File No. 100331 Committee Item No. 2
Board Item No. _____

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Subcommittee BUDGET AND FINANCE Date 4/7/10

Board of Supervisors Meeting Date _____

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OTHER (Use back side if additional space is needed)

☐	☐	Contract*
☐	☐	
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Completed by: Gail Johnson Date 4/2/10
Completed by: _____ Date _____

* An asterisked item represents the cover sheet to a document that exceeds 25 pages. The complete document is in the file.

FILE NO. 100331 RESOLUTION NO.

[Approving Central Subway Final Design Contract Package No.3 – Systems]

Resolution approving Municipal Transportation Agency Contract No. CS-155-3, Professional Architectural and Engineering Services for the Final Design and Construction Support of the Central Subway Project – Design Package #3 Systems Design for the Central Subway Project with HNTB – B&C JV, a joint venture of HNTB Corporation and B&C Transit, Inc. for an amount not to exceed $32,294,319 for a term not to exceed ten years with an option to extend the term an additional two years.

WHEREAS, Design and construction of the 1.75-mile Central Subway ("Central Subway Project") is Phase 2 of the Third Street Light Rail Project; and

WHEREAS, The San Francisco Municipal Transportation Agency ("SFMTA") board of Directors adopted Resolution No. 02-144 on June 7, 2005, which selected the Fourth Street alignment as the Locally Preferred Alternative for the Central Subway Project, which alternative was carried through the Supplemental Environmental Impact Statement/Environmental Impact Report and the federal New Starts Process for the funding the Central Subway Project, and,

WHEREAS, The SFMTA Board of Directors adopted Resolution No. 08-029 on February 19, 2008, which selected the Central Subway Project Alternative 3B, Fourth/Stockton Alignment with semi-exclusive surface rail operations on Fourth Street, as the Locally Preferred Alternative; and,

WHEREAS, The San Francisco Planning Commission adopted Motion No. M-17668 on August 7, 2008, which certified completion of the Central Subway Final Supplemental Environmental Impact Report; and,

WHEREAS, The SFMTA Board of Directors adopted Resolution No. 08-150 on August 19, 2008, which adopted the Central Subway Project Alternative 3B, fourth Stockton Alignment with semi-exclusive surface rail operations on Fourth Street and a construction variant to extend the tunnel another 2,000 feet north of Jackson Street, the CEQA Findings and Statement of Overriding Considerations for the SEIS/SEIR and the Mitigation Monitoring and Reporting Plan; and,

WHEREAS, The SFMTA Board of Directors adopted Resolution No. 09-055 on April 7, 2009, which authorized the Director of Transportation to issue a Request for Proposals ("RFP") for SFMTA Contract No. CS-155 for Professional Architectural and Engineering Services for the final Design and Construction of the Central Subway, evaluate proposals, select the highest ranking proposal, and negotiate a contract for Contract No. CS-155, Professional Architectural and Engineering Services for the Final Design and Construction Phases of the Central Subway Project; and,

WHEREAS, The anticipated complexity of the Central Subway Project, in proximity to sensitive urban structures and facilities, poses significant design and construction challenges to the City; and,

WHEREAS, The City does not have the specialized expertise or staff resources to design and support the construction a project of the size and intricacy of the Central Subway Project; and,

WHEREAS, To increase competition and provide additional contracting opportunities for small businesses, the SFMTA amended the RFP to divide the final design work for the Central Subway into three packages: (1) Tunnels and Utility Relocation – Contact CS-155-1; (2) Stations – Contract CS 155-2; and, (3) Control Systems and Trackways – Contract CS-155-3; and,

WHEREAS, The SFMTA conducted a competitive selection process in which the proposal for Systems design submitted by HNTB – B&C JV, a joint venture partnership of HNTB Corporation and B&C Transit, Inc., was the highest ranked of two responsible and responsive proposers for the Systems design; and,

WHEREAS, Staff and the Central Subway Design Group engaged in lengthy and detailed negotiations for Contract CS 155-3 to determine the costs and resources necessary to design the Stations; and,

WHEREAS, The City engineer's estimate for the costs to design both the Central Subway and Central Control Systems was $24,400,000; and,

WHEREAS, The negotiated amount for the base contract work during the initial ten-year term is not to exceed $24,924,852 for base contract work and $7,369,467 for optional work (optional work to be exercised at the discretion of the SFMTA), for a total contract amount not to exceed $32,294,319 and,

WHEREAS, On February 26, 2010. the SFMTA Board of Directors by Resolution No. 10-030 authorized award of Contract CS-155-3 for Systems final design to HNTB – B&C JV, for an amount not to exceed $32,294,319 for base contract and optional services, for a term not to exceed ten years and an option to extend the term an additional two years; and,

WHEREAS, Services provided under this contract are subject to and contingent upon approval of the Civil Service Commission; now, therefore, be it

RESOLVED, That the Board of Supervisors approves San Francisco Municipal Transportation Agency Contract No. CS-155-3 for the Final Design and Construction of the Central Subway Project Systems Design with HNTB – B&C JV, a joint venture of HNTB Corporation and B&C Transit, Inc. for an amount not to exceed $32,294,319 for base contract work and optional services, for a term not to exceed ten years with an option to extend the

term an additional two years, said option to be exercised by the SFMTA without further action by the Board of Supervisors.

CITY AND COUNTY OF SAN FRANCISCO

BOARD OF SUPERVISORS

BUDGET AND LEGISLATIVE ANALYST

1390 Market Street, Suite 1025, San Francisco, CA 94102 (415) 554-7642
FAX (415) 252-0461

April 1, 2010

TO: Budget and Finance Subcommittee

FROM: Budget and Legislative Analyst

SUBJECT: April 7, 2010 Budget and Finance Subcommittee Meeting

TABLE OF CONTENTS

Item 2 File 10-0331	Department(s): Municipal Transportation Agency (MTA)

EXECUTIVE SUMMARY

Legislative Objective

- The proposed resolution would approve a not-to-exceed $32,294,318 design contract between the City and County of San Francisco, acting on behalf of the Municipal Transportation Agency (MTA), and HNTB-B&C JV, a joint venture of two private firms HNTB Corporation and B&C Transit, Inc, for Design Package #3 services for a not-to-exceed term of ten years with one optional two-year extension.

Fiscal Impacts

- The proposed not-to-exceed $32,294,318 Design Package #3 contract would be awarded to HNTB-B&C JV to provide the MTA with basic and optional final design services for the Central Subway Project (Part A) and the Central Control and Communications (C3) Program (Part B). Part A includes (a) the installation and integration of Central Subway Project systems and (b) the construction of the surface station on Fourth Street and Brannon Street. Part B includes (a) the installation or replacement and integration of C3 Program systems, (b) construction of a new Operations Control Center at 1455 Market Street, (c) conceptual design for rehabilitation of the existing Operations Control Center at 131 Lenox Way and (d) conceptual design for a new Transbay Operations Control Center located at the old Transbay terminal, on 1st Street and Mission Street.

- The proposed $32,294,318 Design Package #3 contract includes $19,919,526 for Part A and $12,374,792 for Part B. Part A would be funded with (a) $10,148,896 in 5309 Federal grant funds, (b) $3,069,164 in State Traffic Congestion Relief Program funds, (c) $1,110,600 in State Regional Transportation Improvement Program funds, (d) $764,639 in State Proposition 1B funds, (e) $918,762 in County Transportation Authority Proposition K (Sales Tax) funds, and (f) $3,907,465 in San Francisco Utility Reimbursement funds. Part B would be funded with (a) $2,767,284 in 5307 Federal Urbanized Area Formula grant funds, (b) $3,720,000 in 5309 Federal grant funds, (c) $711,844 in Federal Intelligent Transportation System earmark funds, (d) $575,000 in State AB 664 Net Bridge Toll Revenue funds, (e) $2,011,434 in State Proposition 1B funds, (f) $2,526,853 in County Transportation Authority Proposition K (Sales Tax) funds, and (g) $62,377 in MTA Operating Fund.

