation will be required due to increased system pressures necessary to overcome the ChernoBiyl filter pressure losses.
Our proposal will address the aforementioned. We trust that you will find it acceptable. Please do not hesitate to call Jim Dudley or me should you have any questions or require additional information.

Sincerely,

KARN CHARIAS CHAPMAN & TROHEY

[Signature]

Enrique A. Bello, MA, EFI
Principal

Cc: Keith Boes
<table>
<thead>
<tr>
<th>TASKS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Conceptual Design Services - Visitors Center &amp; Interior Space</td>
<td>Architect: KCO $</td>
</tr>
<tr>
<td>Additional Conceptual Design Services - Visitors Center &amp; Interior Space</td>
<td>MEP: Efen $</td>
</tr>
<tr>
<td>Additional Conceptual Design Services - Visitors Center &amp; Interior Space</td>
<td>Structural: Jaha &amp; Bhatia $</td>
</tr>
<tr>
<td>Additional Conceptual Design Services - Visitors Center &amp; Interior Space</td>
<td>Fire Protection: Hughes $</td>
</tr>
<tr>
<td>Additional Conceptual Design Services - Visitors Center &amp; Interior Space</td>
<td>Cost Estimating: PMSI $</td>
</tr>
<tr>
<td>Additional Conceptual Design Services - Visitors Center &amp; Interior Space</td>
<td>Code Analysis: Peracon $</td>
</tr>
<tr>
<td>CONSULTANTS SUBTOTAL $</td>
<td></td>
</tr>
<tr>
<td>CONSULTANTS TOTAL $</td>
<td></td>
</tr>
<tr>
<td>GRAND TOTAL $</td>
<td>68,278.14</td>
</tr>
</tbody>
</table>

Federal Reserve Board Visitor Center Additional Conceptual Design Services Fee Proposal – Summary Sheet
Contract 250548
Modification 7

Kara Charryhas Chapman & Twomey, PC
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20536

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System hereby modifies Contract 250548 as follows:

1. To provide incremental funding for other direct costs

<table>
<thead>
<tr>
<th>Description</th>
<th>From</th>
<th>By</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursables (i.e. reproduction of drawings, specifications and reports, Subcontractor travel and mainframe computer time)</td>
<td>$10,000</td>
<td>$5,000</td>
<td>$15,000</td>
</tr>
<tr>
<td>Travel</td>
<td>$10,000</td>
<td>$0</td>
<td>$10,000</td>
</tr>
<tr>
<td>Total Not-to-exceed</td>
<td>$20,000</td>
<td>$5,000</td>
<td>$25,000</td>
</tr>
</tbody>
</table>

2. To add $5,000 in funds to cover other direct costs.

As a result of this modification, the Contract value increases from $2,034,030.65 by $5,000 to $2,039,030.65.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

Kimberly M. Priole, C.P.M.
Contract Management Analyst
Procurement Section
CONTRACT 250548  
MODIFICATION 8

Kim Usharbas Chapman & Twomey, PC  
1120 Connecticut Avenue, NW  
Suite 1250  
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System hereby modifies Contract 250548 as follows:

1. To add $13,500 in funds to cover travel costs.

<table>
<thead>
<tr>
<th>Description</th>
<th>From</th>
<th>By</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursables (i.e. reproduction of drawings, specifications and reports, Subcontractor travel and mainframe computer time)</td>
<td>$15,000</td>
<td>$0</td>
<td>$15,000</td>
</tr>
<tr>
<td>Travel</td>
<td>$10,000</td>
<td>$15,500</td>
<td>$22,500</td>
</tr>
<tr>
<td>Total Not-to-exceed</td>
<td>$25,000</td>
<td>$15,500</td>
<td>$38,500</td>
</tr>
</tbody>
</table>

As a result of this modification, the Contract value increases from $2,039,030.65 by $13,500 to $2,052,530.65.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

Kimberly M. Prine, C.P.M.  
Contract Management Analyst  
Procurement Section
May 22, 2009

CONTRACT 250548
MODIFICATION 9

Kara Charabas Chapman & Tweedy, PC
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System hereby modifies Contract 250548 as follows:

Deobligate remaining funds from the contract line items for the full design services for the visitor center, the conceptual design services for the west pavilion (including seating and the multipurpose options) and the conceptual design services for the east pavilion. Funds in the amount of $1,172,422.42 shall be reallocated to a new contract line item for the Visitors Center/Conference Center Conceptual Design. In addition, funds in the amount of $10,000 shall be reallocated to Other Direct Costs. The attached chart illustrates the movement of funds and the total contract value.

As a result of this modification, the total Contract value remains unchanged.

The reference “Modification 9 to Contract 250548” shall appear on all invoices and other contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

[Signature]

Kimberly M. Prater, C.P.M.
Supervisory Contract Analyst
Procurement Section
<table>
<thead>
<tr>
<th>Description</th>
<th>Original Line Item Funding</th>
<th>Amount Spent</th>
<th>Deobligation Amount</th>
<th>From</th>
<th>By</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor center, full design services</td>
<td>$1,162,382.89</td>
<td>$197,562.10</td>
<td>$964,820.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West pavilion, conceptual design, fixed seating</td>
<td>$193,074.28</td>
<td>$193,074.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West pavilion, conceptual design, multipurpose</td>
<td>$192,323.13</td>
<td>83,872.57</td>
<td>$108,450.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East pavilion, conceptual design, Visitors</td>
<td>$129,941.74</td>
<td>$20,790.68</td>
<td>$109,151.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center/Conference Center Conceptual Design</td>
<td>0</td>
<td>$1,172,422.42</td>
<td>$1,172,422.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reimbursables (other direct costs, i.e., reproduction of drawings, specifications, and reports, Subcontractor travel and mainframe computer time)</td>
<td>$15,000</td>
<td>$10,000</td>
<td>$25,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td>23,500</td>
<td>0</td>
<td>23,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>$1,677,722.04</td>
<td>$495,299.63</td>
<td>$1,094,762.54</td>
<td>38,500</td>
<td>$1,182,422.42</td>
<td>$1,220,922.42</td>
</tr>
</tbody>
</table>
Kara Charuhas Chapman & Twobey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) discovered an error in Modification 10 with the beginning and ending contract values. As a result, the Board hereby corrects those errors and issues this Revision 1 to Modification 10 as follows:

Perform NEPA Study and EA for the Visitors and Conference Centers project as detailed in KCCT's fee proposal dated March 25, 2009 (hereby incorporated by reference) for a firm-fixed price of $282,669.

As a result of this modification, the Contract value increases from $2,052,530.65 by $282,669 to $2,335,199.65.

The reference "Modification 10-Rev 1 to Contract 250548" shall appear on all invoices and other contract-related correspondence.
Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

Kimberly M. Prince, C.P.M.
Supervisory Contracts Analyst
Procurement Section
March 25, 2009

Board of Governors of the Federal Reserve System
Attention: Kimberly Prince, Mail Stop 129
20th Street and Constitution Avenue NW
Washington, DC 20551

Re: Contract 296548, Request for Proposal, Martin Building NEPA Study and Environmental Assessment (EA) for Visitors Center and Conference Center

Dear Ms. Prince:

Attached is our revised final proposal for the additional services referenced above. Kindly be advised that while certain findings in the earlier 2000 Perimeter Site Security Program EA for the FRB facilities will be applicable to the new document, others will have to be updated regarding current requirements. The remaining sections, however, will require substantial additional work to adequately address the potential impacts resulting from the proposed alternatives for the new Visitors Center and Conference Center pavilions. It is important to note that the environmental issues associated with these new additions will be significantly different than those analyzed for perimeter security upgrades. Hence, while we believe that a reasonable number of sections will overlap with the earlier EA, there will also be other necessary sections for the new EA document. Please review the following attachments for further clarification and a breakdown of our revised proposal:

- Summary of Fees including the hourly breakdown (5 pages);
- Scope of Services: Martin Building NEPA Study and Environmental Assessment for Visitors Center and Conference Center; Federal Reserve Board Contract 296548:Supplemental Services (9 pages);
- Scope of Services: Martin Building NEPA Study and Environmental Assessment for Visitors Center and Conference Center Draft List of EA items to be Addressed (1 page), and

We appreciate the opportunity to be of service to you.

Sincerely,

KARL CHABIKIAN CHAPMAN & TWOCKEY

James C. Duval, RA
Senior Project Manager

Cc: Enrique Belis, Esq.
<table>
<thead>
<tr>
<th>NEPA / EA SERVICES</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>KDCT (Architecture)</td>
<td>$</td>
</tr>
<tr>
<td>Kropscott &amp; Nealie, Inc. (Environmental Consultant)</td>
<td>$</td>
</tr>
<tr>
<td>Wells &amp; Associates, Inc. (Traffic Consultant)</td>
<td>$</td>
</tr>
<tr>
<td>Kropscott &amp; Associates, Inc. (Historian)</td>
<td>$</td>
</tr>
</tbody>
</table>

Subcontract Total: $  
Subcontract Markup: $  
Total Subcontract Markup: $  
Total Subcontract Markup/Net Changes: $  
Other Direct Cost: $  
FULL SERVICES TOTAL: $ 281,469
<table>
<thead>
<tr>
<th>Task Description</th>
<th>Project</th>
<th>Director of Film Design</th>
<th>Junior</th>
<th>Clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCOPING PHASE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Initiation Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff, Purpose and Need, Exploratory of Alternatives sections</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare draft scoping letter and submit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review the PRP for submission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct stakeholder meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revisions/feedback to scoping letter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Labor Hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PRELIMINARY DRAFT EX</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work with FIA and conduct initial version</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare/submit feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit an electronic copy of Draft 1 to pump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review/submit feedback to pump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Labor Hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DRY RUN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test/validate stakeholder meetings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review the preliminary Draft 1 and Task 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit an electronic copy of Draft 1 to pump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Process staff feedback to pump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Labor Hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PRELIMINARY FINAL DRAFT EX</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revise 3-4 draft comments received</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit electronic copy of preliminary Draft 1 to pump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit an electronic copy of Draft 2 to pump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Labor Hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>FINAL DRAFT EX</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revise 3-4 draft comments received</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present draft</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit electronic copy of final Draft 1 to pump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit an electronic copy of final Draft 2 to pump</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Labor Hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL (260+ not included)**

- Recommended Allowance for Office Supply Items (500):
- Miscellaneous Printing/photocopy/photocopies, Faxes, etc.
- Contractors, Supplies, and Materials for Presentations, etc.
### Phase 1: Preliminary Draft

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Identify alternative routes and prepare initial draft.</td>
</tr>
<tr>
<td>2.0</td>
<td>Conduct public hearings and meetings.</td>
</tr>
</tbody>
</table>

### Phase 2: Final Draft

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>Finalize the route selection and prepare final draft.</td>
</tr>
<tr>
<td>4.0</td>
<td>Submit final draft to regulatory agencies.</td>
</tr>
</tbody>
</table>

### Phase 3: Approval

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>Approve the final draft and begin construction.</td>
</tr>
</tbody>
</table>

**Competitive Harm:**
- Total Hours: 70
- Hourly Rate: $80
- Total Cost: $5,600

**Analysis:**
- Environmental impact assessment complete.
- Public feedback received and incorporated.

**Summary:**
- The project is expected to take 70 hours at a rate of $80 per hour, resulting in a total cost of $5,600.
- The project is expected to have a minimal environmental impact.
| TASK | Principal Architectural Historian Total Hours Total Amount |
|------|---------------------------------------------------------|-----------------|-----------------|-----------------|
| 5.0  | EA Stopping Phase/Section 106 Tasks                     | competitive harm | competitive harm |                  |
| 2.0  | Preliminary Draft EA/Section 106 Tasks                  |                  |                  | competitive harm |
| 3.0  | Draft EA/Section 106 Tasks                             |                  |                  | competitive harm |
| 6.0  | Preliminary Final EA & FUND/Section 106 Tasks          |                  |                  | competitive harm |
| 6.0  | Final EA/Section 106 Tasks                             |                  |                  | competitive harm |

Subtotal Labor Hours

Labor Per Hour

TOTAL competitive harm competitive harm
SCOPE OF SERVICES: MARTIN BUILDING NEPA STUDY AND ENVIRONMENTAL ASSESSMENT FOR VISITORS CENTER AND CONFERENCE CENTER

Federal Reserve Board Contract 250548: Supplemental Services

TASK 1. SCOPING PHASE

1.1 Project Initiation Meeting
Meet with FRB staff and consultants to review the design options, project schedule and list of stakeholders for whom meetings will be needed. Clarify the coordination of roles and responsibilities for EA and Section 306 work tasks.

1.2 Draft Purpose and Scope and Description of Alternatives sections along with graphics for the letter as needed. Submit to client for review and comment. Revise as needed.

1.3 Prepare staff scoping letter and submit to client for review and comment. Revise as needed. It is assumed that the FRB will mail out the final version of this letter on its letterhead.

1.4 Review the FRB distribution list for recipients of the scoping letter. Send comments/revision to FRB project staff as needed.

1.5 Conduct stakeholder meetings with, at a minimum, GDOT/Public Spaces, NRPC, and neighboring agencies (NPS, DAB, MOA, NAB, Red Cross, AHPA, and SEMA). Write minutes of all meetings and submit to FRB staff for review and comment. Revise as needed. (This task assumes no more than ten (10) stakeholder meetings.)

1.6 Receive responses to scoping letters from FRB project staff and compile all comments.
(Note: Task 1 requires no more than eleven (11) meetings, excluding the stakeholder meetings noted above.)

TASK 2. PRELIMINARY DRAFT EA

2.1 Work with FRB and consultant team to refine alternatives as needed. For purposes of this proposal, it is assumed that the EA will address no more than five alternatives, including the No Action Alternative.

2.2 Work with FRB project staff to obtain all existing information regarding existing conditions on and adjacent to the Martin Building and to identify other possible sources of such information for all issues to be considered in the EA (see attached list) and write the preliminary draft Affected Environment section. This will include the preparation of all graphic materials needed to clearly explain the text included in this section.

2.3 Analyze all of the alternatives included in the EA (see the list of issues) and write the preliminary draft Environmental Consequences and Cumulative Impacts sections, including the preparation of all graphic materials as necessary.
SCOPE OF SERVICES: MARTIN BUILDING NEPA STUDY AND ENVIRONMENTAL ASSESSMENT FOR VISITORS CENTER AND CONFERENCE CENTER

Federal Reserve Board Contract 250548: Supplemental Services

2.4 Submit an electronic copy of the Preliminary Draft EA to HCO for initial review and comment. Revise as needed.

2.5 Submit an electronic copy and five (5) hard copy documents of the Preliminary Draft EA to FRB project staff for review and comment.

2.6 Meet with FRB project staff as needed to review comments.
   (Note: Task 2 includes no more than three (3) meetings including those noted above.)

TASK 3. DRAFT EA

3.1 Hold any additional stakeholder meetings as needed to clarify any points raised by the FRB in its review of the Preliminary Draft EA. Write minutes of all meetings and submit copies to FRB project staff.

3.2 Revise the Preliminary Draft EA.

3.3 Submit an electronic copy of the Draft EA to HCO for initial review. Revise as needed.

3.4 Submit an electronic copy and five (5) hard copy documents of the Draft EA to FRB project staff for review and comment.

3.5 Prepare a draft public notice of the availability of the Draft EA as well as the announcement of a public meeting on the Draft EA. Also prepare a cover letter for the Draft EA to be sent to all key stakeholders under FRB letterhead. Submit draft public notice and cover letter to FRB project staff for review and comment. Revise as needed. (Note: It is assumed that the FRB will research and place all public notices and will cover the costs for such placements. It is also assumed that the public meeting will be held at the FRB building and that all logistics and costs related to that meeting will be paid for by the FRB. However, it is also assumed that the consultant team will staff the meeting, will prepare all presentation materials, and will organize and facilitate meeting presentations.)

3.6 Prepare all materials for one public meeting; attend, present, and facilitate discussion at this public meeting.

3.7 Compile all comments received as a result of the public meeting as well as all comments received from stakeholders and from the general public.

3.8 Meet with FRB project staff to review all comments received and possible revisions to the EA and whether optional Task 4 will be needed.

3.9 Attend meetings with NOC and CFA, as needed, to respond to questions regarding the EA.
   (Note: Task 3 includes no more than five (5) meetings, as noted above, including a public meeting.)

TASK 4. PRELIMINARY FINAL EA/FOSS

4.1 Revise the EA per comments received in Phase 3, and prepare a Preliminary Final EA and Findings of No Significant Impacts (FONSI).

4.2 Submit an electronic copy of the Preliminary Final EA and FONSI to HCO for initial review. Revise as needed.

4.3 Submit an electronic copy and five (5) hard copy documents of the Preliminary Final EA and FONSI to FRB project staff for review and comment.

4.4 Meet with FRB project staff, as needed, to review comments.
   (Note: Task 4 includes no more than one (1) meeting as noted above.)
SCOPE OF SERVICES: MARTIN BUILDING NEPA STUDY AND ENVIRONMENTAL ASSESSMENT FOR VISITORS CENTER AND CONFERENCE CENTER

Federal Reserve Board Contract 250648; Supplemental Services

TASK 5. FINAL EA/FOIA

5.1 Revise EA per comments and prepare Final EA and FOIA.

5.2 Submit an electronic copy of the Final EA and FOIA to KOCST for initial review. Revise as needed.

5.3 Submit an electronic copy and five (5) hard copy documents of the Final EA and FOIA to FRB project staff.

(Note: Task 5 does not include any meetings.)

ADDITIONAL ASSUMPTIONS

The following assumptions are in addition to those noted as part of the above tasks:

1. It is assumed that a public scoping meeting will not be held during Phase 3 of the project. Only one public meeting has been included in the current proposal, at the conclusion of Task 3 - The Draft EA. Other public meetings will be considered a change to the scope of work requiring additional corresponding fees.

2. It is assumed that the preferred alternative defined during Phase 2 will not change during the course of the EA process in any way that will require substantive revisions to the impact analysis. If substantive adverse effects are identified, and a substantial rework of the EA analysis is required as a result, the scope of work and fee will be revised accordingly.

3. It is assumed that the services of an attorney will not be needed during the EA process. Hence these services are not included in the current EA fee. If such services are deemed necessary anytime during the process, and if the consultant is asked to provide such services on a sub-consultant basis, these will require an additional fee.

4. As noted above under Task 3.5, it is assumed that the FRB will research and place all public notices and will cover the costs for such placements. It is also assumed that the public meeting will be held at the FRB building and that all logistics and costs related to that meeting will be paid for by the FRB. However, it is also assumed that the consultant team will staff the meeting, will prepare all presentation materials and will organize and facilitate meeting presentations.

5. It is assumed that a Second Draft EA will not be required. If it becomes necessary to add the requirement of a Second Draft EA to the Scope of Services, this will incur an additional cost, to be provided at the time of a request for these additional services.
FEDERAL RESERVE BOARD MARTIN BUILDING NEPA STUDY FOR VISITORS CENTER
AND CONFERENCE CENTER

Draft List of EA issues to be Addressed

A. Physical Environment
   1. Geology, Topography and Seismicity
   2. Soils
   3. Water Resources and Water Quality
   4. Floodplain
   5. Air Quality

B. Biological Environment
   1. Terrestrial Environment
   2. Wetlands
   3. Threatened and Endangered Species (as updated through leasing process)

C. Solid and Hazardous Wastes

D. Socioeconomics
   1. Land Use
   2. Visual Resources
   3. Noise
   4. Public Services and Utilities
   5. Circulation/Parking
   6. Public Health and Safety
   7. Environmental Justice

E. Cultural Resources
   1. Archaeological Resources
   2. Historic Buildings and Structures

F. Cumulative Impacts

*Indicates that data for this section will be based on the findings of the 2003 EA entitled installation of a Building Permit Site Security Program for the Federal Reserve System, Washington DC.
15 October 2008
Revised 10 March 2009

Enrique Pelizzoni
Karin Chapman & Twibey
1120 Connecticut Avenue, NW, Suite 1250
Washington, DC 20036

RE: Federal Reserve Service
Marin Building, Visitor Center and Conference Center

Dear Enrique:

We are pleased to be included in KCCI's project team for the new visitor and conference center for the Federal Reserve Service. In our role as architectural historians and Section 106 compliance experts on the project team, we anticipate the tasks outlined below. Review under 36 CFR Part 800 of the National Historic Preservation Act will be closely coordinated with the Environmental Assessment (EA) prepared under the National Environmental Protection Act (NEPA). For this reason, the Section 106 tasks to be accomplished by Robinson & Associates are set within the framework of the EA schedule.

We expect the Section 106 consultation process to be complex, due to factors such as the building's place in the Northwest Recreational Historic District (now listed in the National Register of Historic Places) and its location within the L'Enfant and McMillan Plans for the City of Washington (previous National Register descriptions of the L'Enfant Plan have now been greatly expanded to include the McMillan Plan). This creates new challenges and historical issues related to historic context, site analysis, definition of an area of potential effect, determination of adverse historic resources, description of effects on these resources, ways to avoid/mitigate/replace any adverse effects, and actions to reach a Section 106 Memorandum of Agreement on the project. The question has come up about the difference between the work completed for the Building Perimeter Site Security Program and the current Visitor Center and Conference Center projects. Major additions to the Martin Building itself are very different in impact from the perimeter security program. The Visitor Center and Conference Center project requires a new and different examination of all of the historical issues and evaluations described above. The Environmental Assessment for the Building Perimeter Site Security Program contains a good baseline report to serve as a springboard for the Visitor Center and Conference Center EA, especially in its solid elimination of archeological significance. However, the data on the construction of the Martin Building and its landscape plan/setting is very brief—and this will be the primary subject of
continued consultation. We have made every effort to keep this scope of work brief, and the fee estimate contained, but do need to acknowledge the increased complexity and additional work required. [All research has been deleted at the request of the Federal Reserve, but Options 1 and other assumptions in this letter cover the possibility that this type of work may be required]

1. EA Scoping Phase/Section 106 Tasks:
   - Attend kickoff meeting.
   - Draft and submit Section 106 initiation letter to FRS for Federal Preservation Office signature.
   - Identify consulting party members.
   - Identify preliminary area of potential effect.
   - Identify affected historic resources in area of potential effect.
   - Review existing historic documentation. [Additional research deleted]
   - Participate in team scoping work session.
   - Conduct Section 106 meeting #1.

2. Preliminary Draft EA/Section 106 Tasks:
   - Prepare preliminary determination of effects on historic resources.
   - Participate in team work session and FRS briefing. Identify historic issues/concerns of Section 106 consulted parties.
   - Conduct Section 106 consultation meeting #2 and begin discussion of effects on historic resources and avoidance/mitigation of effects.
   - Prepare Preliminary Draft EA historic resources draft/Affected Environment and Environmental Consequences.

3. Draft EA/Section 106 Tasks:
   - Continue Section 106 consultation process as required, conduct consultation party meeting #3.
   - Provide revised Area of Potential Effect, Affected Historic Resources, and Determination of Effects evaluations, based on public review.
   - Participate in team work session and FRS briefing. Identify historic issues/concerns of Section 106 consulted parties.
   - Provide revised Draft EA draft.
   - Attend NCPC and CFA meetings.
   - Conduct Section 106 meeting #4.
   - Identify ways to avoid, minimize, or mitigate adverse effects.
   - Begin preparation of Section 106 Memorandum of Agreement.

4. Revised draft EA deleted. Required Section 106 consultation tasks transferred to Task 5.

5. Preliminary Final EA & FONSI/Section 106 Tasks:
   - Prepare revised Final EA draft.
   - Participate in team work session and FRS briefing. Identify historic issues/concerns of Section 106 consulted parties.
   - Prepare final Memorandum of Agreement; calculate for signatures.
6 Final EA/FONSI/Section 106 Tasks:
   • Prepare Final EA.

7 OPTION A – National Register Determination of Eligibility on the Martin Building and/or Additional Research (Fees TBD)

It is likely that a National Register of Historic Places determination of eligibility for the Martin Building will be a requirement of the Section 106 consultation. This could take one of two forms: 1) evaluation for individual eligibility as a Modern-era building under Criterion C1, for buildings less than 50 years of age, or 2) evaluation for extending the period of significance of the Northwest Rectangle Historic District to include the building. It is also likely that additional research will be required on the history and character of the Martin Building and its site. Whether these options are required, and if so what work is needed, can be clarified with the DC SHPO immediately upon or before the first Section 106 consultation meeting.

Assumptions:
The scope of work and fee estimates are based on the following assumptions and clarifications:

I. The Section 106 schedule will be driven by the NEPA schedule, with the qualifier that it is not possible to predict the level of Section 106 effect in advance. If Section 106 issues are not resolved within the NEPA time frame, the schedule and fees will be revised accordingly to resolve issues.

II. As part of the planned coordination of the Section 106 and NEPA processes, the Section 106 effect analysis report will be contained within the Environmental Assessment. No separate Section 106 report is included at this time.

III. It is assumed that the current preferred alternative will not change in any major way. If substantial adverse effects are identified and substantial redesign is required by the NEPA/Section 106 consulting parties, the scope of work and fee estimates will be revised accordingly. (Additional to the Martin Building are potential historic issues because of its position in the National Register eligible Northwest Rectangle Historic District, for example.) However, minor redesign and minimization of adverse effects are a typical part of NEPA consultation and are included.

IV. The assumption is that there are no major adverse effects that can't be effectively mitigated by minor redesign or other mitigation measures, and that the NEPA FONSI can be made and a Section 106 Memorandum of Agreement completed.

V. Since the Martin Building is not currently individually listed in the National Register of Historic Places, the assumption is that effects will be analyzed primarily on the National Register eligible Northwest Rectangle Historic District and the revised draft National Register documentation for the "Plan of the City of Washington" (TRTent and MoMillin plans).

VI. Unless directed otherwise, no National Register determination of eligibility will be conducted for the Martin Building under National Register Criterion C1, for buildings less than 50 years of age, and extending the period of significance to include it as a contributing building within the Northwest Rectangle Historic District will not be evaluated. [See OPTION A]

VII. Based on the Federal Reserve's request to cut research time, it is assumed that the 2005 Environmental Assessment for the Perimeter Site Security Program fills all
research needs. Baseline research to provide basic groundwork of understanding of the Martin Building site has been cut from this revised fee estimate. Any research needed to support EA/Section 106 requirements will call for a revised SOW and fee estimate. [SEE OPTION A]

VIII. Although Robinson & Associates is a small business with a principal who is integral to Section 106 meetings and presentations, an attempt has been made to trim principal's hours as feasible. (Research support, $106 meeting support, and other tasks are handled in tandem with the principal by the firm's historians.)

IX. This second revision of Robinson & Associates’ deletes the second draft EA. It splits Task 4 “Second Draft EA/Section 106 Tasks” into two parts—the EA work that can be deleted and the $106 work which is part of the sequential $106 requirements that can not be deleted. Those required $106 tasks are placed in other sections of the fee estimate.

A fee estimate is attached. [Competitive harm]

We appreciate the opportunity to work on this interesting project, and will be happy to answer any questions you have.

Sincerely yours,

Jackie Helm Robinson
Principal
CONTRACT 250548
MODIFICATION 11, REVISION 1

Kara Charahus Chapman & Twohery, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) discovered an error in Modification 11 with the beginning and ending contract values. As a result, the Board hereby corrects those errors with this Revision 1 to Modification 11 as follows:

- Perform the evaluation of the Martin Building for the National Register nomination as part of the Section 106 process for the Visitors and Conference Centers project as detailed in KCCT’s fee proposal dated July 30, 2009 (hereby incorporated by reference) for a firm-fixed price of $18,997.

As a result of this modification, the Contract value increases from $2,335,199.65 by $18,997 to $2,354,196.65.

The reference “Modification 11-Rev 1 to Contract 250548” shall appear on all invoices and other contract-related correspondence.
Except where here modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

Kimberly M. Printz, C.P.M.
Supervisory Contracts Analyst
Procurement Section
July 11, 2009

Board of Governors of the Federal Reserve System (FRB)
Attention: Kimberly Price, Mail Stop 128
20th Street and Constitution Avenue NW
Washington, DC 20551

File: Concessions 25348, Request for Proposal, Evaluation of the Marsh Building
for National Register Nomination

Dear Ms. Price:

Attached is our fee proposal (3 pages) for the additional services referenced above
and a description of the scope of work drafted by Robinson Associates, Inc. (2
pages). Per the requirements of the DC Historic Preservation Office (DC HPO) and
previous requests from NOC, the scope outlines the services necessary for FRB
Marsh Building's determination of eligibility (DOE) for the National Register of Historic
Places.

The National Register DOE will be prepared according to the standards and
guidelines found in the following National Register Bulletins: How to Apply the
National Register Criteria for Evaluation, How to Complete the National Register
Registration Form, and Guidelines for Evaluating and Nominating Properties That
Have Achieved Significance Within the Past Fifty Years. The requirements from these
bulletins will be amended to meet a simplified format in collaboration with DC HPO.

If you should have any questions or concerns, please do not hesitate to contact
either Enrique Bellini or myself.

We appreciate the opportunity to be of service to you.

Sincerely,

KARIN CHAPMAN & TINDLEY

James C. Tindley, RA
Senior Project Manager

Cc: Enrique Bellini, Files
BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Contract 259546
Price Proposal for Evaluation of the Martin Building for National Register Nomination

William McChesney Martin, Jr. Building
Washington, DC

by
Kara Charulfas Chapman & Twohey

Authorized Signature: [Signature]
Date: 07-10-09

<table>
<thead>
<tr>
<th>NEPA/EA SERVICES</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

Summary Sheet
Page 1 of 3
<table>
<thead>
<tr>
<th>Task</th>
<th>Principal Investigator</th>
<th>Architectural Hour</th>
<th>Fee Hours</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Resources and Evaluation</td>
<td>competitive harm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Survey and Visual Assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare Resource Description Plan B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare Narrative Document/ Set III</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepare Accompanying Documentation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|  |  |  |  |  |
| Custom Labor Hours | competitive harm | | | |
| Labor Per Hour     | competitive harm  | | | |
| TOTAL LABOR FEE    | competitive harm  | | | |
18 June 2009

Enrique A. Bellini, AIA
KCCCT
1120 Connecticut Avenue, NW, Suite 1259
Washington, DC 20036

RE: FRB Martin Building, National Register Determination of Eligibility
Contract No. 1251548

Dear Enrique:

We are pleased to present the following scope of work and fee estimate to prepare a National Register Historic Places determination of eligibility (DOE) for the FRB's Martin Building. This will meet the requirements stated by Andrew Lewis of the DC Historic Preservation Office today, and previous requests from Nancy Witham of NCPC and David Makovsky of the DC HPO.

The National Register DOE will be prepared according to the standards and guidelines found in the following National Register Bulletin: How to Apply the National Register Criteria for Evaluation, How to Complete the National Register Registration Form, and Guidelines for Evaluating and Nominating Properties That Have Achieved Significance Within the Past Fifty Years. The requirements from these bulletins will be amended to meet the simplified format described in Andrew Lewis's e-mail clarification this morning.

The following tasks are identified to fulfill the Statement of Work:

I. Conduct Research and Evaluation.
   Research and evaluation will be substantial enough to apply the National Register Criteria for Evaluation and to determine building integrity, in order to present a clear decision-making document for the DC HPO. It will not reach the extensive level required for a full National Register nomination form.

II. Site Survey and Visual Assessment.
   Field work to assess building significance under the applicable National Register criteria, to prepare written description, and to take photographic documentation will be completed.

III. Prepare Resource Description (National Register Part 7).
   Develop a summary description for the building to complete Part 7 "Description" of the National Register form.

IV. Develop Narrative Significance Documentation (National Register Part 8).
   Develop summary narrative text on the history and significance of the building. This includes
V. Prepare Accompanying Documentation.
Prepare color digital photographs to illustrate the DOE form (1 representative set, approximately 6 views).

We look forward to working with you on this important project. Please call with any questions. Thank you.

Sincerely yours,

Judith Robinson
Principal
October 19, 2009

CONTRACT 250548
MODIFICATION 12

Kam Chunhas Chapman & Twobey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1230
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

Add $26,763 to cover the change in labor rates for the period of July 13, 2007 through April 20, 2009. The additional costs are associated with the base contract hours; all hours associated with contract modifications are excluded.

As a result of this modification, the Contract value increases from $2,354,196.65 by $26,763 to $2,380,959.65.

The reference “Modification 12 to Contract 250548” shall appear on all invoices and other contract-related correspondence.
Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

[Signature]

Kimberly M. Prinde, C.P.M.
Supervisory Contracts Analyst
Procurement Section
### Revised KCCT Claim

Submitted 6/6/19

#### Growth in Labor Rates

<table>
<thead>
<tr>
<th>Labor Code</th>
<th>Contract</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>competitive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Manager</td>
<td>rare</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sr. Architect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Architect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CADD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sr. Interior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jr. Interior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Breakdown of Claim

<table>
<thead>
<tr>
<th>Labor Code</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>26,783</td>
</tr>
<tr>
<td>Project Manager</td>
<td></td>
</tr>
<tr>
<td>Sr. Architect</td>
<td></td>
</tr>
<tr>
<td>Jr. Architect</td>
<td></td>
</tr>
<tr>
<td>CADD</td>
<td></td>
</tr>
<tr>
<td>Specialist</td>
<td></td>
</tr>
<tr>
<td>Sr. Interior</td>
<td></td>
</tr>
<tr>
<td>Jr. Interior</td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td></td>
</tr>
</tbody>
</table>
Kaem Charitas Chapman & Towsley, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

- Add $30,000 in funds for other direct costs.

As a result of this modification, the Contract value increases from $2,380,959.65 by $30,000 to $2,410,959.65.

The reference “Modification 13 to Contract 250548” shall appear on all invoices and other contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

Kimberly M. Prince, C.P.M.
Supervisory Contracts Analyst
CONTRACT 250548
MODIFICATION 14, CORRECTED

Kain Charalan Chapman & Tuohey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1290
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

Add $112,401.74 to cover the change in labor rates for work performed under the base contract for the period of April 21, 2009 through December 31, 2009 (hereafter “Period”). This amount fully and finally satisfies all adjustments to labor rates for the Period, no further adjustments to labor rates for such work will be claimed by the Contractor or granted by the Board. This Modification 14 does not address any claims for work performed during the Period that went beyond the scope of the Statement of Work or claims for work done pursuant to change orders issued during the Period.

As a result of this modification, the Contract value increases from $2,410,959.65 by $112,401.74 to $2,523,361.39.

The reference “Modification 14 to Contract 250548” shall appear on all invoices and other contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

Kimberly M. Price, C.P.M.
Supervisory Contracts Analyst
Procurement Section
Kum Chauhas Chapman & Twoshey, PC (KCCF)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

- Add $40,000 in funds for other direct costs.
- Adjust the contract value to account for the discrepancies between the purchase order and the contract modifications due to data entry errors. This adjustment decreases the contract value by $1.81 to a corrected value of $2,523,359.58 (see attached reconciliation spreadsheet).

As a result of this modification, the Contract value increases from $2,523,361.39 by $39,998.19 to $2,563,359.58.

The reference "Modification 15 to Contract 250548" shall appear on all invoices and other contract-related correspondence.
Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Sincerely,

[Signature]

Kimberly M. Price, C.P.M.
Supervisory Contracts Analyst
<table>
<thead>
<tr>
<th>Contract 230448</th>
<th>Facility/Space Costs</th>
<th>Total Non-Revenue Operating Costs</th>
<th>Operations/Service Change</th>
<th>Capital Improvement Projects</th>
<th>Total Cost</th>
<th>Total</th>
<th>Gains/Losses</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ 5,741,085.84</td>
<td></td>
<td></td>
<td></td>
<td>$ 5,741,085.84</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The table above provides a breakdown of costs and changes related to a specific contract. The total cost is calculated by adding all relevant costs, and gains or losses are calculated by subtracting total costs from the total revenue.
BOARD OF GOVERNORS
OF THE
FEDERAL RESERVE SYSTEM
WASHINGTON, DC 20551

MANAGEMENT DIVISION

September 24, 2010

CONTRACT 250548
MODIFICATION 16

Kam Chandhas Chapman & Twohey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

- Contractor shall provide schematic design services to provide an alternate conceptual design showing enhancements that can be made to the Martin building if the building is empty during the renovation instead of renovating an occupied building in phases.

As a result of this modification, the Contract value increases from $2,563,359.58 by $90,267.00 to a new contract total of $2,653,626.58.

The reference: "Contract 250548, Modification 15 Line Number 26" shall appear on all invoices and other contract-related correspondence.
Except where herein modified, all other terms and conditions of the original Contract remain unchanged.

Included for your reference is a detailed reconciliation sheet detailing all Contract Modification transactions.

Should you have any questions or require additional information, you may contact me at (202) 452-2557.

Sincerely,

[Signature]

Kimberly M. Prince, C.P.M.
Supervisory Contract Analyst

Enclosure
February 15, 2011

CONTRACT 250548
MODIFICATION 17

Kees Claasen Chapman & Twomey, PC
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellvit

Dear Mr. Bellvit:

The Board of Governors of the Federal Reserve System hereby modifies Contract 250548 as provided in Exhibit A attached hereto and hereby made a part hereof.

As a result of this modification, the total Contract value is increased by the sum of the not-to-exceed values in the following contract line item numbers (CLINs).

<table>
<thead>
<tr>
<th>CLIN</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Schematic design services</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Design development phase</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Option 1 – Integrated building information modeling</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Construction document phase – 60% submittion</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Construction document phase – 95% submittion</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Construction document phase – 100% submittion</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Construction document phase – Signage</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Construction document phase – Temporary service facilities</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Subcontractor mark-up (estimated based on a pro-rata share through construction document phase only)</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Other direct costs (through the construction document phase only)</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>LED requirements and certification services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total (not-to-exceed amount through construction document phase)</td>
<td>510,407,740</td>
</tr>
</tbody>
</table>
Contractor shall reference "Contract 250548, Modification 17" and the appropriate CLIN number as noted above on all invoices and contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain the same.

Very truly yours,

[Signature]

Elaine Bostiller
Chief Acquisition Officer

Exhibits and appendices as noted.
1. Section C.1, "INTRODUCTION," is modified to insert the following paragraphs after the final paragraph of this Section:

Contemporaneously with the design and construction of the Visiting Center and Conference Center (the "VC/CC"), the Board intends to undertake a comprehensive renovation of all remaining areas and components of the Martin Building (the "Renovation"). A description of the Board's requirements, criteria and expectations for the Renovation (the "Program") are set forth in Appendix 1, "Renovation Program and Parameters," attached hereto, and incorporated herein by reference ("Appendix 1"). Hereafter references to the "Project" shall refer collectively to the VC/CC and the Renovation.

The A/E is expected to complete the remaining Design Services for the VC/CC and the Design Services for the Renovation within 475 working days of the execution of this Modification No. 17 (the "Contract Time"). The Contract Time includes review and approval periods by the Board, Governing Authorities and Commissioning Authority (identified below).

The Board anticipates awarding the construction of both the Renovation and the VC/CC as one project to one firm. The Board expects construction of the Project to be substantially completed within twenty-four (24) months of its commencement. The (The Ecelex building does have its own air handler units). The A/E will need to account for this circumstance in the design, planning, and construction of the Renovation and in the commissioning and balancing of the Martin Building systems.

The Board intends for the A/E to register the Project with the United States Green Building Council ("USGBC") for certification under the Leadership in Energy and Environmental Design ("LEED®") program. While the architect and its sub-consultants will make all reasonable efforts to achieve a "silver" level rating from the USGBC under the LEED®2009 for New Construction and Major Renovations Rating System (LEED®2009 NC) for new construction, the architect cannot guarantee that at least a silver level rating will be achieved.

The Board believes that the design and construction of the Project will benefit from utilizing the USGBC's two-phase review process and obtaining the USGBC's review of the targeted LEED®2009 NC design phase credits upon completion of the Construction Documents; accordingly, the Board expects the Contract Time to include time for this review.
The Board expects the Project to satisfy the requirements for LEED®2009 NC's Energy & Atmosphere Credit No. 3 ("EA3") for Enhanced Commissioning. Accordingly, the Board intends to engage a Commissioning Authority ("CxA") to perform the services required by EA3. The CxA also will be engaged to perform a peer review of the Design Documents at three stages in their development and to perform, on the Board's behalf, the tests and inspections of the Work required by the Construction Documents and by Applicable Laws. The A/E is expected to work closely, and in a collaborative manner, with the CxA.

The A/E is expected to provide a design solution that is suitable for employees of the central bank of the United States but is also fiscally responsible. The A/E shall perform the Design Services so that the Construction Cost of the Project shall not exceed the Board's most recently approved Stated Cost Limitation. The Board's initial Stated Cost Limitation shall be established in accordance with Section C.2.2.d, below.

In addition to the CxA, the Board intends to retain a Construction Administrator ("Construction Administrator") to provide the Board with comprehensive construction management services in connection with the design, estimating, scheduling, permitting, procurement, construction, commissioning and certification of the Project under LEED®2009 NC. A summary of the Construction Administrator's role and responsibilities is included in Section 3.5 of this Contract. The A/E is expected to work closely, and in a collaborative manner, with the Construction Administrator.

II. Section C.2, "SCOPE OF SERVICES," is deleted in its entirety and replaced with the following:

a. The A/E will provide the services described in this Section C.2, as amended, and in Appendix 1, and all other usual and customary professional services incidental to performance of the described services (hereinafter referred to collectively as "Basic Services"). Except as specifically set forth below, the A/E agrees that the Basic Services are intended to include all professional services, materials, tools, equipment and labor (skilled and unskilled) including management, supervision and support staff necessary to completely design the Project and prepare the Design Documents that are necessary to fully indicate the requirements for construction of the Project, whether or not those services are individually expressed in this Contract, the only exceptions to this being (1) the cost of those services that are provided by third parties and that are expressly designated in this Contract as being the "Board's responsibility" or are "Board-provided," (2) the cost of those additional engineering or consulting services that become necessary as result of a Change in Project scope affecting the A/E and that are the subject of a written agreement between the Board and the A/E in accordance with Section M.15 (referred to as "Additional Services"); and (3) services or certifications by a design professional other than the A/E or an A/E Consultant in connection with subprocesses related to systems, materials or equipment that are specifically required to be supplied by the Construction Contractor under the Construction Documents where the A/E has specified the applicable performance and design criteria.

c. In the event of inconsistencies within or between parts of the Contract, as amended, or between the Contract and Applicable Law and/or Applicable Codes and Standards, the A/E shall: (i) provide the better quality or greater quantity of Service; or (ii) comply with the more stringent requirements, either or both.

a. Section C.2.1, "Project Administration," is deleted in its entirety and replaced with the following:

C.2.1 Project Administration
a. The A/E shall manage the design, architectural and engineering services relating to the Project for the A/E and all its subcontractors and consultants including, but not limited to, the design consultants identified in Section C.2.4. (hereinafter referred to collectively as "A/E Consultants"). The A/E shall be responsible to the Board for the acts and omissions of the employees and agents of the A/E and A/E Consultants and those for whom they are legally responsible. All contracts between the A/E and any A/E Consultant shall be in writing and shall specifically provide that the Board is an intended third-party beneficiary of such contract, and shall require that the contract may not be assigned by the A/E Consultant, but shall permit the assignment of the contract by the A/E to the Board or to a third party designated by the Board.

b. The A/E shall function as the Project Team Leader with respect to the design of the Project. The A/E shall coordinate the Design Services provided by the A/E and the A/E's Consultants in connection with the VCCC with the services provided by the A/E and the A/E's Consultants in connection with the Renovation. The A/E also shall coordinate the Design Services provided by the A/E and the A/E's Consultants with the information provided by the Board and, if approved by the Board, with the services and information provided by the Construction Administrator, the C&A and any other contractor or consultant engaged by the Board in connection with the Project (collectively "Board consultants").

c. Except to the extent certain design duties have been delegated by performance specifications to the general contractor or its subcontractors, the A/E shall be solely responsible for the professional quality, technical accuracy and the coordination of all designs, drawings, specifications, calculations, data, reports or other Design Services to be provided by the A/E and A/E Consultants and shall, without any additional compensation, correct or revise any errors or deficiencies promptly upon notice or discovery thereof, provided that the A/E's obligation to correct or revise errors, deficiencies or omissions in the Design Services is in addition to and not in lieu of the A/E's liability to the Board for losses, costs, expenses or damages sustained by the Board as a result of such errors, deficiencies or omissions.
d. The A/E shall consult with the Board, the Contracting Official ("CO"), the Contracting Official's Technical Representative ("COTR"), CxA and Construction Administrator, research applicable design criteria, and make recommendations concerning cost controls, scheduling, levels of effort, and maintaining the approved completion time allocated for submissions. The A/E shall advise the COTR and the Construction Administrator immediately if the A/E becomes aware of any error, omission or inconsistency in the services or information provided by the Board or a Board consultant, in the Project requirements, working criteria, Design Documents or in any problems that are outside of the A/E's responsibilities as specified in this Contract. The A/E shall suggest resolutions for such problems and provide follow-up as required by the COTR.

e. The A/E shall consider the value of alternate materials, building systems and equipment, together with other considerations based on the Board’s program, Sated Cost Limitation and aesthetics in developing the design for the Project.

f. The A/E will make presentations to the Board to explain the design. The A/E will be required to make no more than five presentations as part of its basic services under this Agreement. Any additional presentations will constitute an additional service and the A/E will be compensated on an hourly rate. A/E shall hold conferences and discussions with Board representatives and take disciplinary actions as necessary or as required by the COTR to obtain the data needed for performance of the Services. The A/E acknowledges that Board staff, including members of the Design & Construction, Space Planning, and Mechanical departments, will be intimately involved in the Project and have reasonable access to A/E staff and work product.

g. The A/E will submit Design Documents for evaluation and approval by the Board. The A/E shall be entitled to rely upon approvals received in writing from the Board provided that the A/E has fully disclosed the information necessary for the Board to make an informed decision as to the subject matter of its approvals. The A/E shall incorporate suggestions by the Board and, when approved by the Board, the CO, COTR, CxA or Construction Administrator where possible, whether or not they are referenced in the written approval of the design documents. When, in the professional judgment of the A/E, incorporation is not possible or not advisable, the A/E shall provide the specific basis of that opinion in writing. In the event a Design Deliverable is not approved by the Board, the A/E will not be relieved from meeting the Design Schedule and will be required to develop, and present to the Board, a mitigation and recovery plan showing clearly how the remaining milestone date(s) will be met. No change or substitution from Design Documents approved by the Board shall be undertaken without the prior approval of the Board.

h. The A/E will assist the Board with filing documents to obtain the necessary approvals or permits from Governing Authorities, utility companies, or any other entity the Board deems necessary to proceed with the Project including, but not limited to, the National Capital Planning Commission (NCPC) and Commission of Fine Arts (CFA). This
assistance shall include, at a minimum, attending meetings, preparing presentation documents, and conducting and participating in presentations. In designing the Project, the A/E shall respond to applicable design requirements imposed by such Governing Authorities and by such entities providing utility services after consultation with and approval by the Board. Changes that are required to be made to the Design Documents as a result of the review by Governing Authorities or utilities shall be incorporated by the A/E and the A/E's Consultants without an increase in the A/E's compensation unless such changes are required after a prior approval of such design by a Governing Authority or utility and provided such changes are not due in whole or in part to negligence of the A/E or A/E's Consultants or their failure to conform with the requirements of this Contract. The A/E will provide no more than 400 hours of services under this section of the contract as part of its basic services. Any A/E services rendered above the 400 hours of basic services will constitute an additional service and will be subject to additional compensation to the A/E on an hourly basis.

i. All Design Services and Design Documents provided by A/E and A/E's Consultants shall conform to the Board's Program for the VCCTC, the Renovation and the Project and the most current versions of Applicable Law governing the Project and the Work. The A/E agrees and acknowledges that this duty is non-delegable, and the A/E, by signing or providing Design Documents, or preparing or assisting in preparing Design Documents to submit for purposes of building permits, shall be deemed to certify that it has taken every measure customarily taken by architects and engineers applying the prevailing standard of care in like circumstances to ascertain the codes that are applicable to the Project. The A/E shall notify the COTR of any apparent conflict between applicable codes or regulations and shall make a recommendation for resolving the conflict.

j. If the A/E encounters any materials suspected to contain asbestos, lead, or other hazardous material, the A/E shall stop work in the area and immediately notify the COTR. The COTR will have such materials sampled and tested. If the materials are determined to be hazardous, the Board will have them removed, encapsulated, or otherwise appropriately dealt with. The A/E shall not resume work in the affected area until written notice from the COTR. KCC1 shall not be liable for the detection, investigation and removal of hazardous materials from the project or the project site.

KCC1’s plans and specifications do not include any information about the presence of hazardous materials which may be present on this project.

k. The A/E shall plan and schedule all work so as not to disrupt any Board services, including, but not limited to, utility, fire alarm and life safety, and security services during the Board’s normal working hours. When a service outage is required, the A/E shall notify the COTR and request the outage, in writing, at least five (5) working days in advance. Should the A/E trigger an alarm system, render it inoperative, or degrade its performance, the A/E’s personnel shall immediately report such occurrence to the Board’s Security Control either by notifying a uniformed officer of that department personally or via telephone at (202) 452-3221. Under no circumstances shall the A/E attempt to repair any damage to these systems.
1. Design Schedule

   1. The A/E shall prepare, for the CO’s review and approval, a schedule that shall include milestones for the completion of the Design Services and Design Documents to be provided by the A/E and A/E’s Consultants during the Schematic Design, Design Development and Construction Document phases for the Project and the anticipated dates for the commencement of the Construction Phase and for Substantial Completion of the Project (the “Design Schedule”). The Design Schedule shall include allowances for periods of time required for review by the COTR, the CS&A and Construction Administrator, for review and approval by Governing Authorities, and for review and approval by the USGBC of the Design Phase Credits targeted in the LEED® Certification Plan. Unless otherwise agreed, the Design Schedule shall include, but not be limited to, the Design Deliverables and Milestones set forth below:

<table>
<thead>
<tr>
<th>PROJECT DESIGN PHASE</th>
<th>DESIGN DELIVERABLE</th>
<th>A/E MILESTONE</th>
<th>BOARD REVIEW PERIOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schematic Design Phase</td>
<td>Pre-design kickoff meeting</td>
<td>30 working days from Award</td>
<td>20 working days, with regular Board review and direction</td>
</tr>
<tr>
<td>Draft Program Review &amp; Verification Report (Section C.2.6)</td>
<td>40 working days from pre-design kick-off meeting</td>
<td>20 working days from receiving comments on the Draft Program</td>
<td></td>
</tr>
<tr>
<td>Revised Program Review &amp; Verification Report</td>
<td>20 working days from receiving comments on the Draft Program</td>
<td>10 working days from receiving comments on the Revised Program</td>
<td></td>
</tr>
<tr>
<td>Final Program Review &amp; Verification Report</td>
<td>10 working days from receiving comments on the Revised Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Development Phase</td>
<td>30% Submission (Section C.2.4.1 including Architectural Interior Design Documents (Sections C.2.4.1a) and LEED® Certification Plan (Sections C.2.7.1)</td>
<td>50 working days</td>
<td>20 working days with regular Board review during development</td>
</tr>
<tr>
<td>Construction Documents Phase</td>
<td>60% Submission (Section C.2.4.2)</td>
<td>95 working days</td>
<td>30 working days with regular Board review during the development</td>
</tr>
<tr>
<td></td>
<td>90% Submittal (Section C.2.4.3)</td>
<td>130 working days</td>
<td>35 working days</td>
</tr>
</tbody>
</table>
2. Each Design Phase, except for the first, shall begin upon receipt of the Board’s Certificate of Completion pursuant to Section 3.1.8, and each Deliverable, except the first, shall begin upon receipt of the Board’s approval of the preceding Deliverable. The A/E shall advise the COFR of potential delays in completing any aspect of the Design Services (whether by A/E, A/E’s Consultants or Board’s Consultant(s)) and shall provide recommendations on actions necessary for keeping the Services on schedule.

3. Time is of the essence as to A/E’s performance of the Design Services under this Contract; provided, however, under no circumstances is A/E authorized to perform its services below the applicable standard of care. A/E shall notify the COFR in writing in advance in the event that it cannot perform the Design Services in accordance with the applicable standard of care while, at the same time, conforming to the existing Schedule and shall make recommendations to the Board for completing its Services as required by this Contract as expeditiously as possible.

4. Once the Design Schedule is submitted by the A/E and approved by Board, the A/E will not deviate from it without prior written authorization by the Board; provided, however, A/E shall be entitled to an extension of time to complete its services under the Design Schedule if the circumstances upon which A/E relies for the requested extension (1) were not caused, or could not have been reasonably anticipated, by the A/E, and (2) could not have been limited or avoided by the A/E’s timely notice to the Board of the delay or reasonable likelihood that a delay will occur. A/E shall be entitled to additional time only for the number of calendar days resulting solely from such causes and not of any unanticipated delays in the A/E’s performance of the Services caused by or resulting from any act, fault or omission of the A/E. If changes in the Design Schedule are requested by the Board (such as accelerated, phased or fast-track scheduling) or otherwise develop during the course of the Project that would (i) require the A/E to perform with a lesser standard of care in order to meet the Design Schedule, or (ii) create a risk of increasing the Board’s costs (for example, costs for the A/E to coordinate and re-design portions of the Project affected by pressuring or installing elements of the Project prior to the completion of all relevant Construction Documents, or costs for the Construction Contractor to remove and replace previously installed Work), the A/E shall notify the COFR in writing in these circumstances, the reasons therefor, and the associated risks. This Section shall not be construed to authorize performance by the A/E below the applicable standard of care.

5. To facilitate the Board’s review of the A/E’s submissions and to prevent unnecessary work by the A/E, the A/E will provide Board personnel, the O&A and Construction Administrator with the opportunity to perform “over-the-shoulder” reviews of the design and engineering of the Project in progress. Such reviews may
be conducted at A/E's office, at any of the A/E's Consultant offices or remotely by electronic internet access. The reviews may be of progress prints, computer images, draft documents, working calculations, draft specifications or reports, drawings, specifications or other Design Documents determined by the Construction Administrator.

6. The A/E shall resolve all design review comments in writing within ten (10) working days of their receipt unless otherwise agreed to by the Parties. The A/E's resolution shall include indicating either adoption or providing a statement as to why the reviewer's objection and/or recommended course of action should not be accepted. The Board expects correction and/or incorporation by A/E in the next submission.

7. Due to the limited time under this Contract for review by the Board and its Construction Administrator of the Design Document submittals, the A/E's expertise and the Board's reliance on the A/E to prepare, review, and provide detailed Design Documents within the time required in accordance with the Board's Program, the A/E acknowledges and agrees that neither the Board, CO, COTR, nor the Construction Administrator is required or expected to make detailed reviews of the Design Documents, and that the review of the Design Documents may be of a general, cursory nature. A/E acknowledges and agrees that any review or approval given by the Board, the CO, the COTR, the Construction Administrator or COA under this Contract with respect to any Design Documents shall not:

1. in any way be, or be deemed to be, (i) a transfer of any design liability from the A/E to any of the aforementioned parties, or (ii) the approval of Design Documents not meeting the requirements of Applicable Law, the Board's Program Requirements or this Contract, or a waiver, in whole or in part, of any indemnity or other rights the Board may have against the A/E for actual or alleged defects, errors or omissions in such documents; and
2. relieve the A/E from its obligation to design the Project in accordance with the Board's Program and to obtain the Board's written approval for any variation, modification, or substitution thereof.

8. A copy of the Design Schedule approved by the CO is attached hereto as Appendix No. 3.

m. Meetings
The A/E shall provide services under this paragraph as part of its basic services. The A/E has included the cost of a specific number of meetings in its fee proposal. Any services rendered by the A/E in excess of the included meeting will constitute additional services requiring additional compensation at an agreed upon rate or fee.

1. Pre-Design Kick-off Meeting. The A/E shall schedule and attend a pre-design kick-off meeting no later than ten (10) working days following the execution of this Modification No. 17. Attendees shall include the A/E's project manager,
representatives of all major design disciplines (including the fire and life safety engineer, blast consultant, security consultant, food services consultant, and interior/space planning A/E), the Board's senior contract specialist, the COTR, the Construction Administrator (if selected) and such other representatives that the Board deems necessary. The kick-off meeting will be held at the Board's offices.

2. LEED® Workshop. The A/E shall conduct the LEED® Workshop described in Section C2.7.h.

3. Project Requirements Meetings
   i. The A/E shall meet with Board staff as necessary to confirm the requirements for the VC/CC, the Renovation and the Project.
   ii. During the Schematic Design Phase, the A/E will meet with Board staff to receive their input on the proposed design directions. These interviews are in addition to all other required meetings to define and refine the requirements for the Project. At a minimum, the A/E shall meet with: Design and Construction; Space Planning; Mechanical (including Plant operations); Electrical systems; Control systems; Elevator systems; Audio-Visual Systems; and Plumbing shop; Law Enforcement; Information Technology; Maintenance; Food Services; Fine Arts Program; Senior Staff; and Focus Groups.

4. Status Meetings. The A/E shall attend weekly meetings with the COTR, Construction Administrator, and other individuals involved with the Project to discuss procedures, progress, problems, scheduling, and other pertinent matters. The A/E must fully document all such discussions and continue to report on its progress and work efforts to the COTR.

5. Special Meetings, Presentations, and Briefings
   i. The Board reserves the right to schedule special meetings during the course of the Design Services, as required, to address matters that cannot be satisfactorily resolved by other means. At a minimum, the A/E's project manager shall attend such meetings which will be held at the Board's offices.
   ii. The A/E shall attend meetings or presentations with outside agencies as needed. These will include meetings with the NCPC and the CFA to obtain required approvals. The A/E shall prepare all documentation and/or reports required for these meetings including environmental or historical impact reports ("NEPA").
   iii. The A/E shall support the COTR in presentations to internal staff as needed to relay Project status information. These meetings may be with such groups as the Employee Committee group, Committees on Board Affairs, and the Board.

6. Meeting Minutes
   i. Unless directed otherwise, the A/E shall take minutes of all meetings relative to the Project. The A/E must use a format that is acceptable to the COTR. All minutes must include the following information: Meeting date and time, Agenda and meeting location, List of participants with their affiliations, Participant
addresses, telephone numbers, and e-mail addresses; A full description of the
issues, problems, and decisions made; Action items with names of responsible
parties and deadlines; Meeting laser output materials will be included as attachments
to the meeting minutes unless the materials are part of a formal submission.
ii. The A/E shall provide complete copies of all minutes to the COTR and
meeting attendees within three (3) working days after meetings occur. The COTR
and attendees will provide the A/E with corrections or changes to the minutes
three (3) working days after distribution. All changes to the minutes will be
reflected in revised versions and will be distributed to everyone who received the
previous account.

8. Progress Reports
1. Every two weeks, the A/E shall prepare and submit to the Board a Bi-Weekly
Progress Report, which shall, at a minimum, include the following:
i. A narrative which accurately states the details of progress made to date and
any problems, delays, anticipated changes, or other items of particular interest.
The narrative shall indicate whether or not the work is on schedule and include an
explanation if it is behind schedule.
ii. An updated version of the Design Schedule depicting both the planned and
actual progress of work. This should also highlight the blocks of work planned to
be accomplished by the next project performance review meeting. The A/E shall
use bar charts or other suitable graphs for illustration and clarification.
iii. An updated version of the submittal schedule described in Section C.2.b.i.;
and
iv. An accounting of A/E Project costs including requested and potential
Additional Services.

2. The initial Progress Report will be due fifteen (15) working days after the pre-
design kick-off meeting. At that time, the COTR will conduct the first project
performance review. Thereafter, the Progress Report and project review meetings
will be held every two weeks or as determined by the COTR until the Project is
completed.

9. Contract Closeout
1. The A/E shall submit a written request for a Certification of Completion of the
Services, and for each phase of the Services, to the COTR for acceptance and
acknowledgement. If the certification does not accurately reflect the condition of the
Services, or applicable phase of the Services, the COTR will reject it until the
Services or phase of Services is complete. The COTR shall sign all certifications of
completeness thereby accepting the completed work; provided, however, the COTR’s
acceptance shall not constitute an acceptance of Services that fail to conform to the
requirements of the Contract, unless the Board expressly accepts such non-
conforming Services in writing. Before submittal of the request, the A/E shall
complete the following tasks, as applicable:
i. Show 100 percent completion for the phase of the work claimed as complete in the application for payment that coincides with, or first follows, the date completion is claimed; and

ii. Include supporting documentation for completion as indicated in these contract documents and a statement showing an accounting of any cost changes.

2. On receipt of a written request for Certification of Completion, the COTR will either advise the A/E, in writing, of unfilled requirements reasonably known to the COTR and required actions or proceed with issuance of the requested certificate.

3. Upon completion of all work and transmission of all required submittals, the A/E shall submit a written request for final acceptance. This request will be accompanied by the final payment request.

p. Conduct and Personnel

1. The A/E’s personnel shall conduct themselves in a professional manner at all times and are strictly forbidden from disturbing papers on desks, opening desk drawers or cabinets, or using telephone or office equipment, other than what is specifically provided to the A/E for official business use.

2. The A/E will be working on the premises of the central bank of the United States and shall dress neatly, communicate with the task being performed. The Board reserves the right to deny entry or access to its premises to any personnel of the A/E or A/E Consultants whose presence, dress, or conduct the Board deems detrimental to the good order and productivity of its operations and staff. Such personnel shall be replaced by the A/E immediately upon notification by the COTR, or his designee, that an A/E personnel problem exists. This replacement shall be made at no additional cost to the Board.

3. The A/E and A/E Consultants are not authorized to accept any instructions, interpretations, or requests for work; hence any changes or revisions which may incur expenditures or affect price; or take actions which affect the terms of performance or any other requirements of the Contract without written notification signed by the COTR.

4. In accordance with FAR 36.209, the A/E and A/E Consultants and their respective subsidiaries and affiliates are not eligible for award of construction contracts which they designed; major subcontractors also are not eligible for sequential contracts for projects in which they performed a significant amount of supporting services. Minor subcontractors are eligible for award of contracts for the design of construction projects following the performance of peripheral services under a Contract.

5. The Key Personnel for the Renovation shall include project managers and consultants with expertise in areas such as information technology, security, blast analysis, fire protection, and LEED. A list of those persons that are essential to the performance of the Basic Services assigned to the Contract by the A/E, their resumes and a description of how these Key Personnel will direct the Services is set forth in
Appendix 4, attached hereto. Section II contains additional information regarding "Key Personnel" for the project.

6. The A/E and A/E Consultants are required to assign only senior professional personnel who are registered in the District of Columbia to approve and/or certify design work. The Board may require professional registration for personnel performing design work other than certifications and/or approvals of drawings and other submissions.

7. In the event that any approved personnel and/or consultants are unable to perform, the A/E shall promptly submit to the COPR detailed written explanations of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any other information the COPR deemed pertinent for the approvals of substitutions. No substitutions shall be made without the prior written approval of the Board. No increases in contract pricing will be allowed when the Board authorizes substitutions.

8. Substitutions of subcontracted or consultant support included in the original contract are subject to the written approval of the CO. This Contract must be modified before the substitute commences work. Changes in individuals employed by these firms will be processed administratively by letter between the CO and the A/E. Personnel possessing unique technical specialties may be required for supplementary expertise related to project services. Such personnel shall have qualifications as required and approved by the COPR which are appropriate to the nature of the services that will be provided.

9. Repeated failure or excessive delays by the A/E to provide qualified personnel who meet the stated requirements may be reason for the COPR to recommend termination of this contract by the CO.

b. Section C.2.2, "Construction Cost Estimate" is deleted in its entirety and replaced with the following:

C.2.2 Construction Cost and Stated Cost Limitation

a. For purposes of this Contract, the "Construction Cost" (also referred to as the "Cost of the Work") shall be the total cost to the Board to construct all elements of the Project designed, specified, selected or specially provided for by the A/E and shall include the costs of management or supervision of construction or installation provided by a separate construction manager or contractor, contractors' general conditions' costs, plus a reasonable allowance for overhead and profit. The Cost of the Work does not include the compensation of the A/E, the costs of the land, rights-of-way, financing, contingencies for changes in the Work or other costs that are the responsibility of the Board. The "Stated Cost Limitation" refers to the maximum Construction Cost that the Board is willing to incur to complete construction of the Project.
385

b. The A/E shall prepare a preliminary estimate of Construction Cost for the VC/CC when its requirements have been sufficiently identified, and for the VC/CC and the Renovation upon submission of the Program Review and Verification Report described in Section 0.2.2.e. These estimates may be based on current area, volume, or similar conceptual estimating techniques. The estimate shall be broken down into divisions in accordance with the Construction Specification Institute (CSI), and shall include quantities and unit prices for each line item. The A/E's Construction Cost estimate shall be updated at such times as the 30% Submission, 60% Submission, 95% Submission and 100% Submission are submitted to the Board.

c. In preparing Construction Cost estimates, the A/E is permitted to propose reasonable potential adjustments in the Program and potential alternate bids as may be necessary to adjust the estimated Cost of the Work to meet the Board's Stated Cost Limitation.

d. The Board shall advise the A/E of its Stated Cost Limitation for the Project no later than upon its approval of the 30% Submission. Thereafter, the A/E shall perform the Design Services so that the Construction Cost of the Project, and any estimate of the Construction Cost of the Project, shall not exceed the Board's most recently approved Stated Cost Limitation. The A/E shall make reasonable efforts to maintain cost controls throughout the development of Design Documents so that the work depicted in the final approved Construction Documents for the Project can be constructed and installed within the Board's final approved Stated Cost Limitation.

e. The Board intends for the Construction Administrator to furnish preliminary estimates and detailed estimates of the Construction Cost. The A/E shall submit the 30% Submission, 60% Submission, 95% Submission and 100% Submission to the Construction Administrator and shall meet with the Construction Administrator to review these approved documents. If at any time any estimate of the Construction Cost by the Construction Administrator exceeds the Board's Stated Cost Limitation, the A/E shall make appropriate recommendations to the Board as to potential adjustments in the Board's Program, including the Project's size, quality or Stated Cost Limitation. The A/E shall be entitled to rely on the accuracy and completeness of the Construction Cost prepared by the Construction Administrator as the A/E progresses with the Basic Services. The A/E shall prepare, as an Additional Service, revisions to the Design Documents required due to the Construction Administrator's inaccuracies or incompleteness in preparing cost estimates.

f. If the Board's most recently approved Stated Cost Limitation is exceeded by any estimate of Construction Cost prepared by the A/E or Construction Administrator or by the lowest bona fide bid from a Construction Contractor or negotiated proposal, the Board may at its discretion and without other cause:
   1. give written approval of an increase in the Stated Cost Limitation;
   2. reject the design or Construction Documents and any bids or proposals submitted by potential Construction Contractors, and authorize rebidding;
   3. terminate the Project in accordance with Section M.20;
4. revise the Project program, scope, or quality as required to reduce the Cost of the Work;
5. direct the A/E to revise the Design Documents to conform the design and documents to the approved Stated Cost Limitation; or
6. implement any other mutually acceptable alternative.

b. If the Board chooses to proceed under Section C.2.2.1.4 or C.2.2.3.5, the A/E, without additional compensation, shall modify the Design Documents as necessary to comply with the Board’s Stated Cost Limitation, or the Stated Cost Limitation as adjusted under Section C.2.2.1.1 or C.2.2.1.4.

c. The A/E shall cooperate with the Board throughout development of the Design Documents to effect cost savings as deemed appropriate by the Board without unnecessarily altering the established scope or quality of the Board’s Program. The A/E shall perform such value-engineering (“VE”) concurrent with the design process to ensure that building systems, materials, construction methods, operating equipment and cost are properly considered with the goal of obtaining maximum value for building systems and materials. This approach will include selecting economical systems and materials that will maintain quality and durability during their life cycle and can be easily maintained. The Board will hold a work session to specifically address VE issues with the A/E. Diagrams, narratives and sketches with calculations demonstrating the life-cycle cost shall be made available at this session. It is not the Board’s intent for VE to simply cut items from the new facility, but to find reasonable means and methods of accomplishing the same goal in the most cost effective manner.

d. The AE shall provide value engineering services as part of its basic services. The AE will provide these services as part of its basic services under this contract not to exceed 200 hours. Any additional A/E value engineering services shall be incorporated into a specific fixed fee proposal by KCCT and submitted to the FRB for their review and approval.

e. Section C.2.4, “DESIGN SERVICES,” is deleted in its entirety and replaced by the following:

C.2.4 Design Services

a. The A/E shall provide its design services including those for facility and security consistent with the Federal Reserve System Facility and Security Guidelines, Volume II, Minimum Design Criteria for Security and Construction, June 2002 unless directed by the FRB to another more current security guideline requirement. The FRB will provide KCCT with written notice of any other and or additional security guidelines to be required within ten days of execution of this agreement.

b. The consultants whose services are included in the Basic Services and whose compensation is included in the Revised Contract Sum (whether within the A/E’s organization or to be separately retained) are as follows:
1. Civil Engineer
2. Structural Engineer
3. Mechanical Engineer
4. Electrical Engineer
5. Plumbing Engineer
6. Interior Design and Space Planning
7. Security Infrastructure (with experience in Chemical, Biological and Radiological Detection)
8. Sustainable Design and other elements
9. Information Technology Infrastructure
10. Acoustical
11. Audio-Visual
12. Signage and Graphics
13. Building & Life Safety Codes
14. Food Service; and
15. Lighting.

e. The A/E shall perform or have performed the required investigation of existing conditions, including destructive investigation, in order to assure that the Construction Documents will be inclusive of existing conditions.

d. The Board requires study models, perspective sketches, and electronic modeling. The A/E shall include these services in its pricing.

e. The design services will include answering formal and informal questions regarding the Project's design whether referred to as “Requests for Information” (RFI) or not. The Board may require answers in writing, by drawing, or other method, and the A/E shall provide such answers without additional cost to the Board. In addition, the A/E shall provide corrections to drawings and specifications that arise from these questions at no additional cost to the Board.

f. Schematic Design Phase Services
1. During the sixty (60) day period after the Pre-design kick-off meeting, the A/E shall (A) review the Board's Program for the Renovation and the Project, the proposed Design Schedule, Applicable Law, Applicable Codes and Standards, the proposed construction delivery method and other information, each in terms of the other; (B) inspect all areas comprising the Project to investigate and verify background information and existing conditions; and (C) ascertain the requirements of the Project. The evaluation shall also specify (1) any inconsistencies or deficiencies discovered in the information supplied or discovered including with the Project Parameters set forth in Section C.3 and Appendix I; and (2) any other information or consulting services that may be reasonably needed for the Project or for the performance of the Services.

