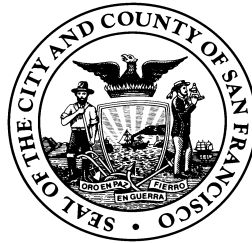


CONTRACT FOR CENTRAL SUBWAY

FINAL DESIGN PACKAGE # 2

MOSCONE, UNION SQUARE & CHINATOWN
STATIONS

FIRST AMENDMENT



**First Amendment to Agreement between the City and County of San Francisco
and
the Central Subway Design Group
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-155-2
Design Package #2**

WHEREAS, The City and County of San Francisco ("City"), by and through its Municipal Transportation Agency ("SFMTA") and the Central Subway Design Group ("Consultant" or "Designer"), a joint venture between Parsons Brinckerhoff, Inc. (contracting through its subsidiary PB Americas, Inc.) and Michael Willis Architects, Inc. and Kwan Henmi Architecture and Planning, Inc., entered into Contract CS-155-2 ("the Agreement") for the final design of three subway stations for the SFMTA's Central Subway Project; and

WHEREAS, As provided in Section 8.2 of the Agreement, Consultant requested that the Agreement be modified to describe and include and provide additional compensation for certain Additional Work (identified herein) that was not part of the original Scope of Work of the Agreement; and

WHEREAS, Consultant and SFMTA subsequently negotiated this First Amendment to the Agreement; ("First Amendment");

NOW THEREFORE, the Consultant and the SFMTA agree to modify the Agreement, as set out below:

A. CONSTRUCTION OF FIRST AMENDMENT

1. Where Additional Work or additional terms to the Agreement are set out in existing text, the new or added text is indicated by underlining text, and deleted text is lined-through. Where a new section is added in its entirety, the text so indicates.
2. Unless otherwise specifically stated, the Consultant is the party responsible for performing the Work described in this First Amendment.
3. The amounts stated in this First Amendment as compensation for the Additional Work described herein is full compensation for said Additional Work, payment of which by City to Consultant shall be an accord and satisfaction of any and

all obligations by City to Consultant for said Additional Work.

4. Except as specifically provided in this First Amendment, all other terms and conditions of the Agreement remain unchanged. No provision of this First Amendment shall amend any agreement or contract other than the "Agreement between the City and County of San Francisco and the Central Subway Design Group 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), SFMTA Contract No. CS-155-2. This First Amendment is dated for convenience as December 20, 2011.
5. Consultant hereby acknowledges and agrees that the amounts agreed for the Additional Work described in this First Amendment shall be in full accord and satisfaction of all current and prospective costs incurred in connection with Consultant's performance of said Additional Work, without limitation. Consultant releases SFMTA from all claims for which full accord and satisfaction is hereby made, as set forth above. If this modification involves the granting of an extension of time, with or without cost, Consultant hereby releases SFMTA from all claims and costs associated with such extension of time. Such costs may include, but are not limited to, costs for labor, materials, equipment, and disruption, lost productivity, escalation, delay, extended overhead, administration and extended performance time.
6. In signing this First Amendment, the signatories certify that each is authorized to execute this First Amendment and thereby bind the party he or she represents.

B. ADDITIONAL GEOTECHNICAL INVESTIGATIONS

Appendix A, Task 3.10, "Supplemental Investigations" is amended as follows:

3.10 Supplemental Investigations Services

Perform additional borings, laboratory analyses, and a total of four pump tests a ~~pump test as needed~~ to assess the anticipated ground and ground water conditions and behavior during excavation.

~~It is anticipated that up to t~~ Two additional borings will be taken at Moscone Station area. ~~and three~~ Five borings will be taken at the Union Square/Market Street Station (UMS) area. ~~and t~~ Three borings will be taken at Chinatown Station (CTS) area. Also a pump test will be will be performed at UMS Station location. ~~The tests described above is~~ will enable the Project to better assess the anticipated ground behavior and ground water condition during excavation and impact of construction of UMS station on the ground water regime in the vicinity of BART Powell Street Station.

Prepare geotechnical data report to provide as information to bidders.

A single geotechnical data report (including data from the PE phase and Design Package 1) will be prepared and included in the three construction bid packages (CP4, CP5, and CP6).

Deliverables

3.10 Supplemental Investigations Plan [NTP + 30 days]

1.20 Geotechnical Data Report (draft and final)
[Draft at 3.5 months + NTP]
[Final at the first 65% station deliverable]

3.20.1 Technical Memorandum CS155-2 Task 03.10

Supplemental Geotechnical Investigations – Additional Union Square Market Street Station Investigation Borings CS-40 & CS-41, Rev. 0, February 22, 2011

3.20.2 Technical Memorandum CS155-2 Task 03.30

Supplemental Investigations, Union Square Market Street Station Groundwater Flow Model Development and Results, Rev. 0, August 22, 2011

Task Leader: Ramin Golesorkhi

Assumptions and Exceptions:

- ~~Data from PE~~ generated by the Preliminary Engineering consultant (PE) and the supplemental geotechnical investigation program performed by Tunnels design consultant from (DP-1) will be made available to Consultant.
- A single data report will be prepared for the three stations and will include data from the PE and DP1 geotechnical investigations.
- Environmental and hazardous materials investigations are by others
- Information generated by the consultants for Tunnels design (DP1) and Stations designs (DP2) will share information and data generated by their respective geotechnical investigations. ~~DP1 and DP2 will combine this work.~~
- Includes 3.20 Geotechnical Characterization report.