- The total estimated budget of $66,369,474 for the design of the Central Subway Project is $25,242,474, or 61.4 percent higher than the original budget of $41,127,000 because (a) the current estimated costs include not only basic, but also optional design costs, (b) the design contractors are now required to commit to Design to Budget Contract Provisions that their designs will not exceed 105 percent of the construction budget, which increases the contractor's risk and, increases the contractors' fixed fee to assume such risk, and (c) the MTA revised the award from one design contract to three design contracts to maximize the design contracting opportunities for Small Business Enterprises (SBEs), which resulted in an increased number of SBEs and an increase in administrative and management costs for each design contract. The additional $25,242,474 will be funded from the Central Subway Project's Unallocated Contingency Fund current balance of $213,744,000.

Recommendation

- Approve the proposed resolution

BACKGROUND/MANDATE STATEMENT

Background

The MTA's proposed Central Subway Project will provide a new underground transit connection between Chinatown (Washington Street and Stockton Street) and the Caltrain Terminal/Muni T-Line (King Street and Fourth Street). The Central Subway Project will have three underground subway stations (Moscone Center/Yerba Buena, Union Square/Powell/Market Street, and Chinatown) and one surface station (Fourth Street and Brannon Street). In order to complete the Central Subway Project, tunneling, cut and cover mined-excavation[1] and construction under City streets and under BART and Muni lines will be required. Final Design work began on January 7, 2010, with completion of construction scheduled for 2018, or approximately eight years. The estimated total cost for the Central Subway Project is $1.578 billion.

In addition to the Central Subway Project, the MTA is working on a Central Control and Communications (C3) Program, which will replace and centralize the MTA's existing central control and communication systems with a new control center for all of MTA's 24/7 command and control functions, including real-time management of all Muni surface and underground revenue lines, the SFgo Traffic Management Center, and 24/7 real-time dispatch functions of MTA's Security Division. The MTA's existing central control and communication systems are located at 131 Lenox Way (between Taraval Street and Ulloa Street). The C3 Program contains 12 individual projects[2] and each project's objectives, schedule, cost, funding source and contracting mechanism are approved individually by the MTA Board of Directors. Planning for the C3 Program began in 2008. The estimated completion date for the C3 Program is not known as of the writing of this report because the MTA has not secured construction funding for two of the 12 individual projects[3]. The total estimated cost for the C3 Program is $285.8 million.

According to Mr. Nathaniel Ford, Executive Director/CEO of the MTA, the City does not have the specialized design expertise or staff resources to perform all services necessary for projects of this size and complexity. The professional design services required for the Central Subway Project and eight of the 12 C3 projects were divided into three design packages: (a) Design Package #1 – Utilities Relocation and Tunnel Design[4], (b) Design Package #2 – Stations

[1] Cut and cover mined-excavation is defined as removing soil utilizing traditional sequential excavation methods.

[2] The 12 C3 projects are (a) an upgrade to the Lenox uninterruptible power supply/heating ventilation air conditioning systems; (b) an extension to the Lenox facility for a management center; (c) two separate upgrades to the Advance Train Control system; (d) construction of a new Operation Control Center at 1455 Market Street; (e) integration of a new Subway Fiber system, (f) replacement and integration of the Public Address/Platform Display System, (g) replacement and integration of the Motive Power Supervisory Control and Data Acquisition system (MP SCADA), (h) replacement and integration of the Supervisory Control and Data Acquisition (SCADA) system and (i) replacement and integration of the blue-light phone system; (j) rehabilitation of the existing Operation Control Center at 131 Lenox Way; and (k) construction of a new Transbay Operation Control Center at an unknown location.

[3] The MTA has not secured construction funding to build a new Transbay Operation Control Center or renovate the existing Operation Control Center at 131 Lenox Way.

[4] Design Package #1 provides Central Subway Project final design and construction oversight services for the construction of tunnels and utility relocations.

Design[5], and (c) Design Package #3 – System and Integration[6] (subject of this request). On April 7, 2009, the MTA issued a Request for Proposal (RFP) for Central Subway Professional Final Design Services (Design Packages #1, #2, and #3) and eight of the C3 projects (Design Package #3). On July 21, 2009, the MTA received five proposals, which included one proposal for Design Package #1, two proposals for Design Package #2, and two proposals for Design Package #3.

On October 20, 2009, the MTA Board of Directors awarded Design Package #1 to PB Telamon, a joint venture of Parsons Brinckerhoff, Inc. and Telamon Engineering Consultants, Inc., private firms, for a five-year term, not-to-exceed $6,500,000 (MTA Board of Directors Resolution No. 09–177). Since the Design Package #1 contract was under $10,000,000 and did not exceed ten years, this contract was not subject to Board of Supervisors approval.

On March 12, 2010, the Board of Supervisors approved the Design Package #2 contract with Central Subway Design Group, a joint venture of three private firms consisting of Parsons Brinckerhoff, Inc., Michael Willis Architects, Inc., and Kwan Henmi Architecture and Planning, Inc, for a ten-year term, not-to-exceed $39,949,948 (File No. 10–0007).

Mandate Statement

In accordance with Charter Section 9.118(b), any contracts or agreements exceeding ten years and/or greater than $10,000,000 is subject to Board of Supervisors approval.

DETAILS OF PROPOSED LEGISLATION

The proposed resolution would approve a not-to-exceed $32,294,318 contract between the City and County of San Francisco, acting on behalf of the MTA, and the joint venture of HNTB Corporation and B&C Transit, Inc (HNTB-B&C JV) for Design Package #3 design services for the Central Subway systems and Central Control and Communications (C3) systems and facilities, for up to ten years, with one optional two-year extension.

The subject contract was awarded subsequent to an RFP process conducted by the MTA on April 7, 2009. The MTA received two proposals from: (a) Jacobs Engineering and PGH Wong Engineering, a joint venture, and (b) HNTB-B&C JV, a joint venture of two private firms HNTB Corporation and B&C Transit, Inc. The MTA Technical Selection Committee[7] evaluated and scored the written proposals and oral presentations for both firms. As shown in Table 1 below, HNTB-B&C JV received the highest score with 13.30 out of a total possible score of 17.50 points.

[5] Design Package #2 provides final design and construction oversight services for the construction of the three underground subway stations and (b) integrates the designs created by City staff and the Central Subway contractor for Design Package #1.

[6] Design Package #3 provides final design and construction oversight services for controls, communications, traction power, trackway, and construction of one surface station and (b) integrates the designs created by City staff and the Central Subway contractors for Design Packages #1 and #2.

[7] The MTA Technical Selection Committee consisted of seven members from various MTA divisions, other City departments, and BART.