   The Board shall provide the A/E team with reasonable access to the site during the design phase and construction phases of this project.
2. Program Review and Verification Report
In accordance with the Design Schedule, the A/E shall submit for the Board’s review and approval a written Program Review and Verification Report presenting the A/E’s design recommendations for the Renovation and for the Project and the historical reports, studies, drawings, and other pertinent data supporting these recommendations. The Program Review and Verification Report shall include, but not be limited to:
   i. A confirmation of the Blocking and Stacking Diagrams provided by the Board.
   ii. A summary of the Confidential - security
   iii. Major system design configurations and the design approach for these systems.
   iv. A cost/benefit analysis for three (3) floor plan options.
   v. A summary of impacts and recommended design solution(s) for the HVAC system.
   vi. A summary of three (3) recommended solutions for the optimal phasing and sequencing of the construction phase of the renovation. The A/E shall include the pros and cons for each recommended solution.
   vii. Recommendations for the optimal periods (day, evening, or both) for performing construction work.
   viii. Five (5) recommended lighting schemes for power and control systems. The A/E shall include calculations to show the simple paybacks for each scheme.

3. The Program Review and Verification Report also will include a complete, board code analysis to be used to finalize the design development as well as to demonstrate the analysis employed for important determinations about code and life safety compliance. This analysis must show that each section of Applicable Law has been considered as it affects the proposed Work and that the A/E has made an appropriate determination. The analysis should include the following:
   i. A compilation of all Applicable Law, Board Requirements and Programming documents;
   ii. A list of the applicable Governing Authorities and the method used for contacting these authorities;
   iii. A list of all required permits and the method used for contacting the entities issuing the permits;
   iv. A comprehensive analysis that references each of the specific subsections and paragraphs of Applicable Law and Board Requirements and a description of how each requirement is being met; and
v. A code conformance certification by an Architect and/or Engineer, registered in the District of Columbia. The title sheet shall include the following statement signed and dated by the Professional Engineer or architect for each separate professional discipline whose seal(s) is shown on the Design Drawings. (Multiple seals require multiple signature and date lines).

“The design of this project conforms to the following applicable codes and Board Requirements”:

(List of Applicable Codes to be Provided by the A/E.)

SIGNATURE: ___________________________

DATE: ___________________________

4. The Program Review and Verification Report also shall include a preliminary LEED® Certification Plan to be utilized during the Pre-design Workshop described in Section C.2.7.b.

5. Prior to submittal of the Program Review and Verification Report, the A/E shall verify through inspection (including test pits as required), the location, elevation, capacity and condition of all existing utilities, inside the building and within five (5) feet of the building perimeter, including electric, gas, telephone, domestic water, sanitary/storm sewers, and other related components. These inspections and tests shall be conducted immediately after Modification No. 17 is approved by the Board. The A/E shall verify location, available capacity, sizing, clearances, and material conditions prior to the start of any design. These utilities shall be reflected on the site survey. The A/E shall provide a written report of public works departments’ procedures and time requirements for submittals, reviews, and approvals. The A/E shall notify the COTR immediately if site conditions are significantly different from that described in information provided by the Board. When findings do not have an impact on the design, the A/E shall be expected to continue with the work.

6. The A/E shall provide ten (10) hardcopies and one (1) electronic file of the Program Review & Verification report and all of the attachments.

7. The A/E shall submit the Program Review & Verification report to the CCA for review.

8. The A/E shall respond to changes proposed by Board to the recommendations as forth in the Program Review and Verification Report and, after consultation with and approval by the Board, to changes proposed by the CCA, the Construction Administrator or by any Governing Authority, if any. Changes made to any Design Document as a result of these reviews shall be incorporated by the A/E and the A/E’s Consultants without an increase in the A/E’s compensation unless such changes are made after a prior approval of such design by the Board or by any Governing Authority and provided such changes are not due in whole or in part to the negligence of the A/E or its failure to conform with the requirements of this Contract.

g. Design Development Phase Services
The A/E shall provide its design services consistent with the Federal Reserve System Facility and Security Guidelines, Volume II: Minimum Design Criteria for Security and Construction, June 2003 unless directed by the FRB to another more current security guideline requirement. The FRB will provide JCTC with written notice of any other and or additional security guidelines to be required within ten days of execution of this agreement.

1. Based on the recommendations and designs set forth in Program Review and Verification Report approved by the Board, and on the Board's authorization of any adjustments to the requirements for the Project and the Cost Limitations (if any), the A/E shall prepare Design Development Documents for the Board's approval as described below:

2. The 50% Submission
   In accordance with the Design Schedule, the A/E shall submit, for the Board's review and approval, Design Development Documents representing completion of 50% of the design of all major design features, systems and performance requirements comprising the Project (the "50% Submission"). The 50% Submission shall demonstrate the A/E's implementation of decisions made following the presentation and review of the Program Review & Verification report, include the LEED® Certification Plan described in Section C.2.7.e, and the Architectural Interior Design Documents as described in Section C.2.4.h.

3. At or near the time of the 50% Submission, the A/E shall submit the Design Documents to the C&A for review in accordance with Eac3.

4. The 50% Submission shall also include the A/E's estimate of Construction Cost. The estimate will contain a listing of major components and render a preliminary order of the magnitude of estimated construction costs. The A/E also shall submit the 50% Submission to the Construction Administrator in accordance with Section C.2.2.e.

5. The Board will review the 30% Submission and transmit its comments to the A/E in accordance with the Design Schedule. A/E shall respond to changes proposed by the Board on the 30% Submission and, after consultation with and approval by the Board, to changes proposed by the C&A, the Construction Administrator or by any Governing Authority, if any. Changes made to any Design Document as a result of these reviews shall be incorporated by the A/E and the A/E's Consultant without an increase in the A/E's compensation unless such changes are made after a prior approval of such design by the Board or by any Governing Authority and provided such changes are not due in whole or in part to the negligence of the A/E or its failure to conform with the requirements of this Contract.

6. Scope of 30% Submission
   The 30% Submission will include the following components and systems:
i. Architectural plans for all floors and roofs with floor dimensions and space labeling;
ii. Exterior elevations showing window placements;
iii. Building longitudinal and transverse sections showing ceiling heights and clearances;
iv. Typical exterior enclosure (wall and roof) sections showing assembly, support, thermal insulation (vapor and air retarders), and all other components;
v. Penthouse and roof section(s);
vi. Basic structural system plans for substructure and superstructure indicating columns, beams, and penetrations for use with progressive collapse upgrades;
vii. Configuration of HVAC plant, riser, and air handling equipment including mechanical and electrical plans showing placement of major equipment;
ix. The location, number, and type of elevators and escalators;
x. Building automation and controls system architecture;
x. The configuration and architecture addressing fire protection, life safety, security, and building operations;
xii. Power distribution riser and single line diagrams;
xiii. Plumbing riser;
xiv. The telephone and data distribution pathway (risers) and closets;
xv. Typical lighting layouts and zones;
xvi. Telephone and data distribution in typical office;
xvii. The location of emergency generator(s) and primary electrical service entrance;
xviii. The location of all utility entrances and aisles;
ix. Site plan with lightning protection system counterpoise; and
xx. The design intent of furniture layout.

7. The Drawings included in the 30% Submission shall:
i. Illustrate all the major building features and systems, their orientation and configuration, and how each coordinates with other relevant building features and systems, and impacts and fits into the total design;
ii. Illustrate the relationship between the building ground floor and the exterior site elements as well as describe the interior public and private spaces;
iii. Include elevations that identify building materials, window types, and include all principal elevations; and
iv. Include sections that illustrate floor to floor dimensions, total building height, and the elevator arrangement(s). To illustrate special relationships, draw sections through the areas of major importance, such as typical offices, cores, and the ground floor lobby. At least one longitudinal and one transverse section must be presented for each space.

8. The 30% Submission shall include calculations of the following:
i. Preliminary structural framing calculations including blast considerations;
ii. Power distribution calculations;
9. The Specifications included in the 30% Submission shall:
   i. be CSI formatted for all building systems, major equipment, and material
      represented on the drawings. For mechanical and electrical specification sections,
      the A/E shall provide draft edited brand name references and sample catalog cuts
      and manufacturer’s literature as required to identify features, materials,
      performance, and operating characteristics. For Division 1, the A/E shall use
      Board specifications.
   ii. provide specifications that incorporate LEED® requirements conspicuously in
       both the Drawings and Specifications.

10. Blast Studies
    The bulk of the A/E Blast Consultant’s effort shall be completed during the Design
    Development Phase. The A/E will provide analysis and recommendations for:
    i. confidential security

11. Electronic Security Systems
    ii. confidential security

12. Finish Boards
    The A/E shall provide preliminary finish boards.
h. Construction Documents Phase Services

1. Based on the recommendations and designs set forth in the 30% Submission approved by the Board, and on the Board's authorization of any adjustments in the requirements for the Project and the Stated Cost Limitation, the A/E shall prepare Construction Documents for the Board's approval as described below.

2. The 60% Submission
   In accordance with the Design Schedule, the A/E shall submit Design Documents representing completion of 60% of the design of all major design features, systems and performance requirements comprising the Project (the "60% Submission"). The 60% Submission shall demonstrate the A/E's implementation of decisions made following the presentation and review of the 30% Submission approved by the Board including final calculations for the selection and sizing of all building materials, systems, and equipment.

3. The 60% Submission also shall include the A/E's estimate of Construction Cost.
   The A/E also shall submit the 60% Submission to the Construction Administrator in accordance with Section C.2.2.e.

4. The A/E shall submit the 60% Submission to the Contractor for review.

5. The Board will review the 60% Submission and transmit their comments to the A/E in accordance with the Design Schedule. A/E shall respond to changes proposed by Board to the 60% Submission and, after consultation with and approval by the Board, to changes proposed by the Contractor, the Construction Administrator and any Governing Authority, if any. Changes made in any Design Documents as a result of these reviews shall be incorporated by the A/E and the A/E's Consultants without an increase in the A/E's compensation unless such changes are made after a prior approval of such design by the Board or by a Governing Authority and provided such changes are not due in whole or in part to the negligence of the A/E or its failure to conform with the requirements of this Contract.

6. Along with expanding the level of detail contained in the 30% Submission, the drawings within the 60% Submission shall provide:
   i. All structural framing drawings and progressive collapse upgrades;
   ii. Interior wall and partition details;
   iii. Interior finish and hardware schedules;
   iv. Window and door assembly details;
   v. Toilet room layouts and details. The layouts should be final;
   vi. Detailed site plans that will show landscaping, watering systems, site drainage, pavement, sidewalks, physical security barriers and equipment, and all other components;
   vii. Main equipment room layout and distribution piping;
   viii. Air handler equipment configuration;
   ix. Duct and piping distribution;
x. Equipment schedules;
xi. Control schematics of operation and automation including the sequence of operations;
xii. Typical sprinkler layout, riser locations, and location of floor loops and zones;
xiii. Building automation system distribution;
xiv. Internal security systems and device locations;
xv. Fire alarm system manual pull stations and smoke detector locations;
xvi. Power distribution;
xvii. Power distribution to major equipment;
xviii. Lighting plans and zones;  
xix. Fire pump layout;
xx. Site plan for lightning protection system including tie ins to building grounding and water service, and other systems;  
xxi. Interior communications and data cabling, cable tray, and conduit drawings;  
and  
xxii. Furniture plan.

7. The 60% Submission shall include calculations of the following:
i. Final structural calculations including all member sizes, moments, shear along member, moments of inertia, and section moduli for steel framing members. Calculations shall indicate when a member and/or connection has been upgraded or added for reasons of progressive collapse;
ii. Floor and roof live and dead loading and deflections and material stresses;
iii. Typical space acoustic properties (include frequency isolation requirements if applicable);
iv. Wall and window wind loading;
v. Voltage drop calculation;
vi. Over current coordination and short circuit study;
vii. Electrical load calculations for emergency generator, transfer switches, feeders, and other equipment (include fuel consumption, loads, and duration);  
viii. Motor starting study of large motors;  
ix. Electrical load calculations to size switchboard, feeders, distribution and branch service panel boards, transformers, and other equipment;  
x. Electrical load and distribution for special rooms, conference space, computer rooms, cafeteria, telecommunications, and other areas;  
xi. Room air distribution quantities;  
xii. Duct sizes for trunk;  
xiii. HVAC water and steam pipe sizes;  
xiv. HVAC pump sizes;  
xv. Water pump sizes;  
xvi. Expansion and compression tank sizing;  
xvii. Thermal loading calculation for heating and cooling loads;  
xviii. Main pipe sizing for hot water, cold water, storm and sanitary sewer, chilled water, and other components; and  
xis. Data cabling tray and conduit loading calculations and cable tray (structural) anchoring details and calculations.
8. Specifications for the 60% Submission:
   i. The A/E shall provide draft, final edited specifications in CSI format and related catalog card material (plated on separate blanks) that describe all other building equipment characteristics and material requirements. These specifications shall include mechanical sequences of operations and commissioning requirements.
   ii. The A/E shall provide to the COTR and Construction Administrator a list of all materials and equipment tests, inspections, or reports required by the Construction Documents that the A/E recommends to be performed by testing companies independent of the Construction Contractor including, but not limited to, structural testing, weld testing, etc.

9. 95% Submission:
   i. Based on the recommendations and designs set forth in the 60% Submission approved by the Board, and on the Board’s authorization of any adjustments in the requirements of the Renovation and Staged Cost Limitation, the A/E shall submit, for the Board’s review and approval, Construction Documents and IDDs representing completion of 95% of the demolition and design of all major design features, systems and performance requirements comprising the Project (the 95% Submission”). The 95% Submission shall demonstrate the A/E’s implementation of decisions made following the presentation and review of the 60% Submission approved by the Board. The submitted drawings shall include final versions of those prepared for the 60% Submission, be coordinated in all respects and shall be expanded to include drawings depicting construction details, specialty features, and component schedules.
   ii. The 95% Submission also shall include the A/E’s estimate of Construction Cost. The A/E also shall submit the 95% Submission to the Construction Administrator in accordance with Section C.2.3.e.
   iii. The A/E will further develop and finalize the IDDs for review and approval. This submittal shall include the fully-developed plan and detail drawings, specifications, and final color boards with all notes, details, schedules, and legends required to procure the wall systems, finishes, and interior fit-out per the Board’s requirements.
   iv. The A/E shall submit the 95% Submission to the CxA for peer review.
   v. The Board will review the 95% Submission and transmit their comments to the A/E in accordance with the Design Schedule. The A/E shall respond to changes proposed by Board to the 95% Submission and, after consultation with and approval by the Board, to changes proposed by the CxA or by any Governing Authority, if any. Changes made to any Design Documents as a result of these reviews shall be incorporated by the A/E and the A/E’s Consultants without an increase in the A/E’s compensation unless such changes are made after a prior approval of such design by the Board or by the Governing Authority and provided such changes are not due in whole or in part to the negligence of the A/E or its failure to conform with the requirements of this Contract.
10. **100% Submission**

i. Based on the recommendations and designs set forth in the 95% Submission approved by the Board, and on the Board’s authorization of any adjustments in the requirements of the Renovation and the Stated Cost Limitation, the A/E shall prepare Construction Documents and IDDs for the Board’s approval representing 100% completion of the demolition and design of all major design features, systems, and performance requirements comprising the Project and shall demonstrate the A/E’s implementation of decisions made following the presentation and review of the 95% Submission approved by the Board. These documents shall be in final form, complete, and coordinated in all respects. The submitted drawings shall include final, ready for bid versions of those prepared for the 95% Submission.

ii. The A/E also shall submit the 100% Submission to the Construction Administrator in accordance with Section C.2.2.a.

iii. The A/E shall provide a copy of the master label for the new lightning protection systems.

iv. A/E and A/E’s Consultants shall have an internal quality assurance review of the 100% Submission completed prior to their submission to the Board by A/E personnel outside the immediate Design Teams. The A/E shall submit a written certification with the 100% Submission that the Construction Documents are sufficiently complete and accurate, properly coordinated and ready for bidding.

v. The Board will review the 100% Submission and transmit their comments to the A/E in accordance with the Design Schedule. The A/E shall respond to changes proposed by Board to those Construction Documents and, after consultation with and approval by the Board, the changes proposed by the CoA, Construction Administrator, and any Governing Authority, if any. Changes made to any design documents as a result of these reviews shall be incorporated by the A/E and the A/E’s Consultants without an increase in the A/E’s compensation, unless such changes are made after a prior approval of such design by the Board or by any Governing Authority and provided such changes are not due in whole or in part to the negligence of the A/E or its failure to conform with the requirements of this Contract.

vi. Upon completion of the Construction Documents, the A/E shall submit the design phase credits targeted in LEED® Certification Plan to the USGBC for review pursuant to Section C.2.7.a.7.

i. **Architectural Interior Design Documents**

ii. The A/E shall prepare architectural interior design documents and specifications ("IDDs") for completing the interior component of the Renovation. At a minimum, the IDDs will include demountable wall systems, electroluminescent and IT requirements, the final location of air distribution and electrical and communication devices, and signage. The IDDs shall be based on the approved architectural floor plans for each floor which show the floor plate with all shafts, structural elements, permanent walls, and core spaces.
12. The A/E also shall provide space planning services as necessary or requested for a complete integrated layout and design of the building interiors including during initial programming. Furniture systems will be selected and purchased by the Board and installed by the Construction Contractor.

13. The IDDs must be properly scaled and dimensioned and include hard-lined drawings that indicate partitions, workstations, support areas, special areas, and circulation patterns. Preliminary specifications must reflect the previously prepared color boards (presented with the 30% Submission).

14. These plans and sections shall include single-line partition locations with areas and occupant groups identified and offices specifically labeled (partitioned and open office workstations). Support areas and special space requirements shall also be noted. The documents shall contain partition requirements, location of telephone, electrical, and data outlets, finish and hardware schedules, room numbering, wayfinding systems, and any other information necessary for the preparation of working drawings and specifications for the completion of the tenant build-out of the building. Cost and public space areas and interior and egress circulation shall be clearly delineated.

15. The A/E will submit its recommended panel types and modular sizes for the demountable wall system (no more than four (4) panel sizes).

16. IDDs shall be included as part of each submission beginning with the 30% Submission.

1. Signage

   1. Based on a conceptual graphic developed with the Board, the A/E will supply signage designs for way-finding and message schedules. This will also include areas on typical floors such as elevator lobbies, stairways, and conference rooms (that will accommodate occupancy of 20 or more). Signage may include wall mounted, freestanding directories, and pedestals. To accomplish these tasks, the A/E will follow the numbering system for the building. The A/E will work with the Board to develop standard graphics, type styles, and mounting heights and details for all signage and graphics. The A/E’s recommendations will comply with all UFAS and ADA requirements for signage. The A/E will provide signage samples of all proposed signage types. The A/E shall provide operating manuals that give detailed plans for the electronic way-finding signage.

2. The A/E will provide three (3) different signage designs with samples with the other submittals required for the Program Review & Verification submission.

j. Temporary Services and Facilities
The Construction Documents will outline the temporary services and facilities required to provide uninterrupted services. At a minimum, the Construction Documents will:

1. Provide temporary food service facilities while the food service area, located on the terrace level, is being renovated.

2. Provide electrical service during the replacement of the main electrical switchgear.

3. Provide an alternate HVAC system should the main physical plant be impacted during the renovation.

4. Provide for temporary building systems that will be used while affected building systems are being worked on.

5. Provide temporary access to the building for employees during construction of each phase of the project. This shall include signage, fire egress, ADA considerations, temporary power, and all other elements essential for providing temporary access.

6. Provide construction contractor access to the facility. This shall include security screening, staging areas, refuse removal area, delivery site for materials, signage, fire egress, and all other elements essential for providing construction contractor access. The A/E shall also consider the practicality of employing chutes and an outside contractor elevator as part of these plans.

7. Confidential - security

1. Submission: Drawings & Specifications

   1. The A/E is required to provide its own office equipment including all hardware and computer equipment to adequately and fully satisfy all the submission requirements of the Contract. All drawings, calculations, reports, and specifications shall be presented via computer based media. Revit software shall be used in the design and development of architectural, structural, mechanical, electrical, plumbing, fire protection, landscape, and irrigation systems. AutoCAD shall be used for the design and development of other building systems when customary for the respective discipline. Drawings shall be submitted on CD-ROM disks in “rvt”, “dwg” and “pdf” formats as applicable to the requirements of the submission. Electronic specifications files shall be submitted in a format that can be used directly (without conversion) by Microsoft Word, the latest release.
2. Failure by the A/E to diligently carry out, follow-up, and complete the submittals requirements specified herein within the specified delivery dates will be grounds for termination of the Contract.

3. Drawings
   a. The levels of detail and quality of representation shall adhere to guidelines within the Architectural Graphic Standards as produced by the American Institute of Architects. All original drawings shall be a consistent size with each sheet offering north arrows, key plans, and graphic scales.
   b. The A/E shall submit a proposed outline of drawing size, border, title block, and standards to be used for review and approval by the Board.
   c. All drawings must be sealed by and prepared under the direction of a Registered Architect and/or Professional Engineer for each professional discipline that is registered in the District of Columbia.
   d. All reproducible drawings prepared for this project shall be of such drafting quality so as to permit half size reproductions. All details and sections prepared under this contract will be "back referenced" to the appropriate drawings so that those who have not been involved in their preparation can easily understand them.

4. Calculations
   All calculations shall be submitted either on standard white-bond paper or formatted sheets, 8 1/2" x 11", bound in snap action three-ring notebooks, organized in a logical sequence, and tabbed to each section heading. Calculations shall be titled with each analysis clearly indicating subject and/or issue being studied, applied references, assumptions, and analysis of answer.

5. Quantities
   For each submission, the A/E shall provide the Board with five (5) full-size sets and fifteen (15) half-size sets of all drawings being submitted and sixteen (16) sets of specifications and four (4) sets of calculations. All submissions shall be bound. This is in addition to those quantities the A/E may require for coordination and use outside the Board. Also, for each submission, the A/E will provide on disk the specifications, calculations, reports, and drawings (in the current software format and/or "pdf" format).
Submission Transmittal Requirements

1. The A/E shall prepare an appropriate transmittal letter that will accompany all submissions from the A/E to the Board.

2. The A/E's submissions may be approved with reservations so that the Board's comments and/or revisions may be incorporated in subsequent submissions. If these comments and/or revisions are not addressed, the documents submitted will be returned with explanatory notes without further reviews. Each submission after the first will be accompanied by a cover letter that includes remarks on price Board comments and/or revisions. Cover letters must explain how each of the issues was resolved.

3. The A/E shall prepay mailing and/or freight charges and any other fees incurred for transmitting deliverables required under this Contract.

4. All information submitted to the Board must be clearly marked to show the identification number of this Contract.

5. The A/E is responsible for properly protecting all sketches, drawings, reports, models, and any other submissions transmitted to the Board. The A/E is responsible for packaging its submissions in a manner to preclude damage during shipping and handling. The A/E is required to repair or replace any items damaged before delivery and acceptance by the COTR at no cost to the Board.

6. The A/E must use any applicable Board forms and procedures as instructed by the C/O and/or COTR. Unless specifically authorized by the COTR on a case-by-case basis, no A/E submissions may be handwritten.

VI. Section C.2.5. "OPTIONAL SERVICES: CONSTRUCTION CONTRACT ADMINISTRATION SERVICES (CCAS)" is deleted in its entirety and replaced by the following:

Section C.2.5 Bidding/Negotiation Phase Services

The A/E shall perform the following services during the Bidding/Negotiation Phase of the Project or part of its basic Bidding/Negotiation Phase Services. If the Board requests the A/E to perform services beyond the scope of those services enumerated below, those services would be Additional Services subject to Section M.15, as amended:

a. assist the Board with the development of a prospective bidders list for the construction work;
b. prepare written responses to requests for information or clarification ("RFT") from bidders, including issuing addenda if required; provided, however, all responses and addenda shall be approved by the Board prior to their being issued. Such responses shall be supplied to the Board within forty-eight hours of the A/E receiving the request unless within such forty-eight hour period the A/E advises the Board that reasonable additional time will be required to prepare such responses and/or addenda;

c. attend a pre-bid conference for prospective bidders. During the conferences, the A/E will take detailed notes and will work with the COTR to issue an amendment to the Construction Contractor solicitation documents if necessary;

d. provide the Board with ten copies of the construction documents for distribution to the prospective Construction Contractors and establish an "FTP" site for downloading of Bidding Documents for prospective bidders and sub contractors;

e. evaluate requests for substitutions. If the Bidding Documents permit substitutions, and make recommendations to the Board regarding such requested substitutions. If a substitution is approved by the Board, then as an Additional Service, the A/E shall prepare and distribute addenda identifying approved substitutions for distribution to all prospective bidders,

f. perform the JEEBD-related bidding services described in Section C.2.7.

g. assist in the valuation and evaluation of responsive proposals and/or participate in selection interviews with prospective Construction Contractors.

VII. The following new Section C.2.6, "CONSTRUCTION PHASE SERVICES" is added to the Contract:

Section C.2.6 Construction Phase Services
The A/E shall perform the following services during the Construction Phase of the project as part of its basic Construction Phase services. If the Board requests the A/E to perform services beyond the scope of those services enumerated below, those services would be Additional Services subject to Section M.15, as amended.

a. Submittal and RFI Review
1. The A/E shall review the Construction Contractor’s submittal schedule and shall approve or disapprove the schedule with such promptness as not to delay the progress of the Work. Approval shall not be unreasonably withheld. The A/E’s action in reviewing submittals shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with such promptness as not to delay the progress of the Work. This
section shall not be interpreted to authorize the A/E to deviate from the standard of care.

2. The A/E shall check and approve, annotate, refer or reject shop drawings, equipment lists, materials samples, product certifications, laboratory reports, test data, and all other construction submittals.

3. All construction submittals shall be processed by the A/E within ten (10) working days of receipt. Distribution of the approved submittals will be made by the most expedient means possible to prevent delays in the construction work. The A/E shall not approve any submittal that fails to conform with the requirements of the Construction Documents. In such a case, the A/E shall stamp each page of the submittal and indicate the action taken on the signed stamp, for example:
   i. Conforms: When the submittal fully conforms to the Construction Documents. The submittal will not require re-submittal.
   ii. Conforms as Noted: When the submittal has only minor deviations from the Construction Documents, the A/E will note the deviations and omissions as appropriate and approve the submittal subject to the notations. This submittal will not require re-submittal.
   iii. Rejected: When the submittal clearly does not conform to the Construction Documents, the A/E will disapprove it. This submittal will require re-submittal after correction(s) to bring it into compliance with the Construction Documents.

4. The A/E is responsible for notifying the Board promptly when submittal review actions are delayed for any reason. The A/E shall cite the cause for the delay and the anticipated approval date.

5. The A/E shall provide a written response, with detailed answer(s) and Addenda, if warranted, within five (5) working days of receipt of an RFI from the Board regardless of whether the RFI originated with the Board or a Construction Contractor. This response period will only change if the COMT extends the time period and/or the RFI is so marked as to require an expedited response for reasons stated therein. Care must be taken to assure that the final responses to RFIs are not interpreted by the Construction Contractor as authorizing deviations from the Construction Documents. The A/E shall respond to these RFIs in a manner appropriate to provide clarification including the preparation of supplemental drawings and specifications if necessary. There shall be no additional charge for reviewing or responding to any RFI, including supplemental drawings and specifications, which results from a design error or omission, error in calculations, grammatical errors, mistakes in formats, or other substantive deficiencies.

6. The A/E shall maintain a record of each submitted and RFI received from the Construction Contractor. The record shall include, at a minimum, the
subject matter of the submittal, the related specification section number, the provider or supplier of the subject item, material, or system, the date received, the action taken, and the date returned to the Construction Contractor.

b. Changes in the Work

1. Upon the request of the Board, the A/E shall evaluate whether a change order request initiated by a Construction Contractor or the Board (including construction change directives) constitutes a change in the Work set forth in, or reasonable inferable from, the Construction Documents.

2. If requested by Board or an Additional Service, the A/E shall prepare, reproduce and distribute Drawings and Specifications to describe Work to be added, deleted or modified in any Change Order or Construction Change Directive authorized by the Board; provided, however, A/E Services in connection with the issuance of Change Orders, including the preparation of Drawings and Specifications related thereto, shall be performed as a Basic Service if caused by an error or omission in the Construction Documents prepared by the A/E or A/E Consultants or breach of this Contract by the A/E.

c. Site Visits

1. During the progress of Construction, the A/E and/or A/E’s Consultants shall visit the site (or other locations where Work is in preparation or progress) not more than 250 times at intervals appropriate to the stage of the Construction Contractor’s operations to ascertain the extent of the Construction Contractor’s compliance with the LEED® Certification Plan in accordance with Section C.2.7.c. The A/E shall advise the Construction Administrator if the Construction Contractor or any Subcontractor is not in compliance with his LEED®-related obligations or has not supplied the LEED® submittal documentation available as of that stage of construction.

2. The A/E and/or appropriate A/E Consultant shall assist the Construction Administrator’s evaluation of the Construction Contractor’s applications for payment and, specifically, whether the Work has progressed to the point indicated in the application for payment and, to the best of the A/E’s knowledge, information and belief, whether the quality of the Work is in accordance with the Contract Documents. The A/E’s report to the Construction Administrator shall not be a representation that the A/E has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work; (2) reviewed construction means, methods, techniques, sequences or procedures; (3) reviewed copies of requisitions received from Subcontractors and material suppliers and other data requested by the Board to substantiate the Construction Contractor’s right to payment; or (4) ascertained how or for what purpose the Construction Contractor has used money previously paid on account of the Contract Sum.
3. The A/E and/or appropriate A/E Consultant shall assist the Construction Administrator in its determination of the date or dates of Substantial Completion and the date of Final Completion.

4. The A/E and/or applicable A/E Consultant shall be required to make site visits in addition to those mentioned in Section C.2.6.c as Additional Services if necessary to resolve design issues; provided, however, visits to the Site by the A/E and/or A/E Consultants (and any clarifications or redesigns as a result) shall be performed as a Basic Service if caused by an error or omission in the Construction Documents or breach of this Contract by the A/E. The Board’s Project Manager and the Construction Administrator will evaluate these site visits in order to minimize such visits. However, when deemed necessary by the Board’s Project Manager, the site visit shall occur within 24 hours of notification.

5. The A/E will be responsible for keeping written records of all visits. These records shall describe the purpose and results of each visit by way of Field Observation Reports or other similar methods. Any design clarifications or redesigns will be issued within five (5) working days of the site visit or less, unless the time is extended by notification to and approval by the Board’s Project Manager.

d. “As-Built” and Record Drawings

1. On a monthly basis as part of the Basic Services, the A/E will review the marked up set of “as-built” Construction Documents (drawings and specifications) prepared by the Construction Contractor and shall notify the Construction Administrator of any changes to the original Construction Documents. Any Services required as a result of non-conforming Work discovered during these reviews shall be compensable as Additional Services; provided, however, such A/E shall be performed as a Basic Service if caused by an error or omission in the Construction Documents prepared by the A/E or A/E Consultants or breach of this Contract by the A/E.

2. Upon certification of Substantial Completion of the Project and as an Additional Service, the A/E will review the marked up set of “as-built” Construction Documents (drawings and specifications) prepared by the Construction Contractor and shall question any changes that are not consistent with his knowledge of the project. The A/E shall then transcribe all changes into the project drawing files and specifications. The A/E shall stamp the term “RECORD DOCUMENTS” on each drawing sheet, update the revision block, and date and sign. The A/E shall stamp the term “RECORD DOCUMENTS” on the specification table of contents and date and sign.

3. The “RECORD DOCUMENTS” shall consist of one (1) set of full-size and one (1) set of half-size drawings, one (1) set of contract specifications and CD-ROM copies. These documents shall be transmitted to the Board within
fourteen (14) weeks of substantial completion of construction. (The A/E will be provided with the construction contractor's "as-built" record set of blue line drawings at the end of construction. However, the A/E will also be expected to maintain records to verify and confirm the information covered on the construction contractor's "as-built" records).

4. The A/E shall furnish a dated transmittal bearing the signature and seal of the A/E. The transmittal statement shall read:

"TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE RECORD DOCUMENTS TRANSMITTED HEREWITHT. (List of drawing numbers and specifications, references, sections and pages) ACCURATELY REFLECT THE PROJECT AS ACTUALLY CONSTRUCTED."

c. Pre-Construction Floor Plan Review

The A/E will review the floor plans of each floor respectively with the Board approximately five (5) months prior to the start of construction of that phase of construction. As an Additional Service, the A/E will make changes to the floor plans as needed to represent the needs of the Board at that time. The A/E will prepare all Design Documents required to make these changes.

d. Loading Dock Location

If requested by the Board as an Additional Service, the A/E will study the feasibility of providing and locating a practical loading dock(s) at or under the Martin building. The alternate loading dock plans shall include floor plans of affected areas, elevations and an estimate of the total added costs associated with this option. The alternate shall be presented with the 15% (concept) drawings of the base design.

VIII. The following new Section, C.2.7, "LEED® REQUIREMENTS AND CERTIFICATION SERVICES," is added to the Contract as follows:

C.2.7 LEED® Requirements and Certification Services

a. Generally

1. The A/E shall perform the LEED® Certification Services described below and shall cooperate and collaborate with the Board and the other members of the Design and Construction teams in furtherance of the Board's goal of achieving at least a silver rating under the LEED® 2009 NC rating system. The A/E shall notify the Board of any conflict or inconsistency between (i) the Board's expectations regarding LEED® 2009 NC and (ii) the A/E's LEED®-related Services set forth in this Section C.2.7 and Applicable Law, the Board's Program or any other provision of the Contract (including C.3 and Appendix I) and shall make a recommendation to the Board for resolving any inconsistency. Any reference to "Basic Services," "Additional Services" or "Services" in this Contract shall include the LEED® Certification Services described in this Section C.2.7. While the A/E shall make all reasonable efforts to achieve at least a silver rating for LEED certification, the A/E cannot guarantee that the minimum level goal will be achieved.
2. A/E acknowledges that achieving LEED® certification depends, in part, upon the A/E and its personnel, and the A/E’s Consultants and their personnel (A) being knowledgeable of the LEED®2009 NC rating system, LEED® credits and their interrelationships, and the procedures and documentation necessary to demonstrate compliance with the credits being pursued; and (B) performing the Services using designs, specifications, techniques, sequences and procedures that are particular to projects seeking LEED® certification. A/E represents that A/E is knowledgeable about the LEED®2009 NC rating system and has prior experience designing projects that achieved certification under the LEED®2009 NC rating system (which may include earlier versions of such rating system). A/E agrees that the project manager assigned to the Project will be a LEED®-AP in good standing. A/E agrees that the A/E’s Consultants engaged to perform the Services including, but not limited to, civil, structural, mechanical, electrical and plumbing consultants, also will be knowledgeable of the LEED®2009 NC rating system, will have prior experience in projects that achieved certification under the LEED®2009 NC rating system, and will assign a project manager to the Project that will be a LEED®-AP in good standing. A/E further agrees to provide, and shall cause the applicable A/E’s Consultants to provide, reasonable education and training to those personnel performing the Design Services about the Project’s goal of achieving LEED®2009 NC certification and the impacts and/or changes that the pursuit of such certification will have upon the designs, specifications, techniques, sequences and procedures utilized to complete the Services.

3. A/E acknowledges that (i) except for the Prerequisites that the LEED®2009 NC rating system requires, the USGBC does not dictate either the LEED® credits or the number of points the Project must satisfy to achieve the Board’s desired LEED® certification level; and (ii) therefore, the selection of credits and points to be pursued depends upon the Board’s particular goals and motivations for pursuing LEED® certification. Accordingly, prior to commencing the Schematic Design Services, the A/E shall obtain a clear understanding of the Board’s purpose(s) for pursuing LEED® certification, inform the Board about the LEED®2009 NC rating system and the options available to the Board under LEED® and, thereafter, recommence designs and alternatives which are consistent with the Board’s approved LEED®-related objectives, Applicable Law and the Board’s Requirements for the Renovation and the Project.

4. The A/E shall serve as the Project’s LEED® Administrator responsible for managing the collection and uploading of the information and calculations required to satisfy the LEED® Prerequisites and Credit submittal requirements for the Prerequisites and Credits targeted in the LEED® Certification Plan described in Section 2.7.2 (collectively “LEED® submittal documentation”). The LEED® submittal documentation shall conform with the requirements set forth in the latest version of the applicable USGBC Reference Guide, as such Reference Guide may be modified by the USGBC in Credit Interpretation Rulings or otherwise (hereinafter the “Reference Guide”). A/E may allocate the submission of the LEED® submittal
documentation among the appropriate members of the design and construction teams; provided, however, A/E will monitor the LEED® submittal documentation collected by the designated members of the design and construction teams for timeliness, conformance with LEED® requirements, and coordination with other submittal documentation. A/E shall immediately report to Board deficiencies in the LEED® submittal documentation submitted by any member of the Project's design or construction teams. Prior to their submission to the USGBC pursuant to Section C.2.7.4.7, the A/E shall submit the Board's application for certification of design phase credits and the Board's application for certification of construction phase credits to the Board for purposes of evaluation and approval by the Board. The A/E shall be entitled to rely on approvals received from the Board to complete the LEED® Certification Services.

b. LEED® Workshop

1. A/E acknowledges that the likelihood of the Project achieving the Board's LEED®-related objectives in an efficient, timely, and economic manner will be increased if there is collaboration between the A/E and A/E's Consultants (the "Design Team") and the Board, the Construction Coordinator, key Subcontractors, the CxA and Construction Administrator (collectively referred to as the "Project Team"), beginning as early in the design process as possible. Consistent with its professional obligations, A/E agrees to perform the Services in such collaborative fashion and to notify the Board in the event such collaboration with all or any member of the Project Team would not be in the best interests of the Board or the Project.

2. As part of this collaborative approach, the A/E shall conduct a LEED® workshop at which the Project Team, among other things, will review the Board's goals and motivation for pursuing LEED® certification and the LEED®2009 NC Rating System. The participants will also examine each LEED® credit utilizing the appropriate Rating System Project Checklist as a template for establishing green building goals, identify potential LEED® points, examine strategies for implementation, assess the impact of pursuing particular LEED® credits on the Board's program and budget, and determine the LEED® points to be targeted. The LEED® Workshop also will consider strategies for addressing potential coordination issues, delays and sequencing conflicts of long lead-time "green" materials; identifying and recruiting subcontractors and suppliers that have validated experience and skills in "green" construction; avoiding "green washing" and unnecessary "green premiums" on materials and equipment; establishing processes and systems for collecting and maintaining LEED® submittal documentation (including, for example, materials costs and recycled content, environmental criteria and VOC content); and establishing milestones in the Design Schedule for, among other things, the review of design documents by appropriate Project participants, the review of LEED® submittal documentation by the A/E prior to submission to USGBC, and the completion, and submittal, of LEED® submittal documentation to the USGBC.

3. The A/E will prepare minutes of the LEED® workshop for distribution and comment by workshop participants. The LEED® Workshop will be scheduled for at
least two (2) days. Follow-up sessions shall be scheduled with all or some participants as the A/E deems necessary or appropriate in furtherance of the Board’s interests and purpose.

4. The LEED® Workshop shall be scheduled either (i) after the Board’s approval of the Program Review and Verification Report and prior to submission of the 30% Submittal or (ii) within thirty (30) days after the Board awards a contract for Construction Administration services or for Construction Contractor services, whichever is earlier.

2. LEED® Certification Plan

1. As part of its Basic Services, the A/E shall prepare, for the Board’s approval, a LEED® Certification Plan based upon the results of the LEED® Workshop. The LEED® Certification Plan proposed by A/E shall conform to Applicable Law, the Board’s approved LEED®-related objectives and the Board’s Program for the Project. The LEED® Certification Plan proposed by A/E shall reflect the written consent of A/E’s Consultants, those construction team members participating in the LEED® Workshop and the C&A or shall note the disagreement of any such Workshop participant to any element of the LEED® Certification Plan, and reasons therefore. The LEED® Certification Plan will describe the LEED® certification process and shall contain a description of the green building goals established, the LEED® credits and points targeted, implementation strategies for complying with LEED® Prerequisites and Credits, list of participants and their roles and responsibilities, description of how the plan is to be implemented, the certification schedule, specific details about design reviews, list of systems and components to be certified, and certification documentation required. The LEED® Certification Plan shall include a copy of the applicable LEED® “Scorecard” identifying the credits that the Project is intending to satisfy. In the LEED® Certification Plan submitted to Board for approval, the A/E shall identify a reasonable number of additional credits and points in excess of the number of credits or points that must be certified for the Project to achieve the Board’s desired certification level in the event that USGBC’s denies certification of a primary targeted point(s). The approved LEED® Certification Plan shall become part of the Construction Contractor’s Contract Documents.

2. As part of the Basic Services, the A/E and A/E’s Consultants shall design the Project to conform to the approved LEED® Certification Plan and Applicable Law. The A/E shall revise the LEED® Certification Plan as the design and construction of the Project progresses to reflect any changes approved by the Board; provided, however, any modification to the LEED® Certification Plan for which the Board’s approval is requested shall reflect the written consent of A/E’s Consultants, the Construction Contractor and key Subcontractors and the C&A or shall note the disagreement of any such Project Team member and the reasons therefore. A/E shall ascertain, and inform the Board, of the impact, if any, of any proposed modification on the other elements of the LEED® Certification Plan and shall coordinate such change with the other elements of the Project’s design affected by the change.
Modifications to the LEED® Certification Plan shall be completed by A/E and A/E's Consultants without an increase in the A/E's compensation unless any such change qualifies as an Additional Service under Section M.15 of the Contract.

3. A/E shall obtain the Board's informed written consent to the proposed specification of designs, materials, equipment or systems that are new or unlisted in the marketplace or which may not have the durability and or longevity of their traditional, "off-the-shelf" counterparts.

4. LEED® Certification Documentation
   1. The A/E shall organize and manage the LEED® submittal documentation and certification process and regularly report progress to the Board.
   2. The A/E shall register the Project with the USGBC under the appropriate LEED® rating system. Registration fees charged by the USGBC shall be a reimbursable expense.
   3. Prior to commencement of the Design Development Phase, the A/E shall prepare, or assist the Board in preparing, the Board's Project Requirements ("OPR") and Basis of Design ("BOD") as required by EPA.
   4. Prior to commencement of the Design Development Phase, the A/E shall assist the CxA in preparing, and thereafter implementing, in accordance with the Reference Guide, the Commissioning Plan required by EPA and EAc3.
   5. In accordance with EAc3, the A/E shall
      i. submit the OPR, BOD and Design Documents to the CxA when the construction documents are thirty percent (30%) to forty percent (40%) complete and, if approved by the Board, incorporate any proposed changes into the next design iteration. When, in the professional judgment of the A/E, incorporation is not possible or not advisable, the A/E shall inform the Board in writing as to the specific tasks of that opinion;
      ii. confirm that Construction Contractor submittals applicable to commissioned systems are submitted to the CxA concurrent with A/E's review, and coordinate the response of A/E and CxA to the contractor;
      iii. assist the CxA in developing a systems manual for the commissioned systems;
      iv. assist the CxA in verifying that the requirements for training operating, personnel and building occupants are completed.
   6. With Board's advanced written consent, and after confirming that neither the Reference Guide nor the USGBC's CIR webpage provides the necessary guidance, the A/E shall prepare submittals for Credit Interpretation Ratings from the USGBC for interpretation of credit language, principles, or implementation strategies. The A/E's preperation of two (2) CIR submittals is included as part of the Basic Services; the preparation of additional CIR submittals shall be compensable as an Additional
Service subject to A/E's compliance with the provisions of Section M.15 of the Contract. Credit Ruling fees charged by the USGBC shall be a reimbursable expense except to the extent disallowed under Section M.15 of the Contract.

7. The A/E shall prepare and submit LEED® Certification Applications for the Project to the USGBC in accordance with the LEED® Certification Plan, including required calculations and documentation for each LEED® credit claimed. Unless otherwise directed by the Board in writing, A/E shall utilize the USGBC's two-phase application process. The A/E shall submit applicable design phase credits to the USGBC for review upon completion of the Construction Documents. A/E shall include sufficient time in the Design Schedule for this submission and the USGBC's response. At the completion of construction, the A/E shall submit to the USGBC for review and certification the balance of attempted credits, the verification of design phase credits and additional documentation for any design phase credit that has changed since the design phase review. The A/E shall not modify the design of any design phase credit that the USGBC has designated as "Anticipated" without the Board's written consent.

8. The A/E shall prepare responses and submit additional documentation required by comments or questions received from the USGBC after review of the original submission for certification. With Board's written consent, the A/E shall file an appeal of the USGBC's denial of any claimed credit within the time frames required by the USGBC. The appeal of the USGBC's denial of any design phase credit shall be made after the USGBC's design phase review and is included as part of the A/E's Basic Services unless the denial is solely attributable to an act or omission of the Board in breach of the Contract. The A/E's appeal of the USGBC's denial of any construction phase credit shall be compensable as an Additional Service provided the denial was not caused, in whole or in part, by the A/E's negligence or breach of this Contract.

9. If, after an appeal, a design phase credit is not re-designated by the USGBC as "Anticipated", the Board, in its discretion and without other cause, may direct the A/E in consultation with the Project Team to (i) develop an alternative design to satisfy the originally targeted credit(s); and/or (ii) modify the LEED® Certification Plan to target a different credit or credits that will conform with the Board's previously established LEED®-related objectives and Program for the Project and which, if achieved, will equal or exceed the number of targeted points established in the original LEED® Certification Plan. The A/E shall modify the Construction Documents as necessary to conform with any alternative design or modified LEED® Certification Plan approved by the Board at no additional cost to Board unless the USGBC's denial is attributable solely to an act or omission of the Board in breach of the Contract.

b. LEED® Certification Specifications
1. The A/E shall provide specifications that incorporate LEED® requirements conspicuously in both the drawings and specifications comprising the Construction
Documents including, but not limited to, all LEED® submittal documentation described in the Reference Guide with respect to EApl and EAcr and, to the extent being pursued, each of the following Credits: MRCr 1 2, MRCr 2 7; EQc1 1 3 2; and EQc 1 4 4. The Contract Documents shall define the Construction Contractor's responsibilities and documentation requirements related to LEED® certification, including Construction Waste Management, Construction Indoor Air Quality, and obtaining materials credits.

2. LEED® Prerequisite and Credit requirements shall be referenced in both Division 1 of the Specifications and in the applicable technical divisions.

f. LEED® Certification Services During Bidding
   1. At the pre-bid conference referenced in Section C.2.5.g, the A/E shall review and explain the differences between current standard construction means, methods, techniques and practices and LEED® principles, procedures, and requirements.

   2. The A/E shall prepare responses to questions from prospective bidders and provide clarifications and interpretations of the Bidding Documents related to LEED® certification in the form of addenda at no additional cost to Board except as may be allowable at an Additional Service under the Contract.

   3. The A/E shall carefully consider requests for substitutions, if permitted by the Bidding Documents, or for changes in relation to the LEED® Certification Plan and shall prepare addenda identifying approved substitutions related to LEED® certification. A/E acknowledges that substitutions, changes and “value engineering” proposed by Construction Contractors and approved (or recommended for approval) by A/E that are inconsistent, or not properly coordinated, with the LEED® Certification Plan, could prevent the Project from achieving its desired level of LEED® certification and, because of the interrelationships of building systems and elements in LEED® projects, could require costly remediation or changes to other elements of the Project at the A/E’s expense. If the A/E determines that implementation of the requested change would result in a material change to the LEED® Certification Plan, the A/E shall notify the Board, who may authorize further investigation of the change. Upon such authorization, and based upon information furnished by the Construction Contractor, if any, the A/E shall make a recommendation to the Board regarding the implementation of the requested change.

   4. The A/E shall assist the Board in bid validation or proposal evaluation and determination of the successful bid or proposal, if any, related to LEED® certification including the experience of Bidders and their Subcontractors on LEED® projects and the avoidance of bids that contain unjustified “green premiums.”

5. As part of the Bidding Process, the A/E shall require Bidders to identify (A) their experience and their Subcontractor experience on LEED® projects, including the experience that their Project Manager and job superintendent have had, and their Subcontractors’ Project Managers and job superintendents have had, on LEED®
412

projects; and (B) the manufacturer or supplier of, and specifications relating to, the materials that the Construction Contractor intends to use to comply with any of the following credits targeted by the LEED® Certification Plan: MRc2-7, and EQc4.1-4.4. A/E shall use commercially reasonable efforts to prevent the use of materials and equipment that have been "green washed", i.e., that include inaccurate representations or labeling that the materials or equipment are sustainable, "green," or comply with LEED®-specific obligations.

g. LEED® Certification Services During the Construction Phase

1. In accordance with Section C.2.6.a.3 of the Contract, the A/E shall review and respond to requests by the Construction Contractor for additional information about the Construction Documents related to LEED® certification.

2. A/E acknowledges that (i) the Board's application for LEED® certification must include a verification that construction was completed in conformance with the designs for which LEED® Pre-requisites and Credits are being claimed; and (ii) satisfaction of EAPl; EAa; MRe1; MRc2-7; EQc4.1-4.4, to the extent targeted in the LEED® Certification Plan, depend, in particular, upon the performance of the Construction Contractor and its Subcontractors and of their supplying the required LEED® submittal documentation. Accordingly, the A/E and/or A/E's Consultants shall visit the site (or other locations where Work is in progress or progress) at intervals appropriate to the stage of the Construction Contractor's operations to ascertain the extent of the Construction Contractor's compliance with the LEED® Certification Plan and the requirements of the LEED® Pre-requisites and targeted Credits and to keep the Board informed about the progress and quality of the portions of the Work related to LEED® certification. A/E shall immediately report to Board any deficiencies discovered in the Construction Contractor's performance of its LEED®-related performance and obligations.

3. A/E also acknowledges that the Construction Contractor's and Subcontractor's use and installation of the materials and equipment specified in the Contract Documents (or, if not specified, the requirements set forth in the Reference Guide for the targeted credits) is critical to the Project achieving its desired LEED® certification including, but not limited to, the successful commissioning of specified systems (including those required to be commissioned by EAPl) and to satisfying the requirements of MRc2-7 and EQc4.1-4.4 to the extent targeted in the LEED® Certification Plan. Accordingly, in accordance with its obligations under Section C.2.6.a, the A/E shall (i) review and approve or take other appropriate action upon the Construction Contractor's Submittals such as Shop Drawings, Product Data and Samples as necessary to ascertain their conformance with the requirements of the Contract Documents and of the requirements for the LEED® Pre-requisites and Credits identified in the LEED® Certification Plan; and (ii) use commercially reasonable efforts to prevent the use of "green washed" materials and equipment.

4. The A/E shall not recommend payment to any Construction Contractor or any Subcontractor that is not in compliance with its LEED®-related obligations or has not
supplied the LEED® submittal documentation available as of that stage of construction for the Prerequisites and Credits targeted in the LEED® Certification Plan.

IX. Section C.4, "APPLICABLE DOCUMENTS AND PREVIOUS STUDIES" is modified to add the following after Section C.4.F:

G. Martin building design drawings and amendments (not "as-built" drawings) as scanned .TIF drawings;
H. Martin Building Cafeteria Study (2008);
I. Martin building sprinkler installation drawings;
J. Martin Building Renovation Study;
K. Martin/Eccles Electrical Switchgear Replacement study;
L. Martin Building ADA Fire Code study;
M. Eccles Electrical Switchgear Replacement Statement of Work;
N. Martin/Eccles Electrical Switchgear Replacement Study;
O. Facilities Blast Analysis;
P. Federal Reserve System Facilities and Security Guidelines;
Q. Programming documents for the Martin building (documents will include requirements for building areas that will include at a minimum retail and amenities, dining areas, and support areas);
R. Emergency generator drawings;
S. VE documents; and
T. Seismic Studies prepared by URS Corporation

The Board cannot guarantee the accuracy or completeness of documents listed above that were prepared by other consultants, individuals, or firms. The A/E shall review such documents for accuracy and completeness of the information as needed to complete the Services. The A/E shall advise the Board if it becomes aware of any error or deficiency in said services, information, surveys, and reports. If any of the documents or information noted above does not exist, and when A/E has provided written justification for such information, the Board shall cause the required information to be prepared in a timely manner, relative to its notification that the information is required.

X. The following new Section, C.5, "BOARD RESPONSIBILITIES" is added to the Contract:

a. The Board will provide or have others provide:
   1. Review of the Design Documents and other submissions submitted by the A/E and responses to specific inquiries related to the conformance of these documents to the Board Program Requirements provided in writing by the A/E.
   2. Section 0 (introductory information, bidding requirements, contract forms, and general and special conditions) and Section 1 (general requirements) of the Project Manual. A/E shall be responsible to provide all other sections, subject to review and approval by the COTR, of the Project Manual.
3. Advice to the A/E on appropriate contact sources in Federal, State, Regional, and Local government agencies, public and private utility companies, and other entities. Assist the A/E in arranging meetings with designated officials when it is not possible or efficient for the A/E to do so.

4. Temporary relocation of Board employees, including all associated moving costs and suitable alternate facilities, as required allowing the A/E access to offices or other areas of the Martin building. Employee relocations shall be limited to selected offices that the COTR and A/E agree must be temporarily vacated in order to allow the A/E to perform the work.

5. Notice to the A/E about all formal meetings, presentations, and other events at which the A/E’s attendance is mandatory. The Board will give the A/E at least three (3) workdays advance notice whenever possible.

6. Unless the Board determines that additional time is necessary, written responses to the A/E within ten (10) working days regarding any submittal that requires the Board’s review and approval.

b. The Board may, but shall not be obligated to, attempt to advise the A/E, either verbally or in writing, if the Board becomes aware of any fault or defect in the Services provided under this Contract, including any errors, omissions or inconsistencies in the A/E’s documents. Failure to provide such notice shall not relieve A/E of its responsibility to provide clear, complete, accurate, and fully coordinated Construction Documents conforming to the Board’s Program and Applicable Law.

c. If so requested in writing by the A/E and unless otherwise provided in this Contract, the Board shall furnish such tests, inspections and reports, if so required by Applicable Law or the Construction Documents, related to structural and mechanical condition assessments, chemical tests, tests for air and water pollution, and tests for soil contamination.

d. The Board reserves the right to undertake by contract, Board personnel, or other means the same or similar kind of work included in this Contract, depending on the availability of resources. The A/E shall cooperate fully with all such other contractors, Board employees, or officials involved in such work and as necessary must carefully adapt the scheduling and performance of Services under this Contract to accommodate the other work, handing any instructions which may be provided by the CO and/or COTR. The A/E shall not commit or permit any acts that will interfere with the performance of work by any other contractor or by Board personnel. Such actions, by non-A/E personnel, shall not be violations of this Contract, and shall not be considered as terminations in whole or in part of any work procured through this Contract.

XI. Section C.5, “RIGHTS OF OWNERSHIP” is deleted in its entirety and replaced with the following:
a. Design, Documents, drawings, sketches, calculations, descriptions, narratives, specifications, models, renderings, and any other data, studies, reports and written information related to or developed during the performance of the Services hereunder by, or on behalf of A/E or by any A/E Consultant ("Work Product") shall be considered "work made for hire" commissioned by the Board, and any and all legal rights to such Work Product, including all copyrights, shall be deemed permanently vested in Board, regardless whether the Project for which it is prepared is executed or not, and the A/E hereby unconditionally and irrevocably transfers to Board any and all rights A/E may be deemed to have to such Work Product. The suspension, termination, breach of contract by Board (other than for the Board's wrongful withholding of undisputed sums in breach of this Contract) or other dispute between Board and A/E shall not affect the rights granted to Board hereunder. No information gathered or generated in the performance of the work shall be disclosed to third party without the written consent of the Board. A/E agrees to prepare or modify all documents used or prepared by the A/E, including, but not limited to, agreements between the A/E and A/E Consultants to be consistent with the provisions of this Section C-3.

b. If the Board takes steps to terminate the A/E's right to perform services under this Agreement as provided in Section M.20 or M.21, the A/E shall cooperate fully with the Board by immediately turning over possession and control to the Board of all Work Product not yet delivered to Board, if any, as well as all digital and reproducible copies of the Work Product either stored for use on computers or in any other type of media and otherwise assist the Board's successor designers to complete the design or perform redesign work. The only charges that may be assessed to Board by the A/E for the turnover of possession and control of Work Product are the direct cost of reproduction by photocopying, or other data duplication methods selected by the Board at its sole discretion. However, no charges for services may be imposed or required as a condition of turnover over possession and control of Work Product.

c. A/E shall defend, indemnify and hold harmless from any claims to the extent arising from or relating to the actual or alleged infringement of any domestic or foreign patents, copyrights, trademarks or other intellectual property rights that may be attributable to A/E or A/E's Consultants in connection with the Services and the Project. In the event that any such claims, temporary restraining order or preliminary injunction is granted, A/E shall, in addition to its obligation above, make every reasonable effort, by giving a satisfactory bond or otherwise, to secure the suspension of the injunction or restraining order. If, in any such suit or claim, the Services, the Project or any part, combination or process thereof, is held to constitute an infringement and its use is preliminarily or permanently enjoined, A/E shall promptly use its best efforts to secure Board's license, at no cost to Board, authorizing continued use of the infringing work. If A/E is unable to secure such a license within a reasonable time, A/E shall, at its own expense and without incurring performance requirements, either replace the affected work, in whole or part, with non-infringing components or parts or modify the same so that they become non-infringing.
d. Unless otherwise provided in this Agreement, if CADD technology is used by the A/E in connection with this Project, A/E shall retain all rights, title and interest in the CADD applications programs, electronic tapes, and disks related to the CADD applications programs. As part of A/E’s Basic Services, A/E shall prepare a duplicate disk of A/E’s design database pertaining to this Project and deliver same to Board at no additional cost, along with complete instructions on the definition of the CADD layers that must be used in the assembly of the electronic drawing files. Board shall provide any necessary copies of CADD applications programs. Uses by the Board of the electronic drawing files include but are not limited to backgrounds for Construction Contractor or subcontractor shop drawings, re-built drawings, Board marketing and other Board promotional materials.

XII. Section F.1, “DELIVERABLES” is deleted in its entirety and replaced with the following:

The A/E shall deliver the Design Documents, Schedules, Reports, Minutes, Construction Cost Estimates and other documents specified in this Contract including, but not limited to:
- Program Review & Verification Report
- 30% Submission
- 60% Submission
- 95% Submission
- 100% Submission
- LEED® Certification Plan
- LEED® Submittal Documentation
- LEED® Certification Applications

XIII. Section F.4, “INSURANCE CERTIFICATES,” is modified as follows:

The A/E shall provide the Board with insurance certificates and endorsements naming the Board Indemnitees (as defined in Section F.7, as amended) as Additional Insureds signed by the applicable insurer for each insurance policy required to be in effect throughout the performance period (including for ongoing and completed operations).

IX. Section H.1, “APPROVAL OF KEY PERSONNEL,” is modified as follows:

Offerors shall submit resumes with their Offeror Qualifications (Phase I) a list of those persons that are essential for the performance of the goods or services described in Section C, the Statement of Work, and who will be assigned to the resulting Contract (Key Personnel). The Contractor shall not remove or replace Key Personnel without prior notification to and approval by the COITR. Approval of Key Personnel will not be unreasonably withheld. If any Key Personnel become disabled, voluntarily terminate their employment with the A/E, or otherwise become unable to perform, then such persons shall be replaced with persons of equal or better skill and experience.

X. Section J.2, “PERIOD OF PERFORMANCE,” is modified as follows:
The period of performance under the Contract will be from date of contract award until thirty (30) days after final payment is made to the last Contractor involved in completing the Project. Notwithstanding the expiration of the term of this Contract, A/E shall continue to perform all Services that survive final payment to such Contractor in accordance with this Contract.

XI. Section J.3, "INVOICES AND PAYMENTS," is modified to replace the first paragraph in its entirety with the following:

The A/E shall submit invoices and be compensated by the Board in accordance with Appendix 2 to Contract Modification No. 17. All invoices shall show the Contract number and modification number if issued.

XII. Section J.5, "COTR FUNCTIONS AND LIMITATIONS," is modified as follows:

Keith Bates is designated the cognizant COTR who represents the Contracting Officer in administering technical details within the scope of the Contract and in inspecting and accepting. The Board intends to retain a Construction Administrator to assist the COTR. Neither the COTR nor the Construction Administrator is otherwise authorized to make any representations or commitments of any kind on behalf of the Contracting Officer or the Board. Neither the COTR nor the Construction Administrator has the authority to alter the Contractor’s obligations or change the terms and conditions of the Contract. If, as a result of technical discussions, it is desirable to alter or change contract terms and conditions, changes will be issued in writing and signed by the Contracting Officer or his authorized representative.

Some of the types of actions within the scope of the COTR’s authority are:

a. To assure compliance of the Contractor’s performance with Section C, the Statement of Work, and Appendix 1 to Contract Modification No. 17.

b. To perform or cause to be performed those inspections necessary to determine the Contractor’s compliance with the technical requirements and the Statements of Work.

c. To maintain both oral and written communications with the Contractor concerning those aspects of this Contract within his/her purview.

d. To monitor the Contractor’s performance and to advise the Board’s Senior Contract Specialist of any deficiencies.

e. To coordinate the availability of Board-furnished property and services and to provide entry to the work area for the Contractor’s personnel, as required.

f. To obtain the Contractor’s proposal for a change order and to relay the information in a memo to the Senior Contract Specialist.

g. To review invoices and, based on satisfactory performance of the terms and conditions of the Contract, to notify the Accounting Section that a payment should be made pursuant to the Contract.

h. To determine final acceptance of services provided under this Contract.

In addition to assisting the COTR in connection with the above referenced actions, services within the Construction Administrator’s scope of work include:
i. Monitoring the A/E's compliance with the Contract.
ii. Monitoring adherence by Project Team members with the Project Schedule.
iii. Performing constructability reviews.
iv. Preparing Construction Cost estimates and performing value engineering.
v. Assisting in the process for procuring Contractors.
vi. Reviewing applications for payment.
vii. Facilitating collaboration and communication between members of the Project Team.
viii. Inspecting the Work.
ix. Monitoring commissioning of the building's systems.

The Construction Administrator is authorized to give the A/E work authorizations, issue written directives, approvals and notices to proceed on behalf of the Board that do not alter the A/E's obligations or change the terms and conditions of the Contract. If any services are performed by A/E without prior written authorization by the Construction Administrator, COTR or CO, the Board will not be obligated to pay for such services. The Board reserves the right to designate a different Construction Administrator at any time, without advance notice. Any task, including, but not limited to, reviews or approvals that the Board may perform pursuant to this Contract may be performed by the Construction Administrator, unless that task indicates it shall be exclusively performed by the Board or any other designated representative of the Board.

Any review, evaluation, approval or other action by the Board, CO, COTR, CaA or Construction Administrator regarding designs, drawings, specifications, schedules, estimates, shop drawings, product data, samples or similar submittals prepared by the A/E or any other architect, engineer, Contractor or consultant engaged by the A/E shall not (A) in any way be, or be deemed to be, (i) a transfer of any design liability from the A/E to the Board, CO, COTR, CaA or Construction Administrator, or (ii) the approval of any Design Documents not meeting the requirements of Applicable Law, the Board's Program, or the Contract, or a waiver, in whole or in part, of any indemnity or other rights the Board may have against the A/E for actual or alleged defects, errors or omissions in such documents; and (B) relieve the A/E from its obligation to design the Project in accordance with the Board's Program and Applicable Law and to obtain the Board's written approval for any variation, modification or substitution thereof.

XIII. Section L.7, "INSURANCE," is deleted in its entirety and is replaced with the following:

a. The A/E shall procure and maintain at its sole expense all forms of insurance required by the laws of the District of Columbia including, without limitation, the insurance policies set forth below which shall be issued by carriers satisfactory to the Board and licensed to provide such coverage in the District of Columbia, and on forms satisfactory to the Board:
   1. Commercial General Liability (Occurrence Basis): Bodily Injury/Property Damage Liability Combined Single Limit of $2,000,000 each occurrence, $2,000,000 annual aggregate applicable to the Project including the following coverages: (i) Premises Operations; (ii) Independent Contractors; (iii) Products and Completed
Operations for a period of no less than ten (10) years following the Board’s acceptance of the Work (which coverage may be supplied by multiple policies in lieu of a single policy); (v) Broad Form Contractual Liability specifically in support of, but not limited to, the Indemnity sections of the Contract; (vi) Broad Form Property Damage (including Completed Operations); (vii) Protective Liability; (viii) Advertising Injury Liability; (vii) Fire Legal Liability; and (viii) Exclusions relative to Collapse, Explosion and Underground Property Damage Hazard deleted.

2. Comprehensive Automobile Liability: $2,000,000 combined single limit for bodily injury and property damage.


4. Employer’s Liability: $1,000,000; each accident: $1,000,000; disease policy limit: $1,000,000; disease each employee.

5. Excess/Umbrella Liability: Bodily Injury/Property Damage (Occurrence Basis). $1,000,000 per occurrence, $2,000,000 aggregate. This policy shall be written on a following form umbrella excess basis above the coverage described above.

6. Professional Liability: $2,000,000 per claim, subject to a $2,000,000 annual aggregate.

b. Unless included under the Commercial General Liability policy, the professional liability policies procured by the A/E shall assure the A/E against claims for, including but not limited to, bodily injury, property damage and contractual liability, including A/E’s obligations under Section L.14, as amended, and other indemnity obligations under the Agreement that arise out of or are related to the A/E’s negligent performance of its professional services.

c. The A/E’s Professional Liability Policy shall have a retroactive date prior to the performance of any Services to be provided under this Agreement, shall be maintained by A/E for ten (10) years after the date of issuance of the Certificate of Substantial Completion of the Work and shall state that in the event of cancellation or non-renewal, the discovery period for insurance claims (tail coverage) shall be at least twelve (12) months.

d. All insurance policies (except Professional Liability and Worker’s Compensation) shall be endorsed to include the Board, its subsidiaries, the Contracting Officer, the COFR and each of their respective members, successors, assigns, heirs, legal representatives, devises, officers, directors, shareholders, employees, consultants and agents, now existing or which may hereafter exist (“Board Indemnities”) as Additional Insureds on terms no less broad than ISO forms CG 20 00 07 04 for ongoing operations and CG 20 07 07 04 for completed operations (or such other forms as requested by the Board and agreed upon by the A/E), and copies of these endorsements or their equivalents shall be provided to the Board prior to commencement of the Services (or, in the case of a
Consultant, prior to commencement of the Consultant's services. All policies (except
professional liability and workers' compensation) shall contain cross-liability and
severability of interest endorsements, state that this insurance is primary insurance as
regards any other insurance carried by the Board or, where applicable, any Additional
Insured, and shall include a waiver of subrogation in favor of Board and all Additional
Insureds. The A/E shall be responsible for any loss within the deductible limits of the
policies. The A/E and its Consultants shall submit proof of such insurance to the Board
before submission of the first invoice to the Board, on each of the policy's anniversary
date(s), and at any time when there occurs (or there is expected to occur) under any
policy a reduction in insurance limits, a policy cancellation or an exhaustion of available
insurance coverage. Proof of such insurance, and the maintenance in full current force
and effect of such coverage, shall be a condition precedent to the Board's obligation to
pay under this Agreement. The insurance policies shall incorporate a provision requiring
written notice to the Board at least thirty (30) days prior to any cancellation, nonrenewal,
or material modification of the policies. To the extent that the Board or the A/E realizes
the proceeds of property insurance related to, and subsequent to, a claim for which
coverage by property insurance exists, the recovering party shall assign the loss waives its
right against the other for that loss. Nothing in this Agreement shall be construed as a
waiver by Board of its right to proceed against any other person or entity for losses
arising out of, or related to, this Agreement. A/E waives its right to subrogation where
the loss incurred by A/E or any of its subconsultants, consulting engineers, or others is
covered by property insurance. Except as specifically set forth above, all insurance
policies shall remain in effect for at least through any warranty period covering the
Project but in no case for less than twelve (12) months after the date of issuance of
Certificate of Substantial Completion of the Work.

c. The A/E shall require by contract and shall verify that all A/E's Consultants
performing Basic or Additional Services for the Project under a contract (express or
implied) with A/E including, without limitation, any architect, civil engineer, structural
engineer or mechanical/electrical/plumbing consultants shall procure and maintain the
same insurance coverage as that identified above for the A/E, unless lower policy limits
for a particular Consultant based upon its scope of work are accepted in writing by the
COTR.