Additional Compensation:

City shall pay Consultant the following amounts in full satisfaction and accord for the Additional Work described in this Section B of this First Amendment:

Task 3.10: CTS Expanded Hydraulic Testing Increase Amount: \$ 26,100.00
Task 3.10: UMS Additional Two Soil Borings Increase Amount: \$ 34,500.00
Subtotal Increase: \$ 60,600.00

C. CHINATOWN STATION LOWERING

All of the work described in this Section C is Additional Work under the Tasks listed herein:

1. Task 3.0, "Geotechnical Investigations"

Summary:

The Parties have agreed that the Chinatown Station (CTS) must be constructed approximately 25 feet lower (deeper in the ground) than originally designed under Preliminary Engineering.

As a result of the lowering of CTS, the tunnel horizon coming into and leaving CTS will be approximately 25 feet deeper than the existing CN1254 design. Upon review of the geologic information in these areas, additional geotechnical information is needed to document ground conditions below the lower station horizon.

Two additional borings (CS-42 and CS-43) are proposed to provide additional data required for the CTS station design along with additional in-situ testing and lab testing planned. No piezometers are proposed for this phase of investigation, as the added expense of installation and monitoring will not add significant value at this stage of the project. The approximate locations and objectives of the borings are summarized in the table below.

An Addendum to the Geotechnical Data Report will be prepared to document the results of the borings in conjunction with the work in DP1, present the field and laboratory data, and present boring logs. This additional information will provide the basis for updating the Geotechnical Baseline Report, and Settlement impacts on Utilities Technical Memorandum.

Consultant shall perform the following Additional Work under Task 3.0:

- a. Develop investigation plan showing a single stage of investigation, borehole locations, planned depths, insitu testing, and procedures.
- b. Update existing site-specific Health & Safety Plan for Drilling Program.
- c. Screen investigation sites for underground utilities: contact Underground Service Alert (USA) a minimum of 48 hours prior to start of field activities. In addition, employ private utility locator to check proposed investigation locations for potential buried utilities.
- d. Drill two borings (CS-42 and CS-43) to depths ranging from 120 to 160 feet below existing ground surface.

- e. Employ geologists and/or geotechnical engineers to supervise drilling, log borings, conduct insitu testing, and retrieve and transport the soil and rock samples.
- f. Perform laboratory tests on selected samples of soil and rock to assess engineering properties and physical characteristics.
- g. Prepare technical memorandum to document new borings and test data obtained from the supplemental investigations including: summary of overall geologic setting and groundwater conditions, borings logs, and field and laboratory test results.
- h. Describe the impacts that certain adverse conditions could have on the progress of the work and to nearby structures and facilities.
- i. Review the update by DP1 on the geologic interpretive profile along the tunnel alignment.
- j. Update Geotechnical Baseline Report as part of the 90% Submittal.

Consultant shall produce the following Deliverables under Task 3.0:

Technical Memorandum CS155-1 Task 17.05 and CS155-2 Task 3.40;
Supplemental Geotechnical Investigations, Additional CTS Investigation Borings
CS-42, CS-43 and CS-44, Rev. 0, April 25, 2011

2. Task 6.20 Settlement Impacts on Utilities and Buildings

Consultant shall perform the following Additional Work under Task 6.20:

- a. Revise prior utility settlement analyses to reflect change in elevation of station (platform, cross-cut and cross-over caverns) and headhouse for impacts on existing utilities.
- b. Prepare technical memorandum to reflect change in station, headhouse and tunnel elevations at CTS. Analyses will assess effects of settlement on buildings caused by lowered station configuration and lowered tunnel profile.

Consultant shall produce the following Deliverables under Task 6.20:

- Technical Memorandum – Building Settlement Impacts due to Underground Construction

3. Task 10.10 Construction Cost Estimate & Schedule Review During Design Services

Consultant shall perform the following Additional Work under Task 10.10:

Prepare and submit updates to quantity takeoff submitted at the Interim Revised 65% Design and the updated 65% Submittal to reflect the station lowering of CTS, relocation of the cross-cut cavern to avoid underpinning of Mandarin Tower, changes to the amount of compensation grouting and other related changes as a result of the CTS lowering.

4. Task 12.0 Drawings and Documents

Consultant shall perform the following Additional Work under Task 12.0:

- Revise designs to conform to lowered station (“Scheme A5”) requirements.

Consultant shall produce the following Deliverables under Task 12.0:

- Interim Drawings and Quantities Revisions for affected disciplines.