Table 1: Design Package #3 Proposals

Bidders	Written Proposal Score	Oral Presentation Score	Total
Total Possible Score	**9**	**8.50**	**17.50**
HNTB-B&C JV	6.08	7.22	**13.30**
Jacobs Engineering and PGH Wong Engineering	6.41	5.86	**12.27**

Source: MTA

The MTA negotiated with HNTB-B&C JV between October 2009 and February 2010. On February 26, 2010, the MTA Board of Directors authorized the MTA Executive Director to execute the subject not-to-exceed $32,294,318 Design Package #3 contract with HNTB-B&C JV, for a not-to-exceed ten years, estimated to commence on May 1, 2010 and end on April 30, 2020, with one two-year option from May 1, 2020 through April 30, 2022 (MTA Board of Directors Resolution No. 10-030). According to Mr. John Funghi, MTA Central Subway Program Manager, the MTA will issue a Notice to Proceed to commence the contract (a) if this proposed resolution is approved by the Board of Supervisors and (b) once the Controller's Office issues the certification of funds and the MTA receives the requested insurance and other related documents from HNTB-B&C JV.

Under Part A ($19,919,526) of the proposed Design Package #3 contract, the HNTB-B&C JV will conduct basic and optional systems engineering and other design services for the installation and integration of the following Central Subway systems and components: (a) traction power distribution system[8]; (b) traction power monitoring and control system[9]; (c) train control system and train signaling system[10]; (d) emergency telephone communication system[11]; (e) fire department telephone communication system[12]; (f) Mayor's emergency telephone communication systems[13]; (g) traffic signal system[14]; (h) indoor radio communication system[15]; (i) fiber optic communication network system[16]; (j) Close Circuit Television (CCTV) system[17]; (k) Next Muni sign system[18]; (l) facility SCADA system[19]; (m) passenger destination display

[8] The traction power distribution system delivers electrical power for train operation in the subway tunnel and along 4th Street.

[9] The traction power monitoring and control system monitors and controls the power availability for train operation.

[10] The train control system and train signaling system will automatically control the train movement in and out of the subway tunnel and provide safe driver-controlled train operation along 4th Street.

[11] The emergency telephone communication system will be installed in the subway stations, subway tunnel, and at the surface platform station to be used by subway patrons and MTA personnel.

[12] The fire department telephone communication system will be installed in the subway stations and subway tunnel to be used only by the Fire Department.

[13] The Mayor's emergency telephone communication systems will be a direct connection from the Mayor's Office to critical command and management centers throughout the City, including MTA Operations Central Control center.

[14] The traffic signal systems will be installed at the following intersections: (a) 4th Street and Bryant Street, (b) 4th Street and Brannan Street, (c) 4th Street and Townsend Street, and (d) 4th Street and King Street.

[15] The indoor radio communication system will provide radio coverage throughout the subway stations and subway tunnel to be used by MTA personnel and emergency personnel.

[16] The fiber optic communication network will provide data connectivity for the Central Subway subsystems in order for such subsystems to communicate with the main MTA network and subsystems.

[17] The CCTV system will monitor the subway tunnel entrance and tail tracks at the surface platform station on Fourth Street and Brannon Street.

[18] The Next Muni sign system, at the surface platform station, will provide train arrival information to Muni patrons.

system[20]; (n) street lighting from 4th Street and Bryant Street to 4th Street and Townsend Street; and (o) electrical lighting and power in the subway tunnel. The HNTB-B&C JV will also assist City staff with the architectural design of the surface station on Fourth Street and Brannon Street. The total estimated cost for Part A is $19,919,526, as detailed in Table 4 below. Such basic and optional Part A costs would be expended during the ten-year contract period, from May 1, 2010 through April 30, 2020. The proposed contract includes one optional two-year extension if MTA needs HNTB-B&C JV to provide basic and optional Part A design services after April 30, 2020.

Under Part B ($12,374,792) of the proposed Design Package #3 contract, the HNTB-B&C JV will conduct basic and optional systems engineering and other design services for eight Central Control and Communications (C3) projects under five tasks: (a) Communications Package 1, which includes the replacement and integration of (i) the MTA subway fiber system[21], (ii) the public address/platform display system[22], (iii) the Motive Power Supervisory Control and Data Acquisition (MP SCADA) system[23], (iv) the SCADA system (see footnote no. 23); (b) Communications Package 2, which includes the replacement and integration the blue-light phone system[24]; (c) construction of a new Operations Control Center at 1455 Market Street; (d) conceptual design for rehabilitation of the existing Operations Control Center at 131 Lenox Way; and (e) conceptual design of a new Transbay Operations Control Center located at the old Transbay terminal, on 1st Street and Mission Street. The total estimated cost for Part B is $12,374,792, as detailed in Table 4 below. Such basic and optional Part B costs would be expended during the ten-year contract period, from May 1, 2010 through April 30, 2020. The proposed contract includes one optional two-year extension if MTA needs HNTB-B&C JV to provide basic and optional Part B design services after April 30, 2020.

The funding sources for Part A and Part B of the proposed Design Package #3 contract are shown in Table 2 below.

[19] The facility SCADA system will monitor and control Central Subway station subsystems (i.e. fan control system, fire alarm system) locally and from the MTA Operations Central Control center.

[20] The passenger destination display system at the subway stations will provide MTA patrons with audible and visual information (i.e. train arrival information or announcements) from the local station agent or the MTA Operations Central Control center.

[21] The subway fiber system will provide data connectivity for the main MTA subway network and subsystems.

[22] The public address/platform display system will allow the MTA to announce and display messages to the public.

[23] The MP SCADA and SCADA systems will monitor and control the MTA station subsystems (i.e. traction power network, fan control system, fire alarm system) locally and from the MTA Operations Central Control center.

[24] The blue-light phone system is required by the California Public Utilities Commission safety codes and allows anyone located in the subway to directly connect to the MTA Operations Central Control center or an outside line.

Table 2: Source of Funds for Design Package #2 Contract

	Total
PART A	
5309 Federal grant funds[25]	$10,148,896
State Traffic Congestion Relief Program (TCRP) funds[26]	3,069,164
State Regional Transportation Improvement Program (RTIP) funds[27]	1,110,600
State Proposition 1B funds[28]	764,639
San Francisco County Transportation Authority Proposition K (Sales Tax) funds[29]	918,762
San Francisco Utility Reimbursement funds[30]	3,907,465
Subtotal	**$19,919,526**
PART B	
Federal Urbanized Area Formula grant funds (FTA Section 5307)[31]	$2,767,284
5309 Federal grant funds	3,720,000
Federal Intelligent Transportation System earmark funds[32]	711,844
State AB 664 Net Bridge Toll Revenue funds[33]	575,000
State Proposition 1B funds	2,011,434
San Francisco County Transportation Authority Proposition K (Sales Tax) funds	2,526,853
MTA Operating Fund	62,377
Subtotal	**$12,374,792**
Total	**$32,294,318**

Source: MTA

Of the total not-to-exceed $32,294,318 contract funding sources, the MTA has received $8,762,793, which includes $1,721,698 for Part A and $7,041,095 for Part B. Table 3 below details the amounts and dates that the MTA Board of Directors approved resolutions to accept and expend these funds.

[25] 5309 Federal funds (49 U.S.C. 5309) provide capital assistance for: (a) new and replacement buses and facilities, (b) modernization of existing rail systems, and (c) new fixed guideway systems (New Starts).

[26] The State Traffic Congestion Relief Program provides funding for (a) congestion relief projects within the State, (b) the State Transportation Improvement Program (a multi-year capital improvement program of transportation projects), (c) local streets and roads improvements, and (d) the Public Transportation Account (a trust fund for transportation planning and mass transportation projects).

[27] The State Regional Transportation Improvement Program provides funding for regional transit, State highway, local road, bicycle and pedestrian projects.