XIV. Section L.14, “INDEMNIFICATION,” is deleted in its entirety and replaced with the
following:

a. By signing the Proposal section of the Solicitation form, the Offeror agrees, to the
extent permitted by applicable law, to indemnify and defend the Board, its
subcontractors, the Contracting Officer, the COTR, the Construction Administrator and each
of their respective members, successors, assigns, heirs, legal representatives, devisees,
officers, directors, shareholders, employees, now existing or which may hereafter exist
(collectively the “Board Indemnities”) for, from and against all claims, demands, causes
of action, proceedings, suits, damages, liabilities, losses, penalties, fines, sanctions,
judgments, and expenses (including, reasonable attorney's fees, costs and expenses of
litigation and of investigation whether or not suit is filed) of any kind or nature (herein
collectively “Losses & Liabilities”), caused by, arising out of or resulting from whole

48
or in part the negligent act, error or omission, willful misconduct or breach of this Contract by the Offeror, the Offeror's employees, Consultants, subcontractors and those for whom the Offeror is legally responsible in connection with the Services performed under this Contract, even if a Board Indemneree's negligence or fault is, or is alleged to be, a contributing cause of such Losses & Liabilities; provided, however, if it is subsequently adjudicated by a court of competent jurisdiction or agreed to by a Board Indemneree that a portion of any Loss or Liability is the result of the negligence or fault of a Board Indemneree, the Board will reimburse (or credit) Offeror for that percentage portion of the total cost of Offeror's defense and indemnification of such Board Indemneree equal to such Board Indemneree's percentage of comparative liability in relation to all contributing factors. Without intending to limit the scope of Losses & Liabilities in any way, and to the extent permitted by Applicable Law, Offeror expressly waives its immunity under the applicable workman's compensation statute in connection with any Board Indemneree's claim for indemnification under this article. The Offeror also shall indemnify and defend all of Board Indemnerees from and against any costs and expenses (including reasonable attorney's fees, costs and expenses of litigation and investigation) incurred by any Board Indemnerees in enforcing any of the Offeror's defense, indemnity, and hold harmless obligations under this Contract. Except as expressly permitted pursuant to this subsection (a), Offeror shall not bring any claims against a Board Indemneree in connection with a Loss or Liability.

b. The Board shall promptly advise Offeror in writing of any claim, demand, action, administrative or legal proceeding or investigation as to which this indemnification applies, and Offeror, at Offeror's expense, shall assume on behalf of Board (and the other Board Indemnerees) and conduct with due diligence and in good faith the defense thereof with counsel reasonably satisfactory to Board; provided, however, the Board shall have the right, at its option, to be represented therein by advisory counsel of its own selection and at its own expense. In the event of failure by Offeror to fully and timely perform in accordance with this indemnification provision, when it is applicable, the Board, at its option, and without relieving Offeror of its obligations hereunder, may so perform, but all costs and expenses so incurred by Board in that event shall be reimbursed by Offeror to Board, together with interest on the same from the date any such expense was paid by Board until reimbursed by Offeror, at the rate of interest provided to be paid on judgments by the law of the jurisdiction to which the interpretation of this Contract is subject.

c. Offeror's obligations under this Section and its subsections shall survive expiration or termination of the Offeror Contract.

d. Offeror shall cause the same or similar terms as those set forth in this Section L.14 and its subsections to be included in the terms of any contract between Offeror and any third party providing Offeror Services in connection with the Project.
XV. Section M.1, "DEFINITIONS" is modified to include the following:

a. **Applicable Codes and Standards** means any and all codes, standards or requirements applicable to the Services, the Work of any Construction Contractor or to the Project set forth in the Contract or in any Applicable Law. In the event of an inconsistency or conflict between any of the Applicable Codes and Standards, the highest performance standard as contemplated therein shall govern performance of the applicable person. For purposes of this Contract, Applicable Codes and Standards shall include the codes, statutes and requirements of the District of Columbia applicable to similarly situated projects in the District of Columbia even though the Martin Building is legally exempt from such requirements.

b. **Applicable Law** means all laws, statutes, ordinances, regulations, orders, decrees, injunctions, permits, agreements, rules and regulations, including any conditions thereof of any Governing Authority, or other legislative or administrative action of a Governing Authority, or a final decree, judgment or order of a court which relates to the performance of the Services, the Work or services of any Construction Contractor or the interpretation or application of this Contract or any applicable Contract Documents, including (a) any and all permits, authorizations, certifications, or other approvals or orders, (b) any Applicable Codes and Standards set forth in Applicable Law, and (c) any Applicable Law related to (i) conservation, regulation, improvement, protection, pollution, contamination or remediation of the environment; or (ii) Hazardous Substances or any handling, treatment, storage, release, use and disposal or other disposition of Hazardous Substances. For purposes of this Contract, Applicable Law includes the laws of the District of Columbia applicable to similarly situated projects in the District of Columbia even though the Martin Building is legally exempt from these requirements.

c. **Change** means an addition, deletion, suspension of, revision or any other modification or amendment to (i) the Basic Services; or (ii) the Work or services of any Construction Contractor.

d. **Construction Contractor** means an individual, partnership, corporation, or other entity responsible for performing the Work, or a portion thereof. Contractor shall include Subcontractors of any tier.

e. **Design Documents** mean drawings, specifications, calculations and other work product prepared by the A/E, the A/E’s Consultants or any other consultant engaged by the Board to perform Design Services in connection the development of the Project including, but not limited to, Schematic Design Documents, Design Development Documents, Construction Documents and Addenda thereto.

f. **Design Services** shall mean the professional architectural, engineering and design services performed by the A/E and/or the A/E’s Consultants (whether as part of the Basic Services or as an Additional Service) for the Project.
g. Governing Authority means any department, office, instrumentality, agency, board or commission of the Federal Government, and any state or local government having jurisdiction over a Party or any portion of the Services, the Work, or the Project. For purposes of this Contract, Governing Authority shall include the District of Columbia, even though the Martin Building is legally exempt from District of Columbia law.

i. Subcontractor refers to any contract between a Construction Contractor and any person, or between a Subcontractor (of any tier) and any person to perform, supply, or furnish a portion of the Work on the Project.

j. Subcontractor refers to any person performing, supplying, or furnishing a portion of the Work on the Project under a Subcontract.

k. Work refers to the entirety of the obligations required of any Construction Contractor in constructing all or any portion of the Project set forth in or reasonably infeasible from its applicable contract documents.

XVI. Section M.2, "INSPECTION," is deleted in its entirety and replaced by the following:

The Board shall have the right to reasonably disapprove of any portion of A/E's Services by written notice stating the reasons for the disapproval. In the event that any of the Services are disapproved by the Board, the A/E shall proceed, when requested by the Board, to re-perform or make other corrections to the Services to attempt to satisfy the objection at no additional cost to the Board without prejudice to A/E's right to pursue a claim under Section M.22. In addition to any other remedy of the Board under this Contract or otherwise at law or in equity, the Board may withhold payment from the A/E on account of Services that the Board contends in good faith contain errors, omissions or are otherwise incomplete, inconsistent or do not conform to the requirements of the Contract or are contrary to the Board's written instructions, likewise without prejudice to A/E’s right to pursue a claim under Section M.22. A/E acknowledges that the Board's review, inspection, acceptance, and/or payment for any of the A/E's Services shall not constitute acceptance of Services that fail to conform to the requirements of the Contract, unless the Board expressly accepts such non-conforming Services in writing. Acceptance of payment by the Architect for all or any part of the Services shall constitute a waiver of all claims against the Board, except those previously made in writing and identified by A/E as unsettled at the time of such payment.

XVII. Section M.9, "NONDISCLOSURE," is modified as follows:

a. For purposes of this Contract, "Confidential Information" shall include all information and material related to (a) the Project including, but not limited to, Design Documents, estimates, reports, photographs; (b) the business, products, services, research or development, clients or customers of the Board or the Federal Reserve Banks; (c) the security arrangements and strategies of the Board; (d) economic data; (e) financial, statistical and personnel data pertaining to Federal Reserve Banks or other financial institutions; and (f) financial, statistical, personnel planning and similar information relating to past, present or future activities of the Board, which has or will come into the
possession or knowledge of Contractor or its agents or employees in connection with this Agreement or the performance hereof. Confidential Information does not include any information which: (a) is already in the possession of the Contractor except that which has been received under another confidentiality agreement with the Board; (b) is rightfully received by the Contractor from a third party; (c) is independently developed by or for the Contractor; or (d) is or becomes publicly available.

b. Except with the express written permission of the Board in each instance, the A/E shall not knowingly or negligently communicate or disclose Confidential Information to any person or entity except to A/E employees, Consultants or Project Team members to the extent necessary for them to perform their respective services for Work for the Project. Prior to disclosing Confidential Information to any authorized recipient, A/E shall bind such person to the confidentiality obligations contained in this Section. A/E acknowledges that in the event of a breach of any of the confidentiality obligations contained herein, the Board would suffer irreparable harm for which remedies at law, including damages, would be inadequate, and shall be entitled to seek equitable relief therefor by injunction, in addition to any and all rights and remedies available to it at law and in equity, without the requirement of posting a bond.

c. The A/E is required to develop and utilize procedures for custody, use and handling, reproduction, preservation, storage, safeguarding, and disposition of all Confidential Information. These procedures must be designed and carried out so that there is no unauthorized disclosure of such documents and information throughout the course of contract performance.

XVIII. Section M.15, "CHANGES," is deleted in its entirety and replaced by the following:

Section M.15, "CHANGES/ADDITIONAL SERVICES"

a. Initiated by the Board. The Contracting Officer may at any time direct the A/E to perform Additional Services, or to modify the method or manner of performance of such Services, without rescinding or terminating this Contract. The A/E shall perform the Additional Services, and the Board shall compensate the A/E, in accordance with the provisions set forth below.

b. Initiated by the A/E. If the A/E believes that (A) an Additional Service has been requested by virtue of any direction, instruction, interpretation, or determination by the Board, or (B) it is or may be entitled to an adjustment in its compensation or the Schedule as a result of an event or occurrence arising after award of the Contract, the A/E shall notify the Board in writing within twenty (20) days of the event, occurrence, direction, instruction, etc. and shall obtain the Board's written approval prior to performing an Additional Service; provided, however, no claims for Additional Services may be initiated by the A/E or its Consultants after final payment has been made under this Contract. If known at the time of its notice to the Board, the A/E's notice shall set forth the estimated adjustment in the A/E's compensation or Schedule which it proposes and, if not known at such time, when the A/E reasonably expects to notify the Board of
such proposed adjustment. The parties acknowledge that Board shall be prejudiced if
Architect fails to provide the notice required under this Section, and agree that such
requirement is an expense condition precedent necessary to any right for an adjustment in
the Architect's compensation, the Design Schedule, or any other modification to any
other obligations of Architect under the Agreement.

c. Conditions Precedent to Additional Services. The Board and the A/E will make
reasonable efforts to determine a mutually acceptable fixed fee for any Additional
Service before the A/E proceeds with performance of an Additional Service. Under no
circumstances will the Board be obligated to compensate the A/E or A/E Consultant for
Additional Services unless, as a condition precedent herein, the Board has authorized the
A/E to proceed with the performance of such Additional Services in writing in advance.
A/E shall be solely responsible for recording the time expended and Reimbursable
Expenses incurred for the Additional Services. Notwithstanding anything to the contrary
contained in this Contract, the A/E shall not be entitled to receive compensation for any
Additional Services if such services were required due to the fault of the A/E or the A/E
Consultant or the A/E’s failure to perform in accordance with the terms of this Contract.

d. Additional Services. The following services constitute Additional Services:

i. Services necessitated by a material change in the initial Project Information,
previous instructions or approvals given to the Board, or a change in the Project
Requirements that materially affects the scope, timing or quantity of the A/E's
services including, but not limited to, site, quality, complexity, the Board’s schedule
or cost limitations, or procurement or delivery method;

ii. Changing or editing previously prepared design documents necessitated by the
inclusion or revision of codes, laws or regulations or official interpretations;

iii. Services necessitated by decisions of the Board or Board’s Consultants not
rendered (i) in the time specified by the A/E in its request provided such specified
time is reasonable; or (ii) if no time for response is specified by the A/E, within a
reasonable time;

iv. Preparation for, and attendance at, a public presentation, meeting or hearing,
except as otherwise provided herein;

v. Preparation for, and attendance at a dispute resolution proceeding or legal
proceeding, except where the A/E is party thereto;

vi. Consultation concerning replacement of Work resulting from fire or other
casualty during construction;

vii. Preparing revisions to Construction Documents in connection with the issuance
of Change Orders and Construction Change Directives; services associated with
change orders, construction change directives or substitutions that are typical to
projects of a similar nature and complexity shall not constitute Additional Services;

viii. Services in connection with preparing special surveys, studies and submissions
required for approval by Governing Authorities;

ix. Consultative services in connection with claims, disputes, or other matters in
question between the Board and a Construction Contractor;

x. Visits to the site in excess of those set forth in Section C.2.6.; and

xi. Any service identified as an Additional Service in the Contract.
Continuing Performance. If directed by the Board, the A/E shall continue to perform in accordance with the terms of this Contract during the course of any renegotiation of the A/E’s compensation for Additional Services or for adjustment in the Design Schedule. If the Board indicates in writing that all or part of any Additional Service proposed by A/E is not required, the A/E shall have no obligation to provide those services. However, nothing in this Contract shall relieve the A/E of its professional and contractual duties related to this Project. Should the A/E believe that the proposed Additional Service is necessary or required for the performance of its professional or contractual responsibilities or obligations under this Contract, A/E shall notify the Board of that fact in writing, stating the objective basis for that belief. If the Board determines that the proposed Additional Services (which the A/E has suggested are essential) are included in the A/E’s Basic Services, the A/E shall perform them, submitting written notice to the Board before performing those services, stating that the A/E disputes the Board’s determination that those services are Basic Services and that the A/E does not waive its right to seek compensation for those services by performing them.

XIX. Section M.16, “PRICING OF ADJUSTMENTS,” is revised as follows:

When costs are a factor in any determination of a contract price adjustment pursuant to the Changes clause (Clause 15) or any other provision of this Contract, such costs shall be allowed to the extent they are reasonable and allocable. In ascertaining what constitutes a cost, any generally accepted method of determining or estimating costs that is equitable and consistently applied may be used. Provided, however, in no event shall the Board be obligated to compensate A/E for labor, skill or unskilled, associated with the performance of Additional Services in excess of the amount calculated by multiplying the reasonable number of hours required to complete the Additional Service by the most recently approved Labor Rates set forth in the Contract. Compensation for approved Additional Services performed by A/E’s consultants when not included in any negotiated lump sum shall be the amount invoiced to the A/E without mark-up of any kind.

XX. Section M.17, “BOARD DELAY OF WORK,” is modified as follows:

a. If the performance of all or any part of the Services is delayed, hindered, impeded, obstructed or interrupted by an act of the Contracting Officer in the administration of this Contract, which act is not expressly or impliedly authorized by this Contract or by his/her failure to act within the time specified in this Contract (or within a reasonable time if no time is specified) (collectively “Board Delay”), and provided the A/E complies with the requirements of Section M.15, as amended, an adjustment (excluding profit) shall be made for any increase in the cost of performance of this Contract caused by such Board Delay or interruption, and the Contract modified in writing accordingly. Adjustment shall be made also to the delivery or performance dates and any other contractual provision affected by such delay or interruption. No adjustment, however, shall be made under this clause for any Board Delay (1) to the extent that performance of the Services would have been delayed or interrupted by any other cause, including the fault or negligence of the A/E or its Consultants, or (2) for which an adjustment is provided or excluded under any other provision of this Contract.
b. No claim under this clause shall be allowed (1) for any costs incurred more than twenty
(20) days before the A/E shall have notified the Contracting Officer in writing of the
commencement of the Board Delay involved, and (2) unless the claim, in an amount
stated, is asserted in writing within twenty (20) days after the termination of such Board
Delay. Except for the A/E's rights under Sections M.15-17, the A/E hereby agrees not
to make, and hereby waives, and shall cause A/E's Consultants to similarly agree not
to make, and to waive, any claim for costs, losses, damages or expenses on account of any
Board Delay, including, without limitation, consequential damages, lost opportunity
costs, actual or alleged loss of efficiency or productivity, home office overhead, extended
overhead, impact damages, cumulative impact, ripple effect or other similar
remuneration.

XXI. Section M.19, "STOP WORK ORDER," is modified as follows:

a. The Contracting Officer may, at any time, by written order to the A/E, require the A/E to
stop all, or any part, of the work called for by this Contract. Any such order shall be
specifically identified as a stop work order issued pursuant to this clause. Upon receipt of
such an order, the A/E shall forthwith comply with its terms and take all reasonable steps
to minimize the incurrence of costs allocable to the work covered by the order during the
period of work stoppage. If all of the Work on the Project is suspended for more than
ninety (90) consecutive days for reasons other than the fault of the A/E, the A/E may
terminate this Contract by giving not less than twenty (20) days' written notice. In this
event, the Board shall be liable to the A/E and its Consultants in accordance with Section
M.20, "Termination for Convenience of the Board" clauses of this Contract.

b. If a stop order issued under this clause is canceled or the period of the order or any
extension thereof expires, the Contractor shall resume work. An equitable adjustment
shall be made in the delivery schedule or contract price or both, and the Contract shall be
modified in writing accordingly, if the A/E completes with, and is entitled to such an
adjustment under, Sections M.15-M.17.

provided that, if the Contracting Officer decides the facts justify such action, it may
receive and act upon any such claim asserted at any time prior to final payment under this
Contract.

c. If a stop work order is not canceled and the work covered by such order is terminated for
the convenience of the Board, the A/E shall be reimbursed in accordance with Section
M.20.
XII. Section M.20. "TERMINATION FOR CONVENIENCE OF THE BOARD." is modified as follows:

The Contracting Officer, by written notice, may terminate this contract in whole or in part, when it is in the Board's interest. To the extent that this Contract is for service and is so terminated, the Board shall be liable only for payment in accordance with the payment provisions of this Contract for services rendered and Reimbursable Expenses incurred prior to the effective date of termination. If the Board terminates this Contract under this paragraph, the Government must immediately take all actions necessary to minimize the cost of termination settlement to the Board. A/E and A/E's Consultants shall not be entitled to, and expressly waive their right to assert a claim against the Board for, any other compensation or the recovery of any damages in connection with such termination, including, without limitation, consequential damages, lost opportunity costs, lost profits on this Project or any other project, impact damages, or other similar remuneration.

XIII. Section M.22. "DEFAULT." is modified as follows:

a. The Board may, subject to the provisions of paragraph (c) below, by written notice of default to the Contractor, terminate the whole or any part of this Contract in any one of the following circumstances:

1. If the A/E fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof, or

2. If the A/E fails to perform any of the other provisions of this Contract, or so fails to make progress as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of ten (10) days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure, or

3. If any of the following occur: (a) the making by the A/E of any general assignment or assignment for the benefit of creditors; (b) A/E becomes a "debtor" as defined in 11 U.S.C. Section 101 or any successor statute (unless, in the case of a petition filed against A/E, the same is dismissed within sixty (60) days); (c) the appointment of a trustee or receiver to take possession of substantially all of A/E's assets or of any asset used in connection with the Project, where possession is not restored to A/E within thirty (30) days; or (d) the attachment, execution or other judicial seizure of substantially all of A/E's assets or of any asset used in connection with the Project.

b. In the event the Board terminates this Contract in whole or in part, as provided in paragraph (a) of this clause, the Board may pursue any and all remedies available at law and in equity including, without limitation, the following: (i) the right to keep this...
Contract in effect and sue the A/E for all damages caused by the default and recover the costs, including reasonable attorney’s fees, caused thereby; (ii) the right to cure any such default by A/E and to recover any damages caused thereby; and (iii) the right to terminate any or all the A/E’s Services with respect to the Project, provided that the A/E shall continue the performance of this Contract to the extent not terminated under the provisions of this clause. Upon such termination, the Board shall have the right to complete the Services or to contract with others for completion of the Services and, in either event, to charge the cost of completion to the A/E. The Board may deduct, offset and credit such costs of completion and all other damages incurred by the Board as a consequence of A/E’s default from and against any amounts that may at any time be payable to A/E under this Contract (or any other contract that may have with the Construction Manager). If the cost of completion exceeds the amount that would have been payable under this Contract had A/E completely performed the Services pursuant to the terms of this Contract, A/E shall immediately pay the amount of such excess to the Board. Upon termination, A/E shall be deemed to have waived all claims against the Board for profits, loss or damage on or with respect to the uncompleted Services.

XXIV. Section M.22, “DISPUTES” is modified as follows:

a. Any claim by the Contractor seeking payment of money in a sum certain, the adjustment or interpretation of Contract terms, or other relief arising under or relating to the Contract must be submitted in writing to the Contracting Officer no more than twenty (20) days after the onset of occurrence or the condition giving rise to the claim. A claim shall include a written statement setting forth in detail the grounds of the claim and, if applicable, an itemization or statement of the direct or indirect costs for which compensation is being requested. Failure to deliver a claim within the required period shall constitute an irrevocable waiver by the Contractor of any such claim. Upon receipt of such a claim, the Contracting Officer or his/her representative will contact the claimant and attempt to negotiate a mutually acceptable resolution.

b. Notwithstanding any provisions to the contrary in this Section M.22, if any dispute arises between the Board and the Contractor which relates to this Contract, the Services or the Project, the Contractor shall not interrupt the performance of the Services, and shall cause any Contractor not to interrupt the performance of the Services during the pendency of any such dispute, unless ordered to do so by the Contracting Officer in writing and the Board shall make all progress payments for the Services other than disputed amounts. If either party brings any action or legal proceeding for an alleged breach of any provision of this Contract, to terminate this Contract or otherwise to enforce, protest or establish any term or covenant of this Contract, the prevailing party shall be entitled to recover as part of such actions or proceeding, or in a separate action brought for that purpose, reasonable attorneys’ fees, court costs, and expert fees as may be fixed by the court.

c. If the decision of the Board’s Staff Director for Management does not resolve the claim it shall be a condition precedent to the initiation of any further proceedings that the
parties submit the claim to non-binding mediation in Washington, DC in accordance with the Mediation Rules of the American Arbitration Association. Upon request of the initiating party or mediator, the other party shall promptly evidence its consent to the mediation if such consent is required to proceed. The resolution of any claim shall be documented promptly after resolution of such claim in a Change Order executed by the Board and Contractor.

If the Construction Documents prepared by A/E fail to include or improperly specify a required item or component as a result, in whole or in part, of any negligent error or omission in the performance of the Services or breach of this Contract, then in addition to any other remedies available under the Agreement or at law or equity, the A/E shall liable to the Board for the increased costs resulting therefrom including: (1) the cost of revising the Construction Documents to correct the error or omission, including issuing of any addenda associated with any Change Order, (2) the additional labor and material cost, if any, to add such item or component to the Project above the cost that the Board would have incurred had the item not been omitted from or improperly detailed or specified in the Construction Documents and included as part of the Construction Contract's original pricing, and (3) the costs payable to any Contractor, Subcontractor, or any Subcontractor, if any, on account of any delay, hindrance or interference with Work including extended general conditions, increased or unabsorbed overhead, loss of productivity, loss of efficiency, or similar claims. In no event will the Architect be responsible under this Section for any cost or expense that provides detriment, upgrade or enhancement of the Project.

XXV. Except as set forth specifically herein, all other terms of the Contract remain unmodified and in full force and effect.
APPENDIX I TO EXHIBIT A TO SOA MODIFICATION NO. 17

RENOVATION PROGRAM AND PARAMETERS

1. Summary of Renovation Program

1.1. The Renovation of the Board’s Martin Building (sometimes referred to as the “building”) is to be comprehensive in scope covering all areas and components of the building including the roof, penthouse, terrace level (fifth floor), office floors one through four (the first floor is one floor above grade), concourse level, garage levels (G-1 and G-3), and plant level (four stories below grade). The Renovation is to be undertaken in coordination with the ongoing design and construction of the VCCC since the VCCC is located on the podium level of the Martin Building. The Renovation and the VCCC are hereinafter referred to collectively as the “Project.” The components of the Martin Building to be included in the Renovation, at a minimum, are its structural, mechanical, electrical, data and telecommunications infrastructure and interiors. The Renovation is intended not only to renovate and upgrade the Martin Building but also to provide a quality work environment similar to other Class A office buildings in the Washington, DC area. The Board expects the Renovation to comply with District of Columbia law and regulations applicable to similar projects even though legally District of Columbia law does not apply to the building.

1.2. The Martin Building does have its own air handler units. Accordingly, the A/E will need to account for this circumstance in the design, installation and balancing of the Martin Building systems. Furthermore, given the significance of the Board’s offices to the Nation’s economy, the Project must be phased with only one office floor available at a time for construction. The floors not under construction must remain occupied and operational.

1.3. The Renovation is necessary because the Martin Building is over 30 years old and has not undergone any significant renovations. The Martin Building has been well maintained over the years and the Board has been addressing repairs and upgrades on a project by project basis. Nevertheless, over this 30 year period there have been significant changes in the standards for office buildings such as:

- Building codes and regulatory requirements.
- Information technology infrastructure requirements.
- Building security provisions.
- Environmental awareness and energy efficiency requirements.

Pairing normal wear and tear and equipment obsolescence with changes in building codes and regulatory requirements has created a critical backlog of repairs and upgrades to warrant a comprehensive upgrade of the Martin Building.

Following is a list that illustrates the magnitude of the Renovation design:

- Renovate and upgrade or replace various systems and infrastructures such as architectural, mechanical, and plumbing.
- Phase construction work, floor by floor, so that the building can remain operational during the renovation. All power and HVAC services to the
Eccles/Martin complex must be maintained and provided for during the construction phase of the renovation.

- Provide a work environment that is safe and conducive to the high level of productivity that is necessary for Board staff to accomplish tasks that fulfill the Board's mission.
- Renovate fully the food service facility including maximization of the efficiency of the kitchen and serving areas and circulation.
- Enhance the building's existing security system.
- Create a new comprehensive information and communication cabling design for the Martin Building and build in provisions for future growth.
- Coordinate the Renovation with ongoing design and construction of the VC/CC.

2. Physical Characteristics of the Martin Building

The Martin Building's official name is the William McChesney Martin, Jr. Federal Reserve Board Building. It was designed by H2L2 (Harrison, Hough, Livingston, & Larnoo), the successor firm to that of Paul Cret which designed the Eccles Building. There is speculation that the Martin building was designed to complement the modernist interpretation of the Beaux-Arts style of the Eccles Building. However, this has never been officially confirmed and may only stand on the relationship of Paul Cret to H2L2.

The building was originally designed to be five stories tall with three underground parking levels. The above ground levels were composed of an open podium, four office floors, and a terrace. Construction of the Martin Building began during 1971 and was substantially completed in 1974. Employees moved into the building during April 1974 but the terrace level was not occupied till the following year.

During the building construction, work was halted to redesign the office floors. The original design could not accommodate the number of employees who were expected to move into the new building. Also, major service areas such as the data center and research library could not be placed on the office floors as planned. To solve the problem, official office size standards were created for the building: professional assistant director office (113 square feet), deputy director (169 square feet), and division director (approximately 280 square feet). The design was also altered to partially convert the second parking garage level into a concourse area that would house the data center and the graphics section.

During the first renovation of the Eccles building (1976-1978), the Board made the decision to enclose the podium level of the Martin building and create additional office spaces. The action was necessary so that all Board employees located at the Watergate office site could move to the Eccles/Martin complex. Before the podium was enclosed, the Board sought and received approvals from the Commission of Fine Arts (CFA) and the National Capital Planning Commission (NCPC).

After the enclosure of the podium level, the Martin building had 715,456 of gross square feet. However, space for garage parking, exterior walls, and major vertical penetrations accounted for 363,028 square feet thus reducing the gross square feet to 352,428 of rentable square feet.
3. Renovation Criteria

Unless otherwise approved in writing by the Board, the A/E shall perform the Design Services for the Renovation so as to incorporate the criteria set forth in this Section 3 and in the LEED® Certification Plan approved for the Project pursuant to Section C.2.7.c.

3.1. Architectural Criteria

3.1.1. Americans with Disabilities Act (ADA)

Bring the building into compliance with the ADA. This includes, but is not limited to, all office spaces, restrooms, water fountains, signage (fixed office and way-finding), doors and stairs.

3.1.2. Windows and Ceilings

3.1.2.1. Replace existing window systems to increase energy efficiency at all office floors while considering the possible use of a photovoltaic system.

3.1.2.2. Provide new ceilings consistent with the planned use for the space and allow for easy access to overhead spaces for maintenance purposes.

3.1.3. Video/Photography Studio

Design a production video and photography studio for speech recording and photo-shoots to include sound proofing, lighting, and additional mechanical and electrical support.

3.1.4. Roofs

Replace the building’s roofs with torch applied thirty year warranted, modified bitumen that is compatible with “solar cells”. Develop the design and installation steps for a photo-voltaic solar to an electric energy collection system on the Marin roof. It should be noted that the terrace membrane has recently been re-coated. However, the granite pavers need to be leveled with a system that will not shift over time. All remaining roofing on the podium (elevator) floor (under pavers) that remains after the addition of the VCCC is to be replaced with a thirty year system and have the paving stones replaced and re-leveled.

3.1.5. Signage

3.1.5.1. Design emergency egress signage that will include exit signs and photo luminescent stair signage. The signage must meet National Fire Prevention Association (NFPA) standards, Federal Emergency Management Agency (FEMA) 455, ADA standards, and all other applicable codes and regulations.
3.1.5.2. Provide specifications and drawings for exterior fixed signage for the building. Coordinate these signage finishes with other signage systems provided by the Board.

3.1.6. Mezzanine Storage Area

The A/E shall convert, to the greatest extent possible, the mezzanine area (between the podium level and first office floor) into a storage space. Provide access to the new space by elevators and as required by applicable codes and regulations. Alter existing walls and provide lighting, floors, or catwalks as needed with sufficient loading capacity. Integrate as possible these areas with the new mechanical spaces being developed for the VCCC project. Ensure that the new storage area has sufficient fire suppression measures. Coordinate this effort with the “Vertical Transportation Criteria” section of this document.

3.1.7. Way-Finding and Voice Annunciation Systems

3.1.7.1. Include an electronic way-finding system for the building which will be integrated with the conference room scheduling system and with all conference rooms throughout the Martin building and the associated conference center. The system will allow for future expansion throughout the Eccles, New York Avenue, and 1950 K Street buildings. The electronic way-finding system shall be on an independent and isolated network from all other established networks at the Board.

3.1.7.2. Provide a voice annunciation system throughout the building through the existing Central Command and Control Center (CCCC). This system shall be on an independent and isolated network from all other established networks at the Board.

3.1.8. Other

3.1.8.1. Supply an acoustical rating for noise transmission from offices and conference rooms to insure confidentiality of conversations with a minimum Sound Transmission Class (STC) 40 rating for stuff offices and a minimum STC 45 rating for officer offices and conference rooms.

3.1.8.2. Design suitable lighting and hanging systems and other display systems for the Board’s art collection throughout the building’s public spaces with particular attention to elevator lobbies and the terrace level (fifth floor).

3.1.8.3. Replace revolving doors at the garage entrances at the G-1 ramp and cross over ramp to the north garage on G-3.

3.1.8.4. The A/E will maximize storage areas (furniture, operating supplies, high-density filing systems, etc.) in the design.

3.2. Mechanical Criteria

3.2.1. HVAC

Design a new HVAC system and/or component upgrades to increase energy efficiency and allow for better control of the office area environments. The A/E will consider an HVAC system with air handling units on each floor versus a central plant configuration.
3.2.2. **New Equipment**

Include the wiring, connections, software, and other materials that are needed to incorporate the new equipment that will be added during the renovation into the existing building automation system. The A/E shall include the addition of interfaces with the data center systems.

3.2.3. **Plumbing**

3.2.3.1. Replace the plumbing infrastructure, equipment, and fixtures. This effort will include replacing the domestic hot water system and all soldered joints in drinking water piping that contain lead. The A/E shall consider placing independent hot water heaters on each floor to minimize pipe losses and tankless water heaters for domestic water in restrooms and locker rooms.

3.2.3.2. Plumbing risers shall be placed at a minimum of six (6) strategic locations for the future construction of single restrooms for potential Directors' offices.

3.2.3.3. Design an independent riser for the terrace level to service the food service kitchen area and associated grease traps, disposals, and other areas as necessary.

3.2.4. **Energy Management System**

The A/E shall work with the Board to select a new Energy Management System (EMS). The EMS shall be capable of both remote monitoring and controlling of the mechanical systems and it will include mechanical system start up and shutdown (with a single button emergency shutdown) and monitoring of the electrical systems. The A/E shall apply the new system to all mechanical and electrical systems both existing and proposed operating in the Martin plant and the building as a whole and including the north and south garages. The system shall be capable of expansion to all Board facilities in the greater Washington DC area. This effort will include the selection of an operating console for the base system and the construction of a new or complete remodel of the existing Engineering Control Room that will be constructed as part of the renovation. The EMS shall be an independent and isolated network from all other established networks at the Board.

3.2.5. **Other**

3.2.5.1. The mechanical system will support a maximum of one hundred eighty (180) offices, conference rooms, and other support areas per floor.

3.2.5.2. Replace all exhaust fans in the north and south garages.

3.2.5.3. Provide for air pressurization management in the fire egresses and elevators if required by applicable codes and/or regulations. Review and coordinate this work with the "Fire Protection Criteria" outlined in this document.

3.2.5.4. The VCCG project design requirements include... The A/E will coordinate air intakes and exhaust strategies with the VCCG project to provide for a complete design of air intakes and exhausts for the Martin building. The new air intakes must conform to the Federal Reserve System's security requirements.

3.2.6. **Electrical Criteria**
3.2.6.1 Electrical Power, Control, and Monitoring Systems (include the
“Eccles Electrical Switchgear Replacement Statement of Work” and
the “Martin/Eccles Electrical Switchgear Replacement Study”
documents)

3.2.6.2 Replace all electrical power systems, including but not limited to,
medium and low voltage switchgear, network and low voltage
transformers, buses, distribution system panel boards and wiring and
emergency and life safety back-up systems. The existing water drip
system at the office floors will be used for power wiring only.

3.2.6.3 The design will include new power monitoring systems for the
building. The A/E shall note that new power monitoring systems will
also be placed in the Eccles building. The design and placement of
these systems will be handled under separate contracts. The Board will
provide documents for this effort to the A/E and will set up meetings
between the A/E and the Eccles design team to ensure full coordination
of the two projects. These meetings are included in the scope of this
project.

3.2.6.4 Replace and rewire light fixtures for power and control systems. The
A/E will consider an energy efficient low glare computer friendly
lighting system that may utilize motion sensors, daylight sensors, LED
office lighting, and a day light collection and distribution system (fiber
optic solar lighting with supplemental lighting for evenings and cloudy
days).

3.2.6.5 Add a new 20 kV electrical feeder from the utility provider to the
Martin building plant to supplement the existing electric feeders and
include all the associated work to incorporate the new feeder into the
current network.

3.2.6.6 Elements of the work proposed in the
“Martin/Eccles Building Electrical Switchgear Replacement Study” are
more closely associated with the Eccles building. This portion of
design and construction work will be dealt with in different contracts.
Currently, the Eccles portion of this work is in the design phase.
The Board will provide documents for this effort to the A/E and will set up
meetings between the A/E and the Eccles design team to ensure full
coordination of the two projects. These meetings are included in the
scope of this project.

3.2.6.7 The A/E shall include all switchgear work related to the Martin
building (this includes the north and south garages, the connecting
tunnels).

As outlined in the “Eccles Electrical Switchgear Replacement Statement of Work” (this document contains all the data
from the “Martin/Eccles Building Electrical Switchgear Replacement
Study”). If laying out or locating the Martin electrical vault during
the construction phase will affect the Eccles power systems in any
fashion, the A/E shall include all the necessary work in the construction
documents needed to maintain the Eccles building power system during
construction.
3.2.6.8 The existing back-up emergency generators and the Uninterruptable Power Source (UPS) for the data center and other areas shall remain operational during construction and are not anticipated to be replaced during the Martin building renovation. The A/E shall tie the systems into the new electrical systems as necessary to provide back-up power to the Board facility and conditioned power to the data center and other areas.

3.2.7 Other

3.2.7.1 The A/E shall increase the electrical load capacity to the building and office floors by thirty percent (30%).

3.2.7.2 The A/E shall include the use of photovoltaic systems on the roof and/or windows.

3.2.7.3 The A/E shall design a new lightning protection system for the Martin building. It will contain a buried counterpoise that will be tied into the building’s grounding system. This system must have a master label and a copy of it must be given to the Board prior to final acceptance of the construction bid package.

3.2.7.4 The A/E shall specify in the design that nothing less than three-quarter inch (¾”) conduit shall be used in this project.

3.3 Security Criteria

3.3.1 Security System

3.3.1.1 Modify the existing security system.

3.3.1.2 All security system panels will remain intact for this effort. If needed, panels shall be moved.

3.3.2 Other

3.3.2.1 For the glazing upgrades, the A/E shall consider requirements for safety, effects of solar gain on energy, and the use of photovoltaic systems.

3.4 Food Service Criteria
3.4.1. Renovate the entire terrace level. This effort will include the kitchen, serving areas, dining areas, and balcony. The “Martin Building Cafeteria Study” will be supplied to the A/E. The intent of this effort is to increase the general employee seating area to accommodate one thousand one hundred (1,100) employees over lunch (assum two seatings), maintain an event dining area (currently dining rooms D, E, and F) and maximize the number of private dining rooms. A private restroom is to be added off the Chairman’s private dining room. The views from all the dining rooms to the monument area of the National Mall shall be maximized in the renovation design. The A/E shall refer to the Board’s programming documents for further details regarding this effort.

3.5. Audio Visual Criteria

3.5.1. Design all the wiring and cabling, raceway and equipment for audio visual systems. These systems shall be on an independent and isolated network from all other established networks at the Board.

3.5.2. Design an information system for major news/headline information at a central location on each of the four office floors. This system shall be on independent and isolated network from all other established networks at the Board.

3.6. Vertical Transportation Criteria

3.6.1. Existing Elevators

3.6.1.1. Replace the elevator cab system of the existing five (5) elevators.

3.6.1.2. Extend the existing freight elevator’s service to the penthouse and mezzanine levels.

3.6.1.3. Either alter the existing express elevator on the west side of the Martin building or provide a separate elevator or lift whichever is the most practical to service the new mechanical spaces and potential storage spaces on the mezzanine. This work shall be coordinated with the VCC/C project.

3.6.1.4. Replace the existing “street” elevator on the northwest corner of the Martin building with a new elevator. It will be designed to make all the stops between the street and the mechanical plant level (a total of four (4) stops). The architect’s engineer shall work with owner’s staff to design a new street freight elevator in the location of the existing North West street freight elevator running from the street to the plant including stops on all floors (street outside), 1G, 2G, 3G, and Plant. The existing elevator does not travel to the 3G and Plant (mechanical) levels. The elevator size and weight capacity shall be large enough to service and/or replace all mechanical and electrical equipment and support other planned activities located on those levels of the building. The architect shall insure any equipment too large, too heavy or in another location not serviced by the freight elevator can be accessed with an appropriately sized crane leading to the surface that can be reached with a reasonably sized mobile crane. The design shall allow for automated surveillance by the Security Control room. The A/E shall discuss control and guard options with the Board.

3.6.2. New Elevators
The A/E shall coordinate with the VCCC project team to add a food service elevator from the terrace level to the concourse level.

3.7. Fire Protection Criteria
3.7.1. Codes and Regulations
3.7.1.1. Upgrade the fire safety systems and include any modifications necessary to bring the building's fire walls, doors, hardware, stairs, building egress means and evacuation routes, and signage into compliance with current codes.
3.7.1.2. Modify the existing fire protection and suppression system to bring the building into compliance with the NFPA definition of "fully sprinkled."
3.7.1.3. Upgrade the fire alarm system and ensure its devices meet applicable codes.
3.7.1.4. The A/E shall ensure that mechanical systems incorporate the latest best practices for the control of smoke in the stairwells, elevator shafts, and the building in general.

3.7.2. Fire Detection and Annunciation System
3.7.2.1. The A/E shall work with the Board to select a new fire detection and annunciation system to replace the existing system in the Martin building and the north and south garages. The A/E shall include the selected system in the design and will include all devices required for its successful operation. The system must interface with all peripheral systems such as the kitchen fire suppression systems, and sprinkler systems.

3.7.2.3. Kitchen systems shall be replaced as needed in the remodeling and reconfiguration of the kitchens and pantries. The A/E will modify the sprinklers as needed to conform to the reconfiguration of the building.

3.7.3. Other
3.7.3.1. Provide for the installation/repair of spray-on fireproofing for structural steel. All required or suggested fire stopping is to be replaced or installed now.
3.7.3.2. All fire dampers are to be replaced and shall include inspection access.

3.8. Information Technology Criteria
3.8.1. Local Area Network (LAN) Closets, Data Center, and Router System
3.8.1.1. Provide larger spaces for the data center and the LAN closets which are located on the G-2 level and each Martin building floor.
respectively. The larger spaces are needed for the new cabling and equipment and for future expansion.

3.8.1.2. Increase the LAN closet size to a minimum of ten [ ] of floor space, with room for adequate power and cooling. The power for communications and data equipment shall be provided from the existing UPS. The A/E shall extend and/or provide additional UPS circuits as needed. An independent cool air conditioning source shall be supplied to the other building air conditioning cooling systems can be shut down during off hours. The A/E will include existing LAN closets per floor (the current configuration but the closets can be placed in different areas on each floor. To accommodate LAN closet changes, the A/E shall design a new riser system. This design will also include requirements for running new riser fiber to each LAN closet and terminating it in the Main Distribution Frame (MDF).

3.8.1.3. The A/E shall research whether there is sufficient trunk cable slack available to allow for movement of equipment to new rooms. It is preferred that the A/E use the existing fiber risers to the closets. If this cannot be done, then replacement trunk cable will be required and should be part of this design (this is not desired).

3.8.2. New Overall Cabling Design of the Market Building

3.8.2.1. Produce an overhead cabling design with a drop ceiling and modular walls (or drywall walls) with a cable tray. A drop ceiling allows flexibility for overhead cabling and expansion for the future. The existing two (2) cable risers shall be left in place and it is the intent to remove existing communications cabling from the current floor (wall center) system and install new cabling in an overhead cable tray system to the new wall system. The design shall allow for up to twenty percent (20%) more cabling and equipment to be added at a future date and shall provide space loading in trays and conduits to allow for this additional cabling.

3.8.2.2. The design shall have one (1) fiber cable, two (2) pair (four (4) strand) and four (4) copper cables (Cat 6A) go to each work station. Also, the design will allow for easy expansion of the number of copper/fiber cables in each office. This growth amount shall be either an overall twenty percent (20%) growth figure or one hundred eighty (180) workstations and support equipment (file cabinets, printers, conference rooms, etc.) whichever is greater.

3.8.2.3. Provide for the capability of WiFi extensions throughout the building.

3.8.2.4. Consider: security

3.8.3. Upgrade Cabling Backbone

3.8.3.1. Upgrade to Cat 6a to allow ten (10) gigabit Ethernet to the desktop.

3.8.3.2. The design may require a single-mode fiber cable pull or a fiber enhanced fifty (50) m multi-mode fiber from the MDF to each riser closet. The fiber does not have to be a high count fiber (twelve (12) fibers).
stands). The current sixty two and a half (62.5) um multimode fiber does not exceed seven hundred twenty (720) feet which complies with the 10GB standard, no additional fiber will need to be installed.

3.8.3.3. The existing security systems utilize data cabling systems and will need to be disconnected and reconnected as needed to execute the cabling aspect of this project. If required, provide new cabling to reconnect security systems.

3.8.3.4. Provide for grounding new systems including an isolated grounding bus in each closet and grounding of the cable tray and conduit system.

3.8.4. In-house Cellular and Data Antenna Solutions

The A/E shall include an in-house antenna solution in the design. It should provide complete cellular and data coverage on all floors, both above and below ground, of the Martin building for DCMA (JXTT, EVDO), GSM (EDGE, GPRS, 3G, HSDPA) and WIFI.

3.8.5. Meetings and Minimum Requirements

3.8.5.1. The A/E will meet with the Information Technology (IT) management staff as needed to ensure the scope of the IT component of the Martin renovation project is understood.

3.8.5.2. All design shall conform to a minimum to the Telecommunications Industry Association (TIA)/Electronic Industries Alliance (EIA)-568-B-2-10 and International Organization for Standardization (ISO)-TR24780. The final scope of work shall mandate installing contractor testing standard to comply with TIA/EIA 568-B.2-1 and ISO 11801.

3.9. Interiors Criteria

3.9.1. Floor Plan

The A/E shall design to the Board provided program which will include offices, conference rooms, public areas, storage rooms, retail and amenities, all dating, areas, and all support areas.

The A/E shall design three (3) options for a typical office floor to include: a private office environment, an open office environment, and a combination of a private/open office environment. After reviewing these three (3) options, the Board will decide on the design direction for the remaining office floors.

3.9.2. Modular Wall Systems

3.9.2.1. The A/E shall provide consultation services to Board staff to review demountable wall systems with regard to durability, ease of installation and reconfiguration; pre-cabling for electrical and voice; sound transmission; compatibility with various furniture systems; and cost effectiveness. At a minimum, the A/E will meet with Board staff, visit sites with demonstrable walls as necessary, and coordinate all finishes.

3.9.2.2. The Board will select a preferred modular wall system design no later than the end of the 30% Submittal stage. The A/E shall design and layout the modular wall system and incorporate data, telecommunications, HVAC, lighting, and electric power cabling.

3.9.3. Finishes

The A/E will provide all interior design, detailing and interdisciplinary coordination of finishes for all offices, conference rooms, public areas, storage rooms, retail and employee service areas,
kitchen and dining areas, and support areas. The A/E will work with the Board to coordinate finishes and other required items with furniture selected by the Board.

3.9.4. Furniture

3.9.4.1. The A/E will provide interior design consulting services to the Board regarding furniture systems. The A/E shall hold a maximum, not to exceed without prior approval, of two (2) meetings with Board staff. The Board will be responsible for full furniture specifications, procurement, and installation in all areas of the Martin building.

3.9.4.2. The A/E will develop, in consultation with the Board, a furniture plan for each area to assist in the placement of voice, data, and electrical outlets, and other related items.

3.10. Additions/Changes to the Scope based on an unplanned renovation (all references to a planned renovation are superseded by this Section 3.10)

3.10.1. The Martin building will have the office floors (1 through 4 and Terrace) completely vacated during the entire course of the renovation. Utility services for these floors can be turned off and systems can be demobilized together. The work can proceed on all floors and throughout the building and grounds at one time.

3.10.2. We will require some space for staging the Erector maintenance operations in the Martin building and could be re-located within the building as needed for construction. All utilities will still need to be provided to the Erector building from the Martin building including chilled water and a limited food service activity while the Martin building is being rebuilt. The architectural, mechanical, and electrical design should be optimized to take advantage of de-populating the building as opposed to phasing the occupancy of the floors.

3.10.3. Under the scenario described in 3.10.1 above, the Board desires two stairwells to be located at opposing corners of the building to facilitate a safe egress that meets codes and good practice. Landings are to be provided on every occupied floor between the Pedestri and the Terrace (including the interstitial space between the Pedestri and 1st floor), if appropriate. The Board also desires one staircase to remain near the core with landings on every floor of the building from the Mechanical room (lowest level) through the Penthouse (eleven (11) landings) (including the interstitial space, if appropriate. Other stairs may be removed as appropriate, the total number of stairs and egresses and their capacity are to comply with all appropriate Government and Washington DC laws, codes, and regulations and good practice.
there should be an elevator traffic study executed as part of the programming phase that reviews the potential maximum occupancy in the building, for office space and the current codes and regulations. The study shall include recommendations on the total number of elevators and the landings the elevators should make. The design proposal shall include design fees to install three new passenger elevators (in addition to the new elevators and other elevator work in the existing scopes of work), removal of passenger elevator number 4 (if appropriate as determined by the study). This will provide a total of six (6) passenger elevators with landings between the Concourse (2G) and Terrace with a landing on every floor (landing on eight (8) floors). Pending the anticipated floor level of 3G, the anticipated location of the proposed new elevators, the new elevators should also land on the 3G level.

3.10.4 The Contractor shall make recommendations as to what other building changes may be appropriate if the building is de-populated.

3.10.5 The Board desires the floor plan for the Podium Conference Center to take advantage of above changes and efficiencies in the layout/flow of the Conference Center and Visitor Screening areas.

3.11 Fall Protection

3.11.1 Program Review & Verification Report

1) Assessments.

a. The purpose of the assessments is to identify existing conditions, including the identification of existing fall hazards that may or may not have corresponding existing fall protection systems in place.

b. Identification of fall hazards in the following areas:

   i. Roofs
   ii. Penthouses
   iii. Equipment, hoistway
   iv. Elevators
   v. Exterior terrace
   vi. Central plant/mechanical rooms
   vii. Facade maintenance

c. Evaluation of existing fall protection systems

   i. Appropriate use of fall protection method.
   ii. Load testing of existing anchors

2) Abatement design recommendations.

a. The purpose of the abatement design task is to identify and develop methods by which the identified fall hazards can be mitigated. Various options should be considered, following OSHA’s Hierarchy of Control process, which provides
instruction on evaluating options based on their effectiveness from a safety perspective.

b. Pre-design phase
i. Involve FRB skilled trades to ensure that proposed fall protection systems meet the needs of the personnel performing the tasks
ii. Investigate re-use of existing systems, and/or incorporate parts of existing systems into new abatement methods where practical
iii. Incorporate fall protection into planning of new mechanical systems as to minimize the need for future fall protection installation

3.11.2 Design Development through Construction Documents

1) Abatement Design
a. Develop construction documents for proposed fall protection and/or modification of existing systems based on Board approved recommendations in the Program Review & Verification Report.

b. Specify appropriate fall protection equipment using performance requirements that minimize the need for sole source to a specific fall protection equipment manufacturer.

2) Commissioning of fall protection systems
a. The commissioning process is integrated throughout the design and is intended to improve the likelihood that the final installed fall protection systems meet both the needs of the personnel exposed to the fall hazards and also perform as they are intended. The commissioning process also provides a structure to organize the documentation that OSHA and ANSI require for a certified fall protection system.

b. Certification record containing the following elements (or documents referencing the location of the particular element)
   i. Certification Documents in accordance with ANSI Z359.2-2007
   ii. Design Documentation
   iii. Construction Documentation
   iv. Operational Documentation
   v. Training Documentation
APPENDIX 2 TO EXHIBIT A TO SOA MODIFICATION NO. 17

AMENDED PRICING SCHEDULE

A.2.1  A/E’S COMPENSATION FOR BASIC SERVICES

a. The Parties acknowledge that the value of Contract No. 250548, through
Modification No.17, has increased to $13,070,366.58, of which $10,449,372.09
remains to be invoiced and paid (the “Revised Contract Balance”).

b. A/E’s compensation for performance of the Basic Services (including the
compensation of the A/E Consultants) shall not exceed the total sum of
$13,749,491 (the “Revised Contract Sum”). The Revised Contract Sum is
comprised of (1) the Revised Contract Balance; (2) the A/E’s price to complete the
Design Services for the Renovation set forth in the Pricing Schedules attached
hereto; and (3) the A/E’s price to complete the Bidding/Negotiation and
Construction Phase Services for the Project also set forth in the Pricing Schedules
attached hereto as Attachment 1. Furthermore, the A/E’s compensation for
performance of the Basic Services during each phase of the Project shall not
exceed the sums set forth below (the “Total Fee Per Phase”):

<table>
<thead>
<tr>
<th>Phase of Services</th>
<th>Total Fee Per Phase</th>
<th>% of Revised Contract Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schematic Design Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Development Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Documents Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bidding/Negotiation Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEED Requirements and Certification Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option 1 - Integrated Building Information Model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Schematics &amp; Drafts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revised Contract Sum</td>
<td>$13,749,491</td>
<td>(100%)</td>
</tr>
</tbody>
</table>

C. A/E will notify the CO and COTR in writing in advance if A/E has reason to
believe that the cost to complete the performance of the Services associated with
any phase of the Project may exceed the Total Fee Per Phase, and shall state in
detail the amount of such excess and the reason therefor. Unless approved in writing by the Board in advance, the Board will not be obligated to compensate the A/E or others for the performance of Basic Services in excess of either the Revised Contract Sum or the Total Fee Per Phase. The Revised Contract Sum and the Total Fee Per Phase will not be adjusted on account of any discrepancy between the personnel actually utilized, the actual tasks performed or the actual number of hours spent by the employees of A/E and A/E Consultants in the performance of the Basic Services comprising each Phase and the types of personnel, tasks and number of hours projected in the Cost/Price Proposals submitted by the A/E in connection with its original proposal and the Pricing Schedules attached hereto except in the event of a Change authorized by Section M.15, as amended.

d. This modification only obligates funds as outlined in the modification cover sheet for design services through the construction document phase. Funding for subsequent phases related to the project construction will be obligated through a formal contract modification after the Board of Governors approves the construction costs.

A.2.2 A/E'S COMPENSATION FOR ADDITIONAL SERVICES

For Additional Services approved by the Owner in accordance with Section M.15, the Board shall pay the A/E a lump sum fee in an amount negotiated to the mutual satisfaction of the parties, but in no event shall the Board be obligated to compensate A/E or the A/E Consultants for Additional Services in excess of the amount calculated by multiplying the reasonable number of hours required to complete the Additional Service by the Hourly Rates set forth in the attached Pricing Schedules. Compensation for Additional Services of the A/E's Consultants when not included in any negotiated lump sum shall be the amount invoiced to the A/E without mark-up of any kind.

A.2.3 A/E'S COMPENSATION FOR REIMBURSABLE EXPENSES

a. In addition to the A/E's compensation for Basic Services and approved Additional Services, the Board will reimburse A/E for the cost of the following expenses actually incurred by A/E and A/E's Consultants directly related to the Project:

1. Long distance services, dedicated data and communication services, videoconferences, Project Web sites, and extermals;
2. Fees paid for securing approval of authorities having jurisdiction over the Project;
3. Printing, reproductions, plots, standard form documents, electronic storage medium in accordance with A/E's pricing set forth in the Pricing Schedules (not for internal use);
4. Postage, handling and delivery except for expedited delivery that, due to the fault of the A/E, is required for A/E to meet the Design Schedule;
5. If authorized in advance in writing by the Board, expense of overtime work by non-exempt employees of A/E or A/E Consultants requiring higher than regular rates;
6. Renderings (in excess of one), models, mock-ups, professional photography, and presentation materials requested by the Board;
7. Ordinary and reasonable expenses of photographic production techniques and photography and photo prints used for a Project;
8. All taxes levied on professional services and on reimbursable expenses;
9. Site office expenses, if any; and
10. If approved in advance by the Board, ordinary and reasonable expenses of transportation (coach or equivalent class only) and subsistence (or per diem, if applicable), in accordance with the Board’s “Reimbursable Travel Expenses Schedule,” attached herein as Attachment 2.

b. The Reimbursable Expenses set forth above shall be at the A/E’s cost without mark-up of any kind. Any and all other costs and expenses incurred by A/E in performing the Services which are not covered in the preceding sentence shall require the prior written approval of the Board and unless such prior approval is given, the Board shall not reimburse A/E for such costs and expenses.

A.2.4 INVOICING AND PAYMENT

a. The A/E shall issue monthly progress payment invoices to the Board which shall set forth in reasonable detail the services performed, the appropriate contract line item number, and the proportionate share of the cost of the service as set forth in the attached Pricing Schedules. Any Additional Service fees shall be similarly identified and separated. Each invoice shall clearly identify the compensation for Basic and Additional Services separately from Reimbursable Expenses. Each invoice shall show the amount of each cost category that has been billed to date in each Phase, and the amount remaining to be billed in each cost category for each Phase in the future. The A/E shall provide such supporting documentation as the Board may reasonably request with respect to Reimbursable Expenses, Additional Services and any Services billed on an hourly basis. All invoices shall be sequentially numbered. A/E’s monthly invoices shall be submitted to Board no later than the tenth (10th) day of each month.

1. The Hourly Rates set forth in Attachment 1 are fully burdened including, but not limited to, mandatory and customary contributions and benefits related thereto such as employment taxes and other statutory employee benefits, social security or other governmental retirement contributions or benefits, insurance, sick leave, holidays, vacations, pensions and profit sharing, and inclusive of all overhead, general and administrative expenses and profit.

2. Commencing October 1, 2011, the Hourly Rates shall be adjusted for all labor categories by a maximum of 4.0% annually for the duration of the Contract. For the avoidance of doubt, escalation calculations are based on A/E’s fiscal year of October 1 through September 30. The A/E shall require that its employees and the employees of A/E Consultants, whether salaried, hourly or otherwise, maintain reasonable records of the time spent, including a description of the work performed by them, on a daily basis in the performance of the Services. If requested by the Board, the A/E shall provide such records to the CO, COM, or Construction Administrator, and the salary, hourly rate or other form or method of
compensation allocable to such person’s work or services for the A/E or A/E Consultant.

b. Subject to the Board’s right to withhold retainage set forth below, the Board shall pay A/E for each monthly invoice submitted to the Board within thirty (30) days after the Board’s receipt of such invoice, unless prior to the expiration of such thirty (30) day period, the Board advises A/E that the Board disagrees with the invoice submitted or disapproves of the Services performed. If an invoice is in question, A/E and the Board shall forthwith attempt to resolve the issue. The Board shall pay the undisputed portion of each invoice within thirty (30) days after receipt thereof. Payments due A/E shall not accrue interest under any circumstances. When the Board specifies that a payment is to be applied in satisfaction of a certain invoice or portion of an invoice, the A/E shall apply the payment to the account as specified and shall indicate that specific application on subsequent monthly statements. The Board’s review, inspection, acceptance, and/or payment of and/or, for any of A/E’s Services shall not constitute acceptance by the Board of Services that fail to conform to the requirements of this Contract, unless the Board expressly accepts such non-conforming Services in writing.

1. A/E shall submit applicable mechanic’s lien waivers with its invoices stating that for that specific portion of the Services for which the Board has paid, all labor, material and A/E Consultant accounts have been duly paid. All such lien waivers (other than lien waivers to be provided promptly following final payments to A/E Consultants) may be conditioned upon receipt of payment for the invoiced labor and materials. Upon completion of the Services and promptly after receiving final payment for such Services, A/E shall submit such unconditional lien waivers and payment affidavits as the Board may reasonably require.

2. By presenting Board with A/E’s monthly billing, the A/E (a) represents to Board that the A/E has no notice of any consultant’s, mechanic’s, supplier’s, or other similar lien rights or rights to liens, chattel mortgages, or conditional sales contracts pertaining to the Services covered by the subject monthly billing; and (b) waives all claims against the Board for extensions of time or adjustments to the Revised Contract Sum based on events or circumstances known to the A/E occurring more than twenty (20) days prior to such monthly billing except for events or circumstances that are the subject of the notice described in Section M.15.B.

c. Retainer. There shall be a ten percent (10%) retainage on A/E’s compensation (excluding the Reimbursable Expenses). The Board will release the retainage for previously completed design phase services and will continue to withhold 10% of the construction phase services or the value of the uncompleted work (total cost to the Board to have another organization complete uncompleted work), whichever is less. Half of the retained construction phase services funds shall be payable at substantial completion of the construction. The balance of the construction phase retained funds shall be payable as such time as the USGBC(r) designates as “Achieved” a sufficient number of credits for the Project to achieve
the LEED® certification rating identified in the LEED® Certification Plan after construction has been completed; or (b) designates as "Achieved" a sufficient number of credits for the Project to achieve a lesser LEED® certification rating based on their analysis and review of the credits; or (iii) after all appeals have been exhausted, declines to designate as "Achieved" a sufficient number of credits for the Project to achieve the LEED® certification rating identified in the LEED® Certification Plan or a lesser rating after construction has been completed so long as the USGBC's denial to designate any credit as "Achieved" is not attributable in whole or in part to the A/E's negligence or failure to comply with the terms of this Contract.

d. Grounds for Withholding Payment. The mere delivery of work by A/E to Board will not constitute acceptance of the work by Board. In addition to any other remedy the Board may have under this Contract, at law, or in equity, Board may withhold payment from A/E on account of Services that the Board contends in good faith contain errors, omissions or any otherwise incomplete, inconsistent or do not conform to the requirements of the Contract or the Board's Program, or are contrary to written instructions of Board, without prejudice to A/E's right to assert a claim for such disputed sums. The Board may withhold payment to the extent the amounts involved exceed the amount of the Services completed in proportion to the Total Fee by Phase for that Phase of the Project. The Board shall provide A/E with a written explanation of any such withholding. Board's review, inspection, acceptance, and/or payment for any of A/E's Services shall not constitute acceptance of Services that fail to conform to the requirements of the parties' Contract, unless Board expressly accepts such non-conforming services in writing. Acceptance of payment by the A/E for all or any part of the Services shall constitute a waiver of all claims against Board, except those previously made in writing and identified by A/E as unsettled at the time of such payment.

e. Entire Compensation. The compensation set forth in this Appendix 2 is the sole compensation payable to the A/E by the Board for all A/E Services and no services or work undertaken by the A/E or the A/E Consultants, agents and employees will result in any obligation of the Board to pay any additional compensation. A/E, for itself and for its A/E Consultants and their respective employees and agents hereby (i) waives any right to compensation or reimbursement for services performed or expenses incurred (a) without written authorization as required herein; or (b) in excess of the amounts set forth in Section CA.9.1, and (ii) covenants not to sue for amounts which might otherwise be payable under the theory of quantum meruit, unjust enrichment or under any other legal or equitable theory, whether or not there is, in fact, any unjust enrichment. Notwithstanding any other provision of this Contract, the Board may elect to reduce the Architect's scope of services. In such case, Owner and Architect will negotiate in good faith an equitable reduction in Architect's Compensation hereunder. In the event Owner and Architect are unable within a
reasonable time to agree on such reduction, either party may assert a claim in accordance with Section M.22.
<table>
<thead>
<tr>
<th>Component</th>
<th>Action</th>
<th>Theory</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine</td>
<td>Improve</td>
<td>Design</td>
<td>Efficiency</td>
</tr>
<tr>
<td>Frame</td>
<td>Strengthen</td>
<td>Material</td>
<td>Strength</td>
</tr>
<tr>
<td>Control</td>
<td>Adjust</td>
<td>Calibration</td>
<td>Accuracy</td>
</tr>
</tbody>
</table>

**Legend:**
- **Competitive harm**
- **Efficiency improvement**
- **Strength enhancement**
- **Accuracy increase**
<table>
<thead>
<tr>
<th>Service Description</th>
<th>Category</th>
<th>Code</th>
<th>Unit</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service 1</td>
<td>Category 1</td>
<td>ABC</td>
<td>Unit 1</td>
<td>$100</td>
</tr>
<tr>
<td>Service 2</td>
<td>Category 2</td>
<td>XYZ</td>
<td>Unit 2</td>
<td>$200</td>
</tr>
<tr>
<td>Service 3</td>
<td>Category 3</td>
<td>PQR</td>
<td>Unit 3</td>
<td>$300</td>
</tr>
<tr>
<td>Service 4</td>
<td>Category 4</td>
<td>MNO</td>
<td>Unit 4</td>
<td>$400</td>
</tr>
</tbody>
</table>

Notes:
- ABC is the code for Category 1
- XYZ is the code for Category 2
- PQR is the code for Category 3
- MNO is the code for Category 4

Table Footer:
- Revenue: $1000
- Expense: $500
- Profit: $500
<table>
<thead>
<tr>
<th>Department &amp; Service (D&amp;SF)</th>
<th>Fuel</th>
<th>Dust</th>
<th>Estimated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Face</td>
<td>Dust</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Competitive harm
- Projecting costs for FY 2013
- Estimated CO2 emissions for FY 2013

**Additional Information:**
- Operational costs for FY 2013
- Detailed breakdown of costs by category
- Comparative analysis with previous fiscal years
<table>
<thead>
<tr>
<th>Location</th>
<th>1270 Main Street</th>
<th>Base</th>
<th>Rev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position</td>
<td>Title</td>
<td>Reporting Quantity</td>
<td>Project Name</td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
<td>--------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Doe</td>
<td>Engineer</td>
<td>100</td>
<td>DOE Project 1</td>
</tr>
<tr>
<td>Jane</td>
<td>Supervisor</td>
<td>50</td>
<td>DOE Project 2</td>
</tr>
<tr>
<td>Bob</td>
<td>Consultant</td>
<td>20</td>
<td>DOE Project 3</td>
</tr>
</tbody>
</table>

The table above represents the organization’s workforce and project management structure for the upcoming fiscal year. The table includes the position, title, reporting quantity, project name, contract number, contract type, and contract amount for selected projects.
COST PROPOSAL FOR THE COMPLETE RENOVATION OF THE MARTIN BUILDING

NEW VISITOR & CONFERENCE CENTER

CONTRACT NO: 250548
MODIFICATION 16

BOARD OF GOVERNORS of the FEDERAL RESERVE SYSTEM
WILLIAM MCHESNEY MARTIN, JR. BUILDING

August 20, 2010
August 20, 2010

Kimberly M. Purcell, C.P.M.,
Supervisory Contract Analyst,
Board of Governors of the Federal Reserve System,
Washington, DC 20551
202-452-2527

RE: Contract No. 2005-08 Request for Change Order Pricing

Dear Mr. Purcell,

In response to the Request for Change Order Pricing dated February 22, 2010 regarding a complete renovation of the Board of Governors of the Federal Reserve System’s (Board) Martin Building, Kari Chaplin Chapman & Twomey (KCCT) is pleased to submit the enclosed proposal which includes the following Sections:

- Section I — Building Information Modeling (BIM) Intercalibration Narrative
- Section II — Cost Proposal with Project Phasing (Base & Option 1 — BIM version)
- Section III — Alternate Cost Proposal without Project Phasing (Base & Option 1 — BIM version)
- Section IV — Appendix 1, Design Schedule
- Section V — Appendix 4, Organizational Chart and Roster of Key Personnel

This proposal takes into consideration the original request with associated Appendices 1 & 2 and Martin Building Executive — Audio/Visual System IF/IT Video Communication: Preliminary Recommendations dated February 22, 2010 in addition to subsequent correspondence from the Board in response to KCCT requests for information in the forms of board letters dated May 14, 2010, May 21, 2010 and July 28, 2010. The included in subsequent correspondence is an email message from Keith Bates on August 9, 2010 requesting alternate pricing for a project without construction phasing, three (3) additional elevators, two (2) remote access units and a revised conceptual scheme of the Conference & Visitors Center illustrating those modifications.

Explanation of Proposal and Identification of Exceptions:

1. Each cost proposal is based on the scope of work described in the documents mentioned above. The Alternate Cost Proposal without Project Phasing is marginally less than the Cost Proposal with Project Phasing. In terms of value to the Board, however, the alternate proposal allows for the optimum modernization of the Martin Building while the proposal with project phasing requires numerous compromises.

2. In addition to providing cost based on the requirements of the scope of work, we have also included Option 1 — Integrated Building Information Modeling (IBIM) for the Board’s consideration. Included in the additional A/E fee is delivery of an intelligent virtual building model containing architectural, structural, mechanical, electrical, plumbing, fire protection and site/landscape information. An initial investment in this progressive technology is advisable.
differ by the anticipated savings in construction and facility operations as described in Section 1 of this proposal.

3. Each cost proposal is based on current loaded billing rates for KCCT and its consultants. Annual adjustments will be made according to mutually agreed rates.

4. Because of the integral nature of architecture and interior design, each cost proposal incorporates estimated labor fees for "Architectural Interior Design Documents" service into the "90% Submission" sub-phase of Design Development.

5. We have estimated Other Direct Costs (ODC) at approximately 4% of the total A/E fee, excluding Option 1. This percentage is based on previous experience. We acknowledge that receipts for reimbursable expenses will be included with all billing.

6. Construction Phase Services are estimated based on a construction duration of thirty-six (36) months as stated in Section C1 "INTRODUCTION" of the Request for Construction Proposal. If there should be a change in construction duration, KCCT will submit requests for appropriate fee adjustments.

7. We are assuming one design for temporary food service in each cost proposal.

8. In the Cost Proposal with Project Planning, we have anticipated these being a total of six (6) separate construction phases. If there should be a change in the number of phases, KCCT will submit requests for appropriate fee adjustments.

9. In the Alternate Cost Proposal without Project Planning, we have identified costs for two separate sub-phases within the Schematic Design Phase. Phase A includes the costs required to permit the Board into two (2) options for a remodeled Poindexter concept plan incorporating three (3) new elevators, two (2) new remote access stairs and a reconfigured core as requested in Mr. Bar's August 9 email. In conjunction with the two (2) remodeled concepts, we will also provide design and elevation studies of the Martin Building and engineering (structural, mechanical, electrical, plumbing) evaluation to ensure a feasible concept. Phase B includes the costs of the schematic design services described in Section C2.4.b of the Request for Construction Proposal.

We look forward to continuing our valued relationship with the Board by successfully fulfilling the goals of this project. Please do not hesitate to contact me or James Day as with any questions or concerns.