5. Additional Compensation:

City shall pay Consultant Nine Hundred Thousand Fifty Dollars (\$950,000) in full satisfaction and accord for the Additional Work described in this Section C of this First Amendment.

D. PREVIOUSLY EXERCISED OPTIONS

By letters (referenced in the following table), the SFMTA has exercised Options under the Contract, which have increased the Base Amount of the Contract Sum and decreased the remaining value of Option Work by the equivalent amount. The SFMTA's exercise and the Consultant's performance of the Optional Work has not increased the Contract Sum or added time to the Project schedule. following table summarizes the Options exercised:

Executed Contract Options:

Option Exercised	Letter No.	Base Amount	Base Fee	Option Amount	Option Fee
		\$35,059,241	\$3,308,718	\$4,890,707	\$474,821
Task 2.50	#0473	\$164,383	\$16,290	(\$164,383)	(\$16,290)
Task 12.07	#0473	\$110,392	\$10,940	(\$110,392)	(\$10,940)
Task 12.01.C5	#1232	\$12,796	\$1,268	(\$12,796)	(\$1,268)
Task 12.12	#0768	\$79,200	\$7,849	(\$79,200)	(\$7,849)

E. ADJUSTMENT OF CONTRACT AMOUNT

1. Section 13.3.1 ("Total Amount") of the Agreement is modified as follows:

13.3.1 The Total Amount of compensation under this Agreement for all Work performed by Consultant, shall not exceed **Forty Million Nine Hundred Sixty Thousand Five Hundred Forty Eight Dollars (\$40,960,548)** ~~Thirty-Nine Million Nine Hundred Forty-Nine Thousand Nine Hundred and Forty-Eight Dollars (\$39,949,948)~~, of which **Thirty Six Million Four Hundred Thirty-Six Thousand Six Hundred and Twelve Dollars (\$36,436,612)** ~~Thirty Five Million Fifty-Nine Thousand Two Hundred and Forty-One Dollars (\$35,059,241)~~ is for Basic Services, and **Four Million Five Hundred Twenty-Three Thousand Nine Hundred and Thirty-Six Dollars (\$4,523,936)** ~~Four Million Eight Hundred Ninety Thousand Seven Hundred and Seven Dollars (\$4,890,707)~~ is for Optional Services. The Total Amount of compensation shall be adjusted annually based on overhead audits performed pursuant to Section 13.11 by each respective consultant of the overhead rate (which shall include the costs of procuring and maintaining the project specific insurance rider or practice rider by KHA and MWA as identified in Section 15.5). This adjustment shall be made through by amendment of the Agreement. The Fixed Fee is not tied to Consultant's overhead rates and shall not increase or decrease based on overhead audit findings.

2. Section 13.4.1 ("Fixed Fee") of the Agreement is modified as follows:

13.4.1 For all of the Consultant's Basic Services, which are all services provided by Consultant except for those tasks and work specifically identified as Additional Work, the Agency shall pay the Consultant a Fixed Fee, which is Consultant's profit for performing the Basic Services under this Agreement. The Fixed Fee shall not exceed a sum total of **Three Million Four Hundred Thirty-Four Thousand Nine Hundred and Ninety-One Dollars (\$3,434,991)** ~~Three Million Three Hundred Eight Thousand Seven Hundred and Eighteen Dollars (\$3,308,718)~~ for Basic Services and an additional **Four Hundred Thirty-Eight Thousand Four Hundred and Seventy-Four Dollars (\$438,474)** ~~Four Hundred Seventy Four Thousand Eight Hundred and Twenty-One Dollars (\$474,821)~~ for Optional Services. The Fixed Fee, which is profit, will be allocated to the Prime and Subconsultants and is included in the Total Price set forth above. The SFMTA will pay Consultant the Fixed Fee proportionate to the completion of the work under the Agreement.

3. Summary of First Amendment:


Total Amount of this First Amendment: Increase: \$ 1,010,600.00

Previous Total Contract Amount:	\$39,949,948.00
New Revised Total Contract Amount:	\$40,960,548.00

Total Contract Time added by this Contract Modification:	None
Previous Task Order Completion Date:	April 2020
New Revised Task Order Completion Date:	April 2020

The remainder of this page has been intentionally left blank.

In Witness Whereof, the parties have executed this Modification in quadruplicate in San Francisco, California as of this _____ day of _____, 201__.

CITY	CONSULTANT
Approved:	Approved:
By: _____ Edward D. Reiskin Director of Transportation SFMTA	By:  _____ Aileen Read Interim Project Manager Central Subway Design Group
Dated: _____	Dated: <u>December 20, 2011</u>
SFMTA Board of Directors	
Resolution No. _____	
Dated: _____	
Attest:	
_____ Roberta Boomer, Secretary SFMTA Board of Directors	
Approved as to form:	
Dennis J. Herrera City Attorney	
By: _____ Robert K. Stone Deputy City Attorney	
Dated: _____	