[28] The State Proposition 1B funds provide improvements to transportation facilities to reduce local traffic congestion and further deterioration, improve traffic flows, or increase traffic safety.

[29] On November 4, 2003, San Francisco voters approved Proposition K to (a) collect a ½ percent Sales Tax to finance transportation projects for the City and (b) approve a new 30-year Transportation Expenditure Plan.

[30] San Francisco Utility Reimbursement funds are fees that the City charges utility companies (electric, phone, cable) to allow placement of utility equipment on City property (buildings, roads, underground). Utility Reimbursement funds can be used by the City to pay for managing and relocating utility equipment.

[31] Urbanized Area Formula funds (49 U.S.C. 5307) provides urbanized areas and State Governors transit capital and operating assistance in urbanized areas and for transportation related planning.

[32] Federal Intelligent Transportation System earmark funds are used to fund transportation system control projects.

[33] AB 664 Net Bridge Toll Revenues are funds used to match federal or state funded transit capital projects that relieve congestion on the San Francisco-Oakland Bay, San Mateo-Hayward, and Dumbarton bridges.

Table 3: Funds Received for Design Package #3 Contract

Date		Total	MTA Resolution No.
	PART A		
11/3/2009	5309 Federal grant funds	$424,799	09-191
9/1/2009	State Proposition 1B funds	764,639	09-146
	San Francisco Utility Reimbursement funds	532,260	
	Subtotal	**$1,721,698**	
	PART B		
11/3/2009	AB 664 Net Bridge Toll Revenue funds	$500,000	09-191
9/9/2009	Federal Urbanized Area Formula grant funds (FTA Section 5307)	2,767,284	09-147
8/5/2008	5309 Federal grant funds	3,000,000	08-126
9/1/2009	State Proposition 1B funds	511,434	09-146
9/22/2009	San Francisco County Transportation Authority Proposition K (Sales Tax) funds*	200,000	10-017
	MTA Operating Fund	62,377	
	Subtotal	**$7,041,095**	
	Total	**$8,762,793**	

Source: MTA

* The San Francisco County Transportation Authority will provide $200,000 of Proposition K (Sales Tax) funds on a reimbursement basis.

Of the $18,197,828 balance needed ($19,919,526 less $1,721,698) for Part A, MTA anticipates receiving (a) $9,724,097 in 5309 Federal grant funds, (b) $3,069,164 in State TCRP funds, (c) $1,110,600 in State RTIP funds, (d) $918,762 in Proposition K (Sales Tax) funds and (e) $3,375,205 in Local Utility Reimbursement funds over the next nine fiscal years.

Of the $5,333,697 balance needed ($12,374,792 less $7,041,095) for Part B, MTA anticipates receiving (a) $75,000 in AB 664 Net Bridge Toll Revenue funds, (b) $711,844 in Federal Intelligent Transportation System earmark funds, (c) $1,500,000 in State Proposition 1B funds, (d) $2,326,853 in Proposition K (Sales Tax) funds and (e) $720,000 in 5309 Federal grant funds by the fall of 2010.

FISCAL ANALYSIS

Breakdown of Design Package #3 Contract Budget

A budget for the proposed not-to-exceed $32,294,318 Design Package #3 contract with HNTB-B&C JV is summarized in Table 4 below and detailed in the Attachment, provided by Mr. Ford.

Table 4: Central Subway Design Group Design Package #3 Contract Budget

Tasks	Basic Service Year of Expenditure*** Costs	Optional Service Year of Expenditure Costs	Total
Part A – Central Subway Project			
Labor Costs	$13,456,104	$4,088,665	$17,544,769
Fixed Fees for the unreimbursed costs, profit and assumption of risk for guaranteeing the construction cost limits	1,440,297	447,707	1,888,004
Other Direct Costs (Reimbursable Expenses)	424,400	62,353	486,753
Subtotal	***$15,320,801****	***$4,598,725***	***$19,919,526***
Part B – Central Control and Communications Program			
Labor Costs	$8,419,649	$2,451,522	$10,871,171
Fixed Fees for the unreimbursed costs, profit and assumption of risk for guaranteeing the construction cost limits	926,161	269,667	$1,195,828
Other Direct Costs (Reimbursable Expenses)	258,240	49,553	$307,793
Subtotal	***$9,604,050****	***$2,770,742***	***$12,374,792***
Part A and B – Combined			
Labor Costs	$21,875,753	$6,540,187	$28,415,940
Fixed Fees	2,366,458	717,374	3,083,832
Other Direct Costs	682,640	111,906	794,546
Total	**$24,924,851**	**$7,369,467**	**$32,294,318**

Source: MTA

* Basic services for Part A include: (1) Project Management and Control, (2) Design and Project Integration, (3) Geotechnical Investigations, (4) Surveying and Right-of-Way, (5) Traffic Engineering, (6) Utility Design Coordination, (7) Drainage, (8) Permits, (9) Contract Specifications, (10) Cost Estimate and Scheduling, (11) Quality Control, (12) Drawings and Documents, (13) Construction Packaging and Schedules, (14) Outreach Support, (15) Bid Support Services, and (16) Design Services during Construction.

** Basic services for Part B include: (1) Communications Package 1, (2) Communications Package 2, and (3) 1455 Market Street Control Center.

*** Calculating the Year of Expenditure (YOE) costs is a Federal Transit Administration requirement. An annual escalation factor is added to the first-year cost estimate and is applied to each year of the project budget. The basic service costs totaling an estimated $24,924,851 would be expended during the ten-year contract period, from May 1, 2010 through April 30, 2020. The proposed contract includes one optional two-year extension if MTA needs to HNTB-B&C JV to provide basic services after April 30, 2020.

Optional services for Part A, which must be approved by the MTA Executive Director, include: (1) Design and Project Integration, (2) Traffic Engineering, (3) Drainage, (4) Drawing and Documents, (5) Contract Specification, (6) Cost Estimate and Schedules, and (7) Design Services during Construction. According to Mr. Funghi, optional design service costs for Part A will only be incurred if (a) City in-house staff are unable to initiate or complete the work, or (b) additional services are required to complete the prescribed tasks.

Optional services for Part B include: (1) design of Communications Package 1, (2) design of Communications Package 2, (3) design of a new Operations Control Center at 1455 Market Street, (4) conceptual design of rehabilitation of the existing Operations Control Center at 131 Lenox Way; and (5) conceptual design of a new Transbay Operations Control Center. According to Ms. Patty DeVlieg, C3 Program Manager the MTA has not secured construction funding to construct a new Transbay Operations Control Center or renovate the existing Operations Control Center at 131 Lenox Way, such that design for these two projects are optional services and will not be conducted until construction funding is secured.

The $3,083,832 Fixed Fees for both Part A and Part B, as shown in Table 4 above, is approximately 9.55 percent of the total Design Package #3 contract cost of $32,294,318. Fixed Fees cover unreimbursed costs[34], assumption of risk[35] and profit.

The $794,546 in Other Direct Costs for both Part A and Part B, as shown in Table 4 above, includes $303,000 for basic travel expenses, $379,640 for other basic expenses, $38,000 for optional travel expenses, and $73,906 for optional other expenses. According to Mr. Funghi, basic and optional travel expenses of $341,000 ($303,000 plus $38,000) would cover the air, hotel and per diem travel costs of outside peer reviewers and HNTB-B&C JV, and potential relocation costs of full-time consultants transferred from other locations in the country. Other basic expenses include (a) the cost to hire outside peer reviewers and other short-term specialty consultants, (b) local transit costs, (c) office supplies, (d) reproduction, (e) courier and (f) other miscellaneous reimbursable non-travel expenses.