Sincerely,

[Signature]

Enrico A. Bellini, AIA
Principal
SECTION I

BUILDING INFORMATION MODELING (BIM) RECOMMENDATION: NARRATIVE
Building Information Modeling (BIM) for the Martin Building Renovation

KCAI appreciates the opportunity to offer services to the Board of Governors of the Federal Reserve System (Board) for the complete renovation of its Martin building. Due to the project complexity and sustainable design goals, we take this occasion to recommend the Board consider Building Information Modeling (BIM) as a requirement of this significant project. BIM is the process of creating an intelligent and scalable virtual building model. The model is considered intelligent because it is more than a three-dimensional representation. It is populated with physical and functional characteristics that allow information to be easily shared and coordinated among team members. As an interdisciplinary depository of information, BIM has demonstrated substantial cost savings benefits for owners.

These cost benefits exist primarily because BIM technology has the potential to allow the seamless transfer of knowledge across all stages of facility life planning, design, construction, management, and operations. Certainly, BIM offers advantages to all members within the design and construction industry; however, it is the owners who will potentially benefit the most because of the continued use of the facility model and its embedded knowledge throughout the lifecycle of the facility.

BIM - the Business Case

For the last several years, BIM has been gaining popularity within the A/E industry, a trend that is expected to increase as technology meets the demands of architects, engineers, contractors, and owners, each of whom has recognized the tremendous benefits offered by BIM. The General Services Administration (GSA) is no exception; as a owner and property manager, it has invested heavily in a National 3D-BIM Program to maximize the advantages of BIM. Even in the pilot program, substantial returns on investment have been demonstrated. These cost savings were expressed through optimized construction schedules (i.e., a 19% reduced duration on the Los Angeles Federal Office Building), avoidance of design conflicts prior to construction and enhanced means of communication between team members.

Because of associated savings, several public and private companies have drifted to BIM including: Department of State, NASA, General Motors, Citi & Bank and Walt Disney Imagineering. Within the private sector, two similar buildings in scope and program were compared—one used BIM on all major scopes of work; the other did not. The building using BIM was completed six months faster with a 31% reduction in construction change orders. That same project also experienced a substantial reduction in Request for Information (RFIs) during construction.

1. As defined by the National Institute of Building Sciences (NIBS), National BIM Standard. BIM is a digital representation of physical and functional characteristics of a facility. It allows virtual review of information about a building during the design process and during construction.
Various other sources document consistent cost savings when owners choose BIM. In his article, "Green -- If Not Green, Why Not?", Dennis Nedley indicates that construction savings between 10-20% are being reported through the use of BIM during design and construction as a method of enhanced collaboration among team members. For tax offices building pursuing LEED Gold certification, BIM permitted early analysis of building technologies minimizing changes during construction and expediting the project. The building owners, cattleGold & Partners, estimated a reduction of construction cost and schedule by 10-15%.

The use of BIM produces substantial savings when used in any phase of the facility life, but these savings are maximized when BIM is introduced during facility planning and design. The initial investment during design is easily offset by the ultimate construction and operation savings realized through early integration of BIM.

**BIM Advantages in the Design Phase:**
- Increased design flexibility through enhanced space utilization and 3D visualization tools to clearly illuminate design and assist in design decisions
- Optimization of sustainable design goals and LEED credit scores through early design analysis
- Embedded non-graphical information such as area/quantity take-offs and accurate analytical data leading to, among other advantages, more accurate cost estimates and expedited construction sequencing
- Non-traditional delivery capability such as 3D coordination never occurring for clarity of design intent for owners extending to construction and sub-contractors during construction.
- More complete and coordinated drawings, reducing owner's risk and contractor's construction time and costs during contract administration.

**BIM Advantages in the Construction Phase:**
- Optimization of site logistics, sequencing and phasing
- Overall reduction in construction schedule through minimization of redundancy, more rapid fabrication and enhanced steel coordination
- Documented consistent cost savings through reduced numbers of RFI's and Change Orders

**BIM Advantages in the Facility Management and Operation Phase:**
- Flexible integration with Building Management System (BMS)
- Interactive and editable as-built documentation for spatial management and typical maintenance activities
- Evidence-based decision delay for upgrades and renovation programs
- Improved facility asset management

---

1. Nedley, Dennis, "Green -- If Not Green, Why Not?", Construction Industry News, February 4, 2010
KARIN CHARINAS CHAPMAN & TWIGELEY
Building Information Modeling (BIM) for the Martin Building Renovation (rev.),
(August 20, 2010)

Proposed BIM Implementation Plan
For the Martin Building renovation project KCCT proposes using BIM software for architecture, site
conditions (civil & landscape architecture), structure, mechanical, electrical, plumbing and fire
protection. The existing conditions and new work will be modeled for architecture, site conditions
and structure. For the sake of efficiency and given that most existing major building systems will be
completely removed during demolition, only new work will be modeled for mechanical, electrical,
plumbing and fire protection.

Conclusions
For the numerous reasons stated above, we believe that use of BIM is the most appropriate response to
the complexity and scope of the Martin Building renovation and offers the Board valuable advantages.
Using a BIM approach is especially appropriate within government agencies because of the increased
public perception of fiscal responsibility.

Beyond the construction cost savings, developing a virtual building model with all major building
systems is an investment in progressive technology, a technology which affords the Board the greatest
opportunity to achieve its immediate project goals, in addition to providing the greatest flexibility for
long-term maintenance and operation.

Resources for Further Information
White Building Design Guide (WBGG), a program of the National Institute of Building Sciences. www.wbdesign.com

Page 1 of 3
SECTION II

COST PROPOSAL WITH PROJECT PHASING

(BASE & OPTION 1: DAM SERVICES)
<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost Summary with Planning</th>
<th>Reimbursability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Notes: CARY, CHAPMAN, CHAPMAN, A. WILSON</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect: Francis J. Ballan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date: August 28, 2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Schematic Design Phase Services</td>
<td>C.2.4.x</td>
<td>competitive harm</td>
</tr>
<tr>
<td>B. Design Development Phase Services</td>
<td>C.1.4.5</td>
<td>competitive harm</td>
</tr>
<tr>
<td>Architectural Design and Interior Design for access</td>
<td>C.5.4.g</td>
<td>competitive harm</td>
</tr>
<tr>
<td>School - Design Development Phase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Construction Documents Phase Services</td>
<td>C.3.4.2</td>
<td>competitive harm</td>
</tr>
<tr>
<td>D. Project Management and Coordination Services</td>
<td>C.3.4</td>
<td></td>
</tr>
<tr>
<td>F. LEED Requirements and Certification Services</td>
<td>C.3.7</td>
<td></td>
</tr>
<tr>
<td>Total Cost (C.3+D.3+C.3.7+C.3.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost: $X</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost Labor, Materials &amp; Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option 1: Temporary Building Information Modeling</td>
<td>Add, Service</td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost Option 1 (D.3+C.3.7+D.4.7)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract No.</td>
<td>Task</td>
<td>Body</td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>1234-5678</td>
<td>485</td>
<td>485</td>
</tr>
</tbody>
</table>

Note: The table contains financial details for a specific task under a contract number. The financial column is represented by the letter 'F'.
VerDate Nov 24 2008

11:04 Mar 16, 2015

Jkt 046629

PO 00000

Frm 00494

Fmt 6602

Sfmt 6602

715AA420.eps

486

L:\HEARINGS 2014\07-15 THE SEMIANNUAL MONETARY POLICY REPORT TO THE CON


<table>
<thead>
<tr>
<th>Service Description</th>
<th>Hours</th>
<th>Rate ($)</th>
<th>Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural Services (ARCH)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Engineering (STR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Engineering (MCH)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Engineering (ELC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting Engineering (LIT)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveying Services (SUR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geotechnical Services (GEO)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineering (CIV)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Engineering (ENV)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Management (CON)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Documents/Phase Service</td>
<td>Total</td>
<td>Rough</td>
<td>Extended</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>20% Substitution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect &amp; Engineer (A&amp;E)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plumbing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Automation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevator/Intrusion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chiller (Chiller)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steam (Steam)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC (HVAC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect &amp; Engineer (A&amp;E)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plumbing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Automation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevator/Intrusion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feature</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chiller (Chiller)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steam (Steam)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC (HVAC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanitation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The table includes various construction and engineering services with the following obligations:
- **competitive harm**
- **20% substitution**

The table is structured to show the breakdown of services and the corresponding obligations for each category.
<table>
<thead>
<tr>
<th>Position</th>
<th>Competitive Harm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Executive Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Executive Officer</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant General Counsel</td>
<td></td>
</tr>
<tr>
<td>General Counsel</td>
<td></td>
</tr>
<tr>
<td>Deputy General Counsel</td>
<td></td>
</tr>
<tr>
<td>Associate General Counsel</td>
<td></td>
</tr>
<tr>
<td>Legal Counsel</td>
<td></td>
</tr>
<tr>
<td>Deputy Legal Counsel</td>
<td></td>
</tr>
<tr>
<td>Assistant Legal Counsel</td>
<td></td>
</tr>
<tr>
<td>Ethics Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Ethics Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Ethics Officer</td>
<td></td>
</tr>
<tr>
<td>Legal Advisor</td>
<td></td>
</tr>
<tr>
<td>Deputy Legal Advisor</td>
<td></td>
</tr>
<tr>
<td>Assistant Legal Advisor</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td></td>
</tr>
<tr>
<td>Deputy CIO</td>
<td></td>
</tr>
<tr>
<td>Assistant CIO</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Administrative Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Administrative Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Administrative Officer</td>
<td></td>
</tr>
<tr>
<td>Administrative Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Administrative Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Administrative Officer</td>
<td></td>
</tr>
<tr>
<td>Chief Human Resources Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Human Resources Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Human Resources Officer</td>
<td></td>
</tr>
<tr>
<td>Human Resources Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Human Resources Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Human Resources Officer</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td></td>
</tr>
<tr>
<td>Deputy CIO</td>
<td></td>
</tr>
<tr>
<td>Assistant CIO</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td></td>
</tr>
<tr>
<td>Deputy CIO</td>
<td></td>
</tr>
<tr>
<td>Assistant CIO</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td></td>
</tr>
<tr>
<td>Deputy CIO</td>
<td></td>
</tr>
<tr>
<td>Assistant CIO</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td></td>
</tr>
<tr>
<td>Deputy CIO</td>
<td></td>
</tr>
<tr>
<td>Assistant CIO</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td></td>
</tr>
<tr>
<td>Deputy CIO</td>
<td></td>
</tr>
<tr>
<td>Assistant CIO</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td></td>
</tr>
<tr>
<td>Deputy CIO</td>
<td></td>
</tr>
<tr>
<td>Assistant CIO</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td></td>
</tr>
<tr>
<td>Deputy CIO</td>
<td></td>
</tr>
<tr>
<td>Assistant CIO</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>CIO</td>
<td></td>
</tr>
<tr>
<td>Deputy CIO</td>
<td></td>
</tr>
<tr>
<td>Assistant CIO</td>
<td></td>
</tr>
<tr>
<td>Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Security Officer</td>
<td></td>
</tr>
<tr>
<td>CISO</td>
<td></td>
</tr>
<tr>
<td>Deputy CISO</td>
<td></td>
</tr>
<tr>
<td>Assistant CISO</td>
<td></td>
</tr>
<tr>
<td>Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Financial Analyst</td>
<td></td>
</tr>
<tr>
<td>Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Finance Officer</td>
<td></td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Deputy Controller</td>
<td></td>
</tr>
<tr>
<td>Assistant Controller</td>
<td></td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Deputy Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Assistant Chief Information Officer</td>
<td></td>
</tr>
<tr>
<td>Position</td>
<td>Grade Level</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Engineering Manager</td>
<td>7-8</td>
</tr>
<tr>
<td>Senior Architect</td>
<td>7-8</td>
</tr>
<tr>
<td>Project Manager</td>
<td>6-7</td>
</tr>
<tr>
<td>Assistant Project Manager</td>
<td>5-6</td>
</tr>
<tr>
<td>Construction Project Manager</td>
<td>4-5</td>
</tr>
<tr>
<td>Construction Inspector (Civil)</td>
<td>3-4</td>
</tr>
<tr>
<td>Skilled Labor Labor (Labor)</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: All positions require a minimum of a Bachelor's degree in a relevant field.*
<table>
<thead>
<tr>
<th>Service</th>
<th>Total Hours</th>
<th>Billing Rate</th>
<th>Extended Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architect &amp; Engineer (ITEC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect &amp; Engineer (ITEC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect &amp; Engineer (ITEC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect &amp; Engineer (ITEC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect &amp; Engineer (ITEC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect &amp; Engineer (ITEC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architect &amp; Engineer (ITEC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheet Metal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The table above represents a partial view of the data. The full table is not fully visible in the image.
<table>
<thead>
<tr>
<th>Task Description</th>
<th>Total</th>
<th>Hourly Rate</th>
<th>Extended Rate</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architectural &amp; Interior Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanical Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil Engineering Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lighting Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Automation Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Exterior Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Interior Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Technology Design</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Management Oversight</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Reporting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Closeout</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Consultation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Consultation Implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Coordination Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Administration Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation Administration Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Administration Coordination Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training Administration Coordination Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation Administration Coordination Training Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Administration Coordination Training Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training Administration Coordination Support Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation Administration Coordination Training Support Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Administration Coordination Training Support Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training Administration Coordination Support Evaluation Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation Administration Coordination Training Support Evaluation Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Administration Coordination Training Support Evaluation Coordination Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training Administration Coordination Support Evaluation Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation Administration Coordination Training Support Evaluation Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Administration Coordination Training Support Evaluation Administration Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training Administration Coordination Support Evaluation Administration Support Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation Administration Coordination Training Support Evaluation Administration Support Coordination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Administration Coordination Training Support Evaluation Administration Support Coordination Training</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training Administration Coordination Support Evaluation Administration Support Coordination Training Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Support Evaluation Administration Coordination Training Support Evaluation Administration Support Coordination Training Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Implementation Administration Coordination Training Support Evaluation Administration Support Coordination Training Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Management Control Training Administration Coordination Support Evaluation Administration Support Coordination Training Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task</td>
<td>Description</td>
<td>Contract Number</td>
<td>Rate</td>
<td>Hours</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>-----------------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>Task 1</td>
<td>Description 1</td>
<td>Contract Number 1</td>
<td>Rate 1</td>
<td>Hours 1</td>
</tr>
<tr>
<td>Task 2</td>
<td>Description 2</td>
<td>Contract Number 2</td>
<td>Rate 2</td>
<td>Hours 2</td>
</tr>
<tr>
<td>Task 3</td>
<td>Description 3</td>
<td>Contract Number 3</td>
<td>Rate 3</td>
<td>Hours 3</td>
</tr>
<tr>
<td>Task 4</td>
<td>Description 4</td>
<td>Contract Number 4</td>
<td>Rate 4</td>
<td>Hours 4</td>
</tr>
</tbody>
</table>

Note: The table above is a placeholder and the actual content is not provided.
The image contains a table and some text that appears to be a part of a report or a record, possibly related to a project management or engineering context. However, the content is not clearly visible due to the nature of the image. The text seems to be fragmented and lacks context, making it difficult to interpret accurately. It appears to include various columns and rows, possibly indicating different project elements or tasks.
<table>
<thead>
<tr>
<th>Building/Construction &amp; Facilities Engineering (Single)</th>
<th>Competitive</th>
<th>Base</th>
<th>$50,000</th>
<th>$50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>50%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction/Project Management</td>
<td>50%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Summary:**
- ** Firm & Project Management**: 50%
- **Design**: 50%
- **Construction/Project Management**: 50%

---

### Labor Subtotals

- **Firm & Project Management**: $50,000
- **Design**: $50,000
- **Construction/Project Management**: $50,000

---

*Note: All rates are inclusive of local taxes, G.I.A., and profit markups.*
<table>
<thead>
<tr>
<th>Option 1 - Integrated Building Information Modeling</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Task</strong></td>
<td><strong>Hours</strong></td>
<td><strong>Rate</strong></td>
</tr>
<tr>
<td><strong>Sanitary and Ventilation</strong></td>
<td><strong>10</strong></td>
<td><strong>$50</strong></td>
</tr>
<tr>
<td></td>
<td><strong>20</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Electrical</strong></td>
<td><strong>30</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td><strong>40</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Structural</strong></td>
<td><strong>50</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Computer/IT</strong></td>
<td><strong>60</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Construction</strong></td>
<td><strong>70</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Architectural</strong></td>
<td><strong>80</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>90</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Design</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Engineers</strong></td>
<td><strong>120</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>140</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td><strong>Total</strong></td>
<td><strong>$5000</strong></td>
</tr>
<tr>
<td><strong>Notes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Position</td>
<td>Contact Information</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>John Doe</td>
<td>Engineer</td>
<td>555-123-4567</td>
</tr>
<tr>
<td>Jane Smith</td>
<td>Project Manager</td>
<td>555-789-0123</td>
</tr>
<tr>
<td>Dr. Jane Chow</td>
<td>Senior Scientist</td>
<td>555-321-6543</td>
</tr>
<tr>
<td>Bill Johnson</td>
<td>Director</td>
<td>555-456-7890</td>
</tr>
<tr>
<td>Sarah Brown</td>
<td>Analyst</td>
<td>555-987-6543</td>
</tr>
</tbody>
</table>

Option 1: Integrated Building Information Modeling
- Experienced in Design, Engineering, and Building Information Modeling
- Proficient in 3D modeling and visualization
- Strong understanding of building components and systems
- Familiar with BIM software (e.g., Revit, AutoCAD)
- Excellent communication and teamwork skills

Option 2: Project Manager
- 10+ years of experience in project management
-能力强 with construction logistics and site supervision
- Proficient in project scheduling and cost management
- Experienced in handling complex projects
- Strong leadership and decision-making skills

Option 3: Analyst
- 5+ years of experience in data analysis and modeling
- Proficient in statistical analysis and predictive modeling
- Experienced in data visualization and dashboard development
- Strong attention to detail and analytical thinking skills
- Familiar with data analysis tools (e.g., Tableau, R, Python)
SECTION III

ALTERNATE COST PROPOSAL WITHOUT PROJECT PHASING

BASE & OPTION I - BM SERVICES
<table>
<thead>
<tr>
<th>Design Service</th>
<th>Additional/Alternative Accessory</th>
<th>Mod. Ref.</th>
<th>Labor</th>
<th>Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schematic Design Phase Services</td>
<td>1. Schematic Design Concept Add. Services</td>
<td>2 &amp; 3</td>
<td>4 &amp; 5</td>
<td>6 &amp; 7</td>
</tr>
<tr>
<td>Phase Alternative or Additional Accessory</td>
<td>C-24.e</td>
<td>8 &amp; 9</td>
<td>10 &amp; 11</td>
<td>12 &amp; 13</td>
</tr>
<tr>
<td>Design Development Phase Services</td>
<td>2. Schematic Design Concept</td>
<td>Add. Services</td>
<td>14 &amp; 15</td>
<td>16 &amp; 17</td>
</tr>
<tr>
<td>Add. Services</td>
<td>18 &amp; 19</td>
<td>20 &amp; 21</td>
<td>22 &amp; 23</td>
<td>24 &amp; 25</td>
</tr>
<tr>
<td>Add. Services</td>
<td>30 &amp; 31</td>
<td>32 &amp; 33</td>
<td>34 &amp; 35</td>
<td>36 &amp; 37</td>
</tr>
<tr>
<td>Total Cost C = B + D + E + F + G</td>
<td>38 &amp; 39</td>
<td>40 &amp; 41</td>
<td>42 &amp; 43</td>
<td>44 &amp; 45</td>
</tr>
<tr>
<td>Total Cost of Conceptualized Form</td>
<td>46 &amp; 47</td>
<td>48 &amp; 49</td>
<td>50 &amp; 51</td>
<td>52 &amp; 53</td>
</tr>
<tr>
<td>Task</td>
<td>Start</td>
<td>End</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>-----</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>Task 1</td>
<td>1</td>
<td>5</td>
<td>Description 1</td>
<td></td>
</tr>
<tr>
<td>Task 2</td>
<td>6</td>
<td>10</td>
<td>Description 2</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td></td>
</tr>
</tbody>
</table>

*Notes:*
- Description 1: Details about Task 1.
- Description 2: Details about Task 2.
<table>
<thead>
<tr>
<th>Design, Development, These Services</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Governors and Federal Reserve System, Washington, D.C. 20551</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Description</td>
<td>Start Date</td>
<td>End Date</td>
<td>Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>------------</td>
<td>----------</td>
<td>--------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design and Drafting (CD)</td>
<td>1/1/2023</td>
<td>3/31/2023</td>
<td>Ongoing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draft Plans</td>
<td>1/1/2023</td>
<td>3/31/2023</td>
<td>Ongoing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Drawings</td>
<td>1/1/2023</td>
<td>3/31/2023</td>
<td>Ongoing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Closeout</td>
<td>1/1/2023</td>
<td>3/31/2023</td>
<td>Ongoing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Report</td>
<td>1/1/2023</td>
<td>3/31/2023</td>
<td>Ongoing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Project duration is for illustrative purposes only.
<table>
<thead>
<tr>
<th>Construction Details From Services</th>
<th>Test</th>
<th>Brack</th>
<th>Edited</th>
</tr>
</thead>
<tbody>
<tr>
<td>16th Street Bridge</td>
<td>competes harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>31st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>42nd Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>51st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>61st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>71st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>81st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>91st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>101st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>111st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>121st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>131st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>141st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>151st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>161st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>171st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>181st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>191st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>201st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>211st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>221st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>231st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>241st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>251st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>261st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>271st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>281st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>291st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>301st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>311st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>321st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>331st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>341st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>351st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>361st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>371st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>381st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>391st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>401st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>411st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>421st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>431st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>441st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>451st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>461st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>471st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>481st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>491st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>501st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>511st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>521st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>531st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>541st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>551st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>561st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>571st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>581st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>591st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>601st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>611st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>621st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>631st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>641st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>651st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>661st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>671st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>681st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>691st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>701st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>711st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>721st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>731st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>741st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>751st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>761st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>771st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>781st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>791st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>801st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>811st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>821st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>831st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>841st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>851st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>861st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>871st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>881st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>891st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>901st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>911st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>921st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>931st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>941st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>951st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>961st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>971st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>981st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
<tr>
<td>991st Street Bridge</td>
<td>harm</td>
<td>harm</td>
<td>harm</td>
</tr>
</tbody>
</table>

*Note: The table contains a detailed list of construction details from various services, including bridges and other infrastructure elements.*
<table>
<thead>
<tr>
<th>Building Component &amp; Technical Engineering Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Engineer - civil, land</td>
</tr>
<tr>
<td>Civil Engineer - civil, land</td>
</tr>
<tr>
<td>Civil Engineer - civil, land</td>
</tr>
<tr>
<td>Civil Engineer - civil, land</td>
</tr>
</tbody>
</table>

**Competitive harm**

- **Board of Governors of the Federal Reserve System**
- Washington, D.C. 20551
- **Martin Hahler**
- Architectural Engineering Services
- Contract No. 1954
- Certification No. 19
- Agreement No. 000008

![Image of the Board of Governors of the Federal Reserve System logo](image.png)

---

<table>
<thead>
<tr>
<th>Position</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Engineer</td>
<td>Civil Engineer</td>
</tr>
<tr>
<td>Project Manager</td>
<td>Electrical Engineer</td>
</tr>
</tbody>
</table>

---

**Construction Documents Phase Services**

- **Civil Engineering**
- **Electrical Engineering**

---

<table>
<thead>
<tr>
<th>Description</th>
<th>Labor Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Survey</td>
<td>10 hours</td>
</tr>
<tr>
<td>Design Drafting</td>
<td>20 hours</td>
</tr>
<tr>
<td>Construction</td>
<td>30 hours</td>
</tr>
</tbody>
</table>

---

**Additional Information**

- The project involves 1,500 square feet of work and a budget of $500,000.
- The project team includes a project manager and a lead engineer.
<table>
<thead>
<tr>
<th>Task</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>2023-01-01</td>
<td>2023-01-31</td>
</tr>
<tr>
<td>(2)</td>
<td>2023-02-01</td>
<td>2023-02-28</td>
</tr>
<tr>
<td>(3)</td>
<td>2023-03-01</td>
<td>2023-03-31</td>
</tr>
</tbody>
</table>

**Notes:**
- Task (1) is dependent on Task (2).
- Task (3) is dependent on Task (1) and Task (2).

**Conclusion:**
- Task (3) should be completed in the timeframe provided to ensure all dependencies are met.
| Building Construction & Site Preparation | | |
|----------------------------------------|------------------|
| Contractor's Name | Job Title | |
| John Doe | Site Manager | |
| Jane Smith | Site Supervisor | |
| Bill Johnson | Superintendent | |

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Construction</td>
<td>March 1st</td>
<td>September 30th</td>
</tr>
<tr>
<td>Site Preparation</td>
<td>May 1st</td>
<td>August 31st</td>
</tr>
</tbody>
</table>

| Subcontractors | % of Total Cost | |
|----------------|-----------------|
| XYZ Company | 30% | |
| ABC Company | 20% | |
| DEF Company | 15% | |

<table>
<thead>
<tr>
<th>Competitor Analysis</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitor 1</td>
<td>10%</td>
</tr>
<tr>
<td>Competitor 2</td>
<td>15%</td>
</tr>
<tr>
<td>Competitor 3</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Note:** The table above represents a simplified version of the project management and competitive analysis. Actual data may vary based on specific project details.
<table>
<thead>
<tr>
<th>Site</th>
<th>Source</th>
<th>Name</th>
<th>Type</th>
<th>Description</th>
<th>Phase</th>
<th>Cost</th>
<th>Site No.</th>
<th>Site Date</th>
<th>Site No.</th>
<th>Site Date</th>
<th>Site No.</th>
<th>Site Date</th>
<th>Site No.</th>
<th>Site Date</th>
<th>Site No.</th>
<th>Site Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site A</td>
<td>Collected Office - Site A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site B</td>
<td>Collected Office - Site B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site C</td>
<td>Collected Office - Site C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site D</td>
<td>Collected Office - Site D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site E</td>
<td>Collected Office - Site E</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site F</td>
<td>Collected Office - Site F</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site G</td>
<td>Collected Office - Site G</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site H</td>
<td>Collected Office - Site H</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site I</td>
<td>Collected Office - Site I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site J</td>
<td>Collected Office - Site J</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site K</td>
<td>Collected Office - Site K</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site L</td>
<td>Collected Office - Site L</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site M</td>
<td>Collected Office - Site M</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site N</td>
<td>Collected Office - Site N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site O</td>
<td>Collected Office - Site O</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site P</td>
<td>Collected Office - Site P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Q</td>
<td>Collected Office - Site Q</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site R</td>
<td>Collected Office - Site R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site S</td>
<td>Collected Office - Site S</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site T</td>
<td>Collected Office - Site T</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site U</td>
<td>Collected Office - Site U</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site V</td>
<td>Collected Office - Site V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site W</td>
<td>Collected Office - Site W</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site X</td>
<td>Collected Office - Site X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Y</td>
<td>Collected Office - Site Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site Z</td>
<td>Collected Office - Site Z</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Component &amp; Test Procedure</td>
<td>Damage Category</td>
<td>Damage Category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold Spreader - Test 2</td>
<td>Damage Category</td>
<td>Damage Category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold Spreader - Test 3</td>
<td>Damage Category</td>
<td>Damage Category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For Construction - Test 4</td>
<td>Damage Category</td>
<td>Damage Category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For Construction - Test 5</td>
<td>Damage Category</td>
<td>Damage Category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold Spreader - Test 6</td>
<td>Damage Category</td>
<td>Damage Category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cold Spreader - Test 7</td>
<td>Damage Category</td>
<td>Damage Category</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Results:**
- Competitive harm
<table>
<thead>
<tr>
<th>Building Location</th>
<th>Name</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(a)</td>
<td>(b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(c)</td>
<td>(d)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Building Location Phase Sequence</th>
<th>Test</th>
<th>Stand</th>
<th>Related</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(a)</td>
<td>(b)</td>
<td>(c)</td>
</tr>
<tr>
<td></td>
<td>(d)</td>
<td>(e)</td>
<td>(f)</td>
</tr>
</tbody>
</table>

*Note: The table above details the phase sequence and test for the building location. The related field indicates the relationship between the phases.*
<table>
<thead>
<tr>
<th>Building Category</th>
<th>Multi-Family Engine Sizing</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit Sectors:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Income</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Moderate Income</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>High Income</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Non-Residential</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Electric Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Gas Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Water Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Sewer Utility</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Solid Waste</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Institutional</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>Competitor Firm Name</td>
<td>Test</td>
<td>Start</td>
</tr>
<tr>
<td>----------------------</td>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>Company A</td>
<td>Yes</td>
<td>01/01</td>
</tr>
<tr>
<td>Company B</td>
<td>Yes</td>
<td>04/01</td>
</tr>
<tr>
<td>Company C</td>
<td>Yes</td>
<td>07/01</td>
</tr>
<tr>
<td>Company D</td>
<td>Yes</td>
<td>10/01</td>
</tr>
<tr>
<td>Company E</td>
<td>Yes</td>
<td>01/01</td>
</tr>
</tbody>
</table>

*Note: The above table represents a portion of the document's content.*
<table>
<thead>
<tr>
<th>Building Component</th>
<th>Type/Component</th>
<th>Mineable</th>
<th>Competitive Farm</th>
<th>Competitive Farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Structure</td>
<td>Core Structure</td>
<td>Mineable</td>
<td>Competitive Farm</td>
<td>Competitive Farm</td>
</tr>
<tr>
<td>Steel Frame</td>
<td>Steel Frame</td>
<td>Mineable</td>
<td>Competitive Farm</td>
<td>Competitive Farm</td>
</tr>
<tr>
<td>Wood Structure</td>
<td>Wood Structure</td>
<td>Mineable</td>
<td>Competitive Farm</td>
<td>Competitive Farm</td>
</tr>
<tr>
<td>Roofing Material</td>
<td>Roofing Material</td>
<td>Mineable</td>
<td>Competitive Farm</td>
<td>Competitive Farm</td>
</tr>
<tr>
<td>Insulation</td>
<td>Insulation</td>
<td>Mineable</td>
<td>Competitive Farm</td>
<td>Competitive Farm</td>
</tr>
</tbody>
</table>

**Note:** This table contains information on the competitive farm and mineable components of the board of governors of the Federal Reserve System.
<table>
<thead>
<tr>
<th>Building Components</th>
<th>No. of Persons</th>
<th>Hours Worked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Atrium</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Main Lobby</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>Conference Rooms</td>
<td>3</td>
<td>30</td>
</tr>
</tbody>
</table>

*Note: All hours are rounded to the nearest 5 hours.*
SECTION IV

APPENDIX 1: DESIGN SCHEDULE
SECTION IV

APPENDIX 4. ORGANIZATIONAL CHART AND RESUMES OF KEY PERSONNEL.
RESUMES

Enrique A. Bellini, AIA
Principal

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Registered Architect: DC, MD, VA, WV
NCARB
Member, American Institute of Architects

YEARS WITH CURRENT FIRM: 27 Years
YEARS WITH OTHER FIRMS: 8 Years

EDUCATION
MS | Environmental Design | University of Notre Dame | 1971
MArch | Architecture | University of Notre Dame | 1970

SECURITY CLEARANCE LEVEL: Top Secret

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitor Screening Center and Conference Center
Principal Architect: Responsible for the master planning and the detailed design for the new 12,000 square-foot Visitor Center that will replace the existing visitor entrance at the Eccles Building, and the current entrance to the Eccles-Marinus complex located at the Marinus Building. The new 30,000 square foot Conference Center includes a 75-seat lecture hall, a 55-seat multi-purpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference management offices, and a business center. Construction Cost: TBD.

Department of State Modernization - Harry S. Truman Building
Principal Architect: Responsible for the master planning for the new modernization of the Old State Building. The modernization includes over 485,000 sf of renovated space, including a 18,000 sf conference center and auditorium, and 60,000 sf of SGIF space. Construction Cost: $70,000,000.

Department of State Briefing Room - Harry S. Truman Building
Principal Architect: Responsible for the planning and detailed design of the Department of State Briefing Room renovation project. Project renovation included extensive IT/ITC upgrades with state-of-the-art technical audiovisual and lighting design elements. Specially designed seating for use by the Press Corps and Press platforms for network news cameras complete the space. Approximately $200,000.
Construction Cost: $2,000,000.

Columbia Plaza Office Building Renovation
Principal Architect: Responsible for the master planning and detail design of the Columbia Plaza project. A mixed-use complex housing a fifteen-story office tower and a low rise building, the Columbia Plaza renovation/modernization included a 220,000 sf of office space renovation, furniture selection, new generator system, a new cafeteria, and a revamped data center. Construction Cost: $4,000,000.

Federal Bureau of Investigation (FBI)
Principal Architect: Responsible for the detailed design of a new branch field office to 3rd and 4th floors of J. Edgar Hoover (JHE) Building (55,000 sf). The project accommodates new FBI field offices in an 85/15 ratio of open to private offices. Construction Cost: $2,000,000.
RESUMES

James Dudney, RA
Project Manager

KYLEN CHAPLINCHAIRMAN & TROY
Washington, DC

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Registered Architect: DC, MD

YEARS WITH CURRENT FIRM
8 Years

YEARS WITH OTHER FIRMS
18 Years

EDUCATION
Bachelor of Architecture | University of Notre Dame | 1985

SECURITY CLEARANCE LEVEL
Top Secret

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitor Screening Center and Conference Center
Project Manager: Responsible for day-to-day operations, client contact, coordination of consultants and construction documents for the new 12,000 square foot Visitor Center that will replace the existing visitor entrance at the Eccles Building, and the current entrance to the Eccles-Martin complex located at the Martin Building. The 8,000 square foot Conference Center includes a 75-seat lecture hall, a 325-seat multi-purpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference management offices, and a business center. Construction Cost: TBD.

U.S. Embassy Compound | Comprehensive Master Plan
Project Manager: Responsible for day-to-day operations, client contact, coordination of consultants and construction documents. KCCJ developed the master plan for the embassy compound in Nassaj, Niger. This master plan provided a comprehensive strategy for rehabilitation of the existing 5-acre embassy compound that reoriented the existing infrastructure and minimized the cost to the United States Government. It identified priority projects as well as options that can be executed over time. Project cost is expected to be $41M over all three phases.

Architect of the Capital H&Q Contract
Project Architect: Responsible for day-to-day operations, client contact, coordination of consultants and construction documents. A four-year H&Q contract for a variety of projects at the LOC Complex. Projects have included surveys, master planning, programming, space planning, engineering, life safety, roofing, and elevators. Construction Cost: N/A.

New USAID Annex Office Building (Accra, Ghana)
Project Architect: Responsible for day-to-day operations, client contact, coordination of AutoCAD construction documents. The new 1,000 square meter Annex Office Building is part of an existing New Embassy Compound. KCCJ is responsible for design and construction administration of the NOC and related parking, site development, security, AT/FT, communications and blast protection. The method of delivery is design-build with a 14-month schedule for design and construction. Construction Cost: $7,700,000.
RESUMES

Benjamin Burgin, AIA, LEED® AP
Architect / LEED Coordinator
Kaen Charueas Chapman & Troxley
Washington, DC

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Registered Architect DC
Member, American Institute of Architects
2010 AIA Board Community Committee Member
2009-2010 AIA Mid-Atlantic Regional Associate Director

YEARS WITH CURRENT FIRM
2 Years

YEARS WITH OTHER FIRMS
4 Years

EDUCATION
MArch | Architecture | Jullian University | 2001
BA | Architectural Studies | Jullian University | 2004

SECURITY CLEARANCE LEVEL
Secret

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitor Screening Center and Conference Center
Project Designer: Responsible for design development, coordination of consultants and construction documents for the new 22,000 square foot visitor center that will replace the existing visitor entrance at the Eisenhower Building and the current entrance to the Eisenhower complex located at the Martin Building. The 4,000 square foot conference center includes a 75 seat lecture hall, a 325 seat multipurpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference management offices, and a business center. Construction Cost T&D.

Architect of the Capital IDRQ Contract
Project Designer: Responsible for design development, coordination and construction documents. A four-year IDRQ contract for a variety of projects at the Architect of the Capitol complex. Projects include the redesign of existing buildings, master planning, programming, space planning, design, life safety, security, and construction. Construction Cost N/A

Based Senate Office Building | Blue Ribbon Panel
Project Designer: Supported the Blue Ribbon Panel that analyzed and addressed the historic preservation and life safety issues of the Russell Senate Building. The panel provided recommendations to the Architect of the Capitol for the building’s compliance with the National Trust for Historic Preservation. Construction Cost N/A

Mary Switzer Office Building Modernization (Protected as permanent landmark)
Construction Administrator: Responsible for construction administration services for the GSA award modernization project. Project scope included $50,000 of renovated office space and windows/roof replacement. Significant structural modifications were also included, adding an additional floor slab and a new 13,000 sf penthouse. The project was designed to meet a LEED Silver rating. Construction Cost: $80,000,000.

Lake Placid Conference Center (Protected as permanent landmark)
Project Designer: Responsible for the schematic design, detailed construction drawings and bidding for the 60,000 sf of conference center additions. The project included a single large multi-use meeting space, five adaptable breakout rooms, executive board room, dance studio, pre-function support, business center, food service facility, and reception area. Project Cost: $52,000,000.
### RESUMES

Jamie Leclerc, ASID, LEED<sup>®</sup> AP

**Director of Interior Design**

**Washington, DC**

<table>
<thead>
<tr>
<th>PROFESSIONAL REGISTRATIONS</th>
<th>MEMBERSHIPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed Interior Designer: DC, MD</td>
<td>Professional Member, American Society of Interior Designers</td>
</tr>
<tr>
<td>LEED&lt;sup&gt;®&lt;/sup&gt; Accredited Professional</td>
<td><strong>YEARS WITH CURRENT FIRM</strong></td>
</tr>
<tr>
<td></td>
<td>10 Years</td>
</tr>
<tr>
<td></td>
<td><strong>YEARS WITH OTHER FIRMS</strong></td>
</tr>
<tr>
<td></td>
<td>28 Years</td>
</tr>
</tbody>
</table>

**EDUCATION**

- BFA | Interior Design | University of Kansas | 1976

**SECURITY CLEARANCE LEVEL**

- Top Secret

### REPRESENTATIVE PROJECT EXPERIENCE:

**Federal Reserve Visitor Screening Center and Conference Center**

**Director of Inteirors:** Responsible for the space planning, interior design, and tenant fit out for the new 12,000 square foot Visitor Center that will replace the existing visitor entrance to the Eccles Building, and the current entrance to the Eccles/Martin Complex located at the Martin Building. The 40,000 square foot Conference Center includes a 75-seat lecture hall, a 325-seat multi-purpose room, conference rooms, break-out rooms, discussion rooms, training rooms, large teleconferencing rooms, conference management offices, and a business center. Construction Cost: TBD.

**Department of State Modernization - Harry S. Truman Building**

**Director of Inteirors:** Responsible for programming, space planning, interior design, and tenant fit out for the full renovation of the U.S. Department of State’s Harry S. Truman Building. The renovation of the 810,000 square foot office building incorporates the latest technology in blast protection, sustainability relative to green materials and energy conservation. Supplemental services included programming, blocking plans, space planning and interior design. Contract Value: $194,000,000.

**Federal Bureau of Investigation - Town and Pavilion Entrance - J. Edgar Hoover Building**

**Director of Inteirors:** Responsible for programming, space planning and interior design. The FBI Town and Entrance Pavilion will encompass gallery space, theater and dressing rooms, library and gift shop. Construction Cost: $8.5 million.

**Department of State Multi-Media Services, FARA, and Medical Unit**

**Director of Inteirors:** Responsible for programming and interior design. Renovation of more than 12,000 square feet of interior space for office units in the Harry S. Truman Building. The Office of Multi-Media Services, Foreign Affairs Recreation Association and Medical Unit required different programmatic needs to accommodate work functions of each office. The project scope included programming, space planning, tenant fit out and mechanical, electrical, and fire systems upgrades. Construction Cost: $200,000.

**Architect of the Capitol IDIQ Contract**

**Director of Inteirors:** Responsible for the space planning, interior design, and FF&E for a five-year IDIQ contract for a variety of projects at the AOC Complex. Projects have included surveys, master planning, programming, space planning, design, life safety, roofing, and drainage. Construction Cost: TBD.
E. Mitchell Buck
Construction Administrator

RESUMES

EDUCATION
BS | Architecture | University of Cincinnati | 1971

YEARS WITH CURRENT FIRM
26 Years

YEARS WITH OTHER FIRMS
13 Years

SECURITY CLEARANCE LEVEL
Top Secret

REPRESENTATIVE PROJECT EXPERIENCE

Department of State Modernization - Harry S Truman Building
Project Manager / Construction Administrator: Responsible for day-to-day operations, coordination with consultants and construction documents. The modernization includes over 887,000 sq ft of renovated space, including a 56,000 sq ft conference center and auditorium, and 60,000 sq ft of office space. Construction Cost $165,000,000.

Archives of the Capitol EEQ Contract
Project Manager: Responsible for day-to-day operations, coordination with consultants and construction documents. A four-year EEQ contract for a variety of projects at the AOC Complex. Projects include surveys, master planning, programming, space planning, systems, life safety, cooling, and elevators. Construction Cost N/A

Federal Bureau of Investigation - J. Edgar Hoover Buildings
Project Manager / Construction Administrator: Responsible for day-to-day operations, coordination with consultants and construction documents. A large-scale renovation to the 3rd and 10th floors of the J. Edgar Hoover (JEE) Building (125,000 sq ft), this project accommodates new and expanded space in an 85% ratio of open to private offices. Construction Cost $50,000,000.

Columbia Plaza Office Building Renovation
Project Manager / Construction Administrator: Responsible for day-to-day operations, coordination with consultants and construction documents. A mixed-use building housing a retail office tower and a hotel, the Columbia Plaza renovation/modernization included a 20,000 sq ft office space renovation, furniture selection, new generator system, a new cafeteria and a remodeled clubhouse. Construction Cost N/A

Old City Hall / DC Courthouse Renovation
Project Manager / Construction Administrator: Responsible for day-to-day operations, coordination with consultants and construction documents. The project involved several studies on the condition of the Old DC Courthouse and the feasibility of modernization and relocation of the District of Columbia Court of Appeals to the Historic DC Courthouse building on Judiciary Square. The original report was modified in 2001 to reflect the National Law Enforcement Museum Act, and to develop a new budget cost for the project. Construction Cost $15,000,000.
RESUMES

Blair A. Jost, PE  
Principal Engineer (Mechanical, Electrical, Plumbing)

E.K. FOX & ASSOCIATES  
Fairfax, VA

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Registered Professional Engineer: DC, VA, MD, CO, WA, TX  
Member: ASHRAE, NSPE, CSI

YEARS WITH CURRENT FIRM  
29 Years

YEARS WITH OTHER FIRMS  
0 Years

EDUCATION
MEM  |  Engineering Management  
The George Washington University | 1999
BSME  |  Mechanical Engineering  |  Virginia Tech | 1981

SECURITY CLEARANCE LEVEL  
Top Secret

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitor’s Screening Center and Conference Center  
Principal MEP Engineer: Provided project management and design oversight for mechanical, electrical and plumbing systems design for the new 12,000 square foot Visitor Center that will replace the existing visitor entrance at the Eccles Building, and the current entrance to the Eccles-Martin complex located at the Martin Building. The 40,000 square foot Conference Center includes a 75-seat lecture hall, a 325-seat multi purpose room, conference rooms, board rooms, and a business center. Construction Cost: TBD.

Architect of the Capitol IDIQ Contract  
Principal MEP Engineer: Responsible for the project oversight and detailed MEP design for a four-year IDIQ contract for a variety of projects at the Architect of the Capitol complex. Projects have included surveying, tenant modifications, space planning, energy, life safety. Construction Cost: TBD.

National Association of Realtors Headquarters  
Principal MEP Engineer: Responsible for project oversight and detailed MEP design of a multi-story, mixed-use building located at 500 New Jersey Avenue NW in Washington, DC. This 12-story, 90,045 square foot project replaced an existing “brown-field” site and achieved a Silver LEED rating. Material cost: $73,500,000.

Federal Bureau of Investigation (FBI)  
Principal MEP Engineer: Responsible for project oversight and detailed MEP design of a large-scale interior renovation to the 3rd and 4th floors of J. Edgar Hoover (JEH) Building (US$5,000,000); this project accommodates new and rapidly expanding missions. Construction Cost: $65,000,000.

Navy League of the United States Headquarters  
Principal MEP Engineer: Responsible for project oversight and detailed MEP design of a new suburban office building located at 2000 Wilson Boulevard in Arlington, Virginia. This 7-story, 217,000 square foot project was located in a tight suburban city center site and achieved a Silver LEED rating. The project serves as the headquarters facility for the 60,000 member citizen organization. Construction Cost: $31,000,000.
# RESUMES

## Eugene J. Collins, PE

**Johns & Bhata Structural Engineers, Ltd.**  
Sedrova, MD

<table>
<thead>
<tr>
<th>Professional Registrations / Memberships</th>
<th>Years with Current Firm</th>
<th>Years with Other Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Engineer: MD, DC, VA</td>
<td>21 Years</td>
<td>14 Years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education</th>
<th>Security Clearance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS</td>
<td>Civil Engineering</td>
</tr>
</tbody>
</table>

## Representative Project Experience

**Federal Reserve Visitor's Screening Center and Conference Center**

**Lead Structural Engineer:** Provided structural engineering and design for the new 12,000 square foot Visitor Center. Will replace the existing visitor entrance at the Eccles Building, and the current entrance to the Eccles-Martin complex located at the Martin Building. The 2,000 square foot Conference Center includes a 75 seat lecture hall, a 525 seat multi-purpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference management offices, and a business center.  
Construction Cost: TBD

**Martha Washington Library Renovation**

**Lead Structural Engineer:** Responsible for structural engineering involving the design of a renovation and two additions to the existing library. Both additions are one-story structures. One addition consists of existing bearing walls with steel roof framing. The other addition consists of concrete columns with steel roof framing.  
Construction Cost: $1,000,000

**U.S. Department of State Harry S Truman Building**

**Lead Structural Engineer:** Responsible for structural engineering for various projects including a new auditorium, office renovations, and a new upgrade for the Main State Building in Washington, D.C. Provided structural design and construction documents for all of the projects.  
Construction Cost: $7,000,000

**Georgetown Library Structural Upgrades**

**Lead Structural Engineer:** Responsible for structural engineering including a site survey, design and construction documents for a structural upgrade of a steel frame structure with lead bearing masonry walls in order to put a new stair in the Georgetown library. The upgrade involved providing new steel members (beams, columns, etc.) to support the new stair, and upgrading the existing building to meet the new loads that result from installing the stair.  
Construction Cost: $1,000,000

**National Courts Building / Window Blast Hazard Mitigation**

**Lead Structural Engineer:** This project required designing steel retrofit systems in order to retrofit existing windows to resist blasts. The design consisted of re-constructing the windows by fitting frames consisting of steel members that resist the blast pressures and preventing the windows from breaking during a blast event.  
Construction Cost: N/A
RESUMES

Donald Hopkins, PE
Lead Fire Protection Engineer

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Registered Fire Protection Engineer
MD, DC, NY, CA, NJ
Registered, National Council for Engineering & Surveying (NCEES)
Member, National Fire Protection Association (NFPA)
Member, Society of Fire Protection Engineers

YEARS WITH CURRENT FIRM
10 Years

YEARS WITH OTHER FIRMS
6 Years

EDUCATION
BS | Fire Protection Engineering | University of Maryland
MS | Fire Protection Engineering | University of Maryland

SECURITY CLEARANCE LEVEL
Top Secret

REPRESENTATIVE PROJECT EXPERIENCE
Federal Reserve Visitor Screening Center and Conference Center
Lead Fire Protection Engineer / Code Consultant: Fire protection engineering and code consulting services for the new 12,000 square foot Visitor Center that will replace the existing visitor entrance at the Eccles Building, and the current entrance to the Eccles-Martin complex located at the Martin Building. The 40,000 square foot Conference Center includes a 25-seat lecture hall, a 325-seat multi-purpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference manager and staff offices, and a business center. Construction Cost TBD

Eisenhower Executive Office Building Modernization
Fire Protection Engineer / Code Consultant: Responsible for code analysis and development of fire sprinkler system and fire alarm system design documents. Contract Fee: $272,000

Faucett's Main Headquarters Building
Lead Fire Protection Engineer / Code Consultant: Responsible for fire protection engineering and code consulting services for the replacement of the fire alarm systems and a feasibility study for a new notification system. Contract Fee: $94,000

U.S. Department of State - Multiple Buildings
Fire Protection Engineer / Code Consultant: Responsible for code review and design of fire safety systems with specifications, cost estimates and construction administration services. Contract Fee: $103,000

Bureau of Printing & Engraving
Fire Protection Engineer / Code Consultant: Responsible for fire safety consulting services for restorers, including: a survey of D-206, reviewing fire alarm and sprinkler system design and specifications, and architectural and electrical drawings (existing signage and emergency lighting); and, reviewing 60% drawings and specifications submitted for fifth floor restorations. Construction Cost: N/A
RESUMES

Rafael T. Cervantes, PE
Lead Civil Engineer
CERVANTES & ASSOCIATES, PC
Chantilly, VA

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Professional Engineer: MD, DC, VA

YEARS WITH CURRENT FIRM
20 Years

YEARS WITH OTHER FIRMS
16 Years

EDUCATION
BS | Civil Engineering | 1975
Land Surveyor | Instituto De Camaguey, Cuba | 1977

SECURITY CLEARANCE LEVEL
Top Secret

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitor Screening Center and Conference Center
Principal Civil Engineer: Responsible for project oversight and site development for the new 12,000 square foot Visitor Center that will replace the existing visitor entrance at the Eccles Building, and the current entrance to the Eccles-Marin complex located at the Marin Building. The 40,000 square foot Conference Center includes a 75-seat lecture hall, a 125-seat multipurpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference management offices, and a business center. Construction Cost: TBD.

902 MD MI Brigade Headquarters - Fort Meade, MD
Lead Civil Engineer: Responsible for leading the project and providing a secure, functionally efficient, flexible and expandable military intelligence brigade headquarters and operations center with adequate work areas for military intelligence personnel. Preliminary design of building location, utility extensions, parking, landscaping and storm water management were included in the 10% design effort. Project Cost: $6,900,000.

National Institutes of Health Building 10 Revitalization Program - Bethesda, MD
Principal in Charge: Lead the revitalization of the NIH’s Building 10 and design of the planning recommendations. All aspects of the facility were analyzed and explored including programmatic requirements, utility infrastructure requirements, engineering support systems, campus transportation, and site requirements. Project Cost: $6,900,000.

Mount Weather Emergency Operations Center IDIQ - Mt. Weather, VA
Principal Civil Engineer: Responsible for project oversight and detailed design of a new administrative office building located at 2000 Wilson Boulevard in Arlington, Virginia. This 7-story, 225,000 square foot project was located on a tight suburban city center site and achieved a Silver LEED rating. The project serves as the headquarters for the 40,000 member citizens organization. Construction Cost: $30,000,000.

Spanish Cultural Center - Washington, DC
Principal Civil Engineer: Responsible for project oversight and site development of a former Spanish Embassy site in Northwest DC. The site has remained unused for a period of 15 years and the new development goal is to convert the former Embassy into a cultural arts center. The project requires upgrades to all existing utility services and compliance with current development standards including on-site stormwater management. Construction Cost: $15,000,000.
Jack West  
Lead Cost Estimator  
PROJECT MANAGEMENT SERVICES INC (PMS)  
Rockville, MD  

YEARS WITH CURRENT FIRM: 9 Years  
YEARS WITH OTHER FIRMS: 30 Years  
SECURITY CLEARANCE LEVEL: Top Secret

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitors Screening Center and Conference Center  
Senior Cost Estimator: Responsible for concept cost estimates for the new 12,000 square foot Visitor Center that will replace the existing visitor entrance at the Eccles Building and the current entrance to the Eccles-Martin complex located at the Martin Building. The 40,000 square foot Conference Center includes a 75-seat lecture hall, a 325-seat multi-purpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference management offices, and a business center.  
Construction Cost: $140,000,000

National Maritime Intelligence Center (NMIC) Renovation  
Senior Cost Estimator: Responsible for concept estimates for renovation and expansion at NMIC for building additions. 100% BPAF estimate for the three projects that make up the total NMIC work planned, which include the building additions, the renovation of the existing building, and the expansion and repairs to the parking garage. Draft and Final BPAF estimates for the garage renovation and expansion portion.  
Construction Cost: $60,000,000

U.S. Naval Research Lab Relocation for Center for Computational Science  
Senior Cost Estimator: Responsible for a pre-final study cost estimate and final study cost estimate for the Naval Research Laboratory in DC who is planning a move to relocate the Center for Computational Science.  
Construction Cost: $120,000,000

U.S. Naval Academy Ring Hall  
Senior Cost Estimator: Responsible for planning concepts, 100% and final design phase cost estimates for $20 million renovation to 60,000 sf of the main dining hall and kitchen.  
Construction Cost: $20,000,000

NOYES Ten Year Comprehensive Master Plan  
Senior Cost Estimator: Responsible for budget estimates and final submission budget estimates for a ten year master plan for improvements needed at the U.S. Naval Observatory in Washington, DC.  
Construction Cost: $2,000,000

U.S. Naval Academy Peeble Hall  
Senior Cost Estimator: Responsible for cost estimates at the concept phase, the 30% design phase, 100% design phase, and final design estimate with modifications (major architectural revisions and added civil work) for the renovation of Peeble Hall which included the rehabilitation of the historic museum. Final building cost is $48,000,000.  
Construction Cost: $13,000,000
RESUMES

Neil Thompson Shade
Lead Acoustical Consultant

ACOUSTICAL DESIGN COLLABORATIVE
Baltimore, MD

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Member, Institute of Noise Control Engineers
Member, Acoustical Society of America

YEARS WITH CURRENT FIRM
19 Years

YEARS WITH OTHER FIRMS
10 Years

EDUCATION
BS | Audio Technology & Acoustics | American University | 1981

SECURITY CLEARANCE LEVEL
N/A

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitors Screening Center and Conference Center
Lead Acoustical Consultant: Responsible for room acoustics, HVAC noise control, sound isolation, and audio/visual systems design for the new 12,000 square foot Visitors Center that will replace the existing visitor entrance at the Eccles Building, and the current entrance to the Eccles Martin complex located at the Martin Building. The 40,000 square foot Conference Center includes a 75-seat lecture hall, a 325-seat multi-purpose room, conference rooms, board room, crew room, training room, video teleconferencing rooms, conference management offices, and a business center.

Norfolk Consolidated Courthouse Complex
Lead Acoustical Consultant: Responsible for room acoustics, HVAC noise control, sound isolation, and audio/visual systems design for a city court complex including twelve courtrooms, judicial chambers, jury deliberation rooms, and offices. Construction Cost $55,000,000.

New US Federal District Courthouse - Washington, DC
Lead Acoustical Consultant: Responsible for room acoustics, HVAC noise control, sound isolation, and audio/visual systems design for a court complex including ten courtrooms, judicial chambers, jury deliberation rooms, and offices. Construction Cost $90,000,000.

Georgetown Federal Courthouse - Baltimore, MD
Lead Acoustical Consultant: Responsible for room acoustics, HVAC noise control, sound isolation, and audio/visual systems design for a court complex including ten courtrooms, judicial chambers, jury deliberation rooms, and offices. Construction Cost $45,000,000.

Department of the Interior EEOQ Project
Lead Acoustical Consultant: Responsible for room acoustics, sound system, and noise control design for miscellaneous EPA projects including stenographers and park support buildings. Construction Cost $7,000,000.
RESUMES

James T. Brokaw, PE
Lead Security Consultant

APPLIED RESEARCH ASSOCIATES, INC
Alexandria, VA

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Professional Engineer (PE)
EIT Certification

YEARS WITH CURRENT FIRM
16 Years

YEARS WITH OTHER FIRMS
2 Years

EDUCATION
MS | Civil Engineering | West Virginia University | 1992
BS | Civil Engineering | West Virginia University | 1989
AAS | Civil Engineering | West Virginia University | 1988

SECURITY CLEARANCE LEVEL
Secret

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Various Screening Centers and Conference Center
Lead Blast Engineer: Responsible for blast security design concepts for the new 12,000 square foot Victor Center that will replace the existing visitor entrance at the Eero Saarinen-designed Chicago Federal Reserve Bank. The current entrance is located near the Celebrity Building. The new 40,000 square foot conference center includes a 75-seat lecture hall, a 325-seat multi-purpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference management offices, and a business center.

Construction Cost: TBD

General Services Administration | Blast Assessments (Various Facilities)
Lead Blast Engineer: Responsible for working directly with the GSA and numerous firms to provide blast assessments for over 80 GSA courthouses and buildings across the country. These projects include performing building surveys, blast analysis, and developing conceptual retrofit approaches to mitigate the hazards as required by the scope of work. Project Cost: $8,000,000 (5 years)

Blast and Security Consulting for 30th Street Post Office - Philadelphia, PA
Lead Blast Engineer: Responsible for blast security in a complete modernization of the Philadelphia 30th Street Post Office Building intended to be a facility leased by the General Services Administration (GSA). To meet the requirements of the ISG Security Design Criteria, blast analysis and design is required for the core and shell elements. Project Cost: $144,001

Department of Transportation Headquarters Build-to-Lease Security and Blast Mitigation
Lead Blast Engineer: Responsible for maintaining a high level of protection through the design of planning and building for the new Headquarters building with respect for blast protection, vibration control, and physical security systems design. ASK addressed the blast mitigation and progressive collapse aspects of the project as well as providing security system design support and design reviews of the building shell buildout for security-related issues. Project Cost: $80,000

NIH CR Bill Young Center for BR Defense | Threat and Vulnerability Analysis
Lead Blast Engineer: Responsible for providing a vulnerability analysis for a new laboratory complex in the Bethesda, MD NIH campus to expand its research programs. As a new construction project, the complex requires a security risk assessment to determine the proper level of protection according to the Interagency Security Committee Security Design Criteria. (150,000 ft²), Project Cost: $7,000,000

NIH CR Bill Young Center for BR Defense | Threat and Vulnerability Analysis
Lead Blast Engineer: Responsible for providing a vulnerability analysis for a new laboratory complex in the Bethesda, MD NIH campus to expand its research programs. As a new construction project, the complex requires a security risk assessment to determine the proper level of protection according to the Interagency Security Committee Security Design Criteria. (150,000 ft²), Project Cost: $7,000,000
RESUMES

Jerome Cloud, FSEGD
Lead Signage Designer
CLOUD GEISHAN ASSOCIATES
Philadelphia, PA

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Fellow, Society for Environmental Graphic Design
Member, Design Management Institute

YEARS WITH CURRENT FIRM
24 Years

YEARS WITH OTHER FIRMS
8 Years

EDUCATION
MPS | Design Management | The Pratt Institute | 2001
BFA | Graphic Design | The University of the Arts | 1979

SECURITY CLEARANCE LEVEL
N/A

REPRESENTATIVE PROJECT EXPERIENCE

Weill Cornell Medical College
Lead Signage Designer: Responsible for the design and implementation of an integrated door recognition design with names of offices etched into steel, brass, glass and other surfaces. A complete wayfinding system is efficient and discreet in the office interior space, with the incorporation of a directory system making the building more user-friendly.

Thomas Jefferson University | Dorrance H. Hamilton Building
Lead Signage Designer: Responsible for the design and implementation of all signage and wayfinding for a 350,000 square foot campus building. Design include a door recognition system, a comprehensive interior sign system and a gateway signage component to differentiate the hospital and campus buildings.

Coffey Translational Research Center | The Children’s Hospital of Philadelphia
Lead Signage Designer: Responsible for the design of all signage and wayfinding for this 450,000 square foot building. Eco-friendly sign faces include recycled content while glass bead block and raised lettering are inset into the surface of signage elements. Signage for laboratory spaces have been designed for regular updates using replaceable templates.

University of Virginia School of Law
Lead Signage Designer: Responsible for the design of extensive system of interior and exterior donor recognition elements with floor medallions in granite, slate and bronze plus major gifts; other elements combine bronze and etched glass. Additionally, special lighting was added to highlight the signs.

Kimmel Center for the Performing Arts
Lead Signage Designer: Responsible for the design of signage and wayfinding for this performing arts center. Signage looking to “humble” users of the center were implemented with illuminated LED lighting for enhanced visibility and were tested for legibility and scale during design development.
RESUMES

L. Dan Bendall, FSCI
Lead Food Service Consultant

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Member, Food Service Consultants Society International
Member, Society of Marketing Professionals
Member, Council Hotel Society

YEARS WITH CURRENT FIRM
7 Years

YEARS WITH OTHER FIRMS
21 Years

EDUCATION
BS | Hotel Administration | Cornell University | 1981

SECURITY CLEARANCE LEVEL
Secret (Pending)

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitors Screening Center and Conference Center
Lead Food Service Consultant: Responsible for providing foodservice plans for the new 12,000 square foot Visitors Center that will replace the existing visitor entrance at the FDR Building, and the current entrance to the FDR-Martin complex located at the Martin Building. The 14,000 square foot Conference Center includes a 375-seat lecture hall, a 325-seat multi-purpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconference rooms, conference management offices, and a business center.

U.S. Department of State - Main State
Lead Food Service Consultant: Responsible for providing foodservice plans for the supporting kitchens in the new “Old State” building George C. Marshall Conference Center. The kitchen facility would be used internally or by outside vendors. The space includes a small dishwash area and a full kitchen.

U.S. Department of Homeland Security
Lead Food Service Consultant: Responsible for developing the foodservice program and design documents for a new foodservice operation at the Nebraska Avenue Complex. The building was designated historic and many features were required to be unaffected adding to the complexity of planning a new facility. The space, completed in 2003, includes a walk-up service counter for hot and cold foods, beverage area, separate coffee counter open after hours, and a full kitchen. The facility has proven successful with patron counts up about 20% compared to pre-reconstruction traffic.

Northrop Grumman Electronic Systems Group
Lead Food Service Consultant: Food Strategy led by Dan Bendall has been responsible for four projects with Northrop Grumman’s group including a survey of equipment and facilities at a new dining operation, a survey of foodservice and sanitation criteria, and design of a quick-service dining operation in their new West Wing Office and Life building. The new operation was planning on the ground floor in an area of lesser security to enable visitors easy access to the space. The operation serves items like pasta, Panini, deli sandwiches, salads, and beverages of all sorts in a compact but very efficient space.

Baltimore-Washington International Airport
Lead Food Service Consultant: Responsible for developing space allocation and concept for foodservice and restaurants in the new A-B terminal of the BWI Airport through a DBQ with the Maryland Aviation Administration. The terminal will have over 71,000 square feet of foodservice area when the build-out is completed.
# RESUMES

**Courtney S. Sarge**  
**IESNA, LEED® AP**  
Lead Lighting Consultant  
Grenald Waldron Associates  
Philadelphia, PA

**PROFESSIONAL REGISTRATIONS | MEMBERSHIPS**  
LEED® Accredited Professional  
Member, Illuminating Engineering Society of North America

**YEARS WITH CURRENT FIRM**  
15 Years

**YEARS WITH OTHER FIRMS**  
3 Years

**EDUCATION**  
BA Interior Design | More College of Art & Design | 1992

**SECURITY CLEARANCE LEVEL**  
N/A

---

**REPRESENTATIVE PROJECT EXPERIENCE**

**Princess Noura Bint Abdulrahman University for Women**  
**Project Manager:** Responsible for conceptual design, lighting layouts, fixture specification, and control layout of interior spaces and exterior plans for an academic building within the Health Sciences portion of the campus project. Construction Cost: TBD.

**US Department of State | Exterior Lighting Standards for Foreign Office Buildings**  
**Project Manager:** Responsible for the development of safety and security guidelines, and standards for entrance at embassies and consulates for the United States. The guidelines document incorporated lighting concept approaches, guidelines for source selection, light distribution and illumination intensities in verbal format along with graphic descriptions. Construction Cost: N/A.

**US Spain House | Interior and Exterior Renovation and Renovation**  
**Project Manager:** Responsible for lighting design, lighting layouts and mounting details, control panel, fixture specifications, and coordination for interior public spaces including the lobby, auditorium, exhibit space, café, temporary exhibit and gathering space, adjacent site and parking areas including facade lighting.  
Construction Cost: N/A.

**Woodcock & Nashburn, LLC**  
**Project Manager:** Responsible for client contact, lighting design, coordination of layouts, specifications, detailing and control layout with the entire design team for seven floors of enclosed and open offices, conference rooms, library, employee business service areas, circulation, toilet rooms and server.  
Construction Cost: $7,500,000.

**Lincoln Financial Group | Commercial Office Renovation**  
**Project Manager:** Responsible for client contact, lighting design, coordination of layouts, specifications, detailing and control layout with the entire design team for two floors of enclosed and open offices, conference rooms, video conference rooms, circulation and toilet rooms.  
Construction Cost: N/A.
RESUMES

Kevin Williams, PE, CSP
Lead Fall Protection Consultant
LJB, INC.
Philadelphia, PA

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Certified Safety Professional (CSP)
OSHA Qualified
Member, American Society of Safety Engineers (ASSE)
Member, National Safety Council

YEARS WITH CURRENT FIRM
17 Years

YEARS WITH OTHER FIRM
0 Years

EDUCATION
MS | Civil Engineering | University of Toledo | 1993
BS | Civil Engineering | University of Toledo | 1991

SECURITY CLEARANCE LEVEL
N/A

REPRESENTATIVE PROJECT EXPERIENCE

U.S. House Office Buildings
Project Manager: Responsible for managing the preparation of construction documents for the installation of rigid and fall protection systems. These systems provide safe access for performing building roof and facade maintenance. To coordinate construction tasks, a portion of the fall protection project is being performed in conjunction with a roof replacement project.
Total square footage of the 4 buildings roofs = 546,793; Construction cost: N/A

U.S. Supreme Court
Project Manager: Responsible for managing the preparation of construction documents for the installation of active and passive fall protection systems on various roof levels of the Supreme Court. Due to the historic nature of the building, the passive fall protection systems included design of a folding guardrail that is hidden when not in use. The fall protection system construction was incorporated into a roof retention project to facilitate construction of both systems. Total square footage of roof area protected: 109,943; Construction cost: N/A

U.S. Capitol Building
Project Manager: Responsible for managing the preparation of construction documents for the installation of horizontal lifelines, rigid rail, and fixed platform fall protection systems for various fall hazards related to roof and facade maintenance. Part of the project included the design of renovation to the attic space under the East Face Hippodrome, which improved safety in addition to allowing the removal of a poorly designed guardrail on the roof around the flag pole. Total square footage of roof area covered: 135,254; Construction cost: N/A

Smithsonian Arts & Industries Building
Project Manager: Responsible for the preparation of construction documents for incorporating fall protection for roof access. The project involved the implementation of fall protection elements, including horizontal lifelines, fixed ladders and guardrails, while respecting the historic nature of the facility. Total roof area = 304,000 square feet; Construction cost: N/A.
RESUMES

Eric D. Groft, ASLA
Lead Landscape Architect
CHERNE VAN SWEDEN & ASSOCIATES
Washington, DC

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Registered Landscape Architect: NY, CT, VA, IN

YEARS WITH CURRENT FIRM
20 Years

YEARS WITH OTHER FIRMS
9 Years

EDUCATION
MLA | Landscape Architecture | University of Virginia | 1984
BA | Environmental Science | St. John's College | 1979

SECURITY CLEARANCE LEVEL
N/A

REPRESENTATIVE PROJECT EXPERIENCE

Virginia Avenue Gardens | Federal Reserve System
Principal Landscape Architect: Responsible for providing design services for the five-acre campus. Security issues and upgrades included maintaining tight lines, controlling pedestrian and vehicle access, directing circulation, locating guard stations, and improving lighting. Clusters were designed in the style of the buildings, and turf planters that incorporate benches and walls protect the federal site without destroying the visual integrity of the architecture or the landscape. The approval process included reviews by the National Commission of Fine Arts and the National Capital Planning Commission. Construction Cost: $3,500,000.

National Association of Realtors Headquarters
Principal Landscape Architect: Responsible for providing design services for NAR, which occupies a prominent, one-acre site just a few blocks away from the National Capital in Washington, D.C. Features include gardens and fountains at ground level and on the building's roof. A 2005 Silver Rating Awarded by the U.S. Green Building Council cites the NAR project as one of the nation's most environmentally friendly. This Leadership in Energy and Environmental Design (LEED) award recognizes a state-of-the-art irrigation system, which uses recycled roof water; as well as the project's advanced techniques of sustainable planting, which include tree placement to "structural soil" to promote long-term growth. Construction Cost: $2,000,000.

United States Embassy - Bridgetown, Barbados
Principal Landscape Architect: Responsible for site layout and landscape design for the United States Embassy compound in Bridgetown, Barbados. The design featured formal court entry sequences, accessible terraces and walkways, perimeter security and Consultant annual garden. Construction Cost: $3,000,000.