Total Design Contract Costs for the Central Subway Project

The MTA originally estimated that the basic design of the Central Subway Project would cost approximately $41,127,000. As shown in Table 5 below, the MTA's current budgeted $66,369,474 for the three Central Subway Project design contracts is $25,242,474, or 61.4 percent higher than the original estimated amount.

Table 5: Central Subway Design Project Budget

	Amount
Original Budget Estimate	
Design Contract	$41,127,000
Original Budget Total (A)	**$41,127,000**
Current Budget Estimate	
Design Package #1	$6,500,000
Design Package #2	39,949,948
Design Package #3 (Part A Costs) (subject of this request)	19,919,526*
New Budget Total (B)	**$66,369,474**
Increase over Original Budget (B) less (A)	**$25,242,474**

Source: MTA

* In addition to the $19,919,526 in total estimated costs for Part A, the Part B cost totals an estimated $12,374,792, resulting in the total not-to-exceed contract amount of $32,294,318.

According to Mr. Funghi, the $25,242,474 increase is because the (a) current estimates include basic as well as optional design costs, (b) the design contractors are required to commit to

[34] According to Mr. Funghi, unreimbursed costs are costs expended during the course of completing the contract work, but not considered a Federal reimbursable expense (i.e. travel expenses beyond the Federal reimbursement rate, non-specialty computers and software costs, etc.).

[35] Mr. Funghi advises that potential risks for Design Package #3 include the contractor working additional hours to redo a prescribed task in order to comply with the contracts design to budget provisions.

Design to Budget Contract Provisions that their Central Subway designs will not exceed 105 percent of the construction budget, which increases the consultant's risk and, therefore, increases the consultant's fixed fee to assume such risk, and (c) the MTA revised the RFP from awarding one design contract to three design contracts to maximize the design contracting opportunities for Small Business Enterprises (SBE), which increased the number of SBE subcontractors under all three Design Packages and also, resulted in an increased number of SBE subcontractors and an increase in administrative, management and design integration risk expenses for each design contract. According to Mr. Funghi, the Federal Transit Administration (FTA) was aware of the increase in design costs and approved the MTA entering into Final Design on January 7, 2010 for the Central Subway Project. According to Mr. Funghi, to cover the increased costs, MTA will allocate $25,242,474 from the Central Subway Project Unallocated Contingency Fund, which receives monies from Federal, State and/or local funding sources[36] and currently has a balance of approximately $213,744,000.

POLICY ANALYSIS

Central Subway Station and C3 Design Construction Cost Limits

According to Mr. Funghi, prior to a competitive RFP process for the three design packages, the MTA established a Central Subway Project construction budget of $94,600,000 (excluding contingencies) for Design Package #3. The construction budget for the construction of the eight C3 projects will be determined when conceptual engineering is 35 percent completed. Mr. Funghi advises that the MTA will amend the Design Package #3 contract once the construction budget amount for the construction of the eight C3 projects is determined.

Under the proposed Design Package #3 contract, HNTB-B&C JV, is required to ensure that the systems construction cost will not exceed 105 percent of the $94,600,000 construction budget. According to Mr. Funghi, the Central Subway and C3 MTA staff and the Program Central Subway Project Management and Construction Management (PMCM) contractor[37] will review the design and estimated construction costs estimates based on the system design plans when the design work is (a) 65 percent, (b) 90 percent and (c) 100 percent completed. Mr. Funghi advises that the Central Subway and C3 MTA and PMCM contractor would consider the market conditions, the current costs of labor and supplies and the existing bidding climate when estimating the construction costs. According to Mr. Funghi, if the design plans result in construction costs exceeding the prescribed systems budget by 105 percent during the design stage, the MTA would request that HNTB-B&C JV redesign the systems at no additional cost to

[36] According to Mr. Funghi, the Unallocated Contingency Fund would be funded by Federal, State and/or local funding depending on when funds are needed and what funds the MTA has received, including funding from (a) 5309 Federal New Starts, (b) Federal Congestion Mitigation and Air Quality, (c) State Regional Transportation Improvement Program, (d) State Traffic Congestion Relief Program, (e) State Proposition 1B and (f) County Transportation Authority Proposition K (Sales Tax).

[37] On January 16, 2009, the Board of Supervisors awarded the Program Management and Construction Management contract to a joint venture of AECOM USA, Inc. and EPC Consultants, private firms, for a five-year term, not-to-exceed $147,375,171 (File No. 08-1454).

the MTA. Mr. Funghi also advises that if the design plans result in construction costs exceeding the prescribed systems budget by 105 percent subsequent to the competitive bidding process for the construction contracts, the MTA could request that HNTB-B&C JV redesign the systems at an additional cost to the MTA.

HNTB-B&C JV will absorb the additional risk of the required design to budget contract provisions within the negotiated fixed fee to ensure that the construction costs would not exceed 105 percent of the construction budget, prior to the competitive bidding process for such construction contracts. As stated in the Fiscal Analysis section above, the total negotiated fixed fee of $3,083,832 is approximately 9.55 percent of the Design Package #3 contract not-to-exceed $32,294,318.

The Design Package #3 contract includes the same design to budget contract provisions that were included in Design Packages #1 and #2 contracts. Design Package #1 was not subject to Board of Supervisors approval because it was under $10,000,000 and did not exceed ten years and Design Package #2 was approved by the Board of Supervisors on March 12, 2010 (File No. 10-0007).

Small Business Enterprise Requirements

The Design RFP was originally written for MTA to award one contract with a goal of reaching a 30 percent Small Business Enterprise[38] (SBE) participation. However, Mr. Ford reported that during the proposal period, the public and professional engineering community was concerned that SBEs would be unable to serve in key leadership roles under the original RFP and therefore, the MTA staff revised the RFP to divide the original design contract into the three separate design packages: (a) Design Package #1, (b) Design Package #2, and (c) Design Package #3 (subject of this request). As a result of the revised RFP, Design Package #1 has (a) a 31.9 percent overall SBE participation (13 SBE firms) and (b) one SBE firm in a key leadership role. Design Package #2 has (a) a 36.6 percent overall SBE participation (21 SBE firms) and (b) one Disadvantaged Business Enterprise[39] (DBE) firm, Kwan Henmi Architecture Planning, Inc., in a key leadership role. The proposed Design Package #3 has (a) a 30.0 percent overall SBE participation (19 SBE firms[40]).

According to Mr. Funghi, dividing the design contract into three separate design contracts has resulted in increased design and coordination expenses. Mr. Funghi advises that the design costs increased from (a) additional administrative expenses from having 13 SBE firms in Design Package #1, 21 SBE firms in Design Package #2, and 19 SBE firms in Design Package #3, and

[38] As stated in the Design Package #3 contract, Small Business Enterprises are for-profit, small businesses that (a) have a three-year average gross revenue not exceeding $12 million and (b) are certified by the State of California's Small Business Program with the Department of General Services, the City and County of San Francisco's Local Business Enterprise (LBE) Program, or the California Unified Certification Program.

[39] Professional, architect, and/or engineering business are Disadvantaged Business Enterprises if (a) located in San Francisco and (b) have average gross annual receipts in the last three fiscal years that do not exceed $2,500,000.

[40] SBE firms include 19 SBE subcontractors: (a) Abtahi Engineering Management, (b) AGS, Inc., (c) Atlantic Consultants, (d) Auriga Corporation, (e) Business Developments, Inc., (f) Chaudhary & Associates, (g) Chaves & Associates, (h) Davis & Associates Communications, (i) Kwan Henmi, (j) MSE Group, (k) Quality Engineering Inc., (l) Robin Chiang and Co., (m) Simon and Associates, (n) Structus, (o) TBD Consultants, Inc., (p) Value Management Strategies, (q) Wilson Engineering and Transportation, (r) Wilson, Ihrig & Associates, and (s) YEI Engineers, Inc.

(b) additional joint venture partners' management and risk costs to ensure that all subconsultants are completing their specific tasks and all designs are integrated.

Civil Service Commission Review for the Design Package #3 Contract

As stated in the proposed resolution, the professional design services provided under the proposed Design Package #3 contract are subject to approval by the Civil Service Commission to verify that the work provided by the HNTB-B&C JV cannot be performed by existing City staff. Mr. Funghi advises that the MTA will request approval of the proposed Design Package #3 contract at the Civil Service Commission meeting on April 5, 2010.

RECOMMENDATION

Contingent on the Civil Service Commission approval of the proposed contract, which is anticipated to occur on April 5, 2010 (subsequent to the April 1, 2010 issuance of the Budget and Legislative Analyst's report) approve the proposed resolution.

Attachment

Part A – Central Subway Project

Task #	Title	Base Hours	Base YOE Cost $	Option Hours	Options YOE Cost $
1.0	Program Management and Control	14,329	1,776,498		
2.0	Design and Project Integration	11,495	1,839,469	604	102,380
3.0	Geotechnical Investigations				
4.0	Surveying and Right-Of-Way	483	91,832		
5.0	Traffic Engineering			934	172,743
6.0	Utility Design Coordination	869	133,179		
7.0	Drainage			628	94,390
8.0	Permits	716	146,269		
9.0	Contract Specifications	8,219	1,021,939	3,204	536,590
10.0	Cost Estimate and Scheduling	3,212	525,981	1,554	199,959
11.0	Quality Control	2,214	387,920		
12.0	Drawings and Documents	26,090	3,302,153	20,624	2,778,060
13.0	Construction Packaging and Schedules				
14.0	Outreach Support	435	64,778		
15.0	Bid Support Services	1,208	178,732		
16.0	Design Services During Construction	25,422	3,987,354	1,127	204,543
	Subtotal:	94,692	**$13,456,104**	28,675	**$4,088,665**
	Fixed Fees		**$1,440,297**		**$447,707**
	Other Direct Costs (Reimbursable Expenses)		**$424,400**		**$62,353**
	Part A Total:		**$15,320,801**		**$4,598,725**

Part B – Central Control and Communication Project

Task #	Title	Base Hours	Base YOE Cost $	Option Hours	Options YOE Cost $
1.0	Comm Pk1	26,613	3,575,353	242	37,046
2.0	Comm Pk2	7,881	1,081,132	121	19,231
3.0	1455 Market	25,720	3,763,164	3,687	566,960
4.0	Transbay			5,297	794,762
5.0	OCC Lenox			6,545	1,033,522
	Subtotal:	60,214	**$8,419,649**	15,892	**$2,451,522**
	Fixed Fees		**$926,161**		**$269,667**
	Other Direct Costs (Reimbursable Expenses)		**$258,240**		**$49,553**
	Part B Total:		**$9,604,050**		**$2,770,742**

Title	Base YOE Cost $	Options YOE Cost $
Total	**$24,924,851***	**$7,369,467***

* Total amount of $32,294,318.

MEMORANDUM

CS Memorandum No. 0362

DATE: March 12, 2010

TO: Honorable Members of the Board of Supervisors

FROM: Nathaniel P. Ford Sr.
for Executive Director/CEO

SUBJECT: Request for Approval of Contract CS-155-3 between the SFMTA and HNTB – B&C JV for Professional Systems Design (Trackways, Signals, Controls, Traction Power and Design Integration) Services for the Central Subway.

The San Francisco Municipal Transportation Agency (SFMTA) requests approval of Contract CS-155-3 between the SFMTA and HNTB – B&C JV for Professional Systems Design Services (Trackways, Signals, Controls, Traction Power and Design Integration) ("System Engineering") for the Central Subway Project. The Contract is for a total amount not to exceed $32,294,319 and for a term of ten years, with an option to extend the term an additional two years. The purpose of the contract is to secure System Engineering and other design services during the Central Subway final design and construction phases.

Background

The Third Street Light Rail Transit (LRT) Project is the most significant capital investment in generations for the San Francisco Municipal Transportation Agency. Phase 1 of the 6.9-mile two-phase project, the T Third line, began revenue service in April 2007, restoring light rail service to the heavily transit-dependent Third Street corridor in eastern San Francisco for the first time in 50 years.

Phase 2, the Central Subway Project, will extend the new Third Street line by constructing three new subway stations and one surface station to provide rail service to the Financial District and Chinatown. The extended light rail line will serve regional destinations such as Union Square, the Moscone Convention Center, Yerba Buena and AT&T Park, and will connect directly to BART and Caltrain, the Bay Area's two largest regional-commuter rail services.

The primary purpose of the Third Street LRT Project is to provide residents with faster, more reliable and more comfortable transit service. Chinatown and the Financial District are two of the most congested and heavily developed areas in San Francisco. The Planning Department projects that by 2030, the population along the corridor of

the Third Street Line and the proposed Central Subway alignment will increase 26 percent and employment will increase 61 percent, factors that are larger than the growth in population and employment anticipated for the City as a whole. The SFMTA estimates that the Central Subway will serve 56,000 riders in its first year of operation in 2016, increasing to 76,000 daily riders projected for 2030.

Project Design and Construction

The Central Subway design consists of a short portion of in-street surface light rail in the southern portion of the system that transitions into subway operation for most of the alignment. Twin bore tunnels are proposed for the subway, with three new subway stations serving the Moscone/Yerba Buena, Union Square/Market Street and Chinatown areas. The Union Square/Market Street Station will interconnect with the existing BART/Muni Powell Street Station. The Project received Federal Transit Administration (FTA) approval to begin the Final Design engineering work in January 2010. Construction to relocate utilities also began in early 2010. The start of revenue operation is scheduled for 2018.

The SFMTA plans to construct the tunnels using a deep tunneling approach with Tunnel Boring Machines (TBMs), which compared to other tunneling methods will reduce surface disruption during construction, allow for a more direct alignment and shorten the construction period. The Central Subway tunnels will pass under the existing BART/Muni Market Street subway tunnels over 100 feet below the existing ground surface. Most of the alignment will be located under existing street right-of-way. Because the tunnels will follow public street right-of-ways, the City will only need to obtain a limited number of easements from property owners along the alignment.

Subway station construction methods will vary. The Moscone/Yerba Buena Station will be constructed using traditional top-down cut-and-cover construction. The Union Square/Market Street Station is located in a very constricted area, and will most likely be constructed using a combination of cut and cover and mined sequential excavation methods. Chinatown Station, also located in a very constricted area, will be constructed using mined sequential excavation. The subway stations will have center-platforms with passenger end-loading and are designed to accommodate high-floor two-car trains. Whenever feasible, off-street properties have been identified for primary station access. The Moscone/Yerba Buena and Chinatown Stations may present Transit Oriented Development (TOD) opportunities above the station entrance.