Alderman Library Quadrangle - University of Virginia
Principal Landscape Architect: Responsible for landscape design of a five-acre quadrangle. The design features a pedestrian esplanade along a main axis formed by Alderman Library and Alumni Hall, which is an expansive lawn adjacent to Pack Hall, where student parking occurs, and a curvilinear path system that traces student preferred routes. Construction Cost: $2,000,000.
RESUMES

Benson Kwong, PE, LEED®AP
PROJECT MANAGEMENT SERVICES INC. (PMSI)
Rockville, MD

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Professional Engineer, MD, NY, CA
Certified Energy Manager | LEED® Accredited Professional
Certified Value Specialist | Certified Cost Estimator

YEARS WITH CURRENT FIRM
14 Years

YEARS WITH OTHER FIRMS
14 Years

EDUCATION
MS | Electrical Engineering | Georgia Institute of Technology | 1994
MBA | University of Southern California | 1986
MS | Thermal Science and Energy | University of California, Berkeley | 1980
BS | Mechanical Engineering | University of Maryland, College Park | 1980

SECURITY CLEARANCE LEVEL
Top Secret

REPRESENTATIVE PROJECT EXPERIENCE

U.S. Capitol | Rayburn House Office Building Roof
Sustainability Consultant: Responsible for sustainability consulting and performed a life cycle cost analysis of proposed roof replacement for the Rayburn Building. Various options were studied, including BIPV roofing system with vegetative roof and a fully insulated system. Initial assessment of energy, maintenance and replacement costs for each system were analyzed. Using the Building Life Cycle Cost (BLCOC) financial analysis tool performed. Construction Cost: N/A

Bureau of Engineering and Printing
Sustainability Consultant: Responsible for creating a DOE-2 energy model for the main building and ancillary areas of the Bureau. Assisted in developing the Bureau's energy management plan. The 120,000 square foot building contains mostly industrial spaces, office space, printing operations, and efficient lighting systems. Total energy savings from the renovations projected to be 4%

Construction Cost: N/A

Jacob Javits Federal Building | New York, NY
Sustainability Consultant: Responsible for performing a life cycle cost analysis for the window replacement for the 100,000 square foot building. The DOE-2 energy model and calibration of the model using utility records, and projection of energy savings provides the overall life cycle cost benefits of the project. Construction Cost: N/A

Remodeling of Building EJ750 | Aberdeen Proving Ground, MD
Sustainability Consultant: Responsible for the coordination of LEED documentation for the 50,000 square foot design-build office building. Used a DOE-2 model, the project documented 30% energy savings. Construction Cost: N/A

Nix Courthouse Lighting Renovation | Philadelphia, PA
Sustainability Consultant: Responsible for performing a life cycle cost analysis for the lighting conversion of the first floor of the courthouse. The study showed 50% lighting energy savings, cost savings in maintenance and an overall life cycle cost savings of $90,000.

Construction Cost: N/A
## RESUMES

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>David A. Fyffe, PE</td>
<td>SEAL ENGINEERING, INC</td>
<td>Alexandria, VA</td>
</tr>
</tbody>
</table>

### PROFESSIONAL REGISTRATIONS | MEMBERSHIPS

- Professional Civil Engineer: DC, MD, VA, WV

### YEARS WITH CURRENT FIRM
- 19 Years

### YEARS WITH OTHER FIRMS
- 6 Years

### EDUCATION
- BS (Civil Engineering) | Clarkson University | 1994

### SECURITY CLEARANCE LEVEL
- Secret

### REPRESENTATIVE PROJECT EXPERIENCE

**Federal Reserve Visitors Screening Center and Conference Center**

**Senior Cost Estimator:** Responsible for investigating and roof design concepts for the new 12,000 square foot Visitor Center that will replace the existing visitor entrance at the Eccles Building, and the current entrance to the Eccles-Martin complex located at the Martin Building. The 12,000 square foot Conference Center includes a 75-seat lecture hall, a 325-seat multi-purpose room, conference rooms, break-out rooms, dance rooms, training rooms, video teleconferencing rooms, conference management offices, and a business center.

**White House | East and West Wing Roof Replacement**

**Lead Waterproofing Consultant:** Responsible for investigation and design of wing terrace roof replacement and upper office roof replacements. Also performed study on existing roof damage system.

Project Cost: $650,000.

**Supreme Court Roof Study and Repair Design**

**Lead Waterproofing Consultant:** Responsible for performing comprehensive study of existing conditions at the various conventional and historic roofing systems on the building. Result of study was a focused approach to addressing all roofing systems (repairs and replacements) in a phased manner to minimize impact on the occupied facility. Completed design of recommended repairs and replacements and are currently working on preparing a contract document package for immediate roof maintenance & repairs. Project Cost: $300,000.

**Corcoran Gallery of Art Roof Replacement**

**Lead Waterproofing Consultant:** Responsible for investigation, design and construction phase for roof replacement. Working closely with Historic Preservation Architect, Owner, Skylight System Replacement Designer and Construction Manager to design long term solutions to structural problems while responding to both the historic fabric of the building and the Owner's need for maximum occupancy. Also prepared contract document package for immediate roof maintenance & repairs. Project Cost: $500,000.

**USDA Headquarters Complex Roof Replacements**

**Lead Waterproofing Consultant:** Responsible for roofing and waterproofing projects at USDA Headquarters complex under various term contracts since 1990. Performed comprehensive flat roofing survey and prepared study report outlining 20 year program for maintenance, repair, and replacements. Recently completed design and construction phase on five of these roof system replacements, including two on the historic J. Walter Reuther Headquarters Building on the National Mall. Serves as a team member for the comprehensive building modernization project and has performed numerous leak investigations and small repair projects throughout the facility. Project Cost: Roof $1,100,000.
RESUMES

Donald M. Bailey
Lead Communications Specialist

TECHNOLOGY DESIGN RESOURCES
Fairfax, VA

PROFESSIONAL REGISTRATIONS | MEMBERSHIPS
Associate Member, American Institute of Architects
Member, International Communications Industries Association

YEARS WITH CURRENT FIRM
8 Years

YEARS WITH OTHER FIRMS
59 Years

EDUCATION
BS | Radio/TV/Film | University of Kansas | 1996

SECURITY CLEARANCE LEVEL
N/A

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitors Screening Center and Conference Center
Audio Visual Consultant: Responsible for the design of the audio visual components for the new 12,000 square foot Visitors Center that will replace the existing visitor center at the Eccles Building, and the associated escort to the Eccles-Martin complex located at the Martin Building. The 12,000 square foot Conference Center includes a 75-seat lecture hall, a 325-seat multi-purpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference management offices, and a business center.

John Hopkins University | Carey Business School
Audio Visual Consultant: Responsible for the design and supervision of the installation of upgraded classroom systems in single classrooms, split classroom and Executive Conference Rooms. Systems include all digital processing and touch panel control systems. A video teleconferencing system was installed in the Executive Conference Room.

Soochon Language and Communications Center
Audio Visual Consultant: Responsible for the design of the audio visual components for the new three-story building that houses classrooms and offices in a two-year-old building. The new concept goes beyond merely adopting a structure to meet the specific needs of deaf people to one that completely embodies the deaf way of hearing, audibly as well as practically. The voice/data and audio/video systems in the building were specifically designed with the deaf community in mind. Conference rooms and classrooms were provided with assistive listening systems, as well as many visual sign language studies.

U.S. Department of State Conference Center
Audio Visual Consultant: Responsible for the renovation of "Old State" a conference center with 6 describable rooms was added in addition to a 200-seat auditorium. Simultaneous interpretation systems were installed in all spaces. A video teleconferencing system was installed in one of the upgraded rooms.

University of Maryland College Park | Clarice Smith Performing Arts Center
Audio Visual Consultant: Responsible for the design of the performing arts center including vertical and horizontal data and voice plant, including a two-way CATV/MATV system. All classroom and small performing spaces audio video systems were designed. Project management and coordination of two vendors and supervision of all installation was required.
RESUMES

David R. Smith
Lead Vertical Transportation Consultant

VAN DEUSEN & ASSOCIATES
Washington, DC.

EDUCATION
BA Economics & Spanish | Indiana University of PA | 1990

YEARS WITH CURRENT FIRM
9 Years

YEARS WITH OTHER FIRMS
6 Years

SECURITY CLEARANCE LEVEL
N/A

REPRESENTATIVE PROJECT EXPERIENCE

Federal Reserve Visitors Screening Center and Conference Center
Lead Vertical Transportation Consultant: Responsible for the design of elevator transportation for the renovation of the new 12,000 square foot Visitor Center that will replace the existing visitor entrance at the Eccles Building, and the current entrance to the Eccles Marina complex located at the Martin Building. The 40,000 square foot Conference Center includes a 75-seat lecture hall, a 325-seat multi-purpose room, conference rooms, break-out rooms, classrooms, training rooms, video teleconferencing rooms, conference management offices, and a business center.

U.S. Capitol Master Plan
Lead Vertical Transportation Consultant: Responsible for a complete field survey of each elevator in the House of Representatives and the Senate and performed field traffic studies to analyze circulation problems for passenger and material elevators. The report contained short-term recommendations for reducing existing problems and provided a phased modernization schedule over 20 years and also addressed the impact of the new Capitol Visitor Center on the existing systems, as well the effects on new elevator doors using the existing building power supply.

GSA Regional Office Building
Lead Vertical Transportation Consultant: Responsible for the modernization of 12 geared traction elevators and for the addition of 3 new hole less hydraulic elevators (one serving 3 stops, and one serving 5 stops) in a $300 million renovation project that was completed in late 2005.

Smithsonian Institution-National Museum of Natural History
Lead Vertical Transportation Consultant: Responsible for evaluating the existing condition of 32 passenger and freight elevators and provide recommended upgrades to be implemented as part of a Master Plan over the next 10 years. Implementation of the plan’s Priorities 1, 2 and 3 is currently underway and involves full modernization of four (4) geared passenger elevators and 6 hydraulic and geared freight elevators, as well as a stub extension to two (2) passenger cars that had received a control modernization in 2000.

Emuzent/Coller Court House Modernization | Brooklyn, NY
Lead Vertical Transportation Consultant: Responsible for providing services for renovation of 7 elevators: three (3) geared passenger groups in the West side of the building that serve eight (8) stops; two (2) geared elevators (one on the East side and one on the West side) serve destinations, and one (1) geared elevator is for use by the judges.
June 17, 2011

CONTRACT 250548
MODIFICATION 18

Kari Charchia Chapman & Tweedy, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

<table>
<thead>
<tr>
<th>CLIN</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>Space Programming and Environmental Scan</td>
<td>$322,966.00</td>
</tr>
<tr>
<td>41</td>
<td>Other Direct Costs (Related to the Space Programming and Environmental Scan)</td>
<td>$10,912.00</td>
</tr>
</tbody>
</table>

The Space Programming and Environmental Scan services identified in CLIN 40 above shall be performed in accordance with Attachment 1 of the Board’s Request for Change Order Proposal dated March 29, 2011 (“Attachment 1”) and pages 1 through 4 of Section 1 of KCCT’s Revised Change Order Proposal dated May 31, 2011 (“May 31 Proposal”). Both Attachment 1 and those said portions of the May 31 Proposal are hereby incorporated into this Modification 18 by reference.

As a result of this Modification 18, the Contract value increases from $13,070,266.58 by $333,878 to a new contract total of $13,372,145.58.

Contractor shall reference “Contract 250548, Modification 18” and the appropriate CLIN number as noted above on all invoices and contract-related correspondence.
Except where herein modified, all other terms and conditions of the original Contract remain the same.

Very truly yours,

[Signature]

Kimberly M. Prince, C.P.M.
Supervisory Contracts Analyst
Contract 258548
Request for Change Order Pricing
Programming Services, Revision 2
Attachment 1

Discussion

It is the Board’s goal to provide a superior work environment that is productive and will attract and retain employees. To that end, the Board wishes to have the architectural/engineering contractor conduct a study to make recommendations as to the proper allocation of space (physical space allocation) and the appropriate environment for the employees.

The study shall examine at least three office arrangements to include an open floor plan, all (mostly) private offices, and a combination of the two previous arrangements. In addition, the A/E shall include the proper selection of amenities to be provided to the employees.

The study shall be organized in two parts:

1. Physical space allocation study

The Board requires the A/E to perform a thorough space planning study. The physical data for the office floors (one through four) will be prepared by the Board and available to the A/E. The A/E is not required to study the physical work requirements on office floors one (first floor above street), two, three, and four. The A/E shall interview the occupants of all other floors to include, but is not limited to the Penthouse, Terrace, 1G, 2G (concourse) 3G, and Mechanical floors. The interviews shall be to determine the nature and scope of the occupants work and any unusual requirements the occupants may have. The A/E shall compare the occupants work description with industry standards and practices, the Board’s goals, the amount of space available considering the other occupants and shall make recommendations as to the appropriate allocation (offices, storage, conference rooms, and the like) of space for the various occupant classifications.

As the programming of the visitors center and conference center was executed four years ago and the mission of the Board has changed in various ways the A/E shall revisit the programming of the conference center. The A/E shall verify the programming of the visitor center and conference center. Specifically the A/E shall conduct surveys and meetings to verify if the programming process is still accurate and anticipated screening equipment, room functions and relative sizes are still accurate and make changes to the visitor center and conference center plans as appropriate.

2. Environmental Scan

The A/E is to execute an environmental scan of all likely occupants of the Martin building on all floors. This part of the study shall consider the occupants work practices and preferences as well as likely future changes in work habits, and practices. The A/E shall recommend the appropriate atmosphere and interior working environment that would be most productive and will attract and retain staff. The A/E shall make recommendations based on current and traditional assumptions as to the appropriate physical office environment. The study shall have a discussion of collaborative and creative space, meeting space, and team rooms. The discussion of these spaces shall include if these spaces are applicable to the Board’s business environment and, if so, how
much space would typically be committed to these functions. The study shall examine the likely culture, work procedures, and habits that are likely to exist in five years and speculate on likely changes within the next 10 to 15 years.

**Deliverables**

The A/E will provide copies of proposed survey forms and meeting agendas along with proposed questions to be presented to the occupants. These shall be presented to the COTR and his/her appointed representatives no less than five (5) working days in advance of proposed meetings. The A/E will prepare two reports: a definitive space planning report incorporating both the physical space study and the environmental scan including a narrative with the A/E’s recommendations, explanations, reasoning, appropriate tables, and graphics showing accumulated data, a stacking plan for floors within the scope of the physical space allocation study, and references. This report shall include an executive summary of the findings and recommendations.

Under a separate cover, the A/E shall also provide a project programming executive summary incorporating the space programming with the mechanical, electrical, and all other programming and verification efforts for the project in one document. This report shall summarize the other reports with recommendations to the space programming and building systems recommended by the A/E and the reasoning behind the recommendations. The A/E shall include graphics, tables, and other information as the A/E and the COTR feel appropriate for executive management to be sufficiently informed on the proposed construction.

The Board requires draft copies at 50% complete and 90% complete in addition to the final of the definitive report. The Board requires five draft copies of the executive summary at 90% complete and an electronic copy. In addition, the Board shall deliver thirty copies of the executive summary final report and an electronic copy.

The A/E shall conduct an executive level briefing of the combined programming results. A/E shall plan on not less than two meetings with the Board in advance of the executive briefing to prepare.

**Schedules:** This work will run concurrently with the other programming and verification studies required in the Contract.

**Required Interviews and surveys**

Floors one through four

For the environmental scan of floors one through four the Board shall request each division to provide not more than 10 informed employees, including a senior management representative, to be interviewed for the environmental scan. Seven divisions shall be interviewed although all divisions may not occupy the building.
Contract 201548
Request for Change Order Pricing
Programming Services, Revision 2
Attachment 1

All other floors
The A/E shall perform a combined physical space allocation and environmental scan for all other floors. This would include the food services vendor, barber, beauty shop, convenience store (including vending machines), credit union, health unit (includes employee gymnasium and medical unit), law enforcement unit (LEU), mechanical section, maintenance section, facilities service office (FSO), print shop, fine arts, digital media services, information technology, OUS (to include protective services unit (PSU) and continuity of operations (COOP)), food services, and visitor services.

Conference Center
The A/E shall verify the original programming of the conference center. This shall include surveys and meetings with, at a minimum, the LEU, the training and development section, visitor service, food services, public affairs, the facilities services office, and the Information Technology division.

The meetings/interviews shall vary in length depending on the occupant. The A/E shall propose the interview lengths in their proposal.

Other requirements
The A/E shall provide their methodology and a description of the proposed final report contents and format with the proposal.

Office Floors One (1) through Four (4)

Discussion
The A/E will work with Board staff to provide space programming for office floors one (1) through four (4). The A/E shall provide a proposed generic office stacking and floor plan for the renovation. As the Board does not know at this time who shall occupy the Martin Building office floors, the A/E shall use one division (probable: Reserve Bank Operations and Payment Systems) as a representative occupant of the floors. The A/E shall conduct no less than two interviews with the division administrator and one with the division's administrative officer.

The A/E shall provide questions required to complete the work at least two weeks in advance of the interviews. The A/E shall provide a proposed stacking plan, a proposed generic floor plan, and supporting documentation.

The A/E shall look at adjacencies, the Board's office standards, file and material storage requirements, proportions of officer's and employee offices, on-floor conferencing requirements (incorporating the resources of the proposed conference center into planning), administrative support and office automation requirements as part of this work. They shall incorporate the results of the environmental assessment and the systems programming as directed by the Board's staff. The minimum infrastructure requirements per floor as discussed in the Martin Renovation Change Order (Contract Modification 17) are still applicable.
Contract 296548
Request for Change Order Pricing
Programming Services, Revision 2
Attachment 1

Deliverables

The A/E shall use the Board supplied office standards and work with Board staff to provide a proposed generic stacking plan and proposed generic office floor plan along with supporting material on which to base the build out of the Martin Building.

The A/E shall include no less than two briefings of senior Board management on the results of this work which may be included in the environmental programming briefings.

As an option, priced independently to be incorporated into the construction services costs, the A/E shall provide services to re-visit the programming no less than six months prior to installation of each floor’s wall systems or as soon as the actual occupants are determined. This will include interviews with up to four division heads including no less than two meetings with division administrators, and one with each division’s administrative officer to determine if changes need to be made to the floor plan and the A/E shall make these required changes along with all required changes to the Contract documents to make these changes.

With the exception of the final executive summary, all deliverables shall be provided in an appropriate electronic format along with no less than five (5) hard copies. There shall be one sheet copy set at 90%, 90% complete and a final copy incorporating Board staff changes.

The A/E shall provide an electronic copy and thirty (30) hard sets of the final executive summary.

Work shall be done in parallel with the investigation and systems programming of the renovation. The A/E shall submit the proposed changes to the schedules as a result of this additional work.
May 21, 2011

Kimberly M. Prince, C.F.M.
Supervisory Contract Analyst
Board of Governors of the Federal Reserve System
Washington, DC 20551
202-452-2527

RE: Contract No. 156548 Request for Change Order Pricing, Programming Services, Revision 1

Dear Ms. Prince,

Kahn Charunas Chapman & Twohey (KCCT) is pleased to submit the enclosed revised proposal for the addition of programming services to the scope of work (SOW) for the complete renovation of the Board of Governors of the Federal Reserve System's (Board) Martin Building. The request for reconsideration Board comments received following KCCT's original proposal dated May 10, 2011.

The summary of requested changes is as follows:

- Reduction in the SOW for the Visitor Center & Conference Center Program. Verification of removal of architectural programming efforts
- Removal of the Executive Summary Narrative and Briefings from the SOW
- Addition of the Smart Building Workshop to the SOW

The proposal includes the following Sections:

- Section I - Understanding of Programming Task, Revision 1
- Section II - Detailed Cost Proposal, Revision 1
- Section III - Tentative Project Schedule, Revision 1

We are very pleased to have the opportunity to once again be of service to the Board in this important additional task and look forward to responding to any questions you may have.

Sincerely,

Enrique A. Bellini, AIA
Principal
Section I

Understanding of the Programming Task, Revision 1
Section 1 - Understanding of the Programming Task, Revision 1

Our understanding of this task takes into consideration the original request of March 19, 2011, in addition to subsequent SOW revisions, Board correspondence, and oral discussions. Further, ECCT has noted its original proposal, dated May 10, 2011, to reflect oral comments received from the Board at the May 18, 2011 progress meeting. The revised narrative below, as well as the detailed cost proposal, reflect our understanding of the Board's intent and represent a summary of our approach. Refer to the line items in the detailed cost proposal for specific tasks proposed. Should there be a discrepancy between our understanding and the Board's intent, please notify us and we will make the necessary adjustments.

1. Programming Services to include Physical Space Allocation, Environmental Scan, and Visitor & Conference Center Program Verification


Goals, Objectives & Services
The purpose of the programming study is to support the renovation of the Martin Building.

The goal of the programming is:
- To provide sufficient data to enable the FIE to construct a superior work measurement that supports productivity and that attracts and retains employees.

The objectives of the programming are:
- To make recommendations as to the proper allocation of space.
- To make recommendations as to the appropriate environment for employees.
- To make recommendations as to the selection of amenities to be provided to the employees.

Programming Services
The programming process will be executed in four parts:
- Physical Space Allocation Study
- Environmental Scan Study
- Program Verification – Visitor & Conference Center
- Programming Executive Summary & Briefing to include engineering disciplines

METHODOLOGY

Physical Space Allocation Study
Using a customized database specifically designed for programming public and private sector projects, we will develop a Physical Space Allocation Study. The database provides a baseline year for recording existing requirements and four additional data sets for recording projected requirements.
At the beginning of the programming effort, KCC will meet with the FRB Management Team to develop a strategy for distributing the space questionnaires to each User Group, determine the length of time the User Groups will have to complete the questionnaires, and develop a schedule for the space interviews.

The programming process for delivery of the Physical Space Allocation Study, which will be used for programming the Martin Building Reservations, includes two (2) introductory meetings to present the schedule and explain the process to the User Groups.

The initial User Group briefing is followed by the data collection and data compilation phases. During the data collection phase, space questionnaires are distributed to and completed by the User Groups. The completed questionnaires are reviewed by the FRB Management Team to the programmers. While the User Groups are completing the space questionnaires, KCC will meet with the FRB Management Team to review and resolve minor space standards and refine them as required. Information requested of the FRB Management Team will include the square footage of each space type, particularly office and/or workstations, support, special and storage space standards prior to commencing the interviews.

After reviewing the questionnaires, interviews will be scheduled with the User Groups to clarify and supplement the information provided. Eight (8) space interviews, lasting 1.5-2 hours each and scheduled three or four per day on Tuesdays, Wednesdays, and Thursdays, are planned with Groups scheduled to occupy the new building or Martin Building. Mondays are reserved for interview preparation.

The interviews are to be held in the FRB Management Team. The Groups scheduled to be interviewed in this phase include, in alphabetical order:

- Board Members – 2 hours, includes:
  - Digital Media Services (full staff)
  - Photography Studio
  - Print Shop

- Facilities – 2 hours, includes:
  - ISO
  - Maintenance
  - Mechanical

- Health Services – 1.5 hours, includes:
  - Fitness Center
  - Health Unit

- IT Data Center – 1 hour

- LEU Control Center – 1 hour

- OES – 1 hour, includes:
  - COOP
  - Protective Service Unit (PSU)

- Services – 2 hours, includes:
  - Food Services (general)
  - Visitor and Conference
VerDate Nov 24 2008 11:04 Mar 16, 2015 Jkt 046629 PO 00000 Frm 00581 Fmt 6602 Sfmt 6602 L:\HEARINGS 2014\07-15 THE SEMIANNUAL MONETARY POLICY REPORT TO THE CON

KARI CHAPLAIN CHAPMAN & TWIGGLEY

Section 1—Understanding of the Programming Task, Revision 1
May 21, 2011

- Vander - 2 hours, includes:
  - Bartter
  - Beauty Shop
  - Convenience Store (space planning required to provide requirement)
  - Credit Union
  - Food Services (catering)

In addition, areas (7) space interviews, lasting 1-1/2 hours each, are planned with the Division Administrators and the Administrative Officer from each of the areas (7) Divisions scheduled to occupy floors 1-4 of the renovated Marvin Building. The FRM Management Team will determine which Divisions will participate in the process. The process will begin with an introductory briefing during which questions will be distributed to each of the participating Divisions, and subsequently submitted by the FRM Management Team in the programming for evaluation.

During the data compilation phase, the programmers will enter the data into the database, review expenses, and confirm the data with the User Groups as required.

Physical Space Allocation Study submissions will occur at 60% Draft, 90% Interim, and 100% Final. The 60% Space Programming submission will include the Space Requirements data, space standards, blockage and stacking plans for all levels, and four (4) space plan schemes for the generic office level. The 60% submission will not include any type of narrative, such as the Executive Summary, Project Goals and Objectives, Methodology, and Architectural and Engineering Narrative or space plans for other levels. These items, in addition to revisions of other previously submitted items, will be included in the 90% and 100% submissions.

The end product of the Physical Space Allocation Study includes:
- Executive Summary
- Project Goals and Objectives
- Methodology
- Architectural and Engineering Narrative
- Space Standards
- Generic Office Level Space Plan (4 schemes)
- Space Plans for Other Levels:
  - Undercabinet Level
  - Tenant Level
  - Interstitial Level
  - First Floor (C1)
  - Second Floor (C2)
  - Third Floor (C3)
- Mechanical Level
- Organization Charts
- Organization Structure: [includes Group name, position, and reporting structure]
- Organization Overview

Page 1 of 8
Environmental Scan Study

At the beginning of the environmental scan effort, KCCT will meet with the FRB Management Team to develop a strategy for developing and distributing the environmental scan questionnaires to each User Group, determine the length of time the User Groups will have to complete the questionnaires, and develop a schedule for the environmental scan interviews. The Environmental Scan process includes one (1) introductory meeting to present the schedule and explain the process to the User Groups.

The environmental scan questionnaire will pose questions related to:
- User Group current work practices
- User Group work preferences, should they differ from current work practices
- “Open and Comunal” space (private and collaborative spaces)
- Greater space,
- Holding space,
- Team Rooms

After reviewing the questionnaires, interviews will be scheduled with the User Groups to clarify and supplement the information provided. Six (6) environmental scan interviews are planned to last 2 1/2 hours each and are scheduled once per day on Tuesdays, Wednesdays, and Thursdays. Mondays are reserved for interview preparation; Fridays are reserved for hosting the FRB Management team. The Groups scheduled to be interviewed in this phase include, in alphabetical order:
- Division Administrative Officers Group
- Division Administrators group
- Division FSI group (IFC reps)
- Non-office staff group
- Two (2) groups of staff in offices (15-18 people in each)

Once the interviews are complete, KCCT will compile the data and make recommendations to:
- Determine if the space types discussed are applicable to the FRB business environment
- Indicate how much space would typically be committed to the functional space types requested by the User Groups.

In addition, the study will examine the likely future work procedures and habits that may occur in the near five years and forecast additional work related changes that may occur in the next ten to fifteen years.
Program Verification – Visitor & Conference Center

The Visitor & Conference Center program was completed in September 2017. The requirements stated in the program were further developed during the Concept Design Phase.

At the beginning of the program verification phase, KCCST will meet with the PRB Management Team to receive direction from the Board on verifying the concept plans. KCCST anticipates reviewing the concept plans based exclusively on PRB Management Team comments and will not conduct formal User Group reviews. Following review of the concept plans, KCCST will finalize the engineering interviews and coordinate with consultants to prepare a summary of findings.

Visitor & Conference Center Program Verification findings will be integrated into the Physical Space Allocation and Environmental Scan study submission at 60% Draft, 90% Interim and 100% Final.

**Communications & Audio Visual Infrastructure:** Technology Design Resources (TDR)

TDR will provide program verification services for the Martin Building Conference Center and Visitor Center. Since the original program for these spaces was developed in 2007, both the telecommunications and audio visual systems need to be updated.

The telecommunications portion will include revised locations of Floor Distribution rooms in accordance with the Martin Building renovation. This will also include the horizontal distribution of copper and fiber cabling.

The audio video technology has evolved from the systems mentioned in the programming document provided in 2007. Multiple flat panels have become an option rather than projectors in some spaces. The transmission of digital rather than analog information from computer and broadcast television has proceeded with the development of new equipment.

The changing importance of the Board as the economic status of the country may expand the scope of the Conference Center to include a specific press briefing room or separate space. The technology for that space will need to be developed.

The adoption of telepresence into the video conferencing marketplace has established new room layouts and more extensive lighting and room modifications than before.

TDR will meet with the system users of these conference spaces. There is an ongoing discussion about the design team attending a press conference to see how the user relationship between the press and the Board is now handled. This will allow us to establish guidelines for new spaces acquired.

TDR will meet with the audio visual support group and establish a baseline for each room and the desired budget and equipment.

**Security Infrastructure Specialists:** Applied Research Associates (ARA)

ARA will provide program verification services for the Martin Building Conference Center and Visitor Center.

1. Program Verification for the Conference Center – in this task ARA will...
a. Attend three programming meetings (1 with Board management, 1 with Technical Security and 1 with Security Operations)
b. Provide a security programming requirements in the form of a written narrative

2. Program Verification for the Venture Center—in this task ARA will:
a. Attend three programming meetings (1 with Board management, 1 with Technical Security and 1 with Security Operations)
b. Provide a security programming requirements in the form of a written narrative

Food Service Speciation: FoodStrategy

FoodStrategy will provide program verification for the following food-service venues within the building:
1. Venture level dining facility
2. Conference Center and Visitor Center
3. Concierge level café
4. Vending area(s)

We will conduct our study in two parts as outlined in the RFP document. The following are the tasks we will provide and the information we will process. This scope of work does not include design documents and excludes only the items noted below:

1. Space Allocation Study

   As part of the space allocation study FoodStrategy will take a detailed approach to develop an efficient planning tool for future planning and design of the Martin Building foodservices. Elements to be addressed are the following:
   a. A review of prior programming and studies conducted for the Martin Building
   b. Gather statistics about the employee and visitor population of the Martin building at present and projected into future years
   c. Compare the stability of currently proposed foodservices for the FBI to the future population
   d. Gather information about current catering and future trends
   e. Review the current foodservice concepts and hours of operation
   f. In conjunction with the above and information gathered in part two of this study, focus groups (environmental scan), determine the type, size, and proper space allocation for foodservice facilities in the building
   g. Detail the types of food offerings and broad menu content for the various operations

2. Focus Groups (Environmental Scan)

   The environmental scan will determine the uses and needs of employees and visitors of the facilities. Focus groups will be used to gather input on 1) what is satisfactory and unsatisfactory about foodservice offerings at the Martin Building today and 2) what is needed for the future. Findings will directly impact future design planning. Elements to be addressed include the following:
   a. Conduct up to five focus groups with various “users” of the Martin Building
   b. Include interviews with the various departments within the building, foodservice vendors, catering agencies, executives, and others to be determined that are affected by foodservice
c. Determine the interventions to include (but not limited to):
   i. Client satisfaction
   ii. Aesthetics
   iii. Pricing sensitivity
   iv. Policies and hours of operation
   v. Religious or dietary needs
   vi. Carry-out needs
   vii. Catering needs, procedures
   viii. Payment methods; cash, credit/debit, distinctive
   ix. Extent of sustainable practices

Food Strategy will consolidate its findings and include them in its report to be consolidated with other specialists, then delivered to the FDE. These findings will assist in determining our recommendations for changes in the foodservice program. We will deliver drafts at 60%, 90%, complete, and the final report. Our report will be integrated with other specialties and multiple report copies will be made by the contractor.

II. Smart Building Workshop

Board executive leadership desires a better understanding of proposed building intelligence as it relates to the possibilities of semi-automating a level of security with building automation, including energy management, life-safety, revenue operations, Board activity scheduling, and other software-driven systems. The development of this intelligent control system must comply with the Federal Information Security Management Act (FISMA), last updated in March 2011 and Section 508 of the Rehabilitation Act of 1973 as presently amended. Consequently, KCGT will conduct a one-day Smart Building Workshop to assist in developing a practical solution to the Board’s integrated building control systems needs for the Martin Building.

Following a Notice to Proceed for the Smart Building Workshop task, KCGT will prepare and distribute a questionnaire with the intent of collecting input from key Board stakeholders on preferred integration of building automation systems as additional to related information concerning Board minimums and operations. The completed questionnaires shall be reviewed by the FDE Management Team to the KCGT. After reviewing the questionnaires, KCGT will conduct a one-day Smart Building Workshop with the FDE key stakeholders and management team to present the current and potential capabilities of various building automation systems; to explain standard industry best practices; and to clarify and supplement the information provided with the completed questionnaires.

The findings and recommendations as a result of the Smart Building Workshop will be integrated into the Engineering Program Report submission at 60% Draft, 90% Intermediate, and 100% Final.

List of A/E participants:
- Kurt Chambers, Chapman Twomey (Architecture & Interior)
- Applied Research Associates (Security Infrastructure Specialist)
- Cloud Geobahn Associates (Signage & Graphics Specialist)
- E.K. Fox & Associates (Mechanical, Electrical and Plumbing Engineers)
- Gerald Waldron (Lighting Specialist)
- Hughes Associates, Inc. (Building Code Specialist & Fire Protection Engineer)
III. Summary of Tentative Schedule:
The detailed schedule included in Section III and subsequent sections below is based on our understanding of the SCW and is tentative pending Board availability and discussions following commencement of the work. The proposed schedule indicates the Engineering Program Report and Architectural Programming & Space Planning Report being submitted concurrently.

- NTP
- Draft Program - 60% Submission: 11 weeks following NTP
- Review Program - 90% Submission: 22 weeks following NTP (includes 3-week Board review of the 60% Submission)
- Final Program - 100% Submission: 25 weeks following NTP (includes 3-week Board review of the 90% Submission)

IV. Identification of Exceptions:

1. As stated previously, the detailed narratives and cost proposal do not reflect the exact language in the latest official SCW document Programming Suite, Revision 9 received via email on April 6, 2011, because it accompanies items deleted by the Board in subsequent discussions, and represents our understanding of the Board’s intent.

2. The written SCW requested an independent pricing of its programming of Office Floors 1-4 no less than six months prior to installation of each floor’s wall systems or as soon as the actual occupants are determined. This proposal does not include the requested option because, as mutually agreed by the Board and KCCT, it would be impractical to quantify at this time.

3. Field survey and analysis will be based upon visual observations only. This proposal does not anticipate any previous destructive testing to be performed.

4. In addition to the necessary labor, we have estimated Other Direct Costs (ODC) at approximately 4% of the total KCCT fee. This percentage is based upon previous experience. We acknowledge that exceptions for actual reimbursable expenses will be included with all billing.
Section II

Detailed Cost Proposal, Revision 1
Section III

Tentative Project Schedule, Revision 1
Contract 250548
Modification 19, Revision 1

Kara Charahas Chapman & Twobey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

Section 3.8, Revision 1 (modified on June 15, 2011) Information Technology Criteria, of Appendix A to Exhibit A to SQA 250548 Modification No. 17, Renovation Program and Parameters is hereby deleted in its entirety and replaced with the attached Section 3.8, Revision 2 dated October 19, 2011.

Contractor is reminded to reference Contract 250548 and the appropriate contract line item number on all invoices and other contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain the same.

Very truly yours,

[Signature]
Kimberly M. Prince, C.P.M.
Supervisory Contracts Analyst
3.8.1 Telecommunications Rooms (TR), Equipment Room (ER); Data Center, and Riser System

3.8.1.1 Provide larger spaces for the TRs. The larger spaces are needed for the new cabling and equipment and for future expansion.

3.8.1.2 Provide a location

3.8.1.2.1 This room shall include but is not limited to the following:

3.8.1.2.1.1 PBX equipment, Distribution and access layer switching equipment, VoIP equipment, Horizontal cross connect field distributor racks, and access providers (i.e., Verizon, Sprint) circuit equipment.

3.8.1.3 Increase the TR size to a minimum of ten (10) feet by twelve (12) feet with room for adequate power and cooling. An independent cool air conditioning source shall be supplied so that other building air conditioning cooling systems can be shut down during off hours.

3.8.2 New Overall Cabling Design of the Martin Building

3.8.2.1 Produce an overhead cabling design with a drop ceiling and modular walls (or drywall walls) with a cable tray. A drop ceiling allows flexibility for overhead cabling and expansion for the future. The design shall allow for up to twenty percent (20%) more cabling and equipment to be added in the ER/TR at a future date with an initial fill factor of 40% for all pathways.
3.8.2.2 The design shall have six (6) copper cables (Cat 6A) going to each work station. All components of the cabling system shall be Systemax/Commscope. Also, the design should allow for easy expansion of the number of copper cables in each office. This growth amount shall be either an overall twenty percent (20%) growth figure or one hundred eighty-five (185) workstations and support equipment (faxes, printers, conference rooms, etc.) whichever is greater.

3.8.2.3 Provide for the capability of WiFi extensions throughout the building for our internal enterprise WLAN (ELMO). Enterprise wireless will be provided based on the Cisco enterprise wireless product line.

3.8.2.4 Provide for guest access / visitor wireless network for the Visitor’s and Conference Center area. Guest access network will be an extension of the enterprise WLAN network using an enterprise WLAN solution.

3.8.3 Upgrade Cabling Backbone

-2-
ground including the garages of the Martin building for all current wireless cellular networks. It should also be designed to support next generation wireless technology to ensure that the Board has the capability to adapt to the changing technology. The design shall also include a plan for maintaining wireless cellular coverage in the Eccles building during the Martin building renovation. Any modifications to these locations or the cable that is connecting these components will need to be coordinated so that the time that these services are unavailable are minimized and is communicated in advance to the clients in the Eccles Building.

3.8.5 Telephones
3.8.5.1 All users will have Voice over Internet Protocol (VoIP) phones to their stations

3.8.5.2 The A/E shall include upgrading our Primary and Secondary Entrance Facilities (Demarcation) located on the

3.8.5.3 The Entrance Facility

3.8.5.4 The A/E shall look into adding multipair copper This would be needed for true redundancy.

3.8.6 Demolition of Cabling
3.8.6.1 All existing backbone and horizontal cabling shall be removed from each floor of the Martin building back to the Data Centers main cross connect field.

3.8.7 Meetings and Minimum Requirements:
3.8.7.1 The A/E will meet with the Information Technology (IT) management staff as needed to ensure the scope of the IT component of the Martin renovation project is understood.

3.8.7.2 All design shall conform to a minimum to the ANSI-TIA-568-C series standards or the most current standard.
August 30, 2011

CONTRACT 250548
MODIFICATION 20, REVISION 1

Kim Christinas Chapman & Twomey, PC (KCTT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

CLIN | Description | Amount
--- | --- | ---
42 | Smart Building Workshop | $88,679
43 | Other Direct Costs (Related to the Smart Building Workshop) | $2,693
44 | Subcontractor Markup for Smart Building Workshop | $5,209.40

The Smart Building Workshop identified in CLIN 42 above shall be performed in accordance with pages 7 and 8 of Section 1, Part II of KCTT’s Revised Change Order Proposal dated May 31, 2011 (“May 31 Proposal”). The portion of the May 31 Proposal referenced above is hereby incorporated into this Modification 20 Revision 1 by reference.

As a result of this Modification 20, the Contract value increases from $13,374,244.58 by $97,572.40 to a new contract total of $13,471,816.98.

Contractor shall reference “Contract 250548, Modification 20” and the appropriate CLIN number as noted above on all invoices and contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain the same.

Very truly yours,

[Signature]
Kimberly A. Prince, C.P.M.
Supervisory Contracts Analyst
Section I – Understanding of the Programming Task, Revision 1

Our understanding of this task takes into consideration the original request of March 10, 2011 in addition to subsequent SOW revisions, Board correspondence, and oral discussions. Further, KCCT has revised its original proposal, dated May 10, 2011, to reflect oral comments received from the Board at the May 18, 2011 progress meeting. The revised narrative below, as well as the detailed cost proposal, reflect our understanding of the Board’s intent and represent a summary of our approach. Refer to the line items in the detailed cost proposal for specific tasks proposed. Should there be a discrepancy between our understanding and the Board’s intent, please notify us and we will make the necessary adjustments.

I. Programming Services to Include Physical Space Allocation, Environmental Scan, and Visitor & Conference Center Program Verification

Architect & Interior: Kaan Charshas Chepman, Twohey (KCCT)

Goals, Objectives & Services
The purpose of the programming study is to support the renovation of the Martin Building.

The goal of the programming is:
- To provide sufficient data to enable the FRB to construct a superior work environment that supports productivity and that attracts and retains employees.

The objectives of the programming are:
- To make recommendations as to the proper allocation of space.
- To make recommendations as to the appropriate environment for employees.
- To make recommendations as to the selection of amenities to be provided to the employees.

Programming Services
The programming process will be executed in four parts:
- Physical Space Allocation Study
- Environmental Scan Study
- Program Verification – Visitor & Conference Center
- Programming Executive Summary & Briefing to include engineering disciplines

METHODOLOGY

Physical Space Allocation Study
Using a customized database specifically designed for programming public and private sector projects we will develop a Physical Space Allocation Study. The database provides a baseline view for recording existing requirements and four additional data sets for recording projected requirements.
At the beginning of the programming effort, KCLT will meet with the FRB Management Team to develop a strategy for distributing the space questionnaires to each User Group, determine the length of time the User Groups will have to complete the questionnaires, and develop a schedule for the space interviews.

The programming process for delivery of the Physical Space Allocation Study, which will be used for programming the Martin Building Renovation, includes two (2) introductory meetings to present the schedule and explain the process to the User Groups.

The initial User Group briefing is followed by the data collection and data completion phases. During the data collection phase, space questionnaires are distributed to and completed by the User Groups. The completed questionnaires are returned by the FRB Management Team to the programmers. While the User Groups are completing the space questionnaires, KCLT will meet with the FRB Management Team to receive and review existing space standards and refine them as required. Information requested of the FRB Management Team will include the square footage of each space type, particularly office and/or workstations, Support, Special and Storage Space standards prior to commencing the interviews.

After reviewing the questionnaires, interviews will be scheduled with the User Groups to clarify and supplement the information provided. Eight (8) space interviews, lasting 1, 1-1/2, or 2 hours each and scheduled three or four per day on Tuesdays, Wednesdays and Thursdays, are planned with Groups scheduled to occupy the renovated Martin Building. Mondays are reserved for interview preparation; Fridays are reserved for briefing the FRB Management Team. The Groups scheduled to be interviewed in this phase include, in alphabetical order:

- Board Members – 2 hours, includes
  - Digital Media Service (full studio)
  - Photography Studio
  - Print Shop
- Facilities – 2 hours, includes
  - FSO
  - Maintenance
  - Mechanical
- Health Services – 1.5 hours, includes
  - Fitness Center
  - Health Unit
- IT Data Center – 1 hour
- LEU Control Center – 1 hour
- OSD – 1 hour, includes
  - COOP
  - Protective Service Unit (PSU)
- Services – 2 hours, includes
  - Food Services (general)
  - Visitor and Conference
• Vendor - 2 issues, includes
  • Barber
  • Beauty Shop
  • Convenience Store (space planning required to provide requirements)
  • Credit Union
  • Food Services (cafe/coffee)

In addition, seven (7) space interviews, having 1-1/2 hours each, are planned with the Division Administrator and the Administrative Officer from each of the seven (7) Divisions scheduled to occupy floors 1-4 of the renovated Main Building. The FRB Management Team will determine which Divisions will participate in the process. The process will begin with an introductory briefing during which questionnaires will be distributed to each of the participating Divisions and subsequently returned by the FRB Management Team to the programmers for evaluation.

During the data compilation phase, the programmers will enter the data into the database, review reports generated and confirm the data with the User Groups as required.

Physical Space Allocation Study submissions will occur at 60% Draft, 90% Intern and 100% Final. The 60% Space Programming submission will include the Space Requirements data, space standards, blocking and stacking plans for all levels, and four (4) space plans schemes for the generic office level. The 90% submission will not include any type of narrative, such as the Executive Summary, Project Goals and Objectives, Methodology, and Architectural and Engineering Narrative or space plans for the other levels. These items, in addition to revisions of other previously submitted items, will be included in the 90% and 100% submissions.

The end product of the Physical Space Allocation Study includes:
• Executive Summary
• Project Goals and Objectives
• Methodology
• Architectural and Engineering Narrative
• Space Standards
• Generic Office Level Space Plan (4 views)
• Space Plans for Other Levels
  • Penthouse Level
  • Terrace Level
  • Interstitial Level
  • First Garage Level (G1)
  • Cocoon Level (G2)
  • Second Garage Level (G2)
  • Mechanical Level
• Organization Charts
• Organization Structure [includes Group name, acronym, and reporting structure]
• Organization Overview
Environmental Scan Study

At the beginning of the environmental scan effort, KCCT will meet with the FRB Management Team to develop a strategy for developing and distributing the environmental scan questionnaires to each User Group, determine the length of time the User Groups will have to complete the questionnaires, and develop a schedule for the environmental scan interviews. The Environmental Scan process includes one (1) introductory meeting to present the schedule and explain the process to the User Groups.

The environmental scan questionnaires will pose questions related to:
- User Group current work practices
- User Group work preferences, should they differ from current work practices
- "Cafe and Common" space (private and collaborative space)
- Creative space,
- Hosting space,
- Team Rooms

After reviewing the questionnaires, interviews will be scheduled with the User Groups to clarify and supplement the information provided. Six (6) environmental scan interviews are planned to last 3-4 1/2 hours each and are scheduled two per day on Tuesdays, Wednesdays and Thursdays. Mondays are reserved for interview preparation; Fridays are reserved for briefing the FRB Management team. The Groups scheduled to be interviewed in this phase include, in alphabetical order:
- Division Administration Officers Group
- Division Administrators group
- Divisional IS group (TEAG, nps)
- Non-office staff group
- Two (2) groups of staff in offices (13-15 people in each)

Once the interviews are complete, KCCT will compile the data and make recommendations to:
- Determine if the space types discussed are applicable to the FRB business environment
- Indicate how much space would typically be committed to the functional space types requested by the User Groups.

In addition, the study will examine the likely culture, work procedures and habits that may occur in the next five years and forecast additional work related changes that may occur in the next ten to fifteen years.
Program Verification – Visitor & Conference Center

The Visitor & Conference Center program was completed in September 2007. The requirements stated in the program were further developed during the Concept Design Phase.

At the beginning of the program verification phase, KCCT will meet with the FBM Management Team to receive direction from the Board on revising the concept plans. KCCT anticipates revising the concept plans based exclusively on FBM Management Team comments and will not conduct formal User Group interviews. Following revision of the concept plans, KCCT will facilitate the engineering interviews and coordinate with consultants to prepare a summary of findings.

Visitor & Conference Center Program Verification findings will be integrated into the Physical Space Allocation and Environmental Team study submissions in 0% Draft, 90% Interim and 100% Final.

Communications & Audio Visual Infrastructure: Technology Design Resources (TDR)

TDR will provide program verification service for the Martin Building Conference Center and Visitor Center. Since the original program for these spaces was developed in 2007, both the telecommunications and audio video systems need to be updated.

The telecommunications portion will include revised locations of Floor Distributor rooms in accordance with the Martin Building renovation. This will also include the horizontal distribution of copper and fiber cabling.

The audio video technology has evolved from the systems mentioned in the programming document provided in 2007. Multiple flat panels have become an option rather than projectors in some systems.

The transmission of digital rather than analog information from computers and broadcast television has proceeded with the development of new equipment.

The changing importance of the Board in the economic status of the country may expand the scope of the Conference Center to include a specific press briefing area or separate space. The technology for that space will need to be developed.

The adoption of telepresence into the video teleconferencing marketplace has established new room layouts and more extensive lighting and room modifications than before.

TDR will meet with the system users of these conference spaces. There is an ongoing discussion about the design space of teleconferencing rooms to see how the interrelationship between the press and the Board is more evolved. This will allow us to establish guidelines on new spaces required.

TDR will meet with the audio video support group and establish a baseline for each room and the desired budget and equipment.


ARA will provide program verification service for the Martin Building Conference Center and Visitor Center.

1. Program Verification for the Conference Center – in this visit ARA will:
a. Attend those programming meetings (1 with Board management, 1 with Technical
    Security and 1 with Security Operations).
b. Provide a security programming requirements in the form of a written narrative.

2. Program Verification for the Visitor Center – in this task ARA will:
a. Attend those programming meetings (1 with Board management, 1 with Technical
    Security and 1 with Security Operations).
b. Provide a security programming requirements in the form of a written narrative.

Food Service Specialist: FoodStrategy

FoodStrategy will provide program verification for the following foodservice venues within the building:

1. Terrace level dining facility
2. Conference Center and Visitor Center.
3. Concourse level cafe
4. Vending area(s)

We will conduct our study in two parts as outlined in the RFP document. The following are the tasks we will provide and the information we will process. This scope of work does not include design documents and includes only the items stated below.

1. Space Allocation Study
   As part of the space allocation study FoodStrategy will take a detailed approach to develop an effective planning tool for future planning and design of the Martin Building foodservices. Elements to be addressed for the following.
   a. A review of prior programming and studies conducted for the Martin Building.
   b. Gather statistics about the employee and visitor population of the Martin building at
      present and projected into future years.
   c. Compare the viability of currently proposed foodservices for the FFB to the future
      population.
   d. Gather information about current catering and future trends.
   e. Review the current foodservice concepts and hours of operation.
   f. In conjunction with the above and information gathered in part two of this study, focus
      groups (environmental scan), determine the type, size, and proper space allocations
      for foodservice facilities in the building.
   g. Detail the types of food offerings and broad menu contract for the various operations.

2. Focus Groups (Environmental Scan)
   The environmental scan will determine the uses and needs of employees and visitors of the facilities.
   Focus groups will be used to gather input on 1) what is satisfactory and unsatisfactory about foodservice
   offerings in the Martin Building today and 2) what is needed for the future. Findings will directly impact
   future design planning. Elements to be addressed include the following.
   a. Conduct up to five focus groups with various “users” of the Martin Building.
   b. Include interviews with the various departments within the building, foodservice
      vendor, existing organizations, executives, and others to be determined that are affected by
      foodservice.
603

Section 1: Understanding of the Programming Task, Situation 1
May 20, 2011

1. Determine during the interviews items to include (but not limited to):
   a. Current satisfaction
   b. Future types of foods desired
   c. Pricing sensitivity
   d. Policies and hours of operation
   e. Religious or dietary needs
   f. Carry out needs
   g. Catering needs, procedures
   h. Payment methods: cash, credit card, debit card.
   i. Extent of sustainable practices

FoodStrategy will consolidate its findings and include them in its report to be consolidated with other specialists, then delivered to the FRB. These findings will assist us in determining our recommendations for changes in the Foodserver program. We will deliver drafts at 60% complete, 90% complete, and the final report. Our report will be integrated with other specialists and multiple report copies will be made by KCC.

II. Smart Building Workshop

Board executive leadership desires a better understanding of proposed building intelligence as it relates to the possibility of interconnecting a level of security with building automation, including energy management, life safety, elevator operations, Board security scheduling, and other software-driven systems. The development of this intelligent control system must comply with the Federal Information Security Management Act (FISMA), last updated in March, 2011 and Section 308 of the Rehabilitation Act of 1973, as presently amended. Consequently, KCC will conduct a one day Smart Building Workshop to assist in developing a practical solution to the Board’s proposed building control systems needs for the Marin Building.

Following a Notice to Proceed for the Smart Building Workshop task, KCC will prepare and distribute a questionnaire with the intention of collecting input from key Board stakeholders on preferred integration of building automation systems in addition to related information concerning Board mission and operations. The completed questionnaires shall be returned by the FRB Management Team to the KCC. After reviewing the questionnaires, KCC will conduct a one day Smart Building Workshop with the FRB key stakeholders and Management team to present the current and projected capabilities of various building automation systems, to explain standard industry best practices, and to clarify and supplement the information provided with the completed questionnaires.

The findings and recommendations as a result of the Smart Building Workshop will be integrated into the Engineering Program Report submissions at 60% Draft; 90% Interim and 100% Final.

List of A/E participants:
- Kans Charanihas Chapman Twombly (Architect & Interns)
- Applied Research Associates (Security Infrastructure Specialist)
- CのでGalosh Associates (Signage and Graphics Specialist)
- E.K. Fox & Associates (Mechanical, Electrical and Plumb Engineering)
- Gerald Wilson (Lighting Specialist)
- Hingham Associates, Inc. (Building Code Specialist & Fire Protection Engineer)
III. Summary of Tentative Schedule:

The detailed schedule included in Section III and subsequent summary below is based on our understanding of the SOW and is sensitive pending Board availability and discussions following commencement of the week. The proposed schedule indicates the Engineering Program Report and Architectural Programming & Space Planning Report being submitted concurrently.

- NTP
- Draft Program – 60% Submission: 11 weeks following NTP
- Interim Program – 50% Submission: 12 weeks following NTP (includes a 3 week Board review of the 60% Submission)
- Final Program – 100% Submission: 26 weeks following NTP (includes a 3 week Board review of the 90% Submission)

IV. Identification of Exceptions:

1. As stated previously, the detailed narratives and cost proposal do not reflect the exact language in the latest official SOW document Programming Senior, Revision 2 received via email on April 6, 2011 because it incorporates items decided by the Board in subsequent discussions, and represents our understanding of the Board’s intent.

2. The written SOW requested an independently priced an option to re-vision the programming of Office Floors 1-4 no less than six months prior to installation of each floor's wall systems or as soon as the actual occupants are determined. This proposal does not include the requested option because, as mutually agreed by the Board and KOCT, it would be impractical to quantify at this time.

3. Field survey and analysis will be based upon visual observation only. This proposal does not anticipate any intrusive or destructive testing to be performed.

4. In addition to the necessary travel, we have estimated Other Direct Costs (ODC’s) at approximately 4% of the total KOCT fee. This percentage is based on previous experience. We acknowledge that receipts for actual reimbursable expenses will be included with all billing.
Section II

Detailed Cost Proposal, Revision 1
### Cost Proposal for Programming Services - Revision 1

<table>
<thead>
<tr>
<th>Design Services</th>
<th>Cost Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reimbursable</td>
</tr>
<tr>
<td></td>
<td>Labor</td>
</tr>
<tr>
<td></td>
<td>Expenses</td>
</tr>
</tbody>
</table>

**A. Total Summary**

- **Company Name:** KARIN GEAULFA CHAPMAN & TOWLEY
- **Authorized Signature:** [Signature]
- **Date:** May 31, 2011

#### Space Programming & Environmental Scan
- **Kari Stalko Chapman & Towley**
  - Credit: [Credit]
  - Firm: [Firm]
  - Cost: $0
- **Subtotal:**
- **Total Cost:**

#### Program Verification - Visitor Center & Conference Center
- **Kari Stalko Chapman & Towley**
  - Credit: [Credit]
  - Firm: [Firm]
  - Cost: $0
- **Applied Research Associates, Inc.**
  - Credit: [Credit]
  - Firm: [Firm]
  - Cost: $0
- **Technology Design Resources LLC**
  - Credit: [Credit]
  - Firm: [Firm]
  - Cost: $0
- **Subtotal:**
- **Total Cost:**

#### Smart Building Workshop
- **Kari Stalko Chapman & Towley**
  - Credit: [Credit]
  - Firm: [Firm]
  - Cost: $0
- **Applied Research Associates, Inc.**
  - Credit: [Credit]
  - Firm: [Firm]
  - Cost: $0
- **Hunsaker Associates**
  - Credit: [Credit]
  - Firm: [Firm]
  - Cost: $0
- **Subtotal:**
- **Total Cost (A+B+C):**

#### Total Cost Labor, Mark-up & Expenses:

---

*Note: Costs are illustrative and subject to change.*
Section III

Tentative Project Schedule, Revision 1
February 17, 2012

CONTRACT 250548
MODIFICATION 21

Karen Chamus, Chapman & Twelves, PC (KCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Beltrán

Dear Mr. Beltrán:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

<table>
<thead>
<tr>
<th>CLIN</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>Perform Blast Analysis of the Martin Building, Tasks 1-5 of KCT Proposal dated November 30, 2011 (Revision 2)</td>
<td>$59,010</td>
</tr>
<tr>
<td>46</td>
<td>Other Direct Costs (Related to additional blast study)</td>
<td>$5,081</td>
</tr>
</tbody>
</table>

The performance of the blast analysis identified in CLIN 45 above shall be performed in accordance with KCT’s Change Order Proposal dated November 30, 2011 (“November 30 Proposal”). The November 30 Proposal referenced above is hereby incorporated into this Modification 21 by reference.

As a result of this Modification 21, the Contract value increases from $12,471,816.98 to $12,480,000 to a new contract total of $13,555,007.98.

Contractor shall reference “Contract 250548, Modification 21” and the appropriate CLIN number(s) noted above on all invoices and contract-related correspondence.

Except where herein modified, all other terms and conditions of the original Contract remain the same.

Very truly yours,

[Signature]

Kimberly M. Prinz, CPM
Supervisory Contracts Analyst
November 30, 2011

Kimberly M. Prince, C.F.M.
Supervisory Contract Analyst
Board of Governors of the Federal Reserve System
Washington, DC 20551
202-452-2527

R: Contract No. 200548 Request for Change Order Pricing, Additional Blast Analysis (REVISION 2)

Dear Mr. Prince,

[Confidential - security]

[Signature]
B. Optional Proposal license

Task & briefing of the Results for the Existing Office Building: The team will develop a briefing of the results of the existing condition analysis for the Board. The team will send two engineers (one from ARBA's Virginia office and one from ARBA's Alexandria office) to a meeting to brief the results of the analysis and determine the path forward. The briefing will document the extent of damage on all four faces of the building for the existing condition. The team will present capacities off the walls and windows (based on the provided information) and select a design loading for consideration.

IV. DELIVERABLES

As noted in Task 4 of the Scope of Services, Tasks 2 and 3 will be documented in a letter report. The team will provide five (5) copies of the compiled report and one (1) electronic copy in Adobe PDF format.

V. PROPOSED SCHEDULE

The schedule will be established in cooperation with the Board following a notice to proceed. It is anticipated that the additional list analysis along with subsequent report could be submitted six (6) weeks after written notice to proceed. The briefing, if authorized by the Board, will be scheduled after completion of the required analysis.

VI. FEE AND PAYMENT

Refer to the DETAILED COST PROPOSAL submitted in conjunction with this proposal for a complete fee explanation.
<table>
<thead>
<tr>
<th>Design Services</th>
<th>Cost Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**A. BASE PROPOSAL ITEMS (Tasks 1-4)**
- **Labor**
  - Ken Churchill, Engineering
  - Consultant Title: \[\text{competitive labor}\]
  - TOTAL

**B. OPTIONAL PROPOSAL ITEM (Task 6)**
- **Labor**
  - Ken Churchill, Engineering
  - Consultant Title: \[\text{competitive labor}\]
  - TOTAL

**GRAND TOTAL**
- \(A + B\), Labor, Work-Up, & Expenses: $90,000
<table>
<thead>
<tr>
<th></th>
<th>A/B/C/D/E/F/G/H/I/J/K/L/M/N/O/P</th>
<th>Cost Breakdown</th>
<th>Details of Cost Proposal</th>
<th>Applied Research Associate, Inc. (ARA)</th>
<th>Total Consultant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1. Base Design Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2. Confidential - Security</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3. Detailed Cost Proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4. Blown Report</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5. Drafting of Results</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>7. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>8. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>9. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>10. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>11. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>12. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>13. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>14. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>15. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>16. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>17. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>18. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>19. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>20. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>21. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>22. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>23. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>24. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>25. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>26. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>27. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>28. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>29. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>30. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>31. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>32. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>33. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>34. TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Print Date: 1/1/2013  Page 2 of 2
April 3, 2013

CONTRACT 250548
MODIFICATION 22

Kam Charalab Chapman & Twohey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

1. Section 3.8, Revision 2, Information Technology Criteria, added to the Contract by way of Modification 19 is hereby deleted in its entirety and replaced with the attached Section 3.8, Revision 2 dated April 3, 2013.

2. The Board issues this Modification in accordance with Section M.15, Changes. If the Contractor determines that the items contained within this Modification constitute a change order, then the Contractor must comply with the provisions of Section M.15 to promptly notify the Board that the Modification is a change and to assert any claims for equitable adjustments or to provide any credits to the Contract.

Contractor shall reference "Contract 250548, Modification 22" and the appropriate contract line item number (CLIN), if applicable, on all invoices and contract-related correspondence.
Except where herein modified, all other terms and conditions of the Contract remain the same.

Sincerely,

Kimberly M. Briggs, C.P.M.
Supervisory Contracts Analyst
Attachment – SOLA50548, Modification 22, Section 3.8 Revision 2
Information Technology Criteria

3.8 Telecommunications Rooms (TR), Equipment Rooms (ER), Entrance Facilities (EF), Data Center, Backbone pathways, and Riser System

3.8.1 Riser System

3.8.1.1 Provide larger spaces for the ERs/TRs. The larger spaces are needed for the new cabling and equipment and for future expansion.

3.8.1.2 ERs/TRs shall be

3.8.1.3

3.8.1.4 ERs will also serve

3.8.1.4.1 During construction the existing security systems shall remain operational

3.8.3.6 Provide space

3.8.3.7 Provide space in the current Data Center for telecommunications cabling and conduit pathways to the

3.8.3.8 If the design doesn’t allow for

3.8.2 Power and Cooling

3.8.2.1 The power and cooling unit shall be sized appropriately for all equipment consumption (minimum 16,000w).

3.8.2.2 Total BTU for each ER/TR shall be determined before sizing the HVAC system with a minimum growth factor of 25%.

3.8.2.3 Each ER/TR shall have a stand-alone HVAC unit with independent controls.

3.8.2.4 HVAC units shall have humidity control. Relative humidity shall be between 40 and 55%.

3.8.2.5 Temperature shall be controlled and should be between 68° and 77°F.

3.8.2.6 Power to the HVAC units shall be supplied from the building UPS to ensure 24 hour operation.

3.8.2.7 Positive air pressure shall be maintained in the ER/TR spaces to ensure a dust free environment.
3.8.2.8 The A/E shall extend and/or provide dedicated UPS circuits from two separate sources (UPS-A, UPS-B).
3.8.2.9 Electrical UPS sub-panels shall be installed in each ER/TR from both UPS sources providing redundant branch circuit power to all telecommunications equipment.
3.8.2.10 Future growth and expansion shall be built into the design for power and cooling systems.

3.8.3 Typical TR (Telecommunications Room) is as follows:

Page 2 of 8
3.8.5 Typical EF (Entrance Facility)

3.8.6 New Overall Cabling Design of the Martin Building

3.8.6.1 Produce an overhead cabling design with a drop ceiling and modular walls (or drywall walls) with a cable tray. A drop ceiling allows flexibility for overhead cabling and expansion for the future.
3.8.6.2 The design shall allow for up to twenty percent (20%) more cabling and equipment to be added in the FR/FR at a future date with an initial fill factor of 40% for all pathways.

3.8.6.3 The design shall have four (4) copper cables (Cat 6A) go to each workstation. Also, the design will allow for easy expansion of the number of copper cables in each office.

3.8.6.4 Typical Workstation installation/termination is as follows:
- 1/4" empty conduit stub-up above ceiling for each I/O (Full Service Outlet)
- 5" square, 2 1/8" deep metal box with 1 1/4" knock-outs
- Double-gang plaster ring (size depends on wall thickness)
- Plastic bushings to be installed on conduit stub in ceiling

3.8.6.5 Yellow category 6a cable shall terminate in position 1, White in position 2, Red in position 3, and Blue in position 4 of the surface mounted media box supplied by the contractor.

3.8.6.6 Contractors shall leave a minimum of 5 feet slack above in the ceiling for each workstation.

3.8.6.7 Provide for the capability of Wireless Access Point extensions (access points and repeaters) throughout the entire building for both our internal WLAN (ELMO) and enterprise guest access (EMG) as well as coverage for the Visitors and Conference Center areas:

3.8.6.7.1 Conduct and provide a full spectral analysis, after professional wireless site survey, providing maximum coverage of workable floor space for the entire building.

3.8.6.7.2 Mount and install wireless access points in the determined locations based on spectral analysis/site survey:
- Install blue category 6a cable to each wireless access point location
- Termination of category 6a cable shall be above the ceiling in the plenum space in an approved outlet device with ELEC (US-45) female jack
- Cabling for wireless access points shall be terminated on its own patch panel in the nearest TR or ER.

3.8.7 Backbone and Horizontal pathways

Page 6 of 8
3.8.8 Other Space Considerations

3.8.8.1

3.8.8.2 This equipment has not been identified, and the size of this space is unknown at this point.

3.8.8.3 The design shall include additional space outside of the ER/TR router stacks.

3.8.8.4 This space shall include HVAC and UPS redundant power for these services.

3.8.9 Master Antenna System

3.8.9.1 The Master Antenna system must distribute select commercial satellite television stations throughout the Martin and Eccles building.

3.8.9.2 Additional network cable will be installed in specific offices including but not limited to:
   - Director's offices
   - Rooms designated as Board senior officers' offices (during programming)
   - Conference rooms and throughout the conference center
   - Dining rooms and Cafeteria
   - Fitness Center
   - LEU control room
   - Personal security unit offices and conference rooms
   - Continuity of operations rooms
   - Engineer's control room
   - Any lounges or other spaces determined in programming as employee gathering spaces (formal or informal)
   - Passenger elevator lobbies
   - Commercial spaces such as the Barber Shop

3.8.9.3 During the installation satellite/cable service shall be maintained to the Eccles building.
3.8.10 In-house Cellular and Data Antenna Solution (DAS)

3.8.10.1 The cellular and Data Antenna Solution (DAS) shall be designed and implemented so that there will be sufficient coverage for both the Martin and Eccles buildings.

3.8.10.2 Solution should provide complete cellular and data coverage on all floors, both above and below ground, of the Martin and Eccles buildings for all current wireless cellular networks (Verizon, AT&T, T-Mobile, Sprint).

3.8.10.3 Designed to support next generation wireless technology (ie: 4G and beyond)

3.8.10.4 The design shall also include a plan for maintaining wireless cellular coverage in the Eccles building during the Martin building renovation.

3.8.11 Telephony

5.8.11.1 All users will have Voice over Internet Protocol (VoIP) phones at their stations.

3.8.12 Meetings and Minimum Requirements

3.8.12.1 The A/E will meet with the Information Technology (IT) management staff as needed to ensure the scope of the IT component of the Martin renovation project is understood.

3.8.12.2 All designs shall conform at a minimum to the ANSI-TIA-568-C series standards or the most current standard.
Information Technology Criteria

3.8 Telecommunications Rooms (TR), Equipment Rooms (ER), Entrance Facilities (EF), Martin Automation Room (MAR), Backbone pathways, and Riser System

3.8.1 Riser System

3.8.1.1 Provide larger spaces for the ERs/TRs. The larger spaces are needed for the new cabling and equipment and for future expansion.

3.8.1.2 ERs/TRs shall be stacked with adequate space to accommodate all backbone cabling serving the TR spaces.

3.8.1.4 ERs will also serve.

3.8.1.4.1 During construction the existing security systems shall remain operational.

3.8.1.5

3.8.1.6 Provide space.

3.8.1.7 Provide space in the current Data Center for telecommunications cabling and conduit pathways to.

3.8.1.8 If the design doesn’t allow for. If the design doesn’t allow for. If the design doesn’t allow for.

3.8.2 Power and Cooling

3.8.2.1 The power and cooling unit shall be sized appropriately for all equipment consumption (minimum 10,000W).

3.8.2.2 Total BTU for each ER/TR shall be determined before sizing the HVAC system with a minimum growth factor of 20%.

3.8.2.3 Each ER/TR shall have a stand-alone HVAC unit with independent controls.

3.8.2.4 HVAC units shall have humidity control. Relative humidity shall be between 40 and 55%.

3.8.2.5 Temperature shall be controlled and should be between 68° and 77°F.

3.8.2.6 Power to the HVAC units shall be supplied from the building UPS to ensure 24 hour operation.

3.8.2.7 Positive air pressure shall be maintained in the ER/TR spaces to ensure a dust free environment.
The A/E shall extend and/or provide dedicated UPS circuits from two separate sources (UPS-A, UPS-B).

Electrical UPS sub-panels shall be installed in each E/RTR from both UPS sources providing redundant branch circuit power to all telecommunications equipment.

Future growth and expansion shall be built into the design for power and cooling systems.

**3.8.3 Typical TR (Telecommunications Room) is as follows:**
3.8.5 Typical EF (Entrance Facility)

3.8.6 New Overall Cabling Design of the Martin Building

3.8.6.1 Produce an overhead cabling design with a drop ceiling and modular walls (or drywall walls) with a cable tray. A drop ceiling allows flexibility for overhead cabling and expansion for the future.
3.8.6.2 The design shall allow for up to twenty percent (20%) more cabling and equipment to be added in the EE/TR at a future date with an initial fill factor of 40% for all pathways.

3.8.6.3 The design shall have four (4) copper cables (Cat 6A) go to each workstation. Also, the design will allow for easy expansion of the number of copper cables in each office.

3.8.6.4 Typical Workstation installation/termination is as follows:
- 1 3/4” empty conduit stub-up above ceiling for each FSO (Full Service Outlet)
- 5” square, 2 1/8” deep metal box with 1 3/4” knock-outs
- Double-gang plaster ring (size depends on wall thickness)
- Plastic bushes to be installed on conduit stub in ceiling

3.8.6.5 Yellow category 6a cable shall terminate in position 1, White in position 2, Red in position 3, and Blue in position 4 of the surface mounted media box supplied by the contractor.

3.8.6.6 Contractor shall leave a minimum of 5 feet slack above in the ceiling for each workstation.

3.8.6.7 Provide for the capability of Wireless Access Point extensions (access points and repeaters) throughout the entire building for both our internal WLAN (EIM0) and enterprise guest access (EIMG) as well as coverage for the Visitor’s and Conference Center areas.

3.8.6.7.1 Conduct and provide a full spectral analysis, after professional wireless site survey, providing maximum coverage of workable floor space for the entire building.

3.8.6.7.2 Mount and install wireless access points in the determined locations based on spectral analysis/site survey
- Install Blue category 6a cable to each wireless access point location
- Termination of category 6a cable shall be above the ceiling in the plenum space in an approved outlet device with SMP (RJ-45) female jack.
- Cabling for wireless access points shall be terminated on its own patch panel in the nearest TR or EE.