Purpose, Scope and Services Provided Under the Contract

The Project poses significant and complex design and construction management and coordination challenges to the City. Design Package #3 will perform all of the Systems Engineering elements to make CS operational, including all work required for the Central Control and Communications upgrade program and upgrades to the existing control and other legacy systems. The City does not have the specialized expertise or staff resources to perform all services necessary for the Project. Given

the substantial capital investment in the Central Subway and the target project completion schedule of 2018, it is in the best interest of the City to engage a qualified consultant with specific experience and expertise in the design of underground transit systems to insure the successful delivery of the Central Subway phase of the Third Street LRT Project.

The Request for Proposal (RFP) for Professional Design Services originally called for final design services to be awarded to a single design consultant. The RFP established a 30 percent Small Business Enterprise (SBE) participation goal. During the proposal period the public and the professional engineering services community communicated their concerns that SBEs should participate in the Project in key, meaningful and leadership roles.

Upon further analysis, staff revised the RFP to divide the scope of services into three separate design packages to maximize competition and opportunities for small and local businesses. The three design contract packages are: Design Package #1 – Utilities Relocation and Tunnel Design, Design Package #2 – Stations Design and Design Package #3 – Systems and Integration. The revised RFP also encouraged prime proposers to place SBEs with local expertise in key roles by awarding up to two additional points for each firm placed in a key role based on the firm's status as an SBE and/or demonstrated local business expertise.

Under the SFMTA Small Business Enterprise program, SBE participation goals may be met by firms certified under any one of the three programs: the federal Disadvantaged Business Enterprise program, the California Department of General Services SBE program or the City and County of San Francisco's Local Business Enterprise (LBE) program.

CS155-1 (Design Package #1) achieved a 31.9 percent SBE participation of base work for a total of $1,853,007 including thirteen SBE firms. The following chart shows the participating SBE firms and the percentage of the base contract that each will perform on the Central Subway Project.

SBE Subconsultant Participation

Design Package #1

Name of SBE	Gender M	Gender F	Ethnicity*	Type of Work (Describe)	Percent of Base Contract
Telamon Engineering Consultants, Inc.		X	A/PI	Civil / Utilities	15.9%
AGS, Inc.	X		A/PI	Civil / Utilities, Geotechnical, Structural	1.0%
Cornerstone Transportation Consulting, Inc.	X		B	CADD & Project Schedule / Admin	2.6%
Fong Brothers Printing, Inc.	X		A/PI	Reprographics	0.2%
HortScience, Inc.		X	W	Archaeology	0.5%
Kendall Young Associates	X		A/PI	Architecture	0.5%
Martin M. Ron Associates	X		W	Land Surveying	0.9%
SC Solutions, Inc.	X		W	Structural	1.0%
Simons & Associates, Inc.		X	W	Sustainability & Green Building Consulting	0.2%
SOHA Engineers	X		A/PI	Structural	5.2%
Stevens & Associates	X		B	Landscape Architecture	0.3%
Structus Consulting Engineers	X		A/PI	Structural	2.8%
Trans Pacific Geotechnical Consultants, Inc.	X		A/PI	Geotechnical	0.8%
				Total SBE Goal	31.9%

* Ethnic Codes: AI/AN = American Indian or Alaskan Native, A/PI – Asian or Pacific Islander, B = Black, F = Filipino, H = Hispanic, and W = White

CS155-2 (Design Package #2) achieved a 36.6 percent SBE participation of base work for a total of $12,849,597 including twenty-two SBE firms. The following indicates the SBE firms and percentage of the base contract.

SBE Subconsultant Participation

Design Package #2

Name of SBE	Gender M	Gender F	Ethnicity*	Type of Work (Describe)	Percent of Base Contract
Kwan Henmi Architecture Planning Inc.		X	A/PI	Architecture	10.9%
A.R. Sanchez-Corea & Associates, Inc.	X		H	Building Code & Permitting	0.2%
Carey & Co., Inc.		X	W	Historical / Building	0.2%
CHS Consulting	X		A/PI	Traffic Engineering	0.7%
Cornerstone Transportation Consulting Inc.	X		B	CADD & Project Schedule / Admin	2.0%
Creegan + D'Angelo Engineers	X		W	Civil / Structural	0.3%
F.E. Jordan Associates, Inc.	X		B	Civil Engineer, Utility Design	0.5%
F.W. Associates, Inc.	X		A/PI	Electrical	1.9%
Fong Brothers Printing, Inc.	X		A/PI	Reprographics	0.3%
Forell/Elsesser Engineers, Inc.	X		W	Structural	3.9%
HortSciences, Inc.		X	W	Archeology	0.2%
Martin M. Ron Associates	X		W	Land Surveying	0.3%
Robin Chiang & Company	X		A/PI	Architecture	2.8%
SC Solutions, Inc.	X		W	Structural / Seismic	0.7%
Silverman & Light, Inc.	X		W	Electrical	1.9%
S.J. Engineers	X		A/PI	Mechanical / Plumbing / Fire Protection	1.0%
SOHA Engineers	X		A/PI	Structural	3.8%
Stevens & Associates	X		B	Landscape Architecture	0.5%
Telamon Engineering Consultants, Inc.		X	A/PI	Civil / Utilities	1.6%
Timmons Design Engineers	X		W	Mechanical / Electrical	0.9%
Trans Pacific Geotechnical Consultants, Inc.	X		A/PI	Geotechnical	0.1%
YEI Engineers, Inc.	X		A/PI	Electrical	2.2%
				Total SBE Goal	36.6%

* Ethnic Codes: AI/AN = American Indian or Alaskan Native, A/PI – Asian or Pacific Islander, B = Black, F = Filipino, H = Hispanic, and W = White

CS-155-3 (Design Package #3) achieved a 30.0 percent SBE participation of base work for a total of $7,478,311 including nineteen SBE firms. The following indicates the SBE firms and percentage of the base contract.

SBE Subconsultant Participation

Design Package #3

Name of SBE	Gender M	Gender F	Ethnicity*	Type of Work (Describe)	Percent of Base Contract
Abtahi Engineering Mgmt.	X		W	Project Coordination	0.4%
AGS, Inc.	X		A/PI	Geotech	0.03%
Atlantic Consultants		X	W	Corrosion Consultant	0.4%
Auriga Corporation	X		A/PI	Fiber Optic Communication	5.8%
Business Development, Inc.	X		B	Contracts Management	0.3%
Chaudhary & Associates	X		A/PI	Survey	0.4%
Chaves & Associates		X	H	Document Control / Admin. Support	2.4%
Davis & Associates Comm.		X	B	Community Outreach	0.7%
Kwan Henmi		X	A/PI	Underground Architecture	1.8%
MSE Group	X		B	Environmental Coordination	0%
Quality Engineering Inc. (QEI)	X		B / W	Quality Assurance	0.6%
Robin Chiang and Co.		X	A/PI	Subsurface Architecture	0.7%
Simon and Associates		X	W	Architecture Sustainability	1.1%
Structus	X		A/PI	Structures	2.0%
TBD Consultants, Inc.	X		W	Estimating/Survey	1.9%
Value Management Strategies	X		W	Value Engineering	1.1%
Wilson Eng. & Transportation	X		W	Engineering	0.0%
Wilson, Ihrig & Associates	X		W	Noise/Vibration	0.0%
YEI Engineers, Inc.	X		A/PI	Mechanical / Electrical	10.4%
				Total SBE Goal	30.0%

* Ethnic Codes: AI/AN = American Indian or Alaskan Native, A/PI – Asian or Pacific Islander, B = Black, F = Filipino, H = Hispanic, and W = White

Based on the total value of the three base design contracts at $65,779,104, the three final design consultants have committed to achieve an agreegate SBE participation goal of 33.7% of the base work, for a total of SBE participation value of $22,180,915. A total 40 SBE firms will participate in the final design of the Central Subway Project. Some of these firms are participating in more than one of the design contracts.