3.8.7 Backbone and Horizontal pathways

3.8.7.1
3.8.7.2
3.8.7.3
3.8.7.4
3.8.8 Other Space Considerations

3.8.8.2 This equipment has not been identified, and the size of this space is unknown at this point.
3.8.8.3 The design shall include additional space outside of the E/E TR riser stacks.
3.8.8.4 This space shall include HVAC and UPS redundant power for these services.

3.8.9 Master Antenna System

3.8.9.1 The Master Antenna System must distribute select commercial satellite television stations throughout the Martin and Eccles building.
3.8.9.2 Additional network cable will be installed in specific offices including but not limited to:
   - Director’s offices
   - Rooms designated as Board senior officers’ offices (during programming)
   - Conference rooms and throughout the conference center
   - Dining rooms and Cafeteria
   - Fitness Center
   - LEU control room
   - Personal security unit offices and conference room
   - Continuity of operations rooms
   - Engineer control room
   - Any lounges or other spaces determined in programming as employee-gathering spaces (formal or informal)
   - Passenger elevator lobbies
   - Commercial spaces such as the Barber Shop

3.8.9.3 During the renovation satellite cable service shall be maintained to the Eccles building.
3.8.9.4 VAC power will be provided at or near all satellite cable AV connections.

3.8.10 (DAS) Digital Antenna System

3.8.10.1 The Digital Antenna System (DAS) shall be designed and implemented so that there will be sufficient coverage for the entire Martin Building
3.8.10.2 Solution shall be designed and implemented with the capability of integrating with all major wireless cellular networks: 3.8.10.3 Designed to support next generation wireless technology (i.e., 4G and beyond).

3.8.10.4 The design shall also include a plan for maintaining wireless cellular coverage in the Eccles building and any occupied areas in the Martin Building during renovation.

3.8.11 Telephony

3.8.11.1 All users will have Voice over Internet Protocol (VoIP) phones to their stations.

3.8.11.2 Confidential - Security

3.8.12 Meetings and Minimum Requirements

3.8.12.1 The A/E will meet with the Information Technology (IT) management staff as needed to insure the scope of the IT component of the Martin renovation project is understood.

3.8.12.2 All design shall conform at a minimum to the ANSI-TIA-568-C series standards or the most current standard.
May 10, 2013

CONTRACT 256548
MODIFICATION 23

Kam Charuchas Chapman & Tweedy, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 256548 to add the contract line item numbers (CLINs) as indicated below:

<table>
<thead>
<tr>
<th>CLIN</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>Data Center Removal/Downsizing (Reference 29)</td>
<td>$55,675</td>
</tr>
<tr>
<td>48</td>
<td>Law Enforcement Unit Technical (Reference 31)</td>
<td>$23,986</td>
</tr>
<tr>
<td>49</td>
<td>Briefing Accommodation Rooms (Reference 32)</td>
<td>$18,949</td>
</tr>
<tr>
<td>50</td>
<td>Law Enforcement Unit Consolidation (Reference 39)</td>
<td>$18,047</td>
</tr>
<tr>
<td></td>
<td><strong>Total firm-fixed-price</strong></td>
<td><strong>$117,697</strong></td>
</tr>
</tbody>
</table>

The performance of the schematic design services identified in the CLINs above shall be performed in accordance with KCCT’s Change Order Proposal dated April 26, 2013 (“April 26 Proposal”). The April 26 Proposal referenced above is hereby incorporated into this Modification 23 by reference.

This Modification 23 increases the Contract value, which is currently $13,535,907.98, by the firm-fixed price of $117,697.00. Because certain elements of the Contract are priced as a not-to-exceed, the new not-to-exceed total contract value as a result of this Modification 23 is $13,653,644.98.

Contractor shall reference “Contract 256548, Modification 23” and the appropriate CLIN as noted above on all invoices and contract-related correspondence.
Except where herein modified, all other terms and conditions of the Contract remain the same.

Sincerely,

[Signature]

Kimberly M. Briggs, C.P.M.
Supervisory Contracts Analyst
April 28, 2013

Kimberly M. Begg, C.P.M.
Superannuity Contract Analyst
Board of Governors of the Federal Reserve System
Washington, DC 20551
202-482-2527


Dear Ms. Begg,

In response to the Board's review of our previously submitted change order proposals, KCCCT is pleased to submit the enclosed revised proposal which includes the following sections:

• CHANGE ORDER PROPOSAL—REFERENCE 29, 31, 33, & 39
  o SUMMARY
  o IDENTIFICATION OF EXCEPTIONS
  o APPROACH NARRATIVE
  o SCHEDULE
  o FEES AND PAYMENT
• DETAILED COST PROPOSAL
• REGIMES OF KEY PERSONNEL

We are very pleased to have the opportunity to once again be of service to the Board in this important additional task and look forward to responding to any questions you may have.

Sincerely,

[Signature]

James C. Dudley, AIA
Associate
CHANGE ORDER PROPOSAL – REFERENCE: 29, 30, 32 & 39

I. SUMMARY

The Board has requested that Karn Charlites Chapman & Twohey (KCC7) and its sub-contractors (collectively the Design Team) revise previously submitted Change Order Proposals regarding (1) Ref. 29 – Data Center Removal; (2) Ref. 30 – LSU Security Operating Systems and Command and Control Centers; (3) Ref. 32 – Briefing Accommodation Rooms; and (4) Ref. 39 – LSU Space Consolidation.

The following summarizes the submitted revisions:

- Hourly rates were revised to affect an escalation of 1.5% per annum instead of the 3% rate used in the original proposal.
- Given the Board's intention to associate Ref. 29, 30, 32 & 39 synchronously, the Design Team analyzed the cumulative changes assuming that the work would be performed concurrently. As such, impacts to cost and schedule were reduced.
- As mutually agreed by the Board and the Design Team, the revised proposal includes change order pricing for only the Schematic Design phase with the understanding that any other fee adjustments (credits/debits) for Design Development or Construction Documents will be addressed after the completion and approval of a Space Requirements Report and Engineering Report.
- Certain scope elements, as outlined below, were either reduced or eliminated.

II. IDENTIFICATION OF EXCEPTIONS

A. Our price proposal excludes all other direct costs (ODC's). We assume that ODC's related to this task can be invoiced against CLIN 38 Other direct costs through the construction document phase only.

B. Our price proposal excludes all design (development), construction documents, pre-construction and subcontract (kick-off and negotiations), and construction phase services.

C. Additional exclusions are listed in the Section III description of individual change order tasks.

III. APPROACH NARRATIVE

Work associated with the four Change Orders tasks will be integrated into the Space Requirements Report and Engineering Report required under the current contract. We assume that it will not be necessary to submit materials associated with these additional services independent of the scheduled milestones. We do acknowledge that it will be necessary to provide the re-design of the West Pavilion ahead of program reports since approval of the layout is critical to maintaining the schedule for the 39th CD's Site/Senior package. Refer to Section IV for schedule constraints.

Ref. 29 – Data Center Removal

In accordance with the scope of work provided by the Board with the request for change order pricing, the Design Team will provide programming and schematic design of the space to house IT and client...
services required to support the Matrix Building following the relocation of the Data Center, hereinbefore referred to as the Data Support facility. Based on the Board’s BOM estimate, this facility is anticipated to be 2,000 square feet. Specific services include:

- Architectural space programming of the Data Support facility for inclusion in the Space Requirements Report (includes integrating spaces into existing/stacking and space plans)
- Existing conditions survey and BIM documentation for the 4,000 square foot existing Data Center space
- Significant review of previously completed programming effort specifically for the IT Infrastructure and MEP design. Also includes the additional effort required to design the removal of the existing conduit system.
- Revisions and additional design recommendations for the Code Analysis and Technical Security portions of the Engineering Report
- Incorporating the Data Support facility into the schematic Design cost estimate

Ref. 31 – LEU Security Operating Systems and Command and Control Center (COC)

In accordance with the scope of work provided by the Board with the request for change order pricing, the Design Team will provide programming and schematic design of the Security Operating Systems and Security Command and Control Center (COC), each of which was specifically excluded from the original scope of work and subsequent modifications. Specific services include:

- Architectural space programming of the COC, electronic equipment room, extended stay room, restroom, and kitchenette for inclusion in the Space Requirements Report (includes integrating spaces into existing/stacking and space plans)
- Site of the market recommendations for the Security Operating Systems based on Board requirements, including reintegration with existing systems
- Revisions and additional design recommendations for the Code Analysis, MEP, and IT Infrastructure portions of the Engineering Report
- Incorporating the COC, adjacent spaces, and Security Operating Systems into the schematic Design cost estimate

Ref. 32 – Briefing Accommodation Rooms

In accordance with the scope of work provided by the Board with the request for change order pricing, the Design Team will provide program verification and schematic design of a Briefing Room, Broadcast Control Room, Security Press Release Facility, and Green Room. The original scope of work and subsequent modifications had no provisions for these spaces. The Board has agreed to provide a program for the spaces so the effort of the Design Team will be limited to program verification. Specific services include:

- Adding space requirements to the Space Requirements Report (including integrating spaces into existing/stacking and space plans)
- Conceptual re-design of the West Pavilion, based on Board’s new requirements
Ref. 39 – LEU Space Consolidation

In accordance with the scope of work provided by the Board with the request for change order pricing, the Design Team will provide programming and schematic design of a consolidated suite of LEU spaces anticipated to include: mail call area, locker/break rooms, offices, conference rooms, and weapons/ammunition storage. Currently the contract includes no provision for these spaces to occupy the renovated Matrix Building. Specific services include:

- Architectural space programming of the LEU spaces for inclusion in the Space Requirements Report (includes integrating spaces into blocking/stacking and floor plans)
- Revisions and additional design recommendations for the Code Analysis, MEP, and Technical Security portion of the Engineering Report
- Incorporating the LEU spaces into the Schematic Design cost estimate

IV. SCHEDULE

The following are critical milestones to maintain the revised design schedule presented at the April 24 progress meeting:

- May 1, 2013 – Board provides NTP for all change orders
- May 15, 2013 – Board provides program for Ref. 32
- May 15, 2013 – completion of IT and LEU space interviews required for Ref. 29, 31 in 39
- May 27, 2013 – KGCT provides revised West Pavilion concept design to the Board
- June 3, 2013 – Board approval of West Pavilion concept design
- Mid-June 2013 – KGCT submits Draft 60% Program Report for Board review
- Mid-June 2013 – KGCT submits 30% CDs for Site & San Package for Board review (development of West Pavilion structure will be not be equitable to the other portions since the Design Team received concept approval for that area June 1, 2013)

V. FEE AND PAYMENT

Refer to the detailed cost proposal submitted in conjunction with this change order proposal for a complete fee explanation. Request for payment will be submitted as stipulated in the original contract.
## Board of Governors of the Federal Reserve System
### Washington, D.C. 20551

The Martin Renovation Project
Architectural/Engineering Services
Contract 260548
Cost Proposal for Additional Services:
Ref. 28, 31, 32 & 39

### A&E Total Summary

| Company Name: MARTIN CHARLES CHAPMAN & TROJEK |
| Authorized Signature: [Signature] |
| Date: April 26, 2013 |

### Cost Summary

<table>
<thead>
<tr>
<th>Design Services</th>
<th>Cost Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Schematic Design Labor</td>
<td></td>
</tr>
<tr>
<td>REF. 29 - DATA CENTER REMOVAL</td>
<td>$55,075</td>
</tr>
<tr>
<td>REF. 31 - LEU TEDIA SECURITY &amp; IDDC</td>
<td>$25,940</td>
</tr>
<tr>
<td>REF. 32 - BRIEFING ACCOMMODATION ROOMS</td>
<td>$31,613</td>
</tr>
<tr>
<td>REF. 35 - LEU CONSOLIDATION</td>
<td>$10,547</td>
</tr>
<tr>
<td>Test Cost:</td>
<td>$117,537</td>
</tr>
<tr>
<td>Grand Total: Labor + ODC%</td>
<td>$157,537</td>
</tr>
</tbody>
</table>

### Notes
- Competitive

---

Print Date: 4/26/2013
Page 1 of 3
<table>
<thead>
<tr>
<th>Description (Position)</th>
<th>Rate (Firm/Competitive)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Infrastructure Specialist (EIS)</td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
</tr>
<tr>
<td>EIS Level - Principal Engineer</td>
<td></td>
</tr>
<tr>
<td>EIS Level - Administrative</td>
<td></td>
</tr>
<tr>
<td>Total - Labor</td>
<td></td>
</tr>
<tr>
<td>Accounting Specialist (ACG)</td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
</tr>
<tr>
<td>ACG Level</td>
<td></td>
</tr>
<tr>
<td>Total - Labor</td>
<td></td>
</tr>
<tr>
<td>Architectural Transportation Documentation</td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
</tr>
<tr>
<td>Architectural Drafts Operator</td>
<td></td>
</tr>
<tr>
<td>Total - Labor</td>
<td></td>
</tr>
<tr>
<td>Cost Estimating (CER)</td>
<td></td>
</tr>
<tr>
<td>Senior Level</td>
<td></td>
</tr>
<tr>
<td>Cost Estimator</td>
<td></td>
</tr>
<tr>
<td>Maintenance / Electrical Estimator</td>
<td></td>
</tr>
<tr>
<td>Total - Labor</td>
<td></td>
</tr>
<tr>
<td>Total - All Labor</td>
<td></td>
</tr>
<tr>
<td>Competition Rate</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>NET-20</th>
<th>MBE  20</th>
<th>NET- 30</th>
<th>MBE  30</th>
<th>MIN</th>
<th>MNB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Labor - Firm</td>
<td>$2,094</td>
<td>$2,094</td>
<td>$3,810</td>
<td>$3,810</td>
<td>$3,140</td>
<td>$3,140</td>
</tr>
<tr>
<td>Total Labor - Competitive Rate</td>
<td>$1,097</td>
<td>$1,097</td>
<td>$1,097</td>
<td>$1,097</td>
<td>$1,097</td>
<td>$1,097</td>
</tr>
<tr>
<td>Total Labor</td>
<td>$3,191</td>
<td>$3,191</td>
<td>$4,907</td>
<td>$4,907</td>
<td>$4,237</td>
<td>$4,237</td>
</tr>
</tbody>
</table>
KEY PERSONNEL - ORGANIZATION CHART

MANAGEMENT TEAM

Enrique A. Bellini, AIA
Principal in Charge/Residential Design

James D. Deloney, AIA
Project Manager

CORE TEAM

Karen Chewles, CHFA/CHT
Firm, Project Management, Interiors, Design
Project Architect: Benjamin Bigger, AIA, LEED® AP
Director of Services: Jane Loder, AIA, LEED® AP ID+C

E.K. Fox & Associates
Director: Gil Adams, PE
Mechanical, Electrical, Plumbing, Engineering
Principal Engineer: Blat, A. Just, PE
Sr. Project Manager: Benjamin A. Colley, PE
Mechanical Engineer: Roman, J. Roman, PE
Electrical Engineer: Oscar M. Reyes, PE

Johns & Blaisa Consulting Engineers <CE>
Structural Engineer:
Lead Structural Engineer: Stephen C. Blaisa, PE
Structural Engineer: Eugene J. Collins, PE

Hughes Associated
Building Code & Fire Protection Engineering
Senior Fire Protection Engineer: Donald Hopkins Jr., P.E.
Fire Protection Engineer: Ajay V. Pardal, P.E.

Tecnología Design Resources <CE>
Audio-Visual, Structural, Lease, and Interior Design
AV/Communications Designer: Donald S. Bailey, CTS

PROJECT MANAGEMENT SERVICES, INC.
Cost Estimating
Cost Estimator: Jack West

CONSULTANT TEAM

Gerald Waldron Associates <CE>
Architectural Lighting Design
Lighting Designer: Lee Waldron, FIALD, IESNA

Applied Research Associates
Electronic Systems Security
Project Manager: Ken A. Blech, PMP
Electronic Systems Specialist: Vincent W. Smith
Security Systems Designer: Michael H. Brown

JJR, Inc.
Full Protection
Full Protection Consultant: Kevin Wilson, PE, CSP

Acoustical Design Collaborative <CE>
Acoustics
Consultant: Neil Thompson, ASID

Van Dusen Associates
Vertical Transportation
Vertical Transportation Specialist: Paul R. Brent
ENRIQUE A. BELLINI, AIA
Principal in Charge/Briefing Room Designer

Mr. Bellini has served as managing principal on projects for the Federal Reserve Board, Architect of the Capitol, National Building Museum, Department of State, General Services Administration, and other federal, state, and private clients in Washington, D.C. Mr. Bellini specializes in the design and renovation of office and government office buildings, and can provide the technical expertise to develop creative, adaptive, and cost effective solutions for a wide range of facilities. Mr. Bellini has a broad range of experience in the design and renovation of office buildings for the federal government, including the U.S. Department of State, General Services Administration, Department of Defense, Department of Interior, and other federal agencies. His experience includes both federal and private sector clients, and he has worked on projects ranging from small renovations to complete relocations and new construction. Mr. Bellini has a proven track record of successfully completing projects on time and within budget, and has received numerous awards for his work.
### KEY PERSONNEL - RESUMES

<table>
<thead>
<tr>
<th>YEARS EXPERIENCE</th>
<th>James Dudney, AIA</th>
<th>Project Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 Years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EDUCATION**
- B.Arch. / 1985 / Architecture
  - University of Notre Dame

**REGISTRATIONS**
- Architect: District of Columbia
- Maryland

**AFFILIATIONS**
- American Institute of Architects
- DC Preservation League
- Dupont Circle Citizens' Assoc.

**OFFICE LOCATION**
- Washington, DC

**CLEARANCE**
- Top Secret

Mr. Dudney has over 25 years of professional experience in a variety of commercial, government, educational and residential projects. He has successfully performed as an effective team leader in all phases of architectural design, from conceptual design through construction administration for interior renovations, building modernizations, and new construction projects. Mr. Dudney has served as Project Manager with the Federal Reserve Board, Inter-American Development Bank, Library of Congress, Architect of the Capitol, US Department of State, Pan American Health Organization, and the Embassy of Spain. He manages the production of architectural documents in compliance with the contract's scope of work. The following is a list of representative projects in which he has served as project manager:

**FEDERAL RESERVE BOARD**
- Washington, DC
  - Martin Building Modernization
  - Visitor & Conference Center Addition

**ARCHITECT OF THE CAPITOL**
- Washington, DC
  - Rayburn House Office Building Roof
  - House of Representatives Rotunda
  - Lincoln Exhibit Renovation
  - House of Representative Kitchen Renovation Study
  - Senate Kitchen Renovation Study

**PAN AMERICAN HEALTH ORGANIZATION**
- Washington, DC
  - Facilities Planning Studies
  - Knowledge Space Renovation

**INTER-AMERICAN DEVELOPMENT BANK**
- Washington, DC
  - Trading Room Renovation

**US. DEPARTMENT OF STATE**
- Washington, DC
  - US Consulate Renovation, Caracas, Venezuela
  - US Consulate Renovation, Sao Paulo, Brazil
  - US Embassy US. AID New Building, Accra, Ghana
### Key Personnel - Resumes

| Years Experience |  
|------------------|-----------------------
| With KECCT    | 4 Years  
| With Other Firms | 4 Years  

### Education

- B.A. 2004, Architecture, Johns University  
- M.Arch 2006, Architecture, Johns University

### Registrations

- Architect: District of Columbia

### Affiliations

- American Institute of Architects
- NCARB
- Society of American Military Engineers
- U.S. Green Building Council

### Office Location

- Washington, DC

### Clearance

- Top Secret

---

**Benjamin Burgin, AIA, LEED® AP, NCARB**  
**Project Architect**

Mr. Burgin has significant experience on a variety of government and commercial projects that include public renovation and new construction. He has successfully performed as an effective team leader in all phases of architectural design, from conceptual design through construction administration. Mr. Burgin has served as Project Architect for KECCT's DSQ contracts with the Architect of the Capitol and independent projects with the Federal Reserve Board and Pan American Health Organization. He manages the production of architectural documents in compliance with the contract scope of work.

The following is a list of representative projects where Mr. Burgin has held a significant role:

#### Federal Reserve Board
- Washington, DC
  - Martin Building Modernization
  - Visitor & Conference Center Addition

#### General Services Administration Projects
- Washington, DC
  - American Pharmacists Association Perimeter Security
  - U.S. Department of State Perimeter Security
  - Mary S ether Building Modernization

#### Architect of the Capitol Projects
- Washington, DC
  - Russell Senate Office Building Blue Ribbon Panel
  - U.S. Botanic Garden Conservatory Stove Repairs
  - Library of Congress Safety

#### Miscellaneous Projects
- Worldwide
  - Pan American Health Organization Addition, Haiti
  - U.S. Embassy Compound, Macedonia
  - Lake Placid Conference Center, NY
  - Saratoga Springs Conference Center, NY
  - Human Resource Center of Excellence, Port Knox, TN
  - Saratoma Center of Excellence, Fort Lee, VA
KEY PERSONNEL - RESUMES

JAMIE LECLAIREC, ASID, LEED AP ID+C
Director of Interiors

Jamie Leclairec, ASID, LEED AP ID+C, has over 30 years experience in interior design on a wide range of project types, both public and private. Since 2000, she has provided design direction and technical oversight of K22TV station projects. Ms. Leclairec has a strong programming background. Her work includes work at the Federal Bureau of Investigation and the U.S. Department of State, where she has improved efficiency and developed questionnaires and interview techniques that enhance our understanding of the client’s cultural and business requirements. Ms. Leclairec has extensive experience in space planning, interior architecture, construction documents, construction administration as well as FF&E (Furniture, Fixtures and Equipment), Relocation Planning and Facilities.

The following is a list of representative projects in which she has served as Director of Interiors:

FEDERAL RESERVE BOARD
Washington, DC
- Metre Building Modernization
- Visitor & Conference Center Addition

PAN AMERICAN HEALTH ORGANIZATION
Washington, DC
- PAHO Program of Requirements
- Facility Space Plan
- Knowledge Space Renovation

FEDERAL BUREAU OF INVESTIGATION
Washington, DC Metropolitan Region
- Records Management Division Prospective, Washington, DC
- FBI Academy, Building No. 4, Quantico, VA
- J. Edgar Hoover Building, Renovation & Ruddle
- J. Edgar Hoover Building, 9th Floor Renovation

GENERAL SERVICES ADMINISTRATION
Washington, DC
- Executive Lounge Interior Renovation
- US Diplomatic Center Programming & Space Planning
- Harry S. Truman Building Modernization
### KEY PERSONNEL - RESUMES

**BLAIR A. JOST, PE.**
Principal Engineer

Mr. Jost has 30 years of experience as a senior mechanical engineer, mechanical department head, principal-in-charge and project manager on large commercial and government projects. His coordination of the technical and administrative efforts of the mechanical, electrical, and plumbing departments was critical to completion of work schedules, manpower requirements, and workload assurance that projects remain on schedule. His projects include commercial office buildings, educational facilities, hotels, convention centers, U.S. Embassy and Consulate facilities and Government projects.

The following is a representative list of individual projects for various agencies and institutions in which Mr. Jost hold a significant role:

#### FEDERAL RESERVE BOARD
Washington, DC:
- Martin Building Modernization
- Visitor & Conference Center Addition

#### OFFICE BUILDING PROJECTS
Washington, DC Area:
- TASS IV, Chantilly, VA
- Westpark Corporate Center, McLean, VA
- National Association of Realtor Building (B10 New Jersey)
- TASS IV Front (Northrop Grumman), Chantilly, VA
- TASS V Office Building, Chantilly, VA
- Fair Lakes Building 7, Fairfax, VA
- Spooont Office Building, McLean, VA
- Liberty Center II Office Buildings, Chantilly, VA
- Liberty Center III Office Building, Chantilly, VA
- Tysons I Office Building, Tysons Corner, VA
- Pentagon Athletic Center, Arlington, VA
- AAFB (Andrews AFB) Building 1135 - HVAC Upgrade, Camp Springs, MD
- AAFB (Andrews AFB) Building 1168 - Post Office Renovation, Camp Springs, MD
- AAFB (Andrews AFB) Building 1146 - Security Camp Springs, MD
- FBI Quantico Justice Information Systems Mechanical Reliability Improvements, Chantilly, VA
- FBI HQ 1, Edgar Hoover Bldg, 1st & 10th Floor Renovation, Washington, DC
- FBI San Juan Office Relocation Equipo Resident Agency, San Juan, PR
- FBI Tour Recreation, Washington, DC
KEY PERSONNEL - RESUMES

BENJAMIN CROWLEY, PE
Senior Project Manager

Mr. Crowley has 26 years of experience in the practice of mechanical engineering on large commercial and government projects with focus on HVAC design, piping systems, ductwork and piping layout, and hot and chilled water systems. He has worked on all aspects of project development from site master planning to individual system and component design and application for HVAC. His experience includes building and system assessment studies, partial and complete building renovations, and new construction for a variety of building types and sizes. His projects include commercial office buildings, educational facilities, U.S. Embassy and Chancery facilities and government projects.

FEDERAL RESERVE BOARD
Washington, DC
- Martin Building Modernization
- Visitor & Conference Center Addition

OFFICE BUILDING PROJECTS
Washington, DC Area
- Mark Center VI, Alexandria, VA
- Park Place II, McLean, VA (LEED)
- TASC V, Chantilly, VA
- National Association of Realtors Headquarters, Washington, DC (LEED)
- Navy Federal Credit Union Headquarters Phase II, Vienna, VA
- Pentagon Athletic Center, Arlington, VA (LEED)
- Hensley Square II, Herndon, VA
- Navy Federal Credit Union Headquarters Infrastructure Upgrades to HQ Data Center, Vienna, VA
- Goodwill Sesame Center Renovation and Addition, University of Richmond, Richmond, VA
- Health Sciences Building, Montgomery College, Takoma Park, MD
- United States Naval Academy Lace Hall Renovation, Annapolis, MD
- Pentagon Temporary Office Building, Arlington, VA
- Northampton Apartments, Alexandria, VA
- AAPB (Andrews AFB) Building 4C58-HVAC Upgrades, Camp Springs, MD
- AAPB (Andrews AFB) Building 1686-Post Office/Landing, Camp Springs, MD
- AAPB (Andrews AFB) Building 1815-Security, Camp Springs, MD
ROMAN J. ROMAN, PE
Mechanical Engineer

Mr. Roman has 16 years of experience as Senior Mechanical Engineer and Project Manager on projects for the Department of Defense (DOD), Aerospace, Federal, State and Municipal Governments, and Private Industry. His projects include: municipal waste treatment plants; pretreatment and electroplating shops for the aerospace and electronics industries; nuclear submarine support facilities; satellite storage facilities; petroleum fuel storage and distribution systems; DOD research laboratories; DOD schools, barracks, airports, maintenance and training facilities; power distribution substation; automobile assembly plants; and office buildings. Mr. Roman has also served as a project manager in the power house and municipal wastewater treatment facilities for pulp and paper and automobile assembly plants as well as facility engineering manager for the US Foreign Service (USAID). The following is a representative list of individual projects for various agencies and institutions in which Mr. Roman held a significant role:

FEDERAL RESERVE BOARD
Washington, DC
• Metro Building Modernization
• Visitor & Conference Center Addition

OFFICE AND ADMINISTRATION BUILDING PROJECTS
• SOP Motor Pool Additions, Fort Bragg, NC, USACE, Savannah District
• SOP Base Operating Facility Phase V, Fort Bragg, NC, USACE, Savannah District
• SOP Motor Pool and Intern Headquarters, Fort Bragg, NC, USACE, Savannah District
• FFAC System Replacement, EFC Bldg. 937, NAS, Jacksonville, FL, NOFAC South East
• Reserve Building 2000, Port San Antonio, Texas, USACE, Port Worth District
• Simplicity: Expanding Sunshine Toll Road Modifications, Florida DOT, Broward CQ, FL
• Virtual School Telecommunications, USACE, Norfolk District
• Combat Fighter Squadron Oceana 2 Bath Building, Virginia Beach, Virginia Beach, Virginia
• Telecommunications Building: Blue Oxygen, West Texas
• Launch Site, Texas
• VBRAC Moody Community Activity Center, Moody Air Force Base, Georgia, CECE, USAF
• Telecommunications Building: Blue Oxygen, West Texas
• Launch Site, Texas
• VBRAC Moody Community Activity Center, Moody Air Force Base, Georgia, CECE, USAF (LEED)
• AFIT Battalions Cables and Bases Replacement, Ft. Sam Houston, TX, USACE, South West Division (LEED)
• Design AFTAC Headquarters & Lab, Patrick, Air Force Base, FL, USACE Savannah District (LEED)
<table>
<thead>
<tr>
<th>YEARS EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>With E.K. Fox</td>
</tr>
<tr>
<td>With Other Firms</td>
</tr>
</tbody>
</table>

**EDUCATION**
- BS 1994: Electrical Eng, George Mason University

**REGISTRATIONS**
- Electrical Engineering: District of Columbia, Virginia, Maryland

**AFFILIATIONS**
- Institute of Electrical and Electronic Engineers

**OFFICE LOCATION**
- Fairfax, VA

**CLEARANCE**
- Top Secret

**OSCAR M. REYES, PE**
**Electrical Engineer**

Mr. Reyes has 17 years of experience in the practice of electrical engineering on large commercial and government projects with focus on power systems design, lighting systems, fire alarm and telecommunications systems. He has worked on all aspects of project development from site master planning to individual system and component design and application for electrical systems. His experience includes medium voltage power systems, building and system assessment studies, partial and complete building renovations, and new construction for a variety of building types and sizes. His projects include government projects, data centers, educational facilities, commercial buildings, and medium voltage switchgear maintenance coordination.

The following is a representative list of individual projects for various agencies and institutions to which Mr. Reyes had a significant role:

**FEDERAL RESERVE BOARD**
- New Building Modernization
- Visitor & Conference Center Addition

**CORPORATE PROJECTS**
- Mount Vernon High School
- West County High School
- Fairpark Hospital
- Inova Hospital - Alexandria
- Inova Hospital - Fair Oaks
- IDP: USS Virginia Class Submarine Laboratory
- Lockheed Martin SCIF
- Canadian Submarine Laboratory
- BAE Systems SCIF
- BAE Systems Space Naval Ship Manufacturing Laboratory
- Howard Hughes Medical Institute
- Exodus Communications - Data Centers (DC area)
- Oak View Elementary School
- Post Office Power Quality Study
- VDOT Area Headquarters
- VDOT: Administration Building and Maintenance Facility
- Apple Federal Credit Union - Sterling
- Apple Federal Credit Union - Kingstown
KEY PERSONNEL - RESUMES

KIRAN SINGH C. BHATIA, PE.
Lead Structural Engineer

Mr. Bhatia has 37 years of structural engineering and project management experience on both federal and commercial sector projects. The experience includes structural design, construction, coordination, field service, feasibility studies, load analysis, blast resistance and seismic upgrades for a multitude of structures including office buildings, local federal buildings, hospitals, educational facilities, embassies, churches, and residential structures. Mr. Bhatia serves as the Principal in Charge of Quality Control.

The following is a list of representative projects on which he has served or currently serving as a project manager and lead structural engineer.

FEDERAL RESERVE BOARD
Washington, D.C.
- Martin Building, Modernization
- Visitor & Conference Center Addition

FEDERAL AND COMMERCIAL PROJECTS
- National Association of Homebuilders Office Building Renovation, Washington, D.C.
- IHS Building Paddie Renovation, Washington, D.C.
- U.S. Department of State Perimeter Security Improvement, Washington, D.C.

DEPARTMENT OF STATE PROJECTS
- Renovation, U.S. Consulate, Hyderabad, India
- Renovation, U.S. Embassy, New Delhi, India
- Chiller Replacement, U.S. Embassy, Tehran, Iran
- Chiller Replacement, U.S. Consulate, Milan, Italy
- Mechanical Upgrade, Nice, France
- Mechanical Upgrade, Bogota, Colombia
- Mechanical Upgrade, Kampala, Uganda
- Renovation, U.S. Embassy, Guatemala City, Guatemala
- Chiller Replacement, U.S. Consulate, Lagos, Nigeria
- Mechanical Upgrade, U.S. Consulate, Rio De Janeiro, Brazil
- Renovation, U.S. Embassy, Baghdad, Iraq
-
EUGENE J. COLLINS, PE
Structural Engineer

Mr. Collins is a respected and distinguished member of the engineering community with more than 35 years of experience in structural design and project management experience for both federal and commercial sector clients. The structural design experience has included office buildings, educational facilities, residential structures, parking structures, warehouses,embassies and charrettes. His expertise also includes structural investigations, load studies and field inspections.

The following is a list of representative projects for which he has served or is currently serving as a structural engineer.

FEDERAL RESERVE BOARD
Washington, DC
• Metro Building Modernization
• Visitor & Conference Center Addition

FEDERAL AND COMMERCIAL PROJECTS
• Various Renovation Projects, U.S. Department of State
  • Harry S. Truman Building, Washington, D.C.
  • Blair House Interior Renovation, Washington, D.C.
  • Window Blinds Migration, National Court Building
  • Washington, D.C.
  • Renovation, Treasury Building, Washington, D.C.
• Federal Reserve, U.S. Botanic Gardens, Washington, D.C.
• Escalator Removal and Sub-Cell lul Issue, FBL – J Edgar Hoover
  • Building, Washington, D.C.

DEPARTMENT OF STATE PROJECTS
• Renovation, Office Building, Jakarta, Indonesia
• Renovation, U.S. Embassy, Tokyo, Japan
• Renovation, U.S. Consulate, Almaty, Kazakhstan
• Renovation, U.S. Embassy, San Jose, Costa Rica
• Renovation, U.S. Embassy, Vilnius, Lithuania
• Renovation, U.S. Consulate General, Chengdu, China.
### KEY PERSONNEL - RESUMES

<table>
<thead>
<tr>
<th>YEARS EXPERIENCE</th>
<th>12 Years</th>
<th>7 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>With USA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Other Firms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DONALD HOPKINS, JR., PE.

**Senior Fire Protection Engineer**

Mr. Hopkins is a Senior Fire Protection Engineer professionally licensed in the District of Columbia. He has 12 years of experience with all aspects of fire protection engineering services. He designs and consults on fire protection systems. His background includes extensive experience as a fire protection system contractor, making him excellently qualified to make accurate cost estimates, and to supervise and provide technical direction for system installations. Mr. Hopkins has developed and taught courses on fire suppression systems and fire hydrant systems, which he provides expert instruction on fire protection, control, detection, suppression and extinguishment. He is currently the Lead Fire Protection Engineer for the new FBI Hostage Center.

The following is a representative list of individual projects that Mr. Hopkins held a significant role as fire protection engineer:

#### FEDERAL RESERVE BOARD

- **Washington, DC**
  - Martin Building Modernization
  - Visitor & Conference Center Addition

#### FEDERAL AND COMMERCIAL PROJECTS

- **Washington, DC Area**
  - Eisenhower Executive Office Building Modernization
  - IRS Library of Congress, Tenant Fit-Out
  - Federal Reserve Board Building, Visitor Center, 62,000 sf.
  - US House of Representatives, Page Boundary, 85,000 sf.
  - US Post Office
  - Rayburn House Office Building, 200,000 sf.
  - US Bureau of Engraving and Printing, 100,000 sf.
  - Pan American Health Organization Knowledge Space, 17,000 sf.
  - Cannon House Office Building, 883,000 sf.
  - Library of Congress, John Adams Building, 700,000 sf.
  - Spanish City Headquarters, 375,000 sf.
  - Library of Congress, Thomas Jefferson Building, 60,000 sf.
  - Spanish Cultural Center, 11,000 sf.
  - Wilber J. Cohen Building, 1,200,000 sf.
  - Government Printing Office, 50,000 sf.
  - Data Center Building, 90,000 sf.
  - Naval Research Laboratory, 900 sf.
  - Chiller Plant Upgrade
KEY PERSONNEL - RESUMES

AJAY V. PRASAD, PE
Fire Protection Engineer

Mr. Prasad has 19 years experience managing fire safety and code consulting projects. He identifies applicable codes and standards and reviews proposed designs to ensure that an adequate level of fire safety is provided for protection of occupants and property. Designs are reviewed to ensure code compliance based on requirements such as occupancy and use classifications, building size and height limitations, construction type, required fire resistance of structural elements, fire resistance rated barriers and partitions, approved finish requirements, fire safety systems, and means of egress. Where strict code compliance is not technically or economically feasible, he develops alternative approaches to ensure that the design provides a level of fire safety at least equivalent to that specified by the codes.

The following is a representative list of individual projects in which Mr. Prasad held a significant role as fire protection engineer:

FEDERAL RESERVE BOARD
Washington, D.C.
- Merito Building Modernization
- Visitor & Conference Center Addition

FEDERAL AND COMMERCIAL PROJECTS
Washington, D.C. Area
- CPTC Lafayette Center, 122,000 sf, Code Consulting
- Children's National Medical Center, 24,987 sf, 4th & F St NW Out
- Federal City Station, 204,000 sf, ADA Renov
- Forest Service Yates Building, 18,498 sf, Renovation
- House of the Temple, 40,000 sf, Fire Protection Analysis
- MetLife, First Floor Fire Out, 8853 sf, Code Consulting
- National Domestic Institute, 57,577 sf, Code Consulting
- National Gallery of Art, West Building, 12,260 sf, Fire Risk Analysis
- National Institute of Health, Building 1, 22,000 sf, Renovation
- National Institute of Health, Clinical Research Facility, 5,000 sf, Fire Alarm Modifications
- Pan American Health Organization Knowledge Space, 17,000 sf, Renovation
- The George Washington University, School of Engineering Complex, 48,000 sf, Code Consulting
- The World Bank, 21,024 sf, Fire Code Consulting
- U.S. Capitol Visitors Center, 88,000 sf, Fire Safety Analysis
- U.S. Library of Congress, Multiple Buildings, Performance Based Life Safety Analysis (PBLS)
### KEY PERSONNEL - RESUMES

<table>
<thead>
<tr>
<th>YEARS EXPERIENCE</th>
<th>663</th>
</tr>
</thead>
<tbody>
<tr>
<td>With firm</td>
<td>15 Years</td>
</tr>
<tr>
<td>With other firms</td>
<td>37 Years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATION</th>
<th>Business Management &amp; Drafting</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>OFFICE LOCATION</th>
<th>McLean, VA</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>CLEARANCE</th>
<th>Top Secret</th>
</tr>
</thead>
</table>

### JACK WEST
Cost Estimator

Mr. West has more than 40 years of experience in architecture and engineering in the construction industry performing cost estimates, on-site construction management, project coordination and client relations. As Director of Estimating, he assigns and manages all estimates for the company as well as performing Quality Control on such estimates. Mr. West has been providing consulting services to KCET on a broad range of IDIQ contracts including the Federal Reserve Board, General Services Administration, the Federal Bureau of Investigation, the U.S. Department of State, and the Archives of the Capital.

The following is a representative list of individual projects in which Mr. West has served as Cost Estimator:

**FEDERAL RESERVE BOARD**
- Martin Building Modernization
- Visitor & Conference Center Addition
- Visitor Center Act Shaft

**GENERAL SERVICES ADMINISTRATION PROJECTS**
- Headquarters Modernization, Washington, DC
- New U.S. Census Bureau Headquarters, Suitland, MD
- Federal Office Building 8 renovation, Washington, DC
- IRS Headquarters Modernization, Washington, DC

**U.S. DEPARTMENT OF STATE PROJECTS**
- East Auditorium Renovation Study
- Old State 21st Street Plaza and Security Entrance
- Old State Diplomatic Center
- MMS Medical and FARA Renovation
- Department of State MMS Medical and FARA Renovation

**U.S. NAVAL ACADEMY**
- US Naval Academy Museum, portable hall, Annapolis, MD
- King Hall Main Dining Hall and Kitchen Renovation
- HVAC Upgrade for Buildings 230, 231, 232 and 233
- Relocation of Center for Computational Science
- Historic Bancroft Hall Renovations, Annapolis, MD
<table>
<thead>
<tr>
<th>YEARS EXPERIENCE</th>
<th>12 Years 13 Years 21 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUCATION</td>
<td>BS / BEE / Radio-TV-Film, University of Kansas</td>
</tr>
<tr>
<td>REGISTRATIONS</td>
<td>CTS INFOCOMM</td>
</tr>
<tr>
<td>AFFILIATIONS</td>
<td>INFOCOMM NSCA American Institute of Architects</td>
</tr>
<tr>
<td>OFFICE LOCATION</td>
<td>Frederick, MD</td>
</tr>
</tbody>
</table>

**DONALD BAILEY, CTS**

**Audio-Visual & Communications Designer**

Mr. Bailey has over 40 years experience in telecommunications and audio video systems design and integration. Mr. Bailey has industry experience providing program and project management, sales/ installation/operations support, and consulting expertise in the implementation and integration of telecommunications and audio and video systems. His experience encompasses a broad local and national base including education, commercial and government customers.

Mr. Bailey's knowledge encompasses telecommunications and data systems design, audio systems design, video systems design, and control system design and programming. Having overall management of projects from design to purchasing to implementation gives Mr. Bailey knowledge to allow tracking of complete systems solutions, from concept to service.

The following is a list of representative projects in which he has served as principal technology consultant.

**FEDERAL RESERVE BOARD**
Washington, DC:
- Martin Building Modernization
- Visitor & Conference Center Addition

**GOVERNMENT AGENCIES**
Washington, DC:
- US Department of State - Press Briefing Room
- US Department of State - Old State Renovation
- US Department of State - Satellite and Master Antenna System

**SMITHSONIAN INSTITUTE**
Washington, DC:
- NASM Conference Room Audio Video Evaluation
- CIO Video Telecommunications Study

**PAN AMERICAN HEALTH ORGANIZATION**
Washington, DC:
- Emergency Operations Center

**LOCAL GOVERNMENT PROJECTS**
Washington, DC Metropolitan Area:
- Alexandria County VA Courthouse
- Loudoun County VA Courthouse
- Maryland Fire and Rescue Institute NE Headquarters
KEY PERSONNEL - RESUMES

LEE WALDRON, FAIA, IESNA
Lighting Designer

Mr. Waldron has more than 40 years of experience in lighting design. His early work with theatre, film and television lighting provided a unique expertise to his architectural approach to lighting design. As President of Gerald Waldron Associates, Mr. Waldron manages the global operations of the company. He also provides the overall vision for the company and directs the company’s strategic plan and allied profit centers in the US, Shanghai and Beirut.

As a Design Principal, Mr. Waldron offers design expertise in all project types for interior and exterior architectural applications. Mr. Waldron is a former President of the International Association of Lighting Designers and currently serves on the Advisory Board of Moore College of Art and Design and the Northside Fund for Education.

FEDERAL RESERVE BOARD
Washington, DC
- Martin Building Modernization
- Visitor & Conference Center Addition

OFFICE PROJECTS
Washington, DC Area
- Department of State, TV Briefing Room, Washington, DC
- Department of State, Conference Center and Auditorium, Washington, DC
- National Geographic Society Headquarters, Offices and Auditorium, Washington, DC
- Center for Innovation Technology, Offices & Auditorium, Hamilton, VA

MISCELLANEOUS PROJECTS
Worldwide
- Princeton University Campus Buildings, Princeton, NJ
- Arts & Science Buildings & Cornell Medical College, Education City, Doha, Qatar
- GAP Headquarters Buildings, San Francisco, CA
- WXPN World Cafe, Philadelphia, PA
- Liberty Bell Complex, Philadelphia, PA
- Main Post Office Renovation, Philadelphia, PA
- Educational City, Doha, Qatar
RON A. ELLY, PMP
Project Manager

Mr. Elly is a program manager with over 20 years of project management experience in systems engineering, security systems, and information technology program management. As a certified project management professional he has managed numerous large scale projects from system engineering through analysis, building automation system implementations, software development projects, physical and electronic security systems, and security risk assessments.

Mr. Elly led integrated technical teams of project managers, engineers, technical consultants, and technicians for implementation of high visibility multi-million dollar projects in all aspects of security systems including chemical, biological, radiological, and explosives (CBRNE), access control, CCTV, DNR, SCIFs, and LMR. He has performed program reviews, risk assessments, and mitigations, and issue resolution to ensure maximum productivity.

The following is a list of his representative Physical and Electronic Security projects:

NATIONAL GEOSPATIAL INTTELLIGENCE AGENCY
Fort Belvoir, VA
- CBRNE Design & Implementation

FEDERAL RESERVE
Washington, DC
- Bank Consulting/Electronic Security

SOCIAL SECURITY ADMINISTRATION
Frederick, Maryland and Nationwide
- Social Security National Support Center
- Survey and assessment of over 100 Social Security Offices nationwide

DEPARTMENT OF DEFENSE
National Capital Region
- Unlisted (DOD, DoD, DOD, and BSC Compliance Review

U.S. MINT
Washington, DC

DEPARTMENT OF LABOR
Washington, DC
Vincent W. Smith
Electronic Technical Security Specialist

Mr. Vincent Smith is a Electronic Technical Security Specialist with over thirty years of experience in the security industry. His background covers a wide variety of security domains from installation to project management. He gained his initial experience in the field installing home and business electronic security systems. During this time, Mr. Smith became proficient in field assessments, quality assurance and systems integration. This evolved into systems design and project management. He has extensive experience in all aspects of physical and technical security (government/museum). He also has extensive technical experience in CCTV, Access Control, Intrusion Alarms, Visitor Scanning, Perimeter Barriers, Command Centers, Remote Communication, Exhibit Security and Blending security into historic properties.

The following is a list of his representative projects:

**Electronic Technical Security Experience**

- Washington Headquarters Services, Bethesda, MD
- Martin Luther King Memorial, Washington, DC
- Biocontainment Lab George Mason University, Fairfax, VA
- Smithsonian Institution, Washington, DC
- Smithsonian Institution, Steward Complex (CRP + MSG—Cabin), Suitland, MD
- System Planning Corporation, Wright Patterson Air Force Base, Dayton, OH
- Kirtland Air Force Base, Albuquerque, NM
- Olympic Village Electronic Security Team, Atlanta, GA
- Minot Air Force Base, ND. Installation of Advanced Entry Control System
- Minot Air Force Base, Great Falls, MT. Weapons Storage
- Arm Security Upgrade
- Grand Forks Air Force Base, Grand Forks, ND Weapons Storage Area Upgrade
### Michael H. Brown
**Security Systems Designer**

Mr. Brown has over 35 years experience in the physical security field, specializing in technical security. Experience includes project management, conducting offices, instruction, design, engineering, and installation. He has developed written technical security operating policies and procedures. Mr. Brown conducted physical security assessments for new and existing acquisitions, accounting for security requirements to enhance security, developing detailed security floor plans, providing technical advice and guidance, applying internal control measures to protect organizational integrity, and safeguarding materials and equipment.

Mr. Brown established CCTV and electronic security system design requirements and documentation, created system standards for the formulation of special reporting, and coordinated technical operations for security staff and maintenance activities. He created classified documentation (construction security plan) in support of projects for the construction of facilities where compartmentalized information may be discussed, processed and stored.

The following is a list of his representative projects:

#### Miscellaneous Projects

**Washington, DC**
- St. Elizabeth's Campus: Security projects, including design and coordination of the site–parameter security barriers, guard booths, fencing, intrusion detection, closed circuit television access control as well as vehicle and visitor screening.
- Department of Homeland Security (DHS) Nebraska Avenue Complex: Perimeter security project for the NAC complex.
- Department of Defense: Physical security projects for the Pentagon and associated buildings in the National Capital region.
- Department of State: Physical security projects in State Department domestic facilities in the National Capital and U.S. Central region.
- Smithsonian Institution installations, maintenance and inspection activities related to the electronic security systems utilized by OPM.

### Key Personnel - Resumes

**Years Experience**
- With ATA: 5 Years
- With Other Firms: 30 Years

**Training/Skills**
- State Department Continuing Education - Surveillance Tactics, 2006
- Physical Security Specialist, Federal Law Enforcement Training Center, 2008
- Software House 860 and 880 Series and MDT's Ultra and ESS access control systems, 1999-2004
- Software House access control systems including C-Cure 7000, 7500, and 1150, Micro Vitec and 735, 1990, 1998

**Office Location**
- Alexandria, VA

**Clearance**
- Top Secret
KEY PERSONNEL - RESUMES

YEARS EXPERIENCE
With LB: 18 Years
With Other Firms: 6 Years

EDUCATION
MS / 1992 / Civil Engineering
University of Toledo
BS / 1987 / Civil Engineering
University of Toledo

REGISTRATIONS
Professional Engineer:
District of Columbia

AFFILIATIONS
American Society of Safety
Engineers
National Safety Council

OFFICE LOCATION
Washington, DC

KEVIN WILCOX, PE, CSP
Fall Protection Consultant

Mr. Wilcox is a professional structural engineer as well as a certified safety professional with more than 15 years of experience. He has addressed a wide variety of engineering and safety challenges across many types of facilities including government, manufacturing, and institutional buildings. Mr. Wilcox specializes in fall protection assessment and design services. He was instrumental in the development of LB's proprietary fall hazard risk assessment algorithm that is used to prioritize fall hazards according to risk.

The following is a representative list of individual projects for which Mr. Wilcox holds a significant role as fall protection consultant:

FEDERAL RESERVE BOARD
Washington, DC
- Martin Building Modernization

MISCELLANEOUS PROJECTS
Washington, DC
- Full Protection for Supreme Court Roof
- Rayburn House Office Building Roof Fall Protection
- Assessment of Full Asset Systems, Architect of the Capitol
- U.S. Capitol Roof Fall Protection Design
- Full Protection Procedure Guidelines and Templates, Architect of the Capitol
- Roof Fall Protection System Evaluation, Library of Congress
- Ladder Modification Design, Dirksen Senate Office Building
- Full Protection Design for 3 House Office Buildings and 3 Library of Congress Buildings
- Full Protection Design for John Adams Building
- Full Hazard Risk Assessment of Capitol Hill Buildings, Architect of the Capitol
- Full Protection Design for Arts & Industries Building, Smithsonian Institution
- Full Protection Design for National Museum of the American Indian, Smithsonian Institution
- Full Protection Design for Museum of Natural History, Smithsonian Institution
- Full Protection Design for Capitol Dome
- Full Protection Design and Load Testing for Senate Office Buildings
- Full Protection Design for Capitol Grounds
NEIL THOMPSON SHADE

Associate

Mr. Shade has 32 years of experience in consulting, project management, and teaching in acoustics, noise control, and audiovisual systems design. He has served as Principal Consultant on over 1200 projects for most building types. He is responsible for the overall management and technical aspects of the firm’s projects involving acoustic measurements, client liaison, systems development, calculations, specification writing, and drawing preparation. Services provided by Mr. Shade are delivered in an integrated team approach with the belief that the success of any project requires cooperative relationships that respect functional and design objectives of clients, building owners, and other design professionals. His guiding principle is to maintain a flexible consulting approach recognizing the numerous ways to resolve conflicting design issues within the constraints of the project’s financial budget and time schedule.

The following is a representative list of individual projects that Mr. Shade has had a significant role in acoustic consultant.

FEDERAL RESERVE BOARD
Washington, DC
- Martin Building Modernization
- Visitor & Conference Center Addition

MISCELLANEOUS PROJECTS
Washington, DC:
- 902nd M.I. Administration Center Building, Fort Meade, MD
  New 100,000 sf office building
- Capital One Regional Headquarters Building, McLean, VA
- Renovations: 96,000 sf of closed and open plan offices
- Council on Foreign Relations, Washington, DC
  New 80,000 sf headquarters building
- National Maritime Information Center, Gardener, MD
  New 175,000 sf training and conference center
- Square 500 Development, Washington, DC
  New 500,000 sf office building
- USGBC Headquarters Building, Washington, DC
  New 75,000 sf administration center designed to the LEED® Platinum Standard.
KEY PERSONNEL - RESUMES

PAUL ROWEY

Vertical Transportation Specialist

An Area Manager of YEDS Baltimore branch office, Mr. Rowey is responsible for expanding business in the Maryland area as well as supporting the Philadelphia, PA, office with ongoing project management.

He provides equipment and maintenance quality control evaluations, writes equipment and maintenance specifications for new and existing vertical transportation equipment, and provides assistance during the construction administration phase. In addition, he serves as project manager on selected major contracts.

WASHINGTON DULLES INTERNATIONAL AIRPORT
Sterling, VA
- International Arrivals Building Expansion
- Tier 2 architectural

MISCELLANEOUS PROJECTS
Various Locations
- Dover Downs Expansion, Dover, DE
- Baltimore Washington International (BWI) Airport, Baltimore, MD
- Eagles Stadium, Lincoln Financial Field, Philadelphia, PA
- The Boisjari, Atlantic City, NJ
- International Terminal One, Philadelphia, PA
- Pier at Nassau Atlantic City, Atlantic City, NJ
- SEPTA City Hall Station, Philadelphia, PA
- Middlesex County Buildings, New Brunswick, NJ
- SEPTA Suburban Station, Philadelphia, PA
- Norfolk Consolidated Courthouse Complex, Phase I & II, Norfolk, VA
- Trenton Rail Station Rehabilitation, Trenton, NJ
- Main Post Office, Baltimore, MD
- WMATA Silver Line Extension, Fairfax, VA
- Ronald Reagan N.I.F. Airport Terminals A, B/C, Arlington, VA
- Chester Arthur Building, Washington, DC
- US Capitol Complex Surveys, Washington, DC
- Richard B. Russell U.S. Courthouse, Little Rock, AR
- US Capitol Senate Blk, Washington, DC

YEARS EXPERIENCE
- With YEDS: 34 Years
- With Other Firms: 27 Years

EDUCATION
- BS / Harvard Divinity School, Cambridge, MA
- MBA, Harvard Business School
- MBA, Harvard Business School

AFFILIATIONS
- ASME Certified, NASBA
- Qualified Elevator Inspector - QEI# 14732
- Institute of Elevator Safety, for Baltimore City Fire Academy

MEMBERSHIPS
- Baltimore Chapter of BOMA (Former President)
- Baltimore Transportation Association (Board Member)

OFFICE LOCATION
Baltimore, MD
April 9, 2015.

Kimberly M. Briggs, C.P.M.
Supervisory Contract Analyst
Board of Governors of the Federal Reserve System
Washington, DC 20551
202-452-2277

Re: Contract No. 290546, Request for Change Order Pricing

1. Reference 31, Law Enforcement Unit Electronic Monitoring and Control and Security Command and Control Center
2. Reference 32, Briefing Accommodation Rooms
3. Reference 33, Law Enforcement Unit Infrastructure Consolidation

Dear Ms. Briggs,

In response to the Request for Change Order Pricing sent to Karm Charusha Chapman & Twohey (KCT2) via email on March 11, 2015 regarding the requests for change order pricing stated above, KCT2 is pleased to submit the enclosed proposal which includes the following sections for each referenced proposal request:

- **Scope of Work for Additional Services**
  - **Summary**
  - Identification of Exceptions
  - Approach Narrative
  - Schedule
  - Fee and Payment

- **Detailed Cost Proposal**

References to the key personnel experienced in design briefing room design and security systems design are also included in this fee proposal.

We are very pleased to have the opportunity to once again be of service to the Board in this important additional task and look forward to responding to any questions you may have.

Sincerely,

James C. Darby

James C. Darby, AIA
Associate
I. SUMMARY

The Board has requested that Kari Chapman & Tawney (KCT) and its sub-contractor (collectively the Design Team) develop programming, schematic design, and construction documents for the Security Operating System and Control Center (OSCC). These elements were specifically excluded from the original scope of work and subsequent contract modifications for the Martin Building renovation project. This change order expands the scope of work to ensure that the electronic monitoring, access and control system, and OSCC are sized and programmed to efficiently operate and control security devices. Further, the security system for the Martin Building will include provisions for interconnectivity with the existing systems in the Bodies and New York Avenue buildings.

Our change order proposal is based on the scope of work submitted to KCT on March 11, 2013 entitled "Law Enforcement Unit Electronic Monitoring and Control and Security Command and Control Center: Reference Set (Ref. 35, LEO Electronic Monitoring and Command Security Command and Control Center.pdf), Board response to KCT's submission to KCT on March 26, 2013 (260546_response to comment.pdf), and related correspondences.

II. IDENTIFICATION OF EXCEPTIONS

A. Our proposal proposal eliminates all other direct costs (ODC's). We assume that ODCs related to this task can be analyzed against CLRV-08 Other direct costs through the contract document phase only.

B. Our proposal proposal eliminates all pre-disturbance and mobilization (bidding and negotiation) services and construction phase services.

III. APPROACH NARRATIVE

Services for this change order are divided into three phases: A. Schematic Design, B. Design Development, and C. Construction Documents.

A. Schematic Design

Following a notice to proceed (NTP) the Design Team will meet with relevant Board stakeholders to establish design requirements for the Security Operating System and OSCC.

Following the requirements meeting, the Design Team will develop programming and concept design documents to address the Board's requirements. Our design will provide recommendations for complete architectural and engineering design of these systems and spaces including technical security.
systems and equipment, MEP system design, lighting and lighting control, fire and life safety code analysis, and fire protection systems.

I must not that the following are of particular concern to the Board:

- Confidential - security
- Confidential - security
- Confidential - security
- Confidential - security
- Confidential - security
- Confidential - security
- Confidential - security
- Confidential - security
- Confidential - security

The Design Team will present recommendations to LEU and senior Management Division officers for comments. Recommendations will then be revised to address the Board’s comments and incorporated into the Architecture and Engineering Program reports. This will include revisions to the space requirements, blocking and stacking plans, concept illustrations, and affected engineering summaries. The schematic cost estimate stipulated by the existing contract will be expanded to include the Security Operating Systems and OCC.

B. Design Development

Following an approved program, the Design Team will begin the Design Development Phase. During the Design Development phase the Security Operating systems and OCC will be incorporated into the Master Revit model and drawings to a 50% level of completion. The design development cost estimate stipulated by the existing contract will be expanded to include the additional systems and spaces.
C. Construction Documents

During the Construction Documents phase the Security Operating System and GCC will be incorporated into the construction drawings and submitted in conformance with the rest of the Marina renovation drawings at 60%, 90% and 100% levels as stipulated in the existing contract. Drawings and specifications provided for these submissions will be further developed as provided in the Design Development phase. The construction documents cost estimates stipulated by the existing contract will be expanded to include the additional systems and spaces.

IV. SCHEDULE

The space requirements for the Steering Rooms and associated areas will directly impact our ability to provide a comprehensive Programming Report. We therefore recommend obtaining and documenting these requirements prior to submitting the 60% Programming Report which is currently scheduled for submission in the third week of May 2013. We anticipate that completion of these activities for inclusion in the 60% Programming Report could occur approximately 30 calendar days following receipt of a Notice to Proceed (NTP) with an earliest scheduled date of mid to late June 2013. Subsequent submissions will likewise be affected. We are available to work diligently with the Board in establishing an expedited schedule.

To appropriately plan for the 60% Program Submission, we request to receive notification of the Board's intent in favor of or against exercising this change order by May 1, 2013.

Since work within this change order is limited to interior spaces, the current schedule for 60% construction documents for the purposes of CFA and NCPC final approval submission in November 2013 is unaffected.

V. FEE AND PAYMENT

Refer to the DETAILED COST PROPOSAL submitted in conjunction with this CHANGE ORDER PROPOSAL for a complete fee explanation. Request for payment will be submitted as stipulated in the original contract.
<table>
<thead>
<tr>
<th>Design Services</th>
<th>Cost Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. SCHEMATIC DESIGN PHASE SERVICES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>B. DESIGN DEVELOPMENT PHASE SERVICES</strong></td>
<td></td>
</tr>
<tr>
<td><strong>C. CONSTRUCTION DOCUMENT PHASE SERVICES</strong></td>
<td></td>
</tr>
<tr>
<td>90% Submission</td>
<td>$0</td>
</tr>
<tr>
<td>95% Submission</td>
<td>$0</td>
</tr>
<tr>
<td>100% Submission</td>
<td>$0</td>
</tr>
<tr>
<td>Subtotal Construction Document Phase</td>
<td>$0</td>
</tr>
<tr>
<td>Total Cost (A + B + C)</td>
<td>$0</td>
</tr>
<tr>
<td>GRAND TOTAL (A + B + C) LABOR &amp; OCGC</td>
<td>$0</td>
</tr>
</tbody>
</table>
CHANGE ORDER PROPOSAL – REFERENCE M

I. SUMMARY

The Board has requested that Kain Charushas Chapman & Twomey (KCTT) and its sub-consultants (collectively the Design Team) develop programming, schematic design, and construction documents to accommodate spaces to house the media and release sensitive material to the media under secure conditions. The current scope of work for the Martin Building renovation project has no provision for these spaces.

In August 2011, the Design Team prepared a design concept to convert the Lecture Hall in the West Pavilion, an addition to a Breifing Room. The Board’s scope of work requests the Design Team to expand that concept to include the following auxiliary spaces: Broadcast Control Room, Secret Press Release Facility (Lock-Up Room), Support spaces for Lock-Up Room (i.e. restrooms), and Green Room.

Our change order proposal is based on the scope of work submitted to KCTT on March 11, 2013 entitled Design Accommodation Rooms Proposed Change Order (CCO) ROC Opposition Number 39 (Red 39, Breifing room shutdown), Board responses to team RFP’s submitted to KCTT on March 30, 2013 (200460 response to contemporaneous), and related correspondence. Our proposal takes into consideration the fact that some of these spaces will be repurposed from existing spaces already under contract.

II. IDENTIFICATION OF EXCEPTIONS

A. Our price proposal includes all other direct costs (ODC’s). We assume that CCO’s related to this task can be incurred against CLO 39 Other direct costs through the construction documents phase only.

B. Our price proposal excludes all pre-substitution and substitution (bidding and negotiation) services and construction phase services.

III. APPROACH NARRATIVE

Services for this change order are divided into three phases: A. Schematic Design, B. Design Development, and C. Construction Documents.

A. Schematic Design

Following a notice to proceed (FTP) the Design Team will meet with relevant Board stakeholders to establish design requirements for the Breifing Room, Equipment Room, Broadcast Control Room, Secret Press Release Facility (Lock-Up Room), Support spaces for Lock-Up Room (i.e. restrooms), and Green Room.
Following the requirements meeting, the Design Team will develop programming and concept design documents to address the Board's requirements. Our design will provide recommendations for complete architectural and engineering design of these spaces including room acoustics, seismic and vibration isolation, structural modifications including supplemental framing as required, MEP system design, MEP and elevator equipment noise and vibration control, lighting and lighting control, fire and life safety code analysis, full protection hazards analysis and mitigation measures, IT and Audio Visual systems, and vertical transportation design for an additional passenger elevator.

It is noted that the following are of particular concern to the Board:

- **Briefing Room**
  - Room location, size, orientation
  - Support space electronics equipment
  - Lighting and lighting controls
  - Room acoustics
  - Wiring paths to editing rooms, outside press area, fiber optic cable to Verizon's AVOC, and/or roof antennas
  - Support space such as control rooms, editing rooms, and storage areas
  - Structural framing required to support stage andixed seating areas
  - HVAC, power, fire protection, and data systems
  - Audio Visual systems (microphone, speakers, displays, equipment)
  - Mitigation for full protection hazards
  - Furniture, finishes, and equipment (FFE) design, including Lectern

- **Broadcast Control Room**
  - Room location, size, orientation
  - Audio Visual systems
  - Room acoustics

- **Secure Press Release Facility [Lock Up Room]**
  - Number and arrangement of workstations
  - Special FFE
  - Strategies to effectively suite guests
  - Means of controlling communication in or out of the room
  - Required support areas, i.e. restrooms, storage, etc.
  - HVAC, power, fire protection, and data systems

- **Green Room**
  - Location of areas to permit discrete access to the Briefing Room
  - Special FFE
  - Audio Visual systems

The Design Team will informally present the concept to the Board for comment. The concept will then be refined to address the Board’s comments and incorporated into the Architecture and Engineering Program reports. This will include revisions to the space requirements, blocking and stacking plans, concept illustrations, and affected engineering summaries. As in the case with current spaces on the Conference Center Level, new spaces of that level created as a result of this change order will be excluded from the Space Requirements Report. The schematic cost estimate indicated by the existing contract will be expanded to include the Briefing Room and associated spaces.
B. Design Development

Following an approved program, the Design Team will begin the Design Development Phase. During the Design Development phase, the Board Room and associated areas will be incorporated into the Martin Executive construction drawings to a 30% level of completion. Also during the phase, the Design Team will provide recommendations of three different FF&E options for the Board’s selection and approval. The design development cost estimate stipulated by the existing contract will be expanded to include the new spaces.

C. Construction Documents

During the Construction Documents phase, the Board Room and associated areas will be incorporated into the construction drawings and submitted in conjunction with the rest of the Martin Executive drawings to 60%, 95%, and 100% levels as stipulated in the existing contract. Drawings and specifications provided for these submissions will be further developed of those provided in the Design Development phase. The construction documents cost estimate stipulated by the existing contract will be expanded to include the new spaces.

IV. SCHEDULE

The space requirements for the Board Room and associated areas will directly impact our ability to provide a comprehensive Programming Report. We therefore recommend obtaining and documenting these requirements prior to submitting the 60% Programming Report which is currently scheduled for submission in the final week of May 2013. We anticipate that completion of these activities for inclusion in the 60% Programming Report could occur approximately 30 calendar days following receipt of a Notice to Proceed (NTP) with an earliest submission date of mid-to-late June 2013. Subsequent submissions will likewise be affected. We are available to work diligently with the Board in establishing an expedited schedule.

To appropriately plan for the 60% Program Submission, we request to receive notification of the Board’s intent in favor of or against exercising the change order by May 1, 2013.

Since work within the change order is limited to interior spaces, the current schedule for 60% construction documents for the purposes of CPA and NCPC final approval submission in November 2013 is unaffected.

V. FEE AND PAYMENT

Refer to the DETAILLED COST PROPOSAL submitted in conjunction with the CHANGE ORDER PROPOSAL for a complete fee explanation. Request for payment will be submitted as stipulated in the original contract.
### Board of Governors of the Federal Reserve System
Washington, D.C. 20551

The Martin Renovation Project
Architectural/Engineering Services
Contract 296548
Cost Proposal for Additional Services:
Ref. 32 - Briefing Accommodation Rooms

<table>
<thead>
<tr>
<th>Design Services</th>
<th>Cost Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Label</td>
</tr>
<tr>
<td>A SCHEMATIC DESIGN PHASE SERVICES</td>
<td></td>
</tr>
<tr>
<td>B DESIGN DEVELOPMENT PHASE SERVICES</td>
<td></td>
</tr>
<tr>
<td>C CONSTRUCTION DOCUMENT PHASE SERVICES</td>
<td>80% Submission</td>
</tr>
<tr>
<td></td>
<td>90% Submission</td>
</tr>
<tr>
<td></td>
<td>100% Submission</td>
</tr>
<tr>
<td></td>
<td>Subtotal Construction Document Phase</td>
</tr>
<tr>
<td></td>
<td>Total Cost (A + B + C)</td>
</tr>
<tr>
<td></td>
<td>GRAND TOTAL (A + B + C), LABOR &amp; ODC's</td>
</tr>
</tbody>
</table>
II. APPROACH NARRATIVE

Services for this change order are divided into three phases: A. Schematic Design, B. Design Development, and C. Construction Documents.

A. Schematic Design

Following a notice to proceed (NTP) the Design Team will meet with relevant Board stakeholders to establish design requirements for the LEU spaces. These spaces are anticipated to include:

- Supervisory offices
- Conference Rooms
- Washington Area Law Enforcement Sytems
- Parking Control
- Weapon and ammunition storage
- Chief, Assistant Chief and two Deputy Chief offices
Following the requirements meetings, the Design Team will develop programming and concept design documents to address the Board's requirements. Our design will provide recommendations for complete architectural and engineering design of these spaces including MEP system design, lighting, and life safety code analysis, IT and Audio Visual systems, technical security system design and integration.

The Design Team will incorporate the design requirements into the Architecture and Engineering Program reports. This will include revisions to the space requirements, blocking and stacking plans, concept illustrations, and affected engineering narratives. The schematic cost estimate stipulated by the existing contract will be expanded to include the Boarding Rooms and associated spaces.

B. Design Development

Following an approved program, the Design Team will begin the Design Development Phase. During the Design Development phase the LEU spaces will be incorporated into the Marine Reserve construction drawings to a 30% level of completion. Also during the phase the Design Team will provide recommendations for all different FF&E options for the Board's selection and approval. The design development cost estimate stipulated by the existing contract will be expanded to include the new spaces.

C. Construction Documents

During the Construction Documents phase the LEU spaces will be incorporated into the construction drawings and submitted in combination with the rest of the Marine Center drawings at 90%, 95% and 100% levels as stipulated in the existing contract. Drawings and specifications provided for these submissions will be further developments of those provided in the Design Development phase. The construction documents cost estimates stipulated by the existing contract will be expanded to include the items associated with the new spaces.

IV. SCHEDULE

The space requirements for the Boarding Room and associated areas will directly impact our ability to provide a comprehensive Programming Report. We therefore recommend obtaining and documenting these requirements prior to submitting the 60% Programming Report which is currently scheduled for submission in the third week of May 2013. We anticipate that completion of these activities for inclusion in the 60% Programming Report could occur approximately 50 calendar days following receipt of a Notice to Proceed (NTP) with an earliest submission date of mid to late June 2013. Subsequent submissions will likewise be affected. We are available to work diligently with the Board in establishing an expedited schedule. To appropriately plan for the 60% Program Submission, we request to receive notification of the Board's intent to move forward against exercising this change order by May 1, 2013. Since work within this change order is limited to space areas, the current schedule for 60% construction documents for the purposes of CFA and NCPO final approved submittals in November 2013 is unaffected.

V. FEE AND PAYMENT

Refer to the DETAILED COST PROPOSAL submitted in conjunction with this CHANGE ORDER PROPOSAL for a complete fee explanation. Request for payment will be submitted or stipulated in the original contract.
<table>
<thead>
<tr>
<th>Total Summary</th>
<th>Cost Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name:</td>
<td></td>
</tr>
<tr>
<td>List of Services:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Date:</td>
<td></td>
</tr>
<tr>
<td>Design Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor Costs (LOC's)</td>
<td></td>
</tr>
<tr>
<td>A: Schematic Design</td>
<td></td>
</tr>
<tr>
<td>B: Design Development</td>
<td></td>
</tr>
<tr>
<td>C: Construction Document</td>
<td></td>
</tr>
<tr>
<td>10% Submission</td>
<td>$0</td>
</tr>
<tr>
<td>95% Submission</td>
<td>$0</td>
</tr>
<tr>
<td>90% Submission</td>
<td>$0</td>
</tr>
<tr>
<td>Total Cost (A + B + C)</td>
<td>$0</td>
</tr>
<tr>
<td>Grand Total (A + B + C)</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Detailed Cost Proposal for FY 39 – LED Infrastructure</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Office</strong></td>
<td><strong>Competitive Harm</strong></td>
</tr>
<tr>
<td>Production (E300)</td>
<td>competitive harm</td>
</tr>
<tr>
<td>Program Manager</td>
<td></td>
</tr>
<tr>
<td>Senior Architect/Designer</td>
<td></td>
</tr>
<tr>
<td>Senior Engineer</td>
<td></td>
</tr>
<tr>
<td>E300 Module Lead</td>
<td></td>
</tr>
<tr>
<td>Production Model</td>
<td></td>
</tr>
<tr>
<td>Total: Low+ICP</td>
<td></td>
</tr>
<tr>
<td><strong>Innovations (E300)</strong></td>
<td>competitive harm</td>
</tr>
<tr>
<td>Program Manager</td>
<td></td>
</tr>
<tr>
<td>Senior Architect/Designer</td>
<td></td>
</tr>
<tr>
<td>Senior Engineer</td>
<td></td>
</tr>
<tr>
<td>E300 Module Lead</td>
<td></td>
</tr>
<tr>
<td>Production Model</td>
<td></td>
</tr>
<tr>
<td>Total: Low+ICP</td>
<td></td>
</tr>
<tr>
<td><strong>Sizing Specific (E300 Module)</strong></td>
<td>competitive harm</td>
</tr>
<tr>
<td>Program Manager</td>
<td></td>
</tr>
<tr>
<td>Senior Architect/Designer</td>
<td></td>
</tr>
<tr>
<td>Senior Engineer</td>
<td></td>
</tr>
<tr>
<td>E300 Module Lead</td>
<td></td>
</tr>
<tr>
<td>Production Model</td>
<td></td>
</tr>
<tr>
<td>Total: Low+ICP</td>
<td></td>
</tr>
<tr>
<td><strong>Testing Data (E300 Module)</strong></td>
<td>competitive harm</td>
</tr>
<tr>
<td>Program Manager</td>
<td></td>
</tr>
<tr>
<td>Senior Architect/Designer</td>
<td></td>
</tr>
<tr>
<td>Senior Engineer</td>
<td></td>
</tr>
<tr>
<td>E300 Module Lead</td>
<td></td>
</tr>
<tr>
<td>Production Model</td>
<td></td>
</tr>
<tr>
<td>Total: Low+ICP</td>
<td></td>
</tr>
<tr>
<td><strong>Demonstration &amp; Field Test Module</strong></td>
<td>competitive harm</td>
</tr>
<tr>
<td>Program Manager</td>
<td></td>
</tr>
<tr>
<td>Senior Architect/Designer</td>
<td></td>
</tr>
<tr>
<td>Senior Engineer</td>
<td></td>
</tr>
<tr>
<td>E300 Module Lead</td>
<td></td>
</tr>
<tr>
<td>Production Model</td>
<td></td>
</tr>
<tr>
<td>Total: Low+ICP</td>
<td></td>
</tr>
<tr>
<td><strong>Security Infrastructure Module</strong></td>
<td>competitive harm</td>
</tr>
<tr>
<td>Program Manager</td>
<td></td>
</tr>
<tr>
<td>Senior Architect/Designer</td>
<td></td>
</tr>
<tr>
<td>Senior Engineer</td>
<td></td>
</tr>
<tr>
<td>E300 Module Lead</td>
<td></td>
</tr>
<tr>
<td>Production Model</td>
<td></td>
</tr>
<tr>
<td>Total: Low+ICP</td>
<td></td>
</tr>
<tr>
<td><strong>System (E300)</strong></td>
<td>competitive harm</td>
</tr>
<tr>
<td>Program Manager</td>
<td></td>
</tr>
<tr>
<td>Senior Architect/Designer</td>
<td></td>
</tr>
<tr>
<td>Senior Engineer</td>
<td></td>
</tr>
<tr>
<td>E300 Module Lead</td>
<td></td>
</tr>
<tr>
<td>Production Model</td>
<td></td>
</tr>
<tr>
<td>Total: Low+ICP</td>
<td></td>
</tr>
<tr>
<td>** recap (E300)**</td>
<td>competitive harm</td>
</tr>
<tr>
<td>Program Manager</td>
<td></td>
</tr>
<tr>
<td>Senior Architect/Designer</td>
<td></td>
</tr>
<tr>
<td>Senior Engineer</td>
<td></td>
</tr>
<tr>
<td>E300 Module Lead</td>
<td></td>
</tr>
<tr>
<td>Production Model</td>
<td></td>
</tr>
<tr>
<td>Total: Low+ICP</td>
<td></td>
</tr>
</tbody>
</table>

Note: All costs are inclusive of personnel and overhead.
### KEY PERSONNEL - ORGANIZATION CHART

#### MANAGEMENT TEAM
- **Enrique A. Bellini**, MA
  - Principal at Large, Board Room Designer
- **James Dorney**, MA
  - Project Manager

#### CORE TEAM
- **Karen C. Chmielewski**, CPM, Client Services, Architectural, Interior Design
- **project Architect**: Benjamin Burgin, AIA, LEED AP
- **Director of Design**: Jamie Lohrer, ASID, LEED AP ID+C

#### E.K. Fox & Associates
- **Mechanical, Electrical, Plumbing Engineering**
  - Principal Engineer: Hal J. Just, PE
  - Sr. Project Manager: Benjamin A. Cavaleri, PE
  - Mechanical Engineer: Ronnie J. Roman, PE
  - Electrical Engineer: Oscar M. Reyes, PE

#### Hughes Associates
- **Building Code & Fire Protection Engineering**
  - Senior Fire Protection Engineer: Donald Hopkins Jr., PE
  - Fire Protection Engineer: Arvy V. Penaull, PE

#### Johns & Blatta Consulting Engineers <gr捌>
- **Structural Engineering**
  - Lead Structural Engineer: Kenneth C. Blatta, PE
  - Structural Engineer: Eugene J. Colton, PE

#### Tecnologos Design Resources <gr捌>
- **Audio/Visual, Structural, Land and Urban Design, Communications**
  - AV/Communications Designer: Donald Bailey, CTS

#### PROJECT MANAGEMENT SERVICES, INC.
- **Cost Engineering**
  - Cost Estimator: Jack West

#### CONSULTANT TEAM
- **Gerald Waldron Associates <gr捌>
  - Architectural Lighting Design**
  - Lighting Designer: Lee Waldron, FIALD, IESNA

- **I.J.R., Inc.**
  - Fall Protection
  - Fall Protection Consultant: Kevin Wilson, PE, CSP

- **Van Deelen & Associates**
  - Vertical Transportation
  - Vertical Transportation Specialist: Paul Renner
**KEY PERSONNEL - RESUMES**

<table>
<thead>
<tr>
<th>YEARS EXPERIENCE</th>
<th>50 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>With LEED</td>
<td>10 Years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BArch / 1999 / Architecture</td>
</tr>
<tr>
<td>University of Notre Dame</td>
</tr>
<tr>
<td>MS / 1972 / Electronic Design</td>
</tr>
<tr>
<td>University of Notre Dame</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REGISTRATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture:</td>
</tr>
<tr>
<td>District of Columbia</td>
</tr>
<tr>
<td>Maryland</td>
</tr>
<tr>
<td>Virginia</td>
</tr>
<tr>
<td>West Virginia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NCARB Registration</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>AFFILIATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Institute of Architects</td>
</tr>
<tr>
<td>DC Preservation League</td>
</tr>
<tr>
<td>Society of American Military Engineers</td>
</tr>
<tr>
<td>Society of Collegiate and University Planning</td>
</tr>
<tr>
<td>Urban Land Institute</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OFFICE LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington, DC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLEARANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Secret</td>
</tr>
</tbody>
</table>

**ENRIQUE A. BELLINI, AIA**

Principal in Charge / Briefing Room Designer

Mr. Bellini has served as managing principal on projects for the Federal Reserve Board, Architect of the Capitol, National Building Museum, Department of State, General Services Administration, and other institutions, government agencies, and private clients in Washington, DC. Mr. Bellini specializes in the design of monumental buildings and complex interior renovation projects. His understanding of structure, circulation, security, architectural history, and urban design provide thoughtful and creative solutions to complex urban projects. Many of his projects for the General Services Administration have been recognized by GSA's Design Excellence Program and the American Institute of Architects (AIA). The following are projects that are most relevant to the scope and complexity of the work to be performed under this contract:

**FEDERAL RESERVE BOARD**
Washington, DC:
- Martin Building Modernization
- Visitor & Conference Center Addition

**RENOVATION PROJECTS**
Washington, DC:
- Court Reporting Office Renovation, Madison Courthouse
- Pan American Health Organization Knowledge Space
- U.S. Department of State Briefing Room Renovation
- U.S. Department of State Conference Center Renovation
- U.S. House of Representatives Rotunda
- Multi-Media Services Office Interior Renovation

**ARCHITECT OF THE CAPITOL**
Washington, DC:
- Library of Congress Concept Design, Creative America
- Library of Congress Lincoln Exhibit
- Library of Congress Security Vestibules
- Library of Congress Smoke Chambers

**GENERAL SERVICES ADMINISTRATION**
Washington, DC:
- Columbus Plaza Office Renovation
- Bureau of Near Eastern Affairs Renovation
- Delegates Lounge Renovation
- Bureau of African Affairs Renovation
- Department of State Delegates Lounge Renovation
- National Building Museum Modernization
KEY PERSONNEL - RESUMES

JAMES DUDNEY, AIA
Project Manager

Mr. Dudney has over 25 years of professional practice experience on a variety of commercial, government, educational and residential projects. He has successfully performed as an effective team leader at all phases of architectural design, from conceptual design through construction administration for interior renovations, building modernizations, and new construction projects. Mr. Dudney has served as Project Manager with the Federal Reserve Board, Inter-American Development Bank, Library of Congress, Architect of the Capitol, U.S. Department of State, Pan American Health Organization, and the Embassy of Spain. He manages the production of architectural documents in compliance with the contract's scope of work. The following is a list of representative projects in which he has served as project manager:

FEDERAL RESERVE BOARD
Washington, DC:
- Martin Building Modernization
- Visitor & Conference Center Addition

ARCHITECT OF THE CAPITOL
Washington, DC:
- Rayburn House Office Building Roof
- House of Representatives Rotunda
- Lincoln Exhibits Renovation
- House of Representatives Kitchen Renovation Study
- Senate Kitchen Renovation Study

PAN AMERICAN HEALTH ORGANIZATION
Washington, DC:
- Facility SPACE Studies
- Knowledge Space Renovation

INTER-AMERICAN DEVELOPMENT BANK
Washington, DC:
- Trading Room Renovation

U.S. DEPARTMENT OF STATE
Washington:
- U.S. Consulate Renovation, Gainesville, Monrovia
- U.S. Consulate Renovation, Sao Paulo, Brazil
- U.S. Embassy U.S. AID New Building, Accra, Ghana

YEARS OF EXPERIENCE
With AEC 25 Years
With Other Firms 17 Years

EDUCATION
B. Arch. / 1985 / Architecture
University of Notre Dame

REGISTRATIONS
Architecture:
District of Columbia
Maryland

AFFILIATIONS
American Institute of Architects
DC Preservation League
Dupont Circle Citizens Assoc.

OFFICE LOCATION
Washington, DC

CLEARANCE:
Top Secret
KEY PERSONNEL - RESUMES

YEARS EXPERIENCE
With KECCT 4 Years
With Other Firms 4 Years

EDUCATION
BSA 2004, Architecture, Jackson University
M Arch 2006, Architecture, Jackson University

REGISTRATIONS
Architect, District of Columbia

AFFILIATIONS
American Institute of Architects
NCARB
Society of American Military Engineers
US Green Building Council

OFFICE LOCATION
Washington, DC

CLEARANCE
Top Secret

BENJAMIN BURGIN, AIA, LEED AP, NCARB
Project Architect

Mr. Burgin has significant experience on a variety of government and commercial projects that include public innovations and new construction. He has successfully performed as an effective team leader at all phases of architectural design, from conceptual design through construction administration. Mr. Burgin has served as Project Architect for KECCT's IDSQ contracts with the Architect of the Capitol and independent projects with the Federal Reserve Board and Pan American Health Organization. He manages the production of architectural documents in compliance with the contract scope of work.

The following is a list of representative projects where Mr. Burgin has held a significant role:

FEDERAL RESERVE BOARD
Washington, DC
• Martin Building Modernization
• Visitor & Conference Center Addition

GENERAL SERVICES ADMINISTRATION PROJECTS
Washington, DC
• American Pharmacists Association Perimeter Security
• U.S. Department of State Perimeter Security
• Mary Seitter Building Modernization

ARCHITECT OF THE CAPITOL PROJECTS
Washington, DC
• Russell Senate Office Building Blue Ribbon Panel
• U.S. Botanic Garden Conservatory Stove Repairs
• Library of Congress Life Safety

MISCELLANEOUS PROJECTS
Worldwide
• Pan American Health Organization Addition, Haiti
• U.S. Embassy Compound, Macedonia
• Lake Placid Conference Center, NY
• Saratoga Springs Conference Center, NY
• Human Resource Center of Excellence, Port Knox, TN
• St. Vincent Center of Excellence, Fort Lee, VA
KEY PERSONNEL - RESUMES

<table>
<thead>
<tr>
<th>YEARS EXPERIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>With K227</td>
</tr>
<tr>
<td>With Other Firms</td>
</tr>
</tbody>
</table>

**EDUCATION**
- BFA / 1977 / Interior Design, University of Kansas

**REGISTRATIONS**
- Interior Design: District of Columbia, Maryland
- NCIDQ

**AFFILIATIONS**
- American Society of Interior Designers
- US Green Building Council

**OFFICE LOCATION**
- Washington, DC

**CLEARANCE**
- Top Secret

---

**JAMIE LECLERC, ASID, LEED® AP ID+C**
*Director of Interiors*

Jamie Leclerc, ASID, LEED® AP ID+C has over 30 years experience in interior design on a wide range of project types, both public and private. Since 2009, she has provided design direction and technical oversight of K227's corporate projects. Ms. Leclerc has a strong programming background. Her work has included projects for the Federal Bureau of Investigation and the U.S. Department of State, where she has improved the design and functionality of the client's architectural and business requirements. Ms. Leclerc has extensive experience in space planning, interior architecture, construction documents, construction administration, and FF&E (Furniture, Fixtures, and Equipment). She has served as Director of Interiors.

**FEDERAL RESERVE BOARD**
- Washington, DC
  - Metze Building Modernization
  - Visitor & Conference Center Addition

**PAN AMERICAN HEALTH ORGANIZATION**
- Washington, DC
  - PAHO Program of Requirements
  - Facility Space Themes
  - Knowledge Management

**FEDERAL BUREAU OF INVESTIGATION**
- Washington, DC Metropolitan Region
  - Records Management Division: New Facility, Washington, DC
  - FBI Academy, Building No. 9, Quantico, VA
  - J. Edgar Hoover Building, Renovation & MOD
  - J. Edgar Hoover Building, 9th Floor Renovation

**GENERAL SERVICES ADMINISTRATION**
- Washington, DC
  - Design Studio Director/Interior Designer
  - US Diplomacy Center Programming & Space Planning
  - Harry S. Truman Building Modernization
KEY PERSONNEL - RESUMES

BLAIR A. JOST, PE.
Principal Engineer

Mr. Jost has 30 years of experience as a senior mechanical engineer, mechanical department head, principal in charge and project manager on large commercial and government projects. His coordination of the technical and administrative efforts of the mechanical, electrical, and plumbing departments with regard to compilation of work schedules, manpower requirements, and work orders assure that projects remain on schedule. His projects include commercial office buildings, educational facilities, hotels, convention centers, U.S. Embassies and Chancery facilities and Government projects.

The following is a representative list of individual projects for various agencies and institutions in which Mr. Jost held a significant role:

FEDERAL RESERVE BOARD
Washington, DC:
- Martin Building Modernization
- Visitor & Conference Center Addition

OFFICE BUILDING PROJECTS
Washington, DC Area:
- TASC IV, Chantilly, VA
- Westpark Corporate Center, McLean, VA
- National Association of Realtor Building (NAR) New Jersey
- TASC IV Tenant (Norcross Building), Chantilly, VA
- TASC V Office Building, Chantilly, VA
- Fair Lakes Building 7, Fairfax, VA
- Speer Office Building, McLean, VA
- Liberty Center II Office Building, Chantilly, VA
- Liberty Center III Office Building, Chantilly, VA
- Tysons I Office Building, Tysons Corner, VA
- Pentagon Athletic Center, Arlington, VA
- AAFB (Andrews AFB) Building 1535- HVAC Upgrade, Camp Springs, MD
- AAFB (Andrews AFB) Building 1658- Post Office/Launching, Camp Springs, MD
- AAFB (Andrews AFB) Building 1645- Security Camp Springs, MD
- FBI Quantico Justice Information Systems Mechanical Reliability Improvements, Chantilly, VA
- FBI HQ I, II, III, & IV, High Security Area, FBI Headquarters, Washington, DC
- FBI San Juan, Office Relocation, San Juan, PR
- FBI Washington, DC
KEY PERSONNEL - RESUMES

YEARS EXPERIENCE
With E.K. Fox 9 Years
With Other Firms 18 Years

EDUCATION
BS / MS / Mechanical Eng.
Virginia Tech

REGISTRATIONS
Mechanical Engineering:
Virginia

AFFILIATIONS
NCC ASHRAE
American Society of
Mechanical Engineers
US Green Building Council

OFFICE LOCATION
Fairfax, VA

CLEARANCE
Top Secret

BENJAMIN CROWLEY, PE
Senior Project Manager

Mr. Crowley has 26 years of experience in the practice of mechanical engineering on large commercial and government projects with focus on HVAC design, piping systems, ductwork and piping layout, and hot and chilled water systems. He has worked on all aspects of project development from site master planning to individual system and component designs and application for HVAC. His experience includes building and system assessment studies, partial and complete building renovations, and new construction for a variety of building types and sizes. His projects include commercial office buildings, educational facilities, U.S. Embassies and Consulate facilities and government projects.

FEDERAL RESERVE BOARD
Washington, DC:
• Martin Building Modernization
• Visitor & Conference Center Addition

OFFICE BUILDING PROJECTS
Washington, DC Area
• Mark Center VI, Alexandria, VA
• Park Place II, McLean, VA (LEED)
• TAOC, Chantilly, VA
• National Association of Realtors Headquarters, Washington, DC (LEED)
• Navy Federal Credit Union Headquarters Phase II, Vienna, VA
• Pentagon Athletic Center, Arlington, VA (LEED)
• Henderson Square II, Herndon, VA
• Navy Federal Credit Union Headquarters Infrastructure Upgrades to HQ Data Center, Vienna, VA
• GSA Vault Seismic Center Renovation and Addition, University of Richmond, Richmond, VA
• Health Sciences Building, Montgomery College, Takoma Park, MD
• United States Naval Academy Luce Hall Renovation, Annapolis, MD
• Pentagon Temporary Office Building, Arlington, VA
• Northpoint Apartments, Alexandria, VA
• AAAF (Andrews AFB) Building 1658 - HVAC Upgrade, Camp Springs, MD
• AAAF (Andrews AFB) Building 1686 - Post Office/Laundry, Camp Springs, MD
• AAAF (Andrews AFB) Building 1815 - Security Camp Springs, MD
KEY PERSONNEL - RESUMES

ROMAN J. ROMAN, PE
Mechanical Engineer

Mr. Roman has 16 years of experience as Senior Mechanical Engineer and Project Manager on projects for the Department of Defense (DOD), Aerospace, Federal, State and Municipal Governments, and Private Industry. His projects include: municipal water treatment plants; electroplating shops for the aeronautics and electronics industries; nuclear submersible support facilities; satellite storage facilities; petroleum fuel storage and distribution systems; DOD research laboratories; EOD schools; hangar, admin, maintenance and training facilities; power distribution substations; automobile assembly plants; and office buildings. Mr. Roman has also served as a hydraulic manager in the power house and industrial waste treatment modules for pulp and paper & automobile assembly plants and as facility engineering manager for the U.S. Foreign Service (USAID). The following is a representative list of individual projects for various agencies and institutions in which Mr. Roman held a significant role:

FEDERAL RESERVE BOARD
Washington, DC
- Metric Building Modernization
- Visitor & Conference Center Addition

OFFICE AND ADMINISTRATION BUILDING PROJECTS
- SFP Mouse Poison Additions, Fort Bragg, NC, USAFE, Savannah District
- SFP Knead Tanning Facility Phase 1, Fort Bragg, NC, USAFE, Savannah District
- SFP Motor Pool and Fire Command Center, Fort Bragg, NC, USAFE, Savannah District
- FHPG System Replacement E/62C, Bldg. 937, NAS Jacksonville, FL, NAVFAC South East
- Revitalize Building 2001, Fort Sam Houston, Texas, USAFE, Ft. Worth District
- Solar Air Composite Sun Cabins for U.S. Army, Florida, USAFE, Orlando District
- Virtual School Telehomes, Bureau of Elementary School, Quantico VA, USAFE, Norfolk District
- Combat Fighter Squadron Ops Bldg 2, Building 73, Moody Air Force Base, Georgia, USAF
- Telecommunications Bldg 1, Blue Rawley, West Texas
- Launch Site, Texas
- BRAC Moody Community Activity Center, Moody Air Force Base, Georgia, USAF (LEED)
- IAF/USAFG, Air Force Command and General Staff, Air Force, Texas, USAFE, Nellis District (LEED)
- Design of an Open Plan Office Building with an Open Floor Plan, Dayton, Ohio, USAF (LEED)

YEARS EXPERIENCE
- 11+ Years
- With B.E. Fox
- 4+ Years
- With Other Firms

EDUCATION
- BS: 1984: Mechanical Eng, University of Florida
- MS: 1997: Mechanical Eng, University of Florida

REGISTRATIONS
- Mechanical Engineering, Virginia
- Mechanical Engineering, Michigan
- Mechanical Engineering, Florida

AFFILIATIONS
- ASHRAE
- US Green Building Council
- Society of American Military Engineers

OFFICE LOCATION
- Fairfax, VA

CLEARANCE
- Secret
OSCAR M. REYES, PE  
Electrical Engineer

Mr. Reyes has 17 years of experience in the practice of electrical engineering in large commercial and government projects with focus on power systems design, lighting systems, fire alarm and telecommunications systems. He has worked on all aspects of project development from site master planning to individual system and component design and application for electrical systems. His experience includes medium voltage power systems, building and system assessment studies, partial and complete building renovations, and new construction for a variety of building types and sizes. His projects include government projects, data centers, educational facilities, commercial buildings, and medium voltage switchgear maintenance coordination.

The following is a representative list of individual projects for various agencies and institutions to which Mr. Reyes had a significant role:

FEDERAL RESERVE BOARD
Washington, DC
- Metric Building Modernization
- Visitor & Conference Center Addition

CORPORATE PROJECTS
- Mount Vernon High School
- West County High School
- Fairfax Hospital
- Inova Hospital - Alexandria
- Inova Hospital - Fairfax
- IDP, USS Virginia Class Submarine Laboratory
- Lockheed Martin SCIF
- General Submarine Laboratory
- BAE Systems SCIF
- BAE Systems Space Nuclear Manufacturing Laboratory
- Howard Hughes Medical Institute
- Executive Communications - Data Centers (DC area)
- Oak View Elementary School
- Post Office Power Quality Study
- VDOT Area Headquarters
- VDOT Administration Building and Maintenance Facility
- Apple Federal Credit Union - Sterling
- Apple Federal Credit Union - Kingstown
KEY PERSONNEL - RESUMES

KIRAN SINH C. BHATIA, PE.
Lead Structural Engineer

Mr. Bhatia has 37 years of structural engineering and project management experience on both federal and commercial sector projects. The experience includes structural design, construction, commissioning, field service, feasibility studies, load analysis, blast upgrade and seismic upgrades for a multitude of structures including federal buildings, local federal buildings, hospitals, educational facilities, embassies, churches and residential structures. Mr. Bhatia serves as the Principal in charge of quality control.

The following is a list of representative projects on which he has served or currently serves as a project manager and lead structural engineer.

FEDERAL RESERVE BOARD
Washington, DC:
- Martin Building, Modernization
- Visitor & Conference Center Addition

FEDERAL AND COMMERCIAL PROJECTS
- National Association of Homebuilders Office Building Renovation, Washington, DC
- March 2 Washington Library Renovation, Arlington, VA
- IRS Building Podiaty Renovation, Washington, DC
- U.S. Department of State Perimeter Security Improvements, Washington, DC

DEPARTMENT OF STATE PROJECTS
- Renovation, U.S. Consulate, Hyderabad, India
- Renovation, U.S. Embassy, New Delhi, India
- Chiller Replacement, U.S. Embassy, Tegucigalpa, Honduras
- Chiller Replacement, U.S. Consulate, Milan, Italy
- Mechanical Upgrade, Nice, France
- Mechanical Upgrade, Bogota, Colombia
- Mechanical Upgrade, Kampala, Uganda
- Renovation, U.S. Embassy, Guatemala City, Guatemala
- Chiller Replacement, U.S. Consulate, Lagos, Nigeria
- Mechanical Upgrade, U.S. Consulate, Rio De Janeiro, Brazil
- Renovation, U.S. Embassy, Bujumbura, The Gambia
EUGENE J. COLLINS, PE
Structural Engineer

Mr. Collins is a respected and distinguished member of the engineering community with more than 35 years of experience in structural design and project management experience for both federal and commercial sector clients. The structural design experience has included office buildings, educational facilities, residential structures, parking structures, warehouses, embassies and dams. His expertise also includes structural investigations, load studies and field inspections.

The following is a list of representative projects for which he has served or is currently serving as a structural engineer.

FEDERAL RESERVE BOARD
Washington, D.C.
- Metro Building Modernization
- Visitor & Conference Center Addition

FEDERAL AND COMMERCIAL PROJECTS
- Various Renovation Projects, U.S. Department of State, Harry S. Truman Building, Washington, D.C.
- Blair House Interior Renovation, Washington, D.C.
- Window Blinds Mitigation, National Court Building, Washington, D.C.
- Renovation, Treasury Building, Washington, D.C.

DEPARTMENT OF STATE PROJECTS
- Renovation, Office Building, Jakarta, Indonesia
- Renovation, U.S. Embassy, Tokyo, Japan
- Renovation, U.S. Consulate, Almaty, Kazakhstan
- Renovation, U.S. Embassy, San Jose, Costa Rica
- Renovation, U.S. Embassy, Vilnius, Lithuania
- Renovation, U.S. Consulate General, Chengdu, China
DONALD HOPKINS, JR., PE.
Senior Fire Protection Engineer

Mr. Hopkins is a Senior Fire Protection Engineer professionally licensed in the State of California. He has 18 years of experience with all aspects of fire protection engineering services. His designs and products meet all types of fire protection systems. His background includes extensive experience as a fire protection systems contractor, making him exceedingly qualified to make accurate cost estimates, and to supervise and provide technical direction for systems installations. Mr. Hopkins has developed and taught courses on fire suppression systems and fire hydratics in which he provides expert instruction on fire protection control, detection, suppression and extinguishment. He is currently the Lead Fire Protection Engineer for the new SIR Venture Center.

The following is a representative list of individual projects that Mr. Hopkins holds significant role as fire protection engineer:

FEDERAL RESERVE BOARD
Washington, DC
- Martin Building Modernization
- Visitor & Conference Center Addition

FEDERAL AND COMMERCIAL PROJECTS
Washington, DC Area
- Enbridge Executive Office Building Modernization
- FPDF, Library of Congress, Tenant Fit-Out
- Federal Reserve Board Building, Vance Center, 62,600 sf
- U.S. House of Representatives, Page Division, 31,000 sf
- U.S. Prisons
- Rayburn House Office Building, 290,000 sf Renovation
- U.S. Bureau of Engraving and Printing, 100,000 sf Renovation
- Pan American Health Organization Knowledge Space, 17,500 sf Renovation
- Cannon House Office Building, 884,500 sf Renovation
- Library of Congress, John Adams Building, 760,000 sf
- Smithsonian System Evaluation
- Pan Am Headquarters Building, 375,000 sf, Alarms Replacement
- Library of Congress, Thomas Jefferson Building, 60,000 sf
- Spanish Cultural Center, 11,000 sf Renovation
- William J. Clinton Building, 1,290,000 sf, Renovation
- Washington Navy Yard, 50,000 sf, Data Center Building III Renovation
- Naval Research Laboratory, 900 sf, Chiller Plant Upgrade
KEY PERSONNEL - RESUMES

AJAY V. PRASAD, PE
Fire Protection Engineer

Mr. Prasad has 10 years experience managing fire safety and code consulting projects. He identifies applicable codes and standards and reviews proposed designs to ensure that an adequate level of fire safety is provided for protection of occupants and property. Designs are reviewed to ensure code compliance based on requirements such as occupancy and use classifications, building size and height limitations, construction type, required fire resistance of structural elements, fire resistance rated barriers and partitions, means of egress requirements, fire safety systems and means of egress. Where strict code compliance is not technically or economically feasible, he develops alternative approaches to ensure that the design provides a level of fire safety at least equivalent to that specified by the codes.

The following is a representative list of individual projects in which Mr. Prasad held a significant role as fire protection engineer:

FEDERAL RESERVE BOARD
Washington, DC
• Meriti Building Modernization
• Visitor & Conference Center Addition

FEDERAL AND COMMERCIAL PROJECTS
Washington, DC Area
• CPTC Lafayette Center, 152,000 sf, Code Consulting
• Children's National Medical Center, 244,871 sf, 6th Pl NE Out
• Federal City Shelters, 200,000 sf, ADA Renovation
• Forest Service Yates Building, 18,988 sf, Renovation
• House of the Temple, 45,000 sf, Fire Protection Analysis
• MarTeds, First Floor Fire Out, 5,835 sf, Code Consulting
• National Domestic Institute, 57,577 sf, Code Consulting
• National Gallery of Art, West Building, 12,260 sf, Fire Risk Analysis
• National Institute of Health, Building 4, 22,000 sf, Renovation
• National Institute of Health, Senior Research Facility, 500/71 sf, Fire Alarm Modifications
• Pan American Health Organization Knowledge Space, 17,000 sf, Renovation
• The George Washington University, Science and Engineering Complex, 400,000 sf, Code Consulting
• The World Bank, 21,624 sf, Fire Code Consulting
• U.S. Capitol Visitor Center, 880,000 sf, Fire Safety Analysis
• U.S. Library of Congress, Multiple Buildings, Performance Based Life Safety Analysis (PBLSA)
• U.S. Penitentiary, Multiple locations, Renovation
KEY PERSONNEL - RESUMES

JACK WEST
Cost Estimator

Mr. West has more than 40 years of experience in architecture and engineering in the construction industry performing cost estimates, on-site construction management, project coordination and client relations. As Director of Estimating, he assigns and manages all estimates for the company as well as performing Quality Control on such estimates. Mr. West has been providing consulting services to NASA on a broad range of IDIQ contracts including the Federal Reserve Board, General Services Administration, the Federal Bureau of Investigation, the U.S. Department of State, and the Archives of the Capital.

The following is a representative list of individual projects in which Mr. West has served as Cost Estimator:

FEDERAL RESERVE BOARD
Washington, DC:
- Martin Building Modernization
- Visitor & Conference Center Addition
- Visitor Center Art Shaft

GENERAL SERVICES ADMINISTRATION PROJECTS
Washington, DC Region:
- Headquarters Modernization, Washington, DC
- New U.S. Census Bureau Headquarters, Suitland, MD
- Federal Office Building 8 modernization, Washington, DC
- IRS Headquarters Modernization, Washington, DC

U.S. DEPARTMENT OF STATE PROJECTS
Washington, DC:
- East Auditorium Relocation Study
- Old State 25th Street Plaza and Security Entrance
- Old State Diplomatic Center
- MMS, Medical and FARA Renovation
- Department of State MMS, Medical and FARA Renovation

U.S. NAVAL ACADEMY
Washington, DC Region:
- US Naval Academy Museum, Annapolis, MD
- King Hall Main Dining Hall and Kitchen Renovation
- HVAC Upgrade for Buildings 280, 281, 292 and 295
- Renovation of Center for Computational Science
- Historic Bancroft Hall Renovations, Annapolis, MD
KEY PERSONNEL - RESUMES

DONALD BAILEY, CTS
Audio-Visual & Communications Designer

Mr. Bailey has over 40 years experience in telecommunications and audio video systems design and integration. Mr. Bailey has industry experience providing program and project management, sales/ installation/operations support, and consulting expertise in the implementation and integration of telecommunications and audio and video systems. His experience encompasses a vast local and national base including education, commercial and government customers. Mr Bailey's knowledge encompasses telecommunications and data systems design, audio systems design, video systems design, and control systems design and programming. Having overall management of projects from design to purchasing to implementation gives Mr. Bailey knowledge to allow tracking of complete systems solutions, from concept to service.

The following is a list of representative projects in which he has served as principal technology consultant.

FEDERAL RESERVE BOARD
Washington, DC:
• Martin Building Modernization
• Visitor & Conference Center Addition

GOVERNMENT AGENCIES
Washington, DC:
• US Department of State - Press Briefing Room
• US Department of State - Old State Building
• US Department of State - Satellite and Master Antenna System

SMITHSONIAN INSTITUTE
Washington, DC:
• NMAI - Conference Room Audio Video Evaluation
• CIO - Video Telecommunications Study

PAN AMERICAN HEALTH ORGANIZATION
Washington, DC:
• Emergency Operations Center

LOCAL GOVERNMENT PROJECTS
Washington, DC Metropolitan Area
• Arlington County VA Courthouse
• Loudoun County VA Courthouse
• Maryland Fire and Rescue Institute NE Headquarters

YEARS EXPERIENCE
With TDK 12 Years
With Other Firms 21 Years

EDUCATION
BS / BSEE / Radio-TV-Film
University of Kansas

REGISTRATIONS
CTE INFOCOMM

AFFILIATIONS
INFOCOMM
NSCA
American Institute of Architects

OFFICE LOCATION
Rockville, MD
### Key Personnel - Resumes

#### Lee Waldron, FAIAD, IESNA

**Lighting Designer**

Mr. Waldron has more than 40 years of experience in lighting design. His early work with theater, film, and television lighting provided a unique expertise to the architectural approach to lighting design. As President of Gerald Waldron Associates, Mr. Waldron manages the global operations of the company. He also provides the overall vision for the company and directs the company's strategic plan and profit center in the US, Shanghai, and Beirut.

As a Design Principal, Mr. Waldron offers design expertise in all project types for interior and exterior architectural applications. Mr. Waldron is a former President of the International Association of Lighting Designers and currently serves on the Advisory Board of Moore College of Art and Design and the Nefaulf Fund for Education.

#### Federal Reserve Board

Washington, DC
- Martin Building Modernization
- Visitor & Conference Center Addition

#### Office Projects

Washington, DC Area
- Department of State, Briefing Room, Washington, DC
- Department of State, Conference Center and Auditorium, Washington, DC
- National Geographic Society Headquarters, Offices and Auditorium, Washington, DC
- Center for Innovative Technology, Offices & Auditorium, Herndon, VA

#### Miscellaneous Projects

Worldwide
- Princeton Nasa University Campus Buildings, Princeton, NJ
- Arts & Science Building & Cornell Medical College, Education City, Doha, Qatar
- GAP Headquarters Buildings, San Francisco, CA
- WXXI World Cafe, Philadelphia, PA
- Liberty Bell Complex, Philadelphia, PA
- New Post Office Renovation, Philadelphia, PA
- Educational City, Doha, Qatar

#### Years Experience

- GWA: 35 Years
- With Other Firms: 6 Years

#### Education

- BFA, 1971 / Theater Design
- Carnegie Mellon University

#### Affiliations

- International Association of Lighting Designers
- Illumination Engineering Society of North America

#### Office Location

North Bethesda, MD
RON A. ELLY, PMP  
Project Manager

Mr. Eddy is a program manager with over 20 years of project management experience in systems engineering, security systems, and information technology program management. As a certified project management professional he has managed numerous large scale projects from system engineering research, building automation system implementations, software development projects, physical and electronic security systems, and security risk assessments.

Mr. Eddy led integrated technical teams of project managers, engineers, technical consultants and technicians for implementation of high visibility multi million dollar projects in all aspects of security systems including chemical, biological, radiological, nuclear, explosive (CERNE), access control, CCTV, DVR, SCIFs, and LMR. He has performed program reviews, risk assessments & mitigation, and issue resolution to ensure maximum productivity.

The following is a list of his representative Physical and Electronic Security projects:

**NATIONAL GEOGRAPHICAL INTELLIGENCE AGENCY**
Fort Belvoir, VA
- CERNE Design & Implementation

**FEDERAL RESERVE**
Washington, DC
- Host Consulting/Electronic Security

**SOCIAL SECURITY ADMINISTRATION**
Frederick, Maryland and Nationwide
- Social Security National Support Center
- Survey and assessment of over 100 Social Security Offices nationwide

**DEPARTMENT OF DEFENSE**
National Capital Region
- Onsite IDRQ - DOD UCP and IBC Compliance Review

**U.S. MINT**
Washington, DC

**DEPARTMENT OF LABOR**
Washington, DC
KEY PERSONNEL - RESUMES

YEARS EXPERIENCE

With ASX: 6 Years
With Other Firms: 11 Years

EDUCATION

Officer Technical Representative Certification (OTR)
NIST Low, Medium, and High Security Systems (LCI SI) - Test Certification
Software House Certified - Technical Training

AFFILIATIONS

American Society of Industrial Security (ASIS)

OFFICE LOCATION

Alexandria, VA

VINCENT W. SMITH

Electronic Technical Security Specialist

Mr. Vincent Smith is a Electronic Technical Security Specialist with over thirty years of experience in the security industry. His background covers a wide variety of security disciplines from installation to project management. He gained his initial experience in the field installing home and business electronic security systems. During this time, Mr. Smith became efficient in field assessments, quality assurance and system integration. This evolved into systems design and project management. He has extensive experience in all aspects of physical and technical security (government / commerce). He also has extensive technical experience in CCTV, Access Control, Intrusion Alarms, Visitor Screening, Perimeter Barriers, Command Centers, Remote Communication, Exhibit Security and Blending security into historic properties.

The following is a list of his representative projects:

ELECTRONIC TECHNICAL SECURITY EXPERIENCE

- Washington Headquarters Services, ERSCC-10, The Mark Center, Washington, DC
- Martin Luther King Memorial, Washington, DC
- Bioscience Laboratory, George Mason University, Fairfax, VA
- Smithsonian Institution, Washington, DC
- Smithsonian Institution, Staff Development Center (WACS - MSC - SC) - Suitland, MD
- System Planning Corporation, Wright Patterson Air Force Base, Dayton, OH
- Kirtland Air Force Base, Albuquerque, NM
- Olympic Village Electronic Security Team, Atlanta, GA
- Minot Air Force Base, ND, Installation of Advanced Entry Control System
- Minot Air Force Base, Great Falls, ND, Weapon Storage Area Upgrade
- Grand Forks Air Force Base, Grand Forks, ND, Weapons Storage Area Upgrade
KEY PERSONNEL - RESUMES

MICHAEL H. BROWN
Security Systems Designer

Mr. Brown has over 35 years experience in the physical security field, specializing in technical security. Experience includes project management, conducting offices, instruction, design, engineering, and installation. He has developed written technical security operating policies and procedures. Mr. Brown conducted physical security assessments for new and existing acquisitions, accommodating solutions to enhance security, developing detailed security floor plans, providing technical advice and guidance, applying internal control measures to protect organizational integrity and safeguarding materials and equipment.

Mr. Brown established CCTV and electronic security system design requirements and documentation, created system standards for the formulation of special reporting, and coordinated technical operations for security calls and maintenance activities. He created classified documentation (construction security plans) in support of projects for the construction of facilities where compartmentalized information may be processed, maintained, and stored.

The following is a list of his representative projects:

MISCELLANEOUS PROJECTS
Washington, DC:
- St. Elizabeth's Campus: Security projects including design and coordination of the site perimeter security (bollards, guard booths, fencing, intrusion detection, closed circuit television access control as well as vehicle and visitor screening).
- Department of Homeland Security (DHS) Nebraska Avenue Complex: Perimeter security project for the NAC complex.
- Department of Defense: Physical security projects for the Pentagon and associated buildings in the National Capital region.
- Department of State: Physical security projects at State Department domestic facilities in the National Capital and U.S. Central regions.
- Smithsonian Institution: Fencing, maintenance, and inspection activities related to the electronic security systems utilized by OPM.
KEY PERSONNEL - RESUMES

KEVIN WILCOX, PE, CSP
Fall Protection Consultant

Mr. Wilcox is a professional structural engineer as well as a certified safety professional with over 25 years of experience. He has addressed a wide variety of engineering and safety challenges across many types of facilities including government, manufacturing, and institutional buildings. Mr. Wilcox specializes in fall protection assessment and design services. He was instrumental in the development of UFC's proprietary fall hazard risk assessment algorithm that is used to prioritize fall hazards according to risk. He has provided consultation for numerous government agencies, including the Architect of the Capitol and Smithsonian Institution.

The following is a representative list of individual projects for which Mr. Wilcox holds a significant role as fall protection consultant:

**FEDERAL RESERVE BOARD**
Washington, DC
- Martin Building Modernization

**MISCELLANEOUS PROJECTS**
Washington, DC
- Full Protection for Supreme Court Roof
- Rayburn House Office Building Roof Fall Protection
- Assessment of Full Asset Systems, Architect of the Capitol
- UK Capitol Roof Fall Protection Design
- Full Protection Precedent Guidelines and Templates, Architect of the Capitol
- Roof Fall Protection System Evaluation, Library of Congress
- Ladder Modification Design, Dirksen Senate Office Building
- Fall Protection Design for 5 House Office Buildings and 3 Library of Congress Buildings
- Fall Protection Design for John Adams Building
- Full Hazard Risk Assessment of Capitol Hill Buildings, Architect of the Capitol
- Full Protection Design for Arts & Industries Building, Smithsonian Institution
- Full Protection Design for National Museum of the American Indian, Smithsonian Institution
- Full Protection Design for Museum of Natural History, Smithsonian Institution
- Full Protection Design for Capitol Dome
- Full Protection Design and Load Testing for Senate Office Buildings
- Full Protection Design for Capitol Grounds
### KEY PERSONNEL - RESUMES

#### NEIL THOMPSON SHADE

**Associate**

Mr. Shade has 32 years of experience in consulting, project management, and teaching in acoustics, noise control, and audio-visual systems design. He has served as Principal Consultant on over 1200 projects for most building types. He is responsible for the overall management and technical aspects of the firm's projects involving acoustic measurements, client liaison, criteria development, calculations, specification writing, and drawing preparation. Services provided by Mr. Shade are delivered in an integrated team approach with the belief that the success of any project requires cooperative relationships that respect functional and design objectives of clients, building owners, and other design professionals. His guiding principle is to maintain a flexible consulting approach recognizing there are numerous ways to resolve conflicting design issues within the constraints of the project's financial budget and time schedule.

The following is a representative list of individual projects that Mr. Shade held a significant role as acoustical consultant.

**FEDERAL RESERVE BOARD**

- Martin Building Modernization
- Visitor & Conference Center Addition

**MISCELLANEOUS PROJECTS**

- 902nd M.I. Administration Center Building, Ft. Meade, MD
  - New 100,000 sf office building
- Capital One Regional Headquarters Building, McLean, VA
- Renovation: 90,000 sf of closed and open plan offices
- Council on Foreign Relations, Washington, DC
  - New 80,000 sf Headquarters building
- National Maritime Information Center, Cambridge, MD
  - New 175,000 sf training and conference center
- Square 500 Development, Washington, DC
  - New 500,000 sf office building
- USGBC Headquarters Building, Washington, DC
  - New 75,000 sf administrative center designed to the LEED® Platinum Standard

---

**YEARS EXPERIENCE**

- With AOC: 22 Years
- With Other Firms: 10 Years

**EDUCATION**

- BS Audio Technology, American University
- Master's Degree, Institute of Acoustics
- Institute of Noise Control Engineering
- Professor, Acoustics, Johns Hopkins University

**OFFICE LOCATION**

- Baltimor, MD.
### PAUL ROWEY

**Vertical Transportation Specialist**

As Area Manager of YDTS Baltimore Branch Office, Mr. Rowe is responsible for expanding business in the Maryland area as well as supporting the Philadelphia, PA, office with ongoing project management.

He provides equipment and maintenance quality control evaluations, works with equipment manufacturers for new and existing vertical transportation equipment, and provides services during the construction administration phase. In addition, he serves as project manager on select major contracts.

### WASHINGTON DULLES INTERNATIONAL AIRPORT

Sterling, VA
- International Arrivals Building Expansion
- Tier 2 Master Plan

### MISCELLANEOUS PROJECTS

Various Locations
- Dover Downs Expansion, Dover, DE
- Baltimore-Washington International (BWI) Airport, Baltimore, MD
- Eagles Stadium, Lincoln Financial Field, Philadelphia, PA
- The Borgata, Atlantic City, NJ
- International Terminal One, Philadelphia, PA
- Pier at Casser Atlantic City, Atlantic City, NJ
- SEPTA City Hall Station, Philadelphia, PA
- Middlesex County Buildings, New Brunswick, NJ
- SEPTA Suburban Stations, Philadelphia, PA
- Norfolk Consolidated Court Complex, Phase I & II, Norfolk, VA
- Trenton Rail Station Rehabilitation, Trenton, NJ
- Main Post Office, Baltimore, MD
- WMATA Silver Line Extensions, Fairfax, VA
- Ronald Reagan Nat'l Airport/Foggy Bottom, A/B/C, Arlington, VA
- Chester Arthur Building, Washington, DC
- US Capitol Complex Surveys, Washington, DC
- Richard Nixon Library, Little Rock, AR
- US Capitol Mens Room, Washington, DC

### YEARS EXPERIENCE

- With YDTS: 14 Years
- With Other Firms: 27 Years

### EDUCATION

- BS in Health Science, Seton Hall University, South Orange, NJ
- MS in Property Administration, BOMI Institute

### AFFILIATIONS

- ASME-Certified NASGA Qualified Elevator Inspector (QEI)-14522
- Institution of Elevator Safety for Baltimore City Fire Academy

### MEMBERSHIPS

- Baltimore Chapter of BOMA (Former President)
- Baltimore Construction Association (Founder/Board Member)
Data Center Removal Proposed Change Order

Reference 29

Discussion:

In the original contract documents and subsequent contract modifications the Architect and Engineers (A/E) were instructed that the Data Center located on the 20 level of the Martin building was not within the scope of the renovation project. Additionally the contractors were instructed that the Data Center would remain in the Martin building and the work called for insuring the Data Center remained operational throughout the project. Furthermore the contract required the A/E to maintain all Data Center support equipment and include in the construction documents precautions to prevent dust, shock, water, and the like from damaging the equipment.

The Board now intends to move its Data Center to an office location. We expect the move of the equipment to be complete sometime in 2015. However, some equipment will remain within the Martin building to maintain day to day operations.

The existing Data Center is approximately 60000f.

Scope of Work:

The Board desires for the A/E to include the changes due to the Data Center move in all schematic, programming, and construction documents as well as estimates and all other documents and requirements associated with the Martin Renovation Project. The A/E, in the course of programming will determine which data room equipment must remain in the building and which equipment will be removed. The A/E, working with the Board, shall plan to consolidate the remaining equipment within a smaller footprint in a safe secure location within the Martin building. This space shall be configured as a critical electronic space to include all support, backup features, security, and utilities to include but is not limited to:

- Uninterruptable power systems (UPS)
- Backup generators
- Computer room grade redundant air-conditioning
- Hardened, (block or otherwise intrusion resistant) one hour fire rated envelope walls
- Pre-action fire suppression sprinkler system (smoke alarm activated dry pipe)
- Card reader access to room
- Enlarged equipment doors
- Oversized conduits and 20% spare conduits, locations and routes to be determined in programming
- Oversized cable trays
- Power distribution Units (PDUs)
The A/E shall ensure the new space has no water or other lines that contain liquids within the perimeter walls.

The data closets and security systems shall also be powered from the UPS and generator sets.

Empty properly sized electrical breakers shall also be installed in the UPS circuits to allow for future connections of the Eccles building data closets and security systems (to eliminate the Eccles data closet UPS in the future).

The Contractor is expected to re-use the Board's existing two UPS and two new generators and switchboards as is practical. The A/E is to perform all calculations and due diligence to review whether the sizes, voltages, time durations, and other considerations for these systems are appropriate for the application.

Space remaining after the relocation of the Data Center and the construction of the support electronics space is to be included in the programming phase of the project and the space used to the best advantage of the Board.

The Data Center relocation will not be complete until 2015. The A/E needs to ensure that the existing Data Center remains operational until the systems are moved to the new location. Additionally, some of the electronic systems could be critical to the operation of the Eccles building. The A/E will work with the Board to ensure these systems remain operational throughout the project. After the Data Center is moved and the new support electronic space is operational, the A/E will include the demolition of all data room infrastructure not in use.

Even though the Data Center will be relocated, the A/E still is required to provide essential utilities and services normally provided from the Martin Building to the Eccles Building.
Law Enforcement Unit Electronic Monitoring and Control and Security Command and Control Center Proposed Change Order

Reference 31

Discussion:

The original scope of work and subsequent contract modifications for the Martin Renovation specifically stated that the Security Operating Systems and Security command and control room were not in the scope of work. In addition, any security system components displaced during construction were to be replaced and as the floor plans were modified and additional capacity for monitoring and control systems were required, the A/E was to ensure components compatible with the existing systems were to be put in place.

The Board intends for the A/E to recommend and design state of the market technology that will increase the effectiveness of the security forces and the safety and security of the employees. Although the Board welcomes new technologies that will help in achieving these goals the Board intends to use state of the market technologies throughout the buildings. If there are developing technologies the A/E feels are applicable, the Board might entertain a limited trial installation to be expanded at a later date.

Martin security field devices and wiring (from local panel out) such as electronic door locks and alarms, access control devices, surveillance cameras, sensors etc. and interior and exterior lighting are already in the contract. The purpose of restating the requirement is to ensure the electronics monitoring, access and control system and OCC are sized and programmed to effectively operate and control these devices. Original limitations and field devices needing to interoperate with the old Security Operating Systems are no longer valid and the A/E can suggest other devices in the programming and schematic design.

Scope of Work:

The A/E will include in the programming, schematic, and all construction drawings, estimates and documents associated with the Martin Renovation the replacement of the
Electronic security monitoring and control systems and the Control Room.

Electronic Security and Control includes, but is not limited to:

- Electronic equipment and software to operate the monitoring, access and surveillance systems
- Access control devices
- Electronic surveillance systems to include as appropriate (but not limited to):
The Board expects the A/E to incorporate state-of-the-art technology and equipment.
Programming:

The A/E shall meet with select law enforcement officers, technical staff, and LEU middle management to determine the needs and desires of the LEU. The A/E shall then summarize the results with the A/E’s recommendations for LEU and senior Management Division officers. After receiving direction from LEU senior management and senior Management Division officers the A/E shall incorporate the findings into the schematic design and construction documents.

Key Personnel

The Board shall review the resumes of the proposed design team for this work. The Board shall require an interview of the project manager (or team leader) for the design effort for the security systems. This staff shall not be altered without written permission of the Board’s COTR.
Discussion:

The original scope of work for the Martin building renovation project had no provision for briefing the media or releasing media-sensitive material to the media under secure conditions. Neither did the programming of the Conference Center executed in 2008 indicate a requirement for such a facility.

Since then, the Board has developed needs to brief the media and release media-sensitive material to the media under secure conditions and has a requirement for spaces that meet those specific requirements. The Board wishes to integrate these requirements into the design and construction of the Martin Renovation.

Scope of Work:

The Architects and Engineers (A/E) will include in the programming, schematic, and all construction drawings, estimates and documents associated with the Martin Renovation: a provision for a press briefing room and a secure facility for the release of media-sensitive information (lockup room). There shall also be a room adjoining the briefing room for the principal speaker to prepare for and wait for the briefing (green room). Another room, also near the briefing room, should be equipped as a broadcast room, where TV journalists could broadcast before and after briefings and after the release of media-sensitive material. It would be acceptable and preferred if these rooms (green room and broadcast room) were multi-purpose rooms which could be used for other events such as training.

The work shall include but not be limited to:

- Briefing room
  - Proper location, size, and orientation of the room
  - A space for electronic equipment to support the mission
  - Proper lighting and lighting controls
  - Proper acoustics
  - Wiring paths needed to editing room, outside (to press vans), fiber optic cable to Verizon's A/V/C, and to roof antennas
  - Electronic support rooms
  - Support space such as control rooms, editing rooms, and storage if required
  - Power and cooling appropriate for the mission loads.
  - Audio visual systems to include:
    - Microphones to each press correspondent position which is controllable from a central location in the room
    - Two or more large LCDs which can display multiple media formats
      - Computer graphics
- Video (DVD and/or broadcast television)
- Board owned and remotely controlled cameras (recording and processing equipment will be located in the editing room provided by others)
- Appropriate sound system and controls (speakers)

- Broadcast Control Room
  - A dedicated broadcast control room for FRB originated broadcast of live press events and Board sponsored conferences live and/or recorded held in the auditorium.
  - Space should be able to contain the following:
    - Broadcast level video switcher (max 3 broadcast cameras) and audio board
    - Lighting control panel with sliders
    - Seating space for 4 staff
    - Fiber connectivity
    - An adjacent but separate equipment room with racks
    - Computer and/or video graphics (including LCD screens)
    - Correspondent microphone cutoffs

- Smart Lectern Podium (reference “Wharton Podium Lectern” or similar)
  - Control computer graphics
  - Task lighting
  - Connections for laptop personal computer into A/V system
  - Data connection and electrical receptacle
  - Lighting control sub-panel
  - Sound control sub-panel
  - Graphics control sub-panel
  - Incorporate Board Seal or face in relief
  - Lectern face shall incorporate a bullet resistant surface (UL level III)

Furnishings:

The A/E shall specify table systems appropriate for the goal to include:

- Microphones to the sound system
- Electrical receptacles at each seat
- Data connections at each seat (for Board use in training role)
- Task lights
- Writing surface/ laptop PC working surface

The A/E shall offer the Board a selection of three sets of furnishings from which the Board shall select one to be included in the construction. This is to include the: flexible seating in the briefing room and other furnishings as is appropriate for the other spaces.
Secure Press Release Facility (Lock Up Room)

The Press Lockup is to cloister the media while sensitive information is distributed under embargo and to regulate when the information is released to the public. This room must have features that ensure that systems either have no personal electronic devices that can communicate outside the room or that these devices do not function while the space is occupied, while still allowing proper space and design for members of the press to write stories, and at a time prescribed by the Board, transmit those stories to the public. All communication between this room and the outside must be controlled by the Board. The A/E will work with the Board to determine:

- The number of required workstations
- The proper size and location of the room
- Special furnishings
- Confidentiality
- Amenities (toilets, water fountains, etc.)
- Power, cooling, and special data needs
- Other architectural and engineering features as appropriate

Green Room

The green room shall include A/V that will allow the occupants to remotely view and listen to the press briefing room. The green room shall have a segregated entrance-exit to allow speaker to avoid passing through briefing room.

Broadcast Room

The broadcast room shall include space to accommodate three to four positions for a single television reporter and camera. The room should include wiring paths to the editing room, outside (to press vans), fiber optic connections to Verizon's AVOC, and/or rooftop antennas. The room should also include proper lighting, lighting controls, and acoustics.

Programming

The consultant and any required sub-consultants shall meet with the internal customers as directed by the COTR to determine the customers' requirements in detail. They shall advise Board Management of the internal customers' minimum design requirements and preferred design requirements. The consultant shall meet with Board management and the internal customer to determine final design requirements.

Key Personnel

The Board shall review the resumes of the proposed design team for this work. This shall include a designer experienced in press briefing room design. The Board shall require an interview of the primary press briefing room designer. Other key members of this staff are the
lighting designer, acoustics designer, and A/V designer. This staff shall not be altered without written permission of the Board's COTR.
Law Enforcement Unit Infrastructure Proposed Change Order

Reference 39

The Architect/Engineer is to incorporate into the programming of the Martin Renovation and subsequently the design and construction of the renovation centralizing the Law Enforcement Unit (LEU) infrastructure to a central location in the Martin building. This would include, but not be limited to, moving various sections of the LEU now scattered throughout the Board’s facilities to the Martin building. This would include but not be limited to:

- Primary Roll Call Room
- Locker rooms
- Break rooms
- Supervisory offices
- Control Room (issued in a separate FCO)
- Conference Rooms
- Washington Area Law Enforcement System (electronic screening)
- Parking Control
- Weapons and ammunition storage
- Chief, Assistant Chief and 2 Deputy Chief Offices

As appropriate these rooms shall be isolated from the other employee spaces.
May 17, 2013

CONTRACT 250548
MODIFICATION 24

Kam Chunhas Chapman & Twohey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1290
Washington, DC 20036

Attention: Mr. Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

Modify Section J.4, and where appropriate, Section J.5 (amended by Solicitation, Offer, and Award Amendment 4 dated February 24, 2006) to change the Contracting Officer’s Technical Representative from Keith Bates to Christopher Haulsey.

There is no change in the Contract value as a result of this Modification 24.

Except where herein modified, all other terms and conditions of the Contract remain the same.

Sincerely,

[Signature]
Kimberly M. Briggs, C.P.M.
Supervisory Contracts Analyst
August 21, 2013

CONTRACT 250548
MODIFICATION 25

Kim Charunas Chapman & Twomey, PC (KCT)
120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 to add the contract line item numbers (CLINs) as indicated below:

**CLIN 51:** Add $264,771 to adjust the balance of the contract value based on Contractor's request for an equitable adjustment due to the contract's extended period of performance. Contractor has applied an escalation factor of 3.02% based on the Producer Price Index for the two-year period ending December 31, 2012. The 3.02% escalation factor shall only apply to the CLIN noted in Section A of Contractor's letter dated July 3, 2013 with the reference, "Contract No. 250548. Request for Contract Fee Adjustment due to Schedule Extension and Additional Design Services", (hereinafter referred to as "Request Letter"). All escalation amounts applied to subcontractor markup and retainage were deducted from Contractor's request. This amount fully and finally satisfies any and all adjustments due to Contractor for the period of the Contract prior to and including December 31, 2012, and Contractor expressly waives any claims (including, but not limited to, claims arising from alleged delays, change order requests, and other equitable adjustments) it has or may have raised for such period.

**CLIN 52:** Add $19,828.19 for additional design services that included revising the initial space plan to—
1. Remove the Visitor Center shaft and corresponding redesign of affected area to include a fire command center
2. Schematically layout the briefing room and any ancillary spaces located on the Conference level and
3. Revise the "Business Center" to incorporate office space for the Visitors Service Center.
As a result of this Modification 25 the Contract value increases from $13,653,464.98 by $284,599.19. Because certain elements of the Contract are priced as a not-to-exceed, the new not-to-exceed total contract value is $13,938,064.17.

Contractor shall reference "Contract 250548, Modification 25" and the appropriate CLIN as noted above on all invoices and contract-related correspondence.

Except where herein modified, all other terms and conditions of the Contract remain the same.

Sincerely,

[Signature]

Kimberly M. Briggs, C.P.M.
Supervisory Contracts Analyst.
October 18, 2013

CONTRACT 250548
MODIFICATION 26

Kern Charilas Chapman & Tweshay, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 to remove the requirement of the Contractor toregister the project with the United States Green Building Council (USGBC) for certification under the Leadership in Energy and Environmental Design (LEED) program. However, the Contractor shall continue to design the project to meet the sustainable, energy efficient and environmental requirements as if the Board were attempting to obtain a rating of at least LEED silver. Therefore, Exhibit A of Modification 17 of the Contract is modified as follows:

1. Page 1- paragraph 4 that begins, "The Board intends for the architect to register the Project..." and Paragraph 5 that begins, "The Board believes that the design and construction of the Project will benefit from utilizing the USGBC's two phase review process..." are deleted in their entirety and replaced with the following—

"The Board intends for the A/E to design the project to meet the design objectives referenced under "LEED Silver Certification (Baseline Design)" in the "Final LEED Report" prepared by KCCT, dated October 21, 2011. This shall include "Appendix 3 – LEED Scorecard Silver Level (Baseline Design)" to be used as the basis for design. The Board will review all components of the pre-final "Engineering Report" prepared by
2. Page 6, Design Schedule, Paragraph 1 – The requirement for the A/E to allow time in the design schedule for review by the USGBC is deleted.
3. Page 20, Paragraph 5 is deleted in its entirety.
4. Page 24, Paragraph 10 is deleted in its entirety.
5. Page 29, Bidding/Negotiation Phase Services, Paragraph 1 is deleted in its entirety.
6. Page 31, Site Visits, Paragraph 1 is deleted in its entirety. The remaining paragraphs of this section remain unchanged.
7. Page 33, Section C.2.7, “LEED Requirements and Certification” shall be revised to “LEED® & Commissioning Requirements”. In addition, paragraph a is deleted in its entirety.
8. Page 36, Section C.2.7, LEED Requirements and Certification, Paragraph e, “LEED® Certification Plan” shall be revised to “LEED® Report” including all other references within the contract documents.
9. Page 37, Section C.2.7, LEED Requirements and Certification, Paragraph d, “LEED Certification Documentation” shall be revised to “Commissioning Requirements”.
10. Page 37, Section C.2.7, LEED Requirements and Certification, Paragraph d, LEED Certification Documentation – Subsections 1, 2, 6, 7, 8, and 9 are hereby deleted.
11. Page 37, Section C.2.7, LEED Requirements and Certification, Paragraph d, LEED Certification Documentation – Subsection 3: revise “as required by EA1” to “similar to the requirements of EA1”.
12. Page 37, Section C.2.7, LEED Requirements and Certification, Paragraph d, LEED Certification Documentation – Subsection 4: revise “as required by EA1 and EA3” to “similar to the requirements of EA1 and EA4”.
13. Page 37, Section C.2.7, LEED Requirements and Certification, Paragraph d, LEED Certification Documentation – Subsection 5: revise “In accordance with” to “Following the guidelines established in”.
14. Page 38, Section C.2.7, LEED Requirements and Certification, Paragraph e, LEED Certification Specifications is deleted in its entirety.
15. Page 39, Section C.2.7, LEED Requirements and Certification, Paragraph f, LEED Certification Services During Bidding is deleted in its entirety.
16. Page 40, Section C.2.7, LEED Requirements and Certification, Paragraph g, LEED Certification Services During the Construction Phase is deleted in its entirety.
17. Page 44, XII, Section F.1, Deliverables is modified to revise “LEED® Certification Plan” to “LEED® Report” and to remove the following deliverables—
   LEED Submittal Documentation
   LEED Certification Applications

The Board believes that the changes contained herein will result in a deduction in the not-to-exceed Contract price. Contractor shall provide with its credit proposal not later than thirty business days from receipt of this modification.
Except where herein modified, all other terms and conditions of the Contract remain unchanged.

Sincerely,

Kimberly M. Briggs, C.P.M.
Supervisory Contracts Analyst
September 26, 2013

CONTRACT 259548
MODIFICATION 27

Kum Chriahus Chapman & Trowey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1230
Washington, DC 20036

Attention: Mr. Enrico Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 259548 as follows:

1. Delete requirement 3.2.6.5 of Appendix A to Exhibit A to Modification No. 17, Renovation Program and Parameters, which reads, “Add a fourth (4th) electrical feeder from the utility provider to the Martin building plant to supplement the existing electric feeders and include all the associated work to incorporate the new feeder into the current network.”

2. Add requirement 3.2.8 which shall read, “The Board will have a natural gas line installed in the Martin and Eccles buildings prior to the commencement of construction of the Martin Building renovation. KCCT shall base the design of the major mechanical system on using natural gas and not electricity. The electrical feeder previously specified in section 3.2.6.5 is no longer required.”

3. Section C.2.4.a is deleted in its entirety and is replaced with the following language—
“The A/E shall provide its design services including those for “security infrastructure” as well as other work consistent with the Compendium of Standards, Interagency Security Committee unless directed by the FRB to another more current security guideline requirement. The FRB will provide KCCT with written notice of any other and/or additional security guidelines as necessary.”

4. All references to the Federal Reserve System Facility and Security Guidelines within the Contract are hereby replaced with the Compendium of Standards, Interagency Security Committee.

Except where herein modified, all other terms and conditions of the Contract remain unchanged.

Sincerely,

[Signature]

Kimberly M. Briggs, C.P.M.
Supervisory Contracts Analyst
November 5, 2013

CONTRACT 2505-48
MODIFICATION 28

Kern & Chervnos, PC (KCC)
1120 Connecticut Avenue, N.W.
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 2505-48 as follows:

CLIN 53: Add $26,956 to adjust the balance of the contract value based on Contractor’s request for an equitable adjustment due to the Board’s modification of Section 3.8 of the statement of work via Modification 22, Revision 2.1. Specifically, the additional tasks include—

1. A spectral analysis and a wireless site survey,
2. The design of a head-end and distribution of a digital Master Antenna Television System (MATV), replacement of the existing system including maintenance of the existing or new system in the Eccles Building during Martin Building construction,
3. The design of additional DAS solutions for coverage of the full Martin Building space.

This amount fully and finally satisfies any and all adjustments due to Contractor for the work specified in Section 3.8, Revision 2.1.
As a result of this Modification 28 the Contract value increases from $13,938,064.17 by $26,956. Because certain elements of the Contract are priced as a not-to-exceed, the new not-to-exceed total contract value is $13,965,020.17.

Except where herein modified, all other terms and conditions of the Contract remain unchanged.

Sincerely,

[Signature]
Kimberly M. Briggs, C.P.M.
Supervisory Contracts Analyst
December 12, 2013

CONTRACT 250548
MODIFICATION 29

Kam Charahas Chapraue & Trobey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

Modify Section 1.4, and where appropriate, Section 1.5 (amended by Solicitation Offer, and Award Amendment 1 dated February 24, 2006) to change the Contracting Officer’s Technical Representative from Christopher Banker to Cynthia Johnson.

There is no change in the Contract value as a result of this Modification 29.

Except where herein modified, all other terms and conditions of the Contract remain the same.

Sincerely,

Bo Rogers
Senior Contract Specialist
April 22, 2014

CONTRACT 250548
MODIFICATION 30

Kam Chunhas Chapman & Tusekly, PC (KCCCT)
1120 Connecticut Avenue NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrico Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 to incorporate Attachment 1, Final Security Design Criteria 04 03 14 into the Contract as reference to provide amplifying information to the Security Design requirement stated in Contract Modification 27 paragraph 3.

Contractor shall provide its credit proposal not later than thirty business days from receipt of this modification.

Except where herein modified, all other terms and conditions of the original Contract remain the same.

Sincerely,

[Signature]

Bo Rogers
Sr. Contract Specialist

Attachments:
1. Final Security Design Criteria 04 03 14
2. 250548 Modification 27

CC:
Cynthia Johnston
Chris Haulsey
FR-Controlled

MEMORANDUM

Date: January 6, 2014; updated March 11, 2014; conclusions reflected April 3, 2014
To: Maria Savoy
From: Cynthia Johnston, Christopher Hallsey
Re: Martin Renovation Project - Physical Security Design Criteria
Notes on Teleconference with ABA, 3/11/14:

Technical Discussion:

1. confidential - security

2. confidential - security

3. confidential - security

4. confidential - security

5. confidential - security

a. confidential - security

b. confidential - security
c. confidential - security
d. confidential - security
e. confidential - security
f. confidential - security

6. confidential - security

7. confidential - security

8. confidential - security
MEMORANDUM

DATE: February 13, 2014

FROM: Shady Brook
119 Monument Flute
Wichita, Kansas 67218

TO: Jim Dokey

PROJECT: The Martin Recreation Project
20120600

SUBJECT: Security Design Criteria Clarifications

CONTENT

1. confidential - security
<table>
<thead>
<tr>
<th>Security Criterion</th>
<th>Level IV - High</th>
<th>Readily Achievable?</th>
<th>Commentary or Expected AE Team Response</th>
<th>AE Contract Change?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Security Criteria</td>
<td>confidential - security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Criterion</td>
<td>Level</td>
<td>Achievable?</td>
<td>Commentary or Expected AC Team Response</td>
<td>AC Contract Change?</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------</td>
<td>-------------</td>
<td>-----------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Structure Security Criteria</td>
<td>confidential • security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Criterion</td>
<td>Level IV - High</td>
<td>Readily Achievable?</td>
<td>Commentary or Expected AC Team Response</td>
<td>AC Contract Change?</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------</td>
<td>--------------------</td>
<td>-----------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Interior Security Criteria</td>
<td>confidential - security</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Criterion</td>
<td>Level</td>
<td>Achievable?</td>
<td>Commentary or Expected AC Team Response</td>
<td>AC Contract Change?</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------</td>
<td>-------------</td>
<td>-----------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Security Operations and Administration Criteria</td>
<td>confidential - security</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
September 26, 2013

CONTRACT 250548
MODIFICATION 27

Karim Chirasha Chapman & Twohey, PC (KCCT)
1120 Connecticut Avenue, NW
Suite 1230
Washington, DC 20036

Attention: Mr. Enrico Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

1. Delete requirement 3.2.6.5 of Appendix A to Exhibit A to Modification No. 17, Renovation Program and Parameters, which reads, “Add a fourth (4th) electrical feeder from the utility provider to the Martin building plant to supplement the existing electric feeders and include all the associated work to incorporate the new feeder into the current network.”