Contract #	SBE Opportunities	SBE Value	Base Contract Value	SBE Participation	First Source Trainee Positions
CS155-1 (DP1)	13	$1,853,007	$5,795,000	31.9%	4
CS155-2 (DP2)	22	$12,849,597	$35,059,252	36.6%	14
CS155-3 (DP3)	19	$7,478,311	$24,924,852	30.0%	12
Total	54*	$22,180,915	$65,779,104	33.7%	30
* Note: some SBE's are participating in more than one of the design contracts.					

In addition, the Central Subway Program is committed to providing 30 employment opportunities for trainees placed through the City's First Source Hiring Program. PB-Telamon, the joint venture consultant for Design Package #1, has committed to provide four trainee positions. Central Subway Design Consultants, the joint venture consultant for Design Package #2, has committed to fourteen trainee positions. HNTB - B&C JV, the consultant for Design Package #3, has committed to Provide twelve trainee positions.

The Design Package #3 consultant will provide the following services:

- All engineering work required for Construction Package #7, including the surface segment from the tunnel portal south to the interface with the T line at 4th and King St. including all system wide elements in order to make CS operational;
- Perform all engineering work required for the Central Control and Communications upgrade program including the implementation of a primary and secondary Operations Control Centers and upgrades to existing control systems;
- Provide engineering support during construction;
- Prepare conformed plans and specifications upon contract completion; and
- Implement a quality control program in performing final design services.

During the initial ten-year term of the contract, the consultant will focus on preparation of the design documents and specifications that the SFMTA will use to competitively bid construction of the systems work, and design services required during construction. The SFMTA may elect to extend the contract up to two years for the

consultant to provide warranty inspection and survey services that may be required during start-up testing and commissioning of the Central Subway.

To avoid conflicts of interest, the consultant and its key personnel and sub-consultants will be precluded from participating in any subsequent contracts for final design, project controls, construction and procurement services for the Central Subway Project.

RFP Process and Contract Negotiation

The SFMTA Board of Directors adopted Resolution No. 09-055 on April 7, 2009 authorizing the Executive Director/CEO to issue a Request for Proposals (RFP), receive and evaluate proposals, select the highest ranking proposal, and negotiate a contract for Contract No. CS-155, Professional Architectural and Engineering Services for the Final Design and Construction Phases of Central Subway.

Two pre-proposal conferences were held on April 28, 2009 and June 11, 2009. On July 21, 2009, four proposers submitted a total of five proposals for the three design packages. All proposals contained significant levels of participation for small businesses, including local business enterprises. Proposals for Design Package #3 were received from Jacobs Engineering and PGH Wong Engineering, a joint venture, and HNTB-B&C JV, a joint venture of HNTB Corporation and B&C Transit, Inc. Both proposals were evaluated by a technical selection committee comprised of members from various SFMTA divisions, other City Departments and BART. The scores tabulated from the selection process determined that HNTB - B&C Transit JV was the highest ranked firm.

Negotiations with HNTB-B&C JV were held from October 2009 to February 2010. . The negotiations focused on clarifying the scope of work and determining reasonable compensation to ensure that the SFMTA and City are obtaining high quality and cost-effective services. As finally negotiated, the base contract for Final Design Package #3 (final design of the subway systems) and construction support services within the initial ten year term is $24,924,852. Options to provide additional related services have been negotiated for an amount not to exceed $7,369,467. The total amount of the contract is $32,294,319.

The SFMTA Board of Directors adopted Resolution No. 10-030 on February 26, 2010 authorizing the Executive Director/CEO to award Contract CS-155-3, Professional Architectural and Engineering Services for the Final Design and Construction Support of the Central Subway Project – Design Package #3 Systems Design to HNTB – B&C JV, for an amount not to exceed $32,294,319 for all base and optional work to complete the final design of the systems work, and for a term of ten years, with an option to extend the term for up to an additional two years.

The work breakdown (Hours and Year of Expenditure (YOE) Cost) for the Project is set out in the following chart:

Part A – Central Subway Project

Task #	Title	Base Hours	Base YOE Cost $	Option Hours	Options YOE Cost $
1.0	Program Management and Control	14,329	1,776,498		
2.0	Design and Project Integration	11,495	1,839,469	604	102,380
3.0	Geotechnical Investigations				
4.0	Surveying and Right-Of-Way	483	91,832		
5.0	Traffic Engineering			934	172,743
6.0	Utility Design Coordination	869	133,179		
7.0	Drainage			628	94,390
8.0	Permits	716	146,269		
9.0	Contract Specifications	8,219	1,021,939	3,204	536,590
10.0	Cost Estimate and Scheduling	3,212	525,981	1,554	199,959
11.0	Quality Control	2,214	387,920		
12.0	Drawings and Documents	26,090	3,302,153	20,624	2,778,060
13.0	Construction Packaging and Schedules				
14.0	Outreach Support	435	64,778		
15.0	Bid Support Services	1,208	178,732		
16.0	Design Services During Construction	25,422	3,987,354	1,127	204,543
	Subtotal:	94,692	**$13,456,104**	28,675	**$4,088,665**
	Fixed Fees		**$1,440,297**		**$447,707**
	Other Direct Costs (Reimbursable Expenses)		**$424,400**		**$62,353**
	Part A Total:		**$15,320,801**		**$4,598,725**

Part B – Central Control and Communication Project

Task #	Title	Base Hours	Base YOE Cost $	Option Hours	Options YOE Cost $
1.0	Comm Pk1	26,613	3,575,353	242	37,046
2.0	Comm Pk2	7,881	1,081,132	121	19,231
3.0	1455 Market	25,720	3,763,164	3,687	566,960
4.0	Transbay			5,297	794,762
5.0	OCC Lenox			6,545	1,033,522
	Subtotal:	60,214	**$8,419,649**	15,892	**$2,451,522**
	Fixed Fees		**$926,161**		**$269,667**
	Other Direct Costs (Reimbursable Expenses)		**$258,240**		**$49,553**
	Part B Total:		**$9,604,050**		**$2,770,742**

Title	Base YOE Cost $	Options YOE Cost $
Total	**$24,924,851**	**$7,369,467**

Optional professional services identified under this agreement include design and project integration, traffic engineering, drainage, contract specifications, cost

estimating and scheduling, drawings and documents and design services during construction. All work to be performed and authorized by the SFMTA will be certified by the Controller's Office prior to the issuance of the notice to proceed. Optional services beyond the scope identified as base services shall be authorized upon approval of the Executive Director/CEO.

Recommendation

The San Francisco Municipal Transportation Agency requests that the Board of Supervisors approve Contract CS-155-3, to HNTB – B&C JV, a joint venture of HNTB Corporation and B&C Transit, Inc. for an amount not to exceed $32,294,319 for a term of ten years, with an option to extend the term for up to an additional two years.

CONTRACT FOR CENTRAL SUBWAY

FINAL DESIGN PACKAGE # 3:

SURFACE SEGMENT, TRACKWAYS, SYSTEMS,

QUALITY CONTROL AND DESIGN INTEGRATION

Agreement between the City and County of San Francisco and HNTB-B&C JV for Architectural and Engineering Services for the Final Design and Construction of the the San Francisco Municipal Transportation Agency Central Subway Project (Third Street Light Rail Project, Phase 2)

Contract No. CS-155-3

Design Package #3: Surface Segment, Trackways, Systems, Quality Control and Design Integration