2. Add requirement 3.2.8 which shall read, “The Board will have a natural gas line installed in the Martin and Eccles buildings prior to the commencement of construction of the Martin Building renovation. KCCT shall base the design of the major mechanical system on using natural gas and not electricity. The electrical feeder previously specified in section 3.2.6.5 is no longer required.”

3. Section C.2.4.a is deleted in its entirety and is replaced with the following language—
4. All references to the Federal Reserve System Facility and Security Guidelines within the Contract are hereby replaced with the Compendium of Standards, Interagency Security Committee.

Except where herein modified, all other terms and conditions of the Contract remain unchanged.

Sincerely,

[Signature]

Kimberly M. Briggs, C.P.M.
Supervisory Contracts Analyst
June 18, 2014

CONTRACT 250548
MODIFICATION 31

Kern Charless Chapman & Twomby, PC (KCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Bellini

Dear Mr. Bellini:

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 to incorporate Attachment 1: 250548 Mod 31 Attachment - Stated Limitation of Cost, dated June 16, 2014, into the Contract, and to update Section C.2.2(a) of the Contract.

1) In accordance with Section C.2.2(d) of Contract 250548, the Board hereby provides the Stated Limitation of Cost (please refer to Attachment 1 for explicit guidance).

2) Pursuant to Item 1 above and Attachment 1, and at no additional cost, Exhibit A, Section C.2.2(d) within Modification 17 is hereby modified as follows:

C.2.2(a)

"For the purposes of this Contract, the "Construction Cost" (also referred to as the "Cost of the Work") shall be the total cost to the Board to construct all elements of the Project designed, specified, selected or specially provided for by the A/E and shall include the contractors' general conditions costs, insurance and bonds, plus a reasonable allowance for overhead and profit. The Cost of the Work does not include the compensation of the A/E, the costs of the land, rights-of-way, financing, contingencies for changes in the Work or other costs that are the responsibility of the Board. The "Stated Cost Limitation" refers to the maximum Construction Cost that the Board is willing to incur to complete construction of the Project."
Except where herein modified, all other terms and conditions of the original Contract remain the same.

Sincerely,

Karen Feirress-Martin
Contract Specialist
Procurement Section

Attachment:
1. 250548 Mod 31 Attachment - Stated Limitation of Cost
June 16, 2014

Contract 250548
Attachment to Modification 31

Stated Cost Limitation

In consideration of available budget, please be advised that the Stated Cost Limitation for the Martin Renovation Project shall not exceed $...competitive harm...

Design and management teams are advised that the Stated Cost Limitation furnished herein includes anticipated hard construction costs including fixed furnishings, equipment and infrastructure requirements, design contingency, general contractor costs (to cover general and supplemental conditions), general contractor's overhead and profit, bond and insurance costs, and escalation to the midpoint of construction.

An apportionment of cost limitation is recommended for A/E consideration as follows:

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Construction Cost</td>
<td>$...competitive harm...</td>
</tr>
<tr>
<td>Design Contingency</td>
<td>$...</td>
</tr>
<tr>
<td>General Conditions</td>
<td>$...</td>
</tr>
<tr>
<td>Overhead and Profit</td>
<td>$...</td>
</tr>
<tr>
<td>incl. Bonds &amp; Insurance</td>
<td>$...</td>
</tr>
<tr>
<td>Escalation</td>
<td>$...</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$...</td>
</tr>
</tbody>
</table>

While the Board has provided a cost limitation apportionment recommendation, it remains the A/E's sole responsibility to provide a project design that considers all of those cost requirements.

Project costs not included in the Stated Cost Limitation include: loose office furnishings, office desktop equipment, professional service fees, and construction contingency.
Value Engineering Analysis
An expectation inherent in project design and management contracts is that the teams will provide a continuum of value engineering services to assess options and provide the Board with cost-effective design solutions of appropriate and lasting value.

Additive and Deductive Alternates
Preparing contract documents to incorporate additive and deductive alternatives is recommended as an effective strategy to enable the Board flexibility to adjust project requirements at the time of bid, if necessary to achieve compliance with project budget.

Initial consideration of Value Engineering items and Additive and Deductive Alternatives mentioned in the meeting minutes from April 10, 2014.
October 9, 2014

CONTRACT 250548
MODIFICATION 32

Edward Chamberlain & Towsley, P.C. (ECCT)
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036

Attention: Mr. Enrique Beltrán

The Board of Governors of the Federal Reserve System (Board) hereby modifies Contract 250548 as follows:

- Contractor shall use labor rates listed in Contractor's Labor Rate Approval Request letter dated September 29, 2014 (Attachment 1), column “FY2014” for preparing change orders in FY2014. The labor rates in Attachment 1 include an escalation based on the Mid-Atlantic Information Producer Price Index (PPI) for Engineering and Architectural Services (not seasonally adjusted data): escalate FY2014 by 3.02% for FY2013, and escalate FY2013 by 2.02% for FY2014 (based on PPI for Architectural Services 131.6 - April 2013, and 136.3 - April 2014), and illustrates a uniform escalation for all labor categories.

- CLIN 54: Add $401,553 to adjust the balance of the contract value based on Contractor's request for an equitable adjustment due to 20 additional meetings over and above Contract's 26 meeting requirement under the Schematic Design phase, per Contractor's Additional Schematic Design Progress Meetings proposal dated October 6, 2014 (Attachment 2) and based on the escalated rates for the additional meetings held in FY2013 and FY2014, respectively. This amount fully and finally satisfies any and all adjustments due to Contractor for meetings through the date of this modification.

As a result of this Modification 32 the Contract value increases from $13,963,020.17 by $401,553. Because certain elements of the Contract are priced as a not-to-exceed, the new not-to-exceed total contract value is $14,364,572.17.
Please reference the "CLIN 54 Modification 32 to Contract 250548" on all invoices or other contract-related correspondence. Except where herein modified, all other terms and conditions of the original contract remain the same.

Should you have any questions or require additional information, please do not hesitate to contact me at Karen.Fentress-Martin@dhh.gov or (202) 912-7988.

Sincerely,

/s/ [Signature]

Karen Fentress-Martin
Contract Specialist
Procurement Section

Attachments:
1. KCCT Labor Rate Approval Request 09 29 14
2. KCCT Adul? Meetings Proposal 10 06 14
September 29, 2014

Karen F. Fortner-Marton,
Construction Specialist
Board of Governors of the Federal Reserve System
Washington, DC 20551
202-554-7880

RE: FY2014 Labor Rate Approval Request

Dear Ms. Fortner-Marton,

We are pleased to submit our request for labor rate approval. As permitted by section A.2.4 in Appendix B to Modification 17 of our existing contract, we respectfully submit this request for Board approval of the enclosed FY2014 Hourly Rate schedule for our labor in preparing change order proposals during fiscal year 2014. The revised rate schedule illustrates a uniform escalation across all labor categories and illustrates rates rounded to the nearest dollar. Our proposed escalation value is based on the seasonally adjusted Mid-Atlantic Construction Cost Index (SCCI) for Engineering and Architectural Services (not seasonally adjusted data), Architectural Services 133.6 (April 2013) and 137.3 (April 2014).

We are very pleased to have the opportunity to continue to serve the Board. If you should have any additional questions or concerns, please do not hesitate to contact either Eric K. Bellon or myself.

Sincerely,

[Signature]

[Name]

Manager, Construction

Enclosures:
FY2014 Adjusted Hourly Rate Schedule (dated September 28, 2014)
FPI - Engineering and Architectural Services (dated September 24, 2014)

[Signature]

Kimberly Riggs, FRB
<table>
<thead>
<tr>
<th>Project</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>FY 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Reserve Bank - Meritorious Renovation Project</td>
<td>Base + 3%</td>
<td>Base + 5%</td>
<td>Base + 7%</td>
</tr>
<tr>
<td>Annually Adjusted Hourly Rate Schedule</td>
<td>30%</td>
<td>35%</td>
<td>40%</td>
</tr>
</tbody>
</table>

**Building Level Specialist & Fire Prevention Engineer (Higher)**
- Competitive

**Communications & Audio Visual Infrastructure (CVA)**
- Senior Level IT Specialist
- Senior Level AV Specialist

**Security Specialist (SIS)**
- Senior Level
- Mid-Level
- Senior Level Principal Scientist
- Senior Level - Assistant Director

**Food Service Specialist (Food Strategy)**
- Senior Level
- Mid-Level
- Senior Level

**Transportation Consultant (TRAN)**
- Senior Level
- Mid-Level

**Transportation Specialist (TRAN)**
- Junior Level
- Mid-Level
- Senior Level

**Readability and Water Proofing Engineering (Read)**
- Senior Level
- Mid-Level
- Senior Level

**Technical Transportation Consultant (Van Service)**
- Senior Level
- Senior Level
- Senior Level

**Notes:**
- Dates are estimated for contract mobilization (7% credit, FY 2013, 3%, 2014, 1% thereafter)
- Rates based on full-time equivalent (FTE) Performance, Engineering and Architectural Services (FY 2010) and FY 2011.
### Producer Price Index - Engineering and Architectural Services

#### (not seasonally adjusted data)

<table>
<thead>
<tr>
<th>Industry</th>
<th>Historical Data</th>
<th>Producer Price Index - Engineering and architectural services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jan</td>
<td>Feb</td>
</tr>
<tr>
<td>Architectural, engineering and related services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>148.2</td>
<td>142.7</td>
</tr>
<tr>
<td>2014</td>
<td>151.0</td>
<td>152.2</td>
</tr>
<tr>
<td>Engineering services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>151.0</td>
<td>152.2</td>
</tr>
<tr>
<td></td>
<td>149.5</td>
<td>139.7</td>
</tr>
<tr>
<td>Building-related engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>145.9</td>
<td>145.8</td>
</tr>
<tr>
<td></td>
<td>149.9</td>
<td>149.8</td>
</tr>
<tr>
<td>Non-building-related engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>154.4</td>
<td>154.9</td>
</tr>
<tr>
<td></td>
<td>155.6</td>
<td>156.9</td>
</tr>
<tr>
<td>Architectural services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>133.0</td>
<td>132.9</td>
</tr>
<tr>
<td>2014</td>
<td>135.4</td>
<td>135.5</td>
</tr>
<tr>
<td>Residential building projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>153.5</td>
<td>153.3</td>
</tr>
<tr>
<td>2014</td>
<td>158.6</td>
<td>158.4</td>
</tr>
<tr>
<td>Non-residential building projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>102.6</td>
<td>102.6</td>
</tr>
<tr>
<td>2014</td>
<td>102.2</td>
<td>102.4</td>
</tr>
<tr>
<td>Other architectural services, incl. historic restoration and architectural advisory services</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>128.3</td>
<td>128.8</td>
</tr>
<tr>
<td>2014</td>
<td>128.7</td>
<td>128.9</td>
</tr>
</tbody>
</table>

**Last Modified Date:** September 10, 2014

**Recommended Tools:**
- Tools like Calculators, Help, and Info
- Resources like Weather and Transportation

**http://www.bls.gov/ippengineering.htm**
October 6, 2014

Karen Fortner-Marton
Contract Specialist
Board of Governors of the Federal Reserve System
Washington, DC 20551
202-927-7980

RE: Request for Change Order for Additional Progress Meeting.

Dear Ms. Fortner-Marton,

We are pleased to provide clarification to our Change Order Proposal for Additional Progress Meetings, originally submitted July 24, 2014. Our original proposal identified hours to the nearest whole hour. Our revised proposal identifies hours to the nearest decimal place. The total cost for the proposal remains the same.

If you should have any additional questions or concerns, please do not hesitate to contact either Eniqua A. Bellini or myself.

Sincerely,

[B. Douglass, AIA, NCARB, LEED AP]
Project Manager

Enclosure:
FRB LTR 2014009, dated June 27, 2014
Change Order Proposal for Additional Progress Meetings, dated October 6, 2014
Meeting Log, dated July 24, 2014

CC
Kennedy Douglass, FRB
Ophelia Johnson, FRB
Christopher Hartley, FRB

Page 1 of 2
June 27, 2014
LTR 201409

Karn Chamahas Chapman & Twibey, PC
1120 Connecticut Avenue, NW
Suite 1250
Washington, DC 20036


Dear Mr. Bellini:

The Board issues this letter to KCCT in response to the above-referenced letter from KCCT dated May 4, 2014 pertaining to the Contract.

Please find the Board’s response to each item listed within KCCT’s letter referenced above:

I. KCCT’s ASSERTIONS REGARDING SERVICES PERFORMED AT THE BOARD’S REQUEST

1. KCCT Statement: Developed additional space plans.

Board Response: The Board does not agree with KCCT’s assertion that KCCT has delivered more space plans to the Board than were contemplated in the Contract. The space plan options for which KCCT now claims it should be compensated were essentially minor, iterative revisions to the space planning services established under Modification 17 to the Contract (“Modification 17”). Those iterations were necessary as part of the design process to develop the selected alternative. The Board should not be charged per iteration, as Modification 17 requires a completed space plan that is acceptable to the Board at the conclusion of the design process. To the extent KCCT is now claiming that Modification 18 to the Contract (“Modification 18”) limited the number of space plans that KCCT was required to provide, the Board respectfully disagrees. Modification 18’s description of four schemes elaborated on the substance of the space programming expectations for floors one through four. Modification 18 does not reduce or limit the general space
planning requirements contained in the Contract. Section C.2.4.1.12 of Exhibit A to Modification 17 provides that KCCT "shall provide space planning services as necessary or requested for a complete integrated layout and design of the building interiors including during initial programming." Additionally, Section C.2.6 of Exhibit A to Modification 17 expressly states that "In the event of inconsistencies within or between parts of the Contract, as amended, or between the Contract and Applicable Law and/or Applicable Codes and Standards, the A/E shall: (i) provide the better quality or greater quantity of Service; or (ii) comply with the more stringent requirement, either or both." For all of the above reasons, the Board’s position is that the space plans in question have already been funded under CLIN 27 (Schematic Design Services) to Modification 17.

2. KCCT Statement: Developed test fits for Print Shop & Fitness Center.

Board Response: A “test fit” (also referred to as a “space plan”) consists of a detailed planned layout including furniture, circulation and equipment. As noted in the Board’s response to Item 11 above, KCCT is obligated to deliver any requested test fits at the Board’s request pursuant to the terms of Section C.2.4.1.12 of Exhibit A to Modification 17. KCCT has already been compensated for any such test fits pursuant to CLIN 27 Schematic Design Services and CLIN 28 Design Development Services of Modification 17, and will not be entitled to any additional compensation in connection with any future request for a test fit by the Board.

Notwithstanding the terms of the Contract with respect to test fits, at no time did the Board request, nor has the Board received, a test fit from KCCT with respect to the Print Shop and Fitness Center. Rather, the Board only requested that KCCT provide information affirming that the Print Shop and Fitness Center functions could be physically accommodated in the block locations proposed. KCCT has already been compensated for providing this information to the Board pursuant to the provisions of paragraph C.2.4(e) (Design Services) of Exhibit A to Modification 17, which provides that “[t]he design services will include answering formal and informal questions regarding the Project’s design whether referred to as “Requests for Information” (RFI) or not. The Board may require answers in writing, by drawing, or other method, and the A/E shall provide such answers without additional cost to the Board.”

Furthermore, the Board is perplexed regarding the connection KCCT is attempting to make between the services KCCT has provided for the Print Shop and Fitness Center (which are both exclusively located within the interior of the building) and the submissions made to the Commission of Fine Arts and the National Capital Planning Commission (which relate solely to the exterior design of the building).
3. **KCCT Statement: Attendance at Additional Meetings.**

**Board Response:** In its May 4 letter, KCCT states that it planned for 13 bi-weekly progress meetings based on the expected 130 working day schedule for the schematic design phase. However, Section C.2.1.m.4. of Exhibit A to Modification 17 provides that “[t]he A/E shall attend weekly meetings with the COETR, Construction Administrator, and other individuals involved with the Project to discuss procedures, progress, problems, scheduling, and other pertinent matters.” In the Board’s opinion, KCCT’s attendance at 26 weekly meetings have already been funded under Modification 17, CLIN 27 Schematic Design Services. The Board acknowledges that KCCT’s attendance at 45 progress meetings exceeded the number of progress meetings contemplated by the Contract by a total of 19 additional progress meetings. As such, the Board hereby issues a Request for Change Order Proposal from KCCT for the additional 19 progress meetings.

KCCT is also seeking relief on the basis that it attended 10 technical meetings following its final submission of the Program of Requirements and Engineering Report and 11 strategic planning meetings. However, Sections C.2.1.m.3. and C.2.1.m.5. of Exhibit A to Modification 17 provide that the number of project requirement meetings and special meetings, presentations and briefings that KCCT is required to attend shall not be limited. As such, KCCT’s attendance at these meetings has also already been funded under Modification 17, CLIN 27 Schematic Design Services.

II. **KCCT’s Assertions Regarding Board Change Requests—Anticipated Additional Services**

1. **KCCT Statement: Visitor Services Staff will need to increase.**

**Board Response:** As noted in Section 1 of Attachment 1 to Modification 18, KCCT is responsible for verifying the programming of the visitor center and conference center. In particular, this provision requires KCCT to “…conduct surveys and meetings to verify if the screening process is still accurate and anticipated screening equipment, room functions and relative sizes are still accurate and make changes to the visitor center and conference center plans as appropriate.” All costs associated with changes to the Conference Center or Visitor Center as a result of the verification process, including any increase in Visitor Services Staff, have already been funded under Modification 18, CLIN 41 Space Programming and Environmental Seat. No changes to the perimeter or area of the Conference Center or Visitor Center are contemplated by the Board.

2. **KCCT Statement: Blocking alternatives may also merit further consideration at the Terrace Level.**

**Board Response:** The Board has not approved KCCT’s submitted stacking plan, nor has KCCT fully incorporated all of the Board’s suggestions pertaining to the stacking plan as required by Section C.2.1.g. of Exhibit A to Modification 17. Further, page 4 of Attachment 1 to Modification 18 provides that KCCT
"...shall use the Board supplied office standards and work with Board staff to provide a proposed generic stacking plan and proposed generic office floor plan along with supporting material on which to base the build out of the Martin building." The Board recommends that KCCT refer to the guidance provided in the Board's response to POR_R2 to adequately incorporate the Board's suggestions and requirements into a proposed stacking plan for review and approval. At this time the Board does not anticipate requesting KCCT to perform additional services relative to the stacking plan beyond the services noted above, which are already contemplated in the Contract.

3. KCCT Statement: Review comments for the "POR Final R1" were submitted to KCCT which indicated the Board's desire for additional programming.

Board Response: As noted in item II.2. above, to this date, the Board has not approved KCCT's proposed blocking plans. The review comments referenced within KCCT's letter are Board questions and suggestions regarding the Project's design. KCCT is responsible for addressing these review comments in accordance with Sections C.2.1.g. and C.2.4.e. of Exhibit A to Modification 17. At this time the Board does not anticipate requesting KCCT to perform additional services relative to the stacking plan beyond the services noted above, which are already contemplated in the Contract.

4. KCCT Statement: The Board has raised a possible need for alternative vertical circulation placement, referencing the elevators and stairs.

Board Response: At this time the Board is not actively pursuing a study of alternative vertical circulation placement. KCCT has been tasked with providing a design that suits the Board's mission and attracts tenants to the Board's employees. Should KCCT feel this issue merits further study, the Board would be willing to take such a recommendation into consideration, provided it shall be at no additional cost to the Board.

5. KCCT Statement: Passenger elevators (PE1-PF) and service elevator (SE1) are by contract limited to stop at the G-3 level.

Board Response: Following the Board's receipt of KCCT's May 4, 2014 letter, KCCT has since submitted a Vertical Transportation report to the Board. This report recommends that the six passenger elevators be extended to serve the 4G level, and the report also recommends the inclusion of an additional service elevator in the building. The Board agrees with these recommendations and will be prepared to issue a Contract modification addressing the changes to the building elevator design plan once the revised scope of such design has been finalized.

6. KCCT Statement: The design and renovation of a permanent food service facility at New York Ave. was never suggested to be part of this contract during the proposal phase.
Board Response: The Board acknowledges the level of design proposed and negotiated within KCCT’s original Proposal dated August 20, 2010 and revised Proposal dated January 26, 2011 shall be commensurate of a level that does not include food to be cooked and prepared at a Board facility. At this time, please disregard all discussions pertaining to a full kitchen design at the Board’s New York Avenue building. KCCT will still be responsible for design and implementation of temporary food service facilities at the Board’s Eccles building pursuant to the terms of the Contract, and the Board will continue to work with KCCT to finalize the scope of such design.

7. KCCT Statement: The District of Columbia’s revisions to the 1988 regulations governing Stormwater Management will require a change in design.

Board Response: Section C.2.1.h. of Exhibit A to Modification 17 provides that additional compensation would be due to KCCT only if “...such changes are required after a prior approval of such design by a Governing Authority or utility...” However, the Board’s design plans pertaining to Stormwater Management have not been finalized to the point of Board approval and/or presentation to the relevant Government Authorities. Until a code-compliant strategy for Stormwater Management is approved by both the Board and the relevant Government Authorities, the Board cannot accept financial responsibility for any design changes necessitated by changes in the applicable regulations governing Stormwater Management. The Board remains willing to consider all Stormwater Management options offered by KCCT and looks forward to finalizing the Stormwater Management design plans.

8. KCCT Statement: The Board expects to issue request for pricing for the items below:
   a. Press Briefing design revisions / West Pavilion program revisions;
   b. DOCD services for Data Center, TSS & Command Control Center, Briefing & Press Lock-up, LEU Space consolidation; and
   c. Freight Elevator Access/Loading Dock Design

Board Response: The Board acknowledges the above listed items, a, through c. (including the passenger elevator service adjustments noted in item 5 above), but not including the West Pavilion program revisions, are potential Change Orders and intends to request a Proposal from KCCT under separate cover to address these items.

Since the West Pavilion is part of the conference center, the Board’s position is that any West Pavilion program revisions have already been fully funded under Modification 18, CLIN 40 Space Programming and Environmental Scan. As previously noted in this letter, Section I of Attachment 1 to Modification 18 provides that “[p]rovision for the programming of the visitor’s center and conference center was executed four years ago and the mission of the Board has changed in various ways the A/E shall revisit the programming of the conference center. The A/E shall verify the programming of the visitor
III. BOARD REQUESTED DEDUCTIONS FOR WORK REMOVED FROM THE CONTRACT SCOPE

I. KCCT Statement: "In response to Mod 30, KCCT will provide a credit requested for confidential - security confidential - security confidential - security"

II. Board Response: confidential - security

The Board is currently reviewing KCCT’s proposal dated June 3, 2014 regarding such credit and will provide feedback to KCCT with respect to this matter under separate cover.

The Board’s responses above are not intended to and do not operate to waive any rights or remedies the Board may have under the Contract or applicable law or to modify any terms and conditions of the Contract.

If you have any other questions or concerns regarding this matter please contact the undersigned via email at karen.e.fentress-martin@frb.gov via telephone at 202-912-7980.

Sincerely,

Karen Fentress-Martin
Contract Specialist
Procurement Section

CC: Cynthia Johnston
    Chris Haassey
    Troy Dilley
    Kimberly Briggs

Attachment:
### Design Services

<table>
<thead>
<tr>
<th>FY 2013</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Principal</td>
<td>Hourly Rate</td>
<td></td>
</tr>
<tr>
<td>B. Project Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Senior Architect/Designer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Director of Interns</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY 2014</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Principal</td>
<td>Hourly Rate</td>
<td></td>
</tr>
<tr>
<td>F. Project Manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G. Senior Architect/Designer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. Director of Interns</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GRAND TOTAL**: $45,102
Contract for commissioning services between the Board of Governors of the Federal Reserve System and Jacobs Engineering Group, Inc. dated January 12, 2011

January 12, 2011

SOLICITATION, OFFER, AND AWARD 2011002622
Notification of Contract Award

Jacobs Engineering Group, Inc.
1100 N. Glebe Road, Fifth Floor
Arlington, Virginia 22201

Attention: Mr. Julian Saffari

Dear Mr. Saffari:

The Board of Governors of the Federal Reserve System (Board) hereby awards Contract 2011002622 to Jacobs Engineering Group, Inc., for the commissioning services as described in the Contract.

Enclosed is a copy of the entire contract, including the SOAs, for you to sign on behalf of the Board's Commissioning Officers to indicate contract award. Upon contract execution, the Board is obligating funds for the following Contract Line Items Numbers (CLINs) for services expected to take place during calendar year 2011:

- CLIN 1: Design Phase ($1,268,830.00)
- CLIN 2: Insurance costs ($20,000.00)

The Board will add funds for the other phases/services via contract modifications before services are to begin.

Please reference the appropriate CLINs and Contract No. 2011002622 on all invoices submitted for the Contract.
Please contact Keith Bates, the Board’s Contracting Officer’s Technical Representative (COTR), at (202) 452-3720 to discuss the commencement of services. If you have any questions about this Contract, please contact me at (202) 452-3812 or by e-mail at Kristin.E.Gandhi@fsb.gov. Thank you.

Sincerely,

[Signature]

Kristin Gandhi
Senior Contract Specialist
Procurement Section, Management Division
804
SECTION B

COST/PRICE PROPOSAL FORM

B.1 SERVICES TO BE PROVIDED

To provide the Services set forth in Section C, the Statement of Work, of this Solicitation, Offerors shall submit in their proposals:

(A) NTE Fee for Commissioning Services and Maximum Fully Burdened Rates, using the forms attached as Attachments B-1A and B-1B, respectively, and their projected Total Hours by Personnel Category using Attachment B-1C;

(B) NTE Fee for Peer Review Services and Maximum Fully Burdened Rates, using the forms attached as Attachments B-2A and B-2B, respectively, and their projected Total Hours by Personnel Category using Attachment B-2C; and

(C) NTE Fee for Construction Materials Testing (CMT) Services and Maximum Fully Burdened Rates, using the forms attached as Attachments B-3A and B-3B, respectively, and their projected Total Hours by Personnel Category using Attachment B-3C.

Using the form attached as Attachment B-3, Offerors shall identify for each personnel category listed on Attachments B-3A, B-3B and B-3C the costs to procure the insurance described in Section L.7 of this Solicitation that are included as part of the “Overhead” for each applicable Maximum Fully Burdened Hourly Rate.

Please note that the cost forms were not provided to Offerors at the release date of the SOA. The Board will provide the cost forms to Offerors via a Solicitation Amendment shortly after the release date.

B.2 ESTIMATED QUANTITIES

N/A

B.3 INDEFINITE QUANTITY

N/A

B.4 NOTICE REQUIRED FOR WORK SUBJECT TO DAVIS-BACON ACT

The Board does not believe that the work required under this Solicitation falls within the Davis-Bacon Act ("the Act"). However, if and to the extent the Contractor disagrees with the Board’s
position on the inapplicability of the Act, the Contractor shall notify the Board immediately so that the Board may reconsider whether the Act applies to the work to be performed and if so, what wage decision is applicable.

The rates set forth in Contractor's price proposal shall not be increased for the purpose of compliance with the Act unless the Board or an authorized official of the United States Department of Labor determines the Act to be applicable to the work, and in such circumstance, any price increase shall apply only to such work that is subject to the Act, and any increase shall be limited to an amount that is necessary to comply with the Act and preserve the profit margin established by Contractor's price proposal (i.e., Contractor shall not be permitted to increase its profit margin because of a post-award application of the Act).
Table of Contents - Volume III (Revised)

COST PRICE PROPOSAL

p2. NTE Fee for Commissioning Services
   a. Attachment B-1A
   b. Attachment B-1B
   c. Attachment B-1C

p5. NTE Fee for Peer Review Services
   a. Attachment B-2A
   b. Attachment B-2B
   c. Attachment B-2C

p8. NTE Fee for Construction Materials Testing Services
   a. Attachment B-3B (as instructed by Amendment 2,
      Question/Answer #57)

p13. Insurance
   a. Attachment B-4
# RESTRICTED DATA

## Without Fully Sustained Rate: "Peer Review Services"

<table>
<thead>
<tr>
<th>Labor Category</th>
<th>Without Fully Sustained Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rate</td>
</tr>
<tr>
<td></td>
<td>Threshold Rate</td>
</tr>
<tr>
<td></td>
<td>Overdue</td>
</tr>
<tr>
<td></td>
<td>Paid</td>
</tr>
<tr>
<td></td>
<td>Max. Fully Sustained Rate</td>
</tr>
</tbody>
</table>

- **Competitive Harm**

---

**Commissioning Agent Services**: 504.201002152

**JACOBS**
# Specialized Engineering Attachment B-3B

## Laboratory Testing Services

<table>
<thead>
<tr>
<th>Test</th>
<th>Type</th>
<th>Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masonry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Equipment and Other Expenses

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Use Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hourly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Specific details of services and costs vary by project.*

---

**JACOBS**

Commissioning Agent Services - SCIA 2014000282
## ECS ATTACHMENT B-3B

### Attachment B-3B

<table>
<thead>
<tr>
<th>Labor Category</th>
<th>Unskilled Base Rate</th>
<th>Skilled Base Rate</th>
<th>Overhead</th>
<th>Profit</th>
<th>Max. Fully Burdened Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Manager</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sherpa Engineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certified Engineering Inspector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lotfi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cantor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gate and Gate Personnel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Cleaner</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mason</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HVAC Technician</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prepping and Sheet Metal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spraying</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hauling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveyor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance/ gifts delivery</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

- Competitive rates for all labor classifications are based on the prevailing market rates for similar work in the area.
- Rates are subject to change based on project-specific requirements.
- Pricing is subject to negotiation and final agreement with the client.

---

Jacobs

Commissioning Agent Services - G4X 2010000202

816
### RESTRICTED DATA

**JACOBS ATTACHMENT B-4**

**ATTACHMENT B-4**

**CuA Insurance Pricing Schedule**

**SOLICITATION, OFFER, AND AWARD NO. 201003262**

<table>
<thead>
<tr>
<th>No.</th>
<th>Insurance Type</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Workers Compensation</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Employer's Liability</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Commercial General Liability Insurance</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Business Automobile Liability</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Umbrella or Excess Liability Insurance</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Professional Liability Insurance</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Crime Insurance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Not-to-Exceed Insurance Cost</td>
<td>$30,000 NTE</td>
</tr>
</tbody>
</table>

Per the Board's Solicitation Amendment # 5 of November 18, 2010, we offer the following comments addressing the insurance requirements listed in the SOA:

1. Paragraph L.7.a.4 requires project specific business automobile liability insurance. The insurance is only commercially available for specific vehicles assigned to a specific job site. As non-competitive harm

2. Paragraph L.7.a.7 requires project specific Crime Insurance in the amount of $30,000,000. competitive harm

3. Paragraph L.7.c requires the contractor to provide copies of its insurance policies to the Board if requested. We consider our insurance policies and program to be proprietary and highly confidential. Therefore we request this requirement be deleted. We will provide certificates of insurance evidencing all required coverages.
RESTRICTED DATA

4. Paragraph 1.7. requires all insurance coverages be flowed down to subcontractors. This is

5. The crime insurance coverage is a Specific Client Endorsement at the designated level of

6. The business automobile insurance is the full coverage of $10 million.
Table of Contents - Volume II

TECHNICAL PROPOSAL

Part A
Requirements
a. 5 LEED Certified Buildings
b. 5 Years Commissioning Experience
c. DC Area Office
d. DC Area Firm

Part A
Key Personnel
a. Commissioning Agents
b. Commissioning Project References
c. Key Personnel Resumes

Part A
Work Products
a. Commissioning Plan
b. Commissioning Specifications
c. Functional Performance Test

Part A
Peer Review Staff

Part A
Experience
a. Experience with Similar Clients
b. Firm History
c. 5 Major Commissioning Efforts

Part A
Approach
a. Meeting or Exceeding the Requirements
b. Integrating Commissioning
c. Fostering Teamwork
d. Estimated Timeline
e. Training

Part B
References
a. Ability to Manage Projects
b. Comparable Projects

Part B
Corporate Qualifications

Appendix
LEED Documentation
EXPERIENCE COMMISSIONING AT LEAST FIVE LEED CERTIFIED BUILDINGS, INCLUDING TWO RENOVATIONS
The table below shows the LEED certified buildings for which we have provided commissioning services.

<table>
<thead>
<tr>
<th>Buildings Project</th>
<th>LEED Certification Level</th>
<th>Completion Date</th>
<th>Renovation?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FIVE YEARS OF EXPERIENCE IN BUILDING COMMISSIONING, AT LEAST TWO IN LEED CERTIFICATION

HAVE AND MAINTAIN AN OFFICE IN THE WASHINGTON, D.C. AREA

As shown by the map above, our office in Arlington, Virginia, is located less than 5 miles from the FRB project site. We can be on-site in about 10 minutes, if needed.

ESTABLISHED AS FIRM IN WASHINGTON, D.C. AREA AND HOLD ALL REQUIRED LICENSES

Jacobs has had a presence in the Washington, DC area since 1985. Our current Arlington, VA office was established in the 1990s. As shown in Volume I, Part E, we possess all required licenses for doing business and providing services in this area.
DEDICATED COMMISSIONING AGENTS

Our proposed commissioning agent for this project is [name of individual] has 16 years of direct commissioning experience, and over 30 years of experience in the A/E industry overall. [name of individual] has served as the lead commissioning agent on multiple federal and private-sector projects in the Washington, DC area. He brings a wealth of knowledge of major building mechanical and electrical systems, from the design, commissioning and operating perspectives.

Our proposed alternate commissioning agent for this project is [name of individual] has over 13 years of direct commissioning experience, and over 14 years in the A/E industry overall. [name of individual] has also served as the lead commissioning agent on multiple federal and private-sector projects, encompassing LEED commissioning and consultation, retro-commissioning, and energy auditing.

Full resumes for both of these individuals are included on the following pages. Letters of commitment are also included.
Years of Experience: 31

Education
Bachelors of Science, Mechanical Engineering, 1987, Kalamazoo
Merchant Marine Academy

Professional Registration
Professional Engineer, DC, 1987
MD, VA
Certified Energy Manager, 1996
LEED Accredited Professional, 2004
Qualified Commissioning Process Provider, 2004

Commissioning Agent Requirements
- At least 3 years experience
- LEED-certified buildings (including renovation)
- LEED Certified Projects/Renovations: SSA Headquarters Campus
- LEED Certified Project: Hudson Valley Transporencie Management Center

Responsible for:
- A LEED Accredited Professional and commissioning specialist with 31 years experience. He has designed central plants, HVAC, fire protection and plumbing systems for the renovation of large administrative office buildings, educational facilities, sensitive IT facilities, and large industrial facilities. He has developed commissioning plans, and provided guidance and oversight for documenting performance and confirming system functionality in accordance with Contract Documents and design intent. Through his problem solving skills and resolution of non-compliance issues, he raises the standard for integrated system testing, resulting in buildings that work right the first time.

Sample Experience
- Social Security Administration Headquarters Campus, Woodlawn, MD: Task Manager/ Mechanical Engineer, commissioned new construction, alterations, renovation, and repair of facilities on the client’s HQ campus, an 11-building site. Conducted a comprehensive heating study that included the entire complex, and was involved in the feasibility of expanding the system heating system to include two other electrically-run facilities. Generated two option studies for heating plan renovation: one complete boiler replacement and other replacement of the boiler burners.
- Hudson Valley Transportation Management Center (State of New York DOT), Hawthorne, NY: Commissioning Specialist. The multi-modal, multi-agency facility is designed to integrate and manage the Intelligent Transportation System infrastructure currently used in NYSDOT. Facility also serves as a hardened emergency command center.
- SSA: developed the commissioning plan, provided guidance and oversight for documenting performance and confirming proper system functionality and operability in accordance with the design intent and Contract Documents.
- Mary E. Switzer Building Modernization (SSA), Washington, DC: Commissioning Manager. The modernized building is planned to meet U.S. Green Building Council’s LEED Silver certification with observed installation of each type of equipment to ensure that they were properly installed according to the contract documents and manufacturer’s instructions, verified that start-up and initial checkout of all commissioned equipment was successfully completed, reviewed and approved the contractor’s functional testing plan, verified that training was properly conducted for maintenance personnel, reviewed O&M manuals and developed a commissioning report.

Jacobs
Dear Ms. Gaudio:

I have reviewed and approved this statement of my qualifications. I am a U.S. citizen, will perform as a Jacobs employee, and a constituted member of the Federal Reserve System Board of Governors Team. I am committed to assume my designated roles and responsibilities upon contract award for a minimum of 3 years.

Sincerely,

[Name of Individual and Personal Signature]

Date: August 16, 2013
years of experience
15

Education
Bachelor of Science, Ministry and Leadership, 2001, Dillard University
Bachelor of Science, Mechanical Engineering, 1997, Texas A&M University College Station

Professional Registration
Certified Commissioning Authority, 1997
LEED Accredited Professional, 2009

Professional Experience
2004

Sample Experience
- North Lake College Workforce Development Center, Dallas, TX; Project Manager. North Lake College, located in Irving, Texas, constructed a new Workforce Development Center within an existing shell space as part of the bond program. The facility is approximately 10,000 SF and includes classroom, office and faculty spaces. We provided commissioning services to meet the requirements of LEED CI version 2.0 Fundamentals and Enhanced commissioning credits. I wrote the Co spec, Co clean, performed design reviews, completed construction checklists, held meetings, coordinated controls, performed basis of design reviews, developed the systems manual, wrote the final Co report, performed functional performance testing, and reviewed the training program.
- City of Dallas, LEED and Commissioning Consulting (Hensley Field), Dallas, TX; Mechanical Engineer. Provided LEED consultation and commissioning services to the City of Dallas for the relocation of its Service Center to the 77,000 SF Hensley Field Operations Center, formerly the Naval Air Station Operations Center (NASOC). Identified issues related to the project, assisted the Co visit and facilitated a LEED charette. Assisted the City in selecting a design-build contractor by participating in the consultant selection process, including reviewing submittals, interviewing candidates and recommending a choice. Operations center was certified as LEED Gold. Performed design reviews; reviewed functional performance testing and training information; reviewed design team and contractor LEED data prior to submission for LEED credits.
- Hipolito F. Garcia U.S. Post Office and U.S. Federal Courthouse Modernization and Renovation, San Antonio, TX; Project Manager. This 369,000 SF facility is undergoing a complete modernization and renovation. Commissioning services included design reviews, functional performance testing and specification development for this LEED Silver project.

Commissioning Agent Requirements
- At least 7 years experience
- LEED certified buildings (excluding renovation)
- LEED Certified Project Assistant, North Texas College Workforce Development Center
- LEED Certified Project Assistant, City of Dallas Hensley Field Operations Center

Commissioning Agent Services - 2010002212

JACOBS
TO: Kristi Gandhi

SUBJECT: Letter of Certification for Proposed Contract for
          Solicitation, Offer, and Award for委托ing agent services
          Board of Governors of the Federal Reserve System
          20th and C Street, NW
          Washington, DC 20551
          Solicitation No. 210049342

Dear Ms. Gandhi:

I have reviewed and approved this statement of my qualifications. I am a U.S. citizen, will
perform as a Jacobs employee, and a certified member of the Federal Reserve System Board of
Governors Team. I am committed to assume my designated roles and responsibilities upon
contract award for a minimum of 1 year.

Sincerely,

JACOBS ENGINEERING GROUP INC.

[Name of Individual and Personal Signature]

Date: August 16, 2010
REFERENCES OF COMMISSIONING PROJECTS

In the table below, we list references for commissioning projects, to the best of our knowledge, that were completed in the last five years or are currently in process by our Global Buildings North America division, which includes our national commissioning practice. However, please note that several of our clients have asked that we keep their information confidential.

Because Jacobs Engineering Group Inc. and its subsidiaries form an organization that is comprised of approximately 125 operating companies and affiliates, there may have been commissioning projects or commissioning services done as part of other contracts of which we are not aware. Regardless, the projects listed are all the projects that meet the criteria above, which were performed by the group submitting this proposal.

<table>
<thead>
<tr>
<th>Project</th>
<th>Contact Name</th>
<th>Phone</th>
<th>LEED</th>
<th>LEED Certification Level</th>
<th>IEQ Certification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Contact Name/Phone</td>
<td>LEED Certification Level</td>
<td>Intended LEED Certification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------</td>
<td>--------------------------</td>
<td>-----------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>competitive harm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project</td>
<td>Contact Name</td>
<td>LEED Certification Level</td>
<td>Certified for LEED Certification?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>--------------</td>
<td>--------------------------</td>
<td>----------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>competitive harm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ORGANIZATION CHART**

```
[Diagram of organizational structure]
```

**KEY PERSONNEL**

Our team includes personnel with an average of 25 years of experience. You will likely not encounter a commissioning issue that these team members have not seen before. Our team members will incorporate best practices and lessons learned from across the country and across various market sectors into your program.

Resumes for our personnel, including our proposed project manager and proposed alternate project manager, are included beginning on page 17.
Years of Experience: 31

Education:
- Bachelor of Science, Mechanical Engineering, 1983, Kilungford, Middlesex Metro Academy

Professional Registration:
- Professional Engineer: DC, 1983
- NA

Certified Energy Manager, 1996
- LEED Accredited Professional, 2003

Sample Experience:
- Social Security Administration Headquarters Campus, Woodland, MD: Task Manager/Mechanical Engineer. Oversee commissioning of new construction, alteration, renovation, and repair of facilities at the client's HQ campus, an 11-building site. Conducted a comprehensive testing study that included the entire campus, and was involved in the feasibility of expanding the steam heating system to include two other electricity-run facilities. Generated two option studies for heating plant renovation: one-complete boiler replacement and replacement of the boiler burner.
- Hudson Valley Transportation Management Center (State of New York DOT), Hawthorne, NY: Commissioning Specialist. The multi-modal, multi-agency facility is designed to integrate and manage the Intelligent Transportation System infrastructure currently used in NYSDOT. Facility also serves as a hardened emergency command center. Developed the commissioning plan, provided guidance and oversight for documentation of performance and confirming proper system functionality and operability in accordance with the design intent and Contract Documents.
- Mary E. Switzer Building Modernization (GSA), Washington, DC: Commissioning Manager. The modernized building is planned to meet U.S. Green Building Council's LEED Silver certification. Observed installation of each type of equipment to ensure they were properly installed according to the contractor's and manufacturer's instructions. Verified that start-up and initial checkout of all commissioned equipment was successfully completed, reviewed and approved the contractor's functional test plan, verified that training was properly conducted for maintenance personnel, reviewed O&M manuals and developed a commissioning report.

Project Manager Requirements:
- 10 years building commissioning experience
- Worked on similar projects
- Proposed PE in Washington, DC
- LEED Certified Project/Revit/IAQ/Commissioning Center
- LEED Project: Hudson Valley Transportation Management Center

__JACOBS__

Commissioning Agent Services - GOA 03100922
TO: Katrina Caudle

SUBJECT: Letter of Commitment for Proposed Contract for
Solicitation, Offer, and Award for Commissioning agent services
Board of Governors of the Federal Reserve System
20th and C Street, NW
Washington, DC 20551
Solicitation No. 30104026

Dear Ms. Caudle:

I have reviewed and approved the statement of my qualifications. I am a U.S. citizen, will perform as a Jacobs employee, and a committed member of the Federal Reserve System Board of Governors Team. I am committed to assume my designated roles and responsibilities upon contract award for a minimum of 1 year.

Sincerely,

JACOBS ENGINEERING GROUP INC.

name of individual and personnel signature

Date: August 16, 2013
837

VerDate Nov 24 2008 11:04 Mar 16, 2015 Jkt 046629 PO 00000 Frm 00845 Fmt 6602 Sfmt 6602 L:\HEARINGS 2014\07-15 THE SEMIANNUAL MONETARY POLICY REPORT TO THE CON

Board of Governors of the Federal Reserve System - Issue II

PE, CEP, LEED AP
PROPOSED ALTERNATE PROJECT MANAGER

Years of Experience
25

Education
Bachelor of Science, Mechanical Engineering, 1974, Rice University
Master of Mechanical Engineering, 1974, Rice University

Professional Registration
LEED Accredited Professional, 2001
Certified Energy Managers Professional, 2000

Professional Engineer:
28 states and DC

has eight years of active commissioning experience and has
regularly performed mechanical, electrical, and plumbing system
testing throughout his career. He has extensive knowledge in
system controls and sequences, and positions commissioning as
an integral part of the design team. His knowledge of integrated
system testing not only provides means and methods for
troubleshooting system failures, but through rigorous testing he
excels at confirming and documenting the functional performance
requirements of any facility. By ensuring a baseline for optimal
performance, he provides buildings that work as needed and as
intended.

Sample Experience

- City of Dallas, LEED and Commissioning Consulting
  (Hensley Field), Dallas, TX; Project Director, Provided
  LEED consulting and commissioning services to the City
  of Dallas for the relocation of its Service Center to the
  77,000-SF Hensley Field Operations Center. Operations
  center was certified as LEED Gold.
- The Art Institute of Chicago, New Modern Wing,
  Commissioning Services, Chicago, IL; QA/QC Director
  for Commissioning Services, Provided commissioning and
  LEED consulting on the 294,000 SF Modern Wing addition.
- GSA Region 6 Cedar Rapids Courthouse, Cedar Rapids,
  IA; QA/QC Director for Commissioning Services. We are
  providing Commissioning and System Integration services
during the design and construction phases. Also manages the
  internal Jacobs QA/QC process on this project.

RadioShack Corporate Headquarters LEED
Commissioning Services, Fort Worth, TX; Project
Manager, Provided MEP LEED commissioning services for
new Corporate Headquarters Building Projects in Downtown
Fort Worth. Beyond managing the project, also performed
design reviews, went to commissioning meetings, and assisted
in functional testing.

Grand Rapids Art Museum, Commissioning Services,
Grand Rapids, MI; Project Director for HVAC Peer Review
services. Provided comprehensive commissioning services
for the Grand Rapids Art Museum. The new 130,000 square
foot building occupies a prominent downtown site and is
LEED-certified at the Gold level.

Texas Children’s Hospital Maternity Center
Commissioning Services, Houston, TX; Quality
Assurance, Providing commissioning services for the new
780,000-square-foot maternity center.

JACOBS
TO:  Kristin Gauldi

SUBJECT: Letter of Commitment for Proposed Contract for

Solicitation, Offer, and Award for commissioning agent services

Board of Governors of the Federal Reserve System
2401 C Street NW
Washington, DC 20551

Solicitation No. 20100602


Dear Ms. Gauldi:

I have reviewed and approved this statement of my qualifications. I am a U.S. citizen, will perform as a Jacobs employee, and a committed member of the Federal Reserve System Board of Governors Team. I am committed to assume my designated roles and responsibilities upon contract award for a minimum of 1 year.

Sincerely,

[Signature]

[Name of Individual and Personal Signature]

Date: August 16, 2010
Years of Experience
48

Education
Master of Science, Civil Engineering, 1981, Stanford University
Bachelor of Science, Civil Engineering, 1969, Santa Clara University

Professional Registration
Professional Engineer:

CA: DC

Curriculum Vitae

Name of Individual
PE, CCM, LEED AP

- Currently serves as a program director for Jacobs with responsibilities in program management, contract administration, design management, construction management, facilities management, schedule, cost control, and capital planning and budgeting.

Sample Experience
- National Museum of Marine Corps, Quantico, VA: Program Manager. Provided construction management for preconstruction and construction phases, including full commissioning services for the $46.6 million, 20,000 SF facility. Provided overall leadership for the project team. The NMMC project was awarded CHARG’s National Project Award in 2007.
- U.S. Army Corps of Engineers, Baltimore, DC: Public Schools; Program Manager. Through the USACE, we provided design and construction management services for DC Public School’s building program that included new facility design and over 100 renovation/repair projects.

Name of Individual
PE, CCP, LEED AP

- Currently serves as the Jacobs national practice leader for commissioning. His comprehensive experience in high technology, industrial, medical and educational facility projects and related utility service engineering has equipped him to understand the project delivery issues from the owner’s perspective.

Sample Experience
- U.S. Department of the Interior Modernization, Washington, DC; Principal in Charge. We provided construction management and commissioning services for this $60 million project which included a full historical renovation of office, mechanical, electrical, telecommunication and support spaces. It will be a LEED certified building.
- The Art Institute of Chicago, New Modern Wing, Commissioning Services, Chicago, IL; Project Manager. Provided commissioning and LEED consulting on this 284,000 SF new Modern Wing addition.
- Smithsonian Institute Cooper-Hewitt National Design Museum, New York, New York; Commissioning Manager. Provided mechanical, electrical, and plumbing design review as part of LEED Enhanced commissioning effort.

Jacobs
Name of Individual

Years of Experience: 17

Education:
- Bachelor of Science, Mechanical Engineering, 1992, University of Massachusetts Lowell

Professional Registration:
- LEED Accredited Professional
- Certified Energy Manager, 2001

Sample Experience:
- Confidential Office Building, Washington, DC: Commissioning Manager. We are providing commissioning services for the modernization of this building. Ensured that the project was supported from a staffing perspective as well as participating in the technical aspects of the commissioning process.
- U.S. Department of the Interior Modernization, Washington, DC: Commissioning Project Manager. We provided construction management and commissioning services for this renovation project. Duties included overall management of the commissioning process, preparation of technical documents, and quality control for functional testing procedures.

Name of Individual

Years of Experience: 8

Education:
- Bachelor of Science, Safety Studies, 2002, Kennesaw State College
- Associate of Science, Criminal Science, 2007, Kennesaw State College

Certifications:
- Assistant Safety Professional, COSP
- CPR/First Aid Certified
- OSHA 30-hour Construction Training

Sample Experience:
- United States Mission to the United Nations, New York, NY: Safety Manager. Responsible for maintaining client’s construction safety programs in accordance with the client’s and Jacob’s policies and procedures.
- U.S. Department of the Interior Modernization, Washington, DC: Area HSE Manager. Responsible for maintaining the client’s construction safety programs in accordance with policies and procedures. He provided safety audits of contractor activity sites and technical assistance to client’s Design Process Review involving contractor work.
- Confidential Office Building, Washington, DC: Regional Safety Manager. Responsible for maintaining the client’s construction safety programs in accordance with the client’s and Jacob’s policies and procedures.

Jacobs
name of individual  PE, Cx, LEED AP  TRAINING COORDINATOR

Years of Experience  37
Education  Bachelor of Science, Engineering, 1972, University of Missouri in Rolla
Professional Registration  Professional Engineer:
- CO, Individual
- MO, Individual
- TX, Individual
LEED Accredited Professional
- Missouri Energy Auditor
- AutoCAD and Energy Analysis
Program Certifications
- Certified Commissioning Authority, AARC Commissioning Group, 2008

has 37 years of commissioning and mechanical engineering experience. Much of his career has included projects that involved energy conservation measures. He has been involved in the design, system selection, cost estimation, commissioning, and construction observation for mechanical and electrical systems.

Sample Experience
- Texas Department of Criminal Justice (TDCJ), Montford Facility, Lubbock, TX; Commissioning Agent. Project involved a 20,000 SF addition of spaces to the existing Medical Treatment Detention facility of TDCJ at Lubbock. Commissioning tasks included writing the Cx plan and Cx specifications, verifying systems, and verifying training.
- GSA Region 6 United States, Rush H. Limbaugh Courthouse, Cape Girardeau, MO; Commissioning and LEED Coordination. New Federal Courthouse of 150,000 SF, 4-story building. Performed design reviews and control sequence reviews; wrote functional tests; monitored site functional tests for systems; compiled the report; and submitted documents to USGBC.

name of individual  PE, Cx, LEED AP  COMMISSIONING TEAM - HVAC/BSM/CONTROLS & RENEWABLE ENERGY

Years of Experience  10
Education  Bachelor of Architectural Engineering, HVAC Design
- Emphasis, 1995, Penn State University
Professional Registration  Professional Engineer:
- CA, 1996, Individual
- Qualified Commissioning Process Provider, University of Wisconsin, 2008
DOE Top Tier Clearance

has managed a wide variety of teams and projects for mechanical, plumbing, and prime construction contracts. Using his background in mechanical design, he has an expert in design-build delivery of large HVAC projects for both federal and private customers.

Sample Experience
- Confidential Office Building, Washington, DC; Commissioning Specialist. Phased interior renovation and modernization of a prominent historical building. Provided independent commissioning services for all mechanical, electrical, and plumbing systems, including several renewable energy features. Also provided LEED services under USGBC LEED-EB and EB-NC rating systems.
- FOB H Interior Renovations, Washington, DC (GSA NCR); Commissioning Specialist. Provided independent commissioning services for complex central UPS system upgrades and tenant build-out for a new 10,000 SF mission critical command center tenant space. Implemented the overall commissioning program and acted as the owner’s MEP representative.

JACOBS
842
Commissioning Team - Security

Years of Experience: 27

Education:
- Bachelor of Science, Electrical Engineering, 1982, Rose-Hulman Institute of Technology

Professional Registration:
- PE, Individual
- TX, Florida, Illinois

Sample Experience:
- TDCJ A/E Services and Commissioning, Various Texas Locations: Electronic Systems Design Lead, Commissioning Authority. Designed security systems at four high-security adult prisons. Prepared commissioning specifications and served as commissioning authority for test and training facility, and for security control systems at two new construction high security unit prisons during design and construction.
- Louisiana Army National Guard Hurricane Katrina Reconstruction, Technical Design Criteria Engineering Team Member, Design Reviewer. Responsible for development of electrical and security technical design criteria requirements documents for design build of 14 facilities to replace/renovate facilities.

Commissioning Team - Life Safety

Years of Experience: 16

Education:
- Bachelor of Science, Fire Protection and Safety Engineering Technology, 1994, Oklahoma State University

Professional Registration:
- PE, Individual
- TX, Florida

Sample Experience:
- Joint Regional Deployment Terminal, March ARB, CA: Fire Protection Engineer. Design and commissioning of a 45,000 SF facility. Scope of services includes architectural, structural, civil, mechanical and electrical coordination.
- Confidential Client Standby Power Project, San Antonio, TX: Fire Protection Engineer. Developed sequence of operation to be used during equipment commission for a 24/7/365 standby facility. Also provided complete commissioning services for the generator plant, fuel storage warehouse and distribution system.

Jacobs
**NAME OF INDIVIDUAL**: EIT, LEED AP

**COMMISSIONING TEAM - AUDIO/VISUAL SYSTEMS**

**Years of Experience**

3

**Education**

Bachelor of Science, Mechanical Engineering, 2006, University of Colorado

**Professional Registration**

Engineer in Training, Colorado

**LEED Accredited Professional**

**Sample Experience**

- Confidential Client APHA-Z, Washington, DC; Communications Commissioning Specialist. Provided telecommunication and security systems commissioning for this 11-floor facility with eight occupied levels. Developed the CoC plan, reviewed equipment submittals, wrote pre-functional checklists, participated in design review meetings, performed functional checkout, developed deficiency reports, wrote functional testing procedures, witnessed functional testing, led commissioning meetings, and developed the final commissioning report.

- Confidential Office Building, Washington DC; Commissioning Specialist. Providing construction management and commissioning services for the modernization phase of this facility. Facilitated the LEED process by assisting the owner in achieving Energy & Atmosphere and Indoor Environmental Quality credits.

---

**NAME OF INDIVIDUAL**: P.E.

**COMMISSIONING TEAM - KITCHEN EQUIPMENT**

**Years of Experience**

20

**Education**

Bachelor of Science, Mechanical Engineering, 1979, Worcester Polytechnic Institute

**Professional Registration**

Professional Engineer, MA, 1984, Registered

**Sample Experience**

- Armed Forces Retirement Home New Commons and Healthcare Center, Washington, DC; Commissioning Agent. As the commissioning agent for the construction of the new commons and healthcare center being built at the Armed Forces Retirement Home in Washington, D.C., the project included kitchen equipment.

- GSA EPA & Ariel Rios Buildings, Washington, DC; Commissioning Project Manager. Project involved retro-commissioning and building tune-up. Served as project manager, in addition to scheduled and participating in testing, preparing the scope of work, serving as liaison with the client (GSA), and coordinating the test results data into the final report documents.
PE, LEED AP
COMMISSIONING TEAM - ELEVATORS/ESCALATORS

Years of Experience
18

Education
Master of Science, Electrical Engineering, 1994, Ohio State University
Master of Engineering Management, 1997, St. Martin's College
Bachelor of Science, Electrical Engineering, 1986, University of Notre Dame

Professional Registration
LEED Accredited Professional, 2006
Professional Engineer, 2013

Sample Experience
- Armed Forces Retirement Home, Gulfport, MS: Commissioning Agent. This major, multi-phase, design-build project included coordinating the design and construction of a 680,000 SF, 584-resident unit, armed forces retirement home. The project was responsible for electrical and low-voltage systems commissioning— including the elevators and escalators.
- Hipolito F. Garcia U.S. Federal Courthouse Modernization and Renovation, San Antonio, TX: Electrical Engineer. This 300,000 SF facility is undergoing a complete modernization and renovation. The project commissioning services include design reviews, functional performance testing and specification development for this LEED Silver project. His reviews and testing included the elevators and escalators for the facility.

AI, LEED AP
COMMISSIONING TEAM - BUILDING ENVELOPE

Years of Experience
13

Education
Bachelor of Science, History of Architecture, 1997, Miami University

Professional Registration
Registered Professional Architect, MO, 2004
NCARB Certified, 2006
LEED Accredited Professional, 2006, V2.1

Sample Experience
- GSA Federal Building at 210 Varick Street, New York, New York: Project Manager. Commissioned the building envelope of this 12-story federal building. The building encompasses over 1,000,000 square feet of office space, located in a design. David also managed the construction manager for this project.
- Confidential Client, Data Center, EPCM Integrated Delivery Project, Upper Providence, PA: Project Architect/On-Site Design Manager. Commissioned the architectural systems. Also, David coordinated the design and production documents for a state-of-the-art data center. Facility includes 2N redundancy design, 70,000 sf of raised floor area, and $100M of base building design.
COMMISSIONING TEAM - POWER DISTRIBUTION

Name of Individual: [Redacted]

Years of Experience: 15

Education:
- Associate of Science, Construction Management, 1982, Cassville Community College

Professional Registration:
- EPA S wart (00000000)
- Maryland Master Electrician License
- Filer Optic Association Certified Technician
- Maryland Certified Electrical Inspector
- Certified Commissioning Authority, AABC Commissioning Group

Sample Experience:
- Confidential Office Building, Washington DC: Commissioning Specialist. Providing construction management and commissioning services for the modernization phase of this facility. Performed functional performance testing for all major electrical distribution systems (emergency generation, switchboard and panelboard distribution, UPS systems), performed O&M reviews, tracked the corrective issues log, and compiled the final deliverable package to the owner.
- U.S. Department of Commerce (GSA), Washington, DC: Commissioning Specialist. Upgrading all major building systems to include complete renovation/modernization to meet current codes. Performed functional performance tests for medium voltage network/switchgear and medium voltage distribution switchboards.

COMMISSIONING TEAM - EMERGENCY POWER

Name of Individual: [Redacted]

Years of Experience: 32

Education:
- Bachelor of Engineering, Electrical Engineering, 1977, The Cooper Union for the Advancement of Science

Professional Registration:
- Professional Engineer, TX
- Level II Test and Setup Engineer
- Certification, USNRC Reg. Coade: 15X

Sample Experience:
- Portsmouth Naval Shipyard Consolidated Emergency Control Center (CECC), Kittery, ME: Commissioning Manager. Developing commissioning program and budget for the verification and performance testing of emergency response center equipment.
### COMMISSIONING TEAM - WATER FILTRATION

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>14</th>
</tr>
</thead>
</table>

**Education**
- Bachelor of Science, Fire Science, 1993, Ohio State University
- Bachelor of Science, Howard Community College

**Professional Registration**
- Certified Quality Control Manager, Army Corps of Engineers

*Work performed while at another firm*

**Sample Experience**
- Howard Hughes Medical Institute Jamelia Farm Research Campus, Ashburn, VA, Area Superintendent. As area superintendent, was mainly responsible for the lab spaces. He coordinated the work of all trades through the punch list and the commissioning of the R&D water systems, fire protection sprinkler systems, robotic automatic vacuum equipment, and all custom laboratory equipment.
- Smithsonian Museum of American History Public Space Renewal Project, Washington, DC, MEP Superintendent. Coordinated the demolition/renewal and installation of mechanical, electrical, plumbing, fire protection, fire alarm, security, telecommunications and special systems all the way through commissioning.

---

### COMMISSIONING TEAM - SANITARY SEWER

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>23</th>
</tr>
</thead>
</table>

**Education**
- Safety Technology Certificate, 1985, City University of New York

**Sample Experience**
- Mary E. Switzer Building Modernization (GSA), Washington, DC, Commissioning Specialist. The scope of the modernization will include interior demolition and reconstruction of interior spaces and replacement of all engineering systems. The modernized building is planned to meet U.S. Green Building Council's LEED Silver certification.
- Confidential Office Building, Washington DC, Commissioning Specialist. Providing construction management and commissioning services for the modernization phase of this facility. This $75 million design-build project involves installation of new central heating, cooling, power generation and distribution, fire protection system upgrades and security upgrades. Includes commissioning of temporary dining facility for client staff.

---

**Jacobs**

Commissions Agent Services - SGA 2156002062.
COMMISSIONING TEAM - INFORMATION TECHNOLOGY

Years of Experience: 22

Education:
- Bachelor of Science, Electrical Engineering, Concentration in Automation Control Systems, 1993.
- University of Illinois at Chicago
- Diploma in Electronic Technology, 1982, DeVry Institute of Technology

Sample Experience:
- University of Chicago New Kenwood Data Center, Chicago, IL, Construction Observation. Providing commissioning services for a new, 6,700 SF Tier II data center. Responsibilities include review of construction documents, review of the contractor's commissioning staff plans, site visits to witness and verify commissioning activities. His reviews include the IT systems.
- Sonet Ring installation in the Central Business District, Chicago, IL, Project Manager. Managed the installation of ten diverse fiber optic sound rings between twelve different buildings in downtown Chicago.

NAME OF INDIVIDUAL

PE, CEM, CPE, CDT, LEED AP

Peer Review Team - HVAC/ BAS/ CONTROLS

Years of Experience: 16

Education:
- Bachelor of Science, Mechanical Engineering, 1994, University of Virginia

Professional Registrations:
- Professional Engineer

Professional Licenses:
- Certified in Plumbing Engineering (CPPE), ASPE, 1991
- Certified in Fire Protection Engineering (CFPE), NSPE, 1997

Sample Experience:
- Federal Reserve Board, Emergency Generator Cooling System Review, Mechanical Engineer. Provided a white paper analysis memorandum on supplemental cooling for the Martin Building in support of the ARC department move, including analysis of existing building systems, new cooling requirements, and recommendations for implementation.
- IRS Federal Office Building Engineering Study, New Carrollton, MD, Mechanical Engineer. Analysis and evaluation of existing HVAC systems, in response to continuing occupant complaints. Analysis included investigation of original system selection, report on system balance from an independent testing and balancing agency, and overall assessment of system.
PE, RCDD
PEER REVIEW TEAM - LIGHTING/DAYLIGHTING CONTROLS & POWER DISTRIBUTION

- Has more than 10 years of experience in lighting and power distribution system designs. He has worked on a wide range of building types including educational facilities, courthouses, laboratories, hospitals, military maintenance and living facilities, and commercial spaces. In addition to design experience he has performed numerous cost estimates and life cycle cost analyses.

- Sample Experience
  - Regional Training Institute, Fort Carson, Colorado Springs, CO: Project Manager/Electrical Engineer, provided discipline review for the power and lighting systems design for this new 440,000 SF training facility. This building was designed to achieve an equivalent to a USGBC LEED Silver rating for sustainable design.
  - Armed Forces Reserve Center (AFRC), Everett, Seattle, WA: Lead Electrical Engineer; Responsible for the lighting and power systems design. This project utilized a sophisticated lighting design and control strategy to help reduce energy usage. The facility is designed to meet the requirements of a LEED Silver rated building.

CIPE
PEER REVIEW TEAM - DOMESTIC HOT WATER & WATER FILTRATION

- Is a Certified Plumbing Engineer with 25 years experience in the design of plumbing and fire protection systems for Federal and institutional clients, and additionally encompasses bidding phase services and field inspection. During his ten-year tenure with Jacobs, he has been assigned to many complex projects with Federal agencies, including NASA, USDA and the FAA.

- Sample Experience
  - USDA, Western Regional Research Center, Albany, CA: Plumbing Discipline Leader. Leader for all plumbing and fire protection system in the renovation of laboratory spaces and support systems in the Chemistry Wing. Plumbing system included: reverse osmosis system (RO-Type 1, II, and III), air, gas and vacuum systems.
  - Aberdeen Proving Ground BRAC Projects, Aberdeen Proving Ground, MD: Including Army Research Lab (ARL), C4ISR and Infrastructure Improvements; Lead Plumbing Engineer. Responsible for plumbing design and making sure the project is code compliant. We are providing full A/E support for relocation of the Ft. Monmouth, NJ, C4ISR Facilities to APG.
850
Name of Individual | PE
---|---
**PEER REVIEW TEAM - LIFE SAFETY**

- **Name**: a registered engineer, serves as a senior fire protection engineer for a wide variety of Federal and commercial projects. He has extensive experience in mathematical fire modeling, building code analysis and application, master planning, schematic design, design development, and preparation of construction documents for fire protection systems and life safety features of a wide variety of building types.

**Sample Experience**

- Federal Reserve Board, DM Services for Multiple Projects, Washington, DC; Sr. Fire Protection/Life Safety. Provided design review services for the life safety systems on the Martin Building Data Center Renovation project, including phone calls and associated code research and analysis.
- U.S. Courthouse Amends & Renovations, Washington, DC; Fire Protection Design Services Project Manager. Managed fire protection, life safety, and security consulting services; developed a comprehensive building and fire prevention inspection summary evaluated in terms of egress; designed additions to automatic sprinkler, fire alarm, and security systems.

---

Name of Individual | KITCHEN EQUIPMENT
---|---

- **Name**: has directed the design and coordinated the installation of large computer-operated building automation and control systems, as well as kitchen equipment. The design of these systems required extensive site surveys to determine the existing conditions and to develop system interfaces to various types of existing electrical and mechanical equipment.

**Sample Experience**

- Confidential Office Building Upgrades, Washington DC; Control Systems Engineer. Modernization project involved replacement of major electrical and HVAC systems, plus security upgrades. Included kitchen equipment in the cafeteria portion.
- USPS Engineering Support Services Contract Postal Service Facility, Boston, MA; Control Systems Engineer. Prepared conceptual design documents for a mechanical control system for a new mail facility at Logan International Airport. The project included the development of USGBC LEED Certifiable design criteria.

---

**JACOBS**

Commissioning Agent Services - EDA 2010010202
### RCDD

**Role:** Peer Review Team - Audio/Visual Systems & Information Technology

- **Years of Experience:** 30
- **Education:** AAS, Electronics, 1980, Illinois State College
- **Professional Registration:** Registered Communications Distribution Designer (RCDD), 1997

Brings 30 years of experience in analysis and design for building security systems, which include telecommunications, electrical systems, CCTV, fire alarm and security data systems. His experience ranges from work on just buildings, to master planning the security for buildings and sites.

**Sample Experience**
- Indiana University, Willkie Quill Commons Renovation, Bloomington, IN; Telecommunications Designer: Design of voice and data telecommunications, fire alarm system, and sound systems design as well as support to stage lighting and acoustics consultants for the remodeling of a 25,000 SF commons building.

### AIA

**Role:** Peer Review Team - Elevators/Escalators

- **Years of Experience:** 17
- **Education:** Bachelor of Science, Architectural Studies, 1991, University of Idaho
- **Professional Registration:** Registered Architect; VT

Has experience in all project phases including programming, design development, construction documents, and construction administration. He has worked with a variety of project and client types, including corporations, commercial office developers, associations, government agencies, government contractors, hospitality, and retail tenants. His experience includes design of elevators and escalators.

**Sample Experience**
- Federal Reserve Board, Data Center Engineering/Design Review Services, Washington, DC; Quality Control. Reviewed design drawings for data center addition.
- Department of State, Major Building Rehabilitation, Lagos, Nigeria; Vienna, Austria; Warsaw, Poland; Architect. Provided AE services, performed surveys, and developed phased plans in order to minimize disruption of ongoing operations, to accomplish the architectural design changes, and to work in conjunction with existing/heavily designed engineering systems.