THIS PRINT COVERS CALENDAR ITEM NO. : 10.3

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

DIVISION: Capital Programs and Construction

BRIEF DESCRIPTION:

Authorizing the Director of Transportation to execute Amendment No. 1 to SFMTA Contract No. CS-174, Professional Project Management and Construction Management Support Services for Van Ness Corridor Transit Improvement Project, with HNTB Corporation, in the amount of \$1,678,925, for a total contract amount not to exceed \$7,380,000, and to extend the term of the contract by 16 months to June 30, 2022.

SUMMARY:

- On February 6, 2018, the SFMTA Board of Directors adopted Resolution No. 180206-021, authorizing the Director of Transportation to execute SFMTA Contract No. CS-174, Professional Project Management and Construction Management Support Services for Van Ness Corridor Transit Improvement Project (Project), with HNTB Corporation, for a total amount not to exceed \$5,701,475, and a term not to exceed three years.
- Due to delays in completion of the construction of the Project, the SFMTA requires additional consultant services to support the work. Among other things, HNTB provides support to SFMTA staff in claims, cost estimating, construction management, quality assurance/quality control, and scheduling.
- Costs for the services in this amendment will be shared with the San Francisco Public Utilities Commission per an existing cost-share Memorandum of Understanding (MOU).

ENCLOSURES:

- 1. SFMTAB Resolution
- 2. Contract No. CS-174 Amendment No.1
- 3. Project Budget and Financial Plan

| APPROVALS: | | DATE |
|------------|-----------------|------------------|
| DIRECTOR | Jonfun Thhi | February 9, 2021 |
| SECRETARY | Caroline Celaya | February 9, 2021 |

ASSIGNED SFMTAB CALENDAR DATE: February 16, 2021

PAGE 2.

PURPOSE

The purpose of this calendar item is to authorize the Director of Transportation to execute Amendment No. 1 to SFMTA Contract No. CS-174, Professional Project Management and Construction Management Support Services for Van Ness Corridor Transit Improvement Project, with HNTB Corporation (HNTB), in the amount of \$1,678,925, for a total contract amount not to exceed \$7,380,000, and to extend the term of the contract by 16 months to June 30, 2022.

STRATEGIC PLAN GOALS AND TRANSIT FIRST POLICY PRINCIPLES

Goal 1: Create a safer transportation experience for everyone

Objective 1.1: Achieve Vision Zero by eliminating all traffic deaths. Objective 1.2: Improve the safety of the transit system.

Goal 2: Make transit and other sustainable modes of transportation the most attractive and preferred means of travel.

Objective 2.1: Improve transit service.

Objective 2.2: Enhance and expand use of the city's sustainable modes of transportation. Objective 2.3: Manage congestion and parking demand to support the Transit First Policy.

Goal 3: Improve the environment and quality of life in San Francisco

Transit First Principles:

- 1. To ensure quality of life and economic health in San Francisco, the primary objective of the transportation system must be the safe and efficient movement of people and goods
- 2. Public transit, including taxis and vanpools, is an economically and environmentally sound alternative to transportation by individual automobiles. Within San Francisco, travel by public transit, by bicycle and on foot must be an attractive alternative to travel by private automobile.
- 3. Decisions regarding the use of limited public street and sidewalk space shall encourage the use of public rights of way by pedestrians, bicyclists, and public transit, and shall strive to reduce traffic and improve public health and safety
- 4. Transit priority improvements, such as designated transit lanes and streets and improved signalization, shall be made to expedite the movement of public transit vehicles (including taxis and vanpools) and to improve pedestrian safety.
- 5. New transportation investment should be allocated to meet the demand for public transit generated by new public and private commercial and residential developments
- 6. The ability of the City and County to reduce traffic congestion depends on the adequacy of regional public transportation. The City and County shall promote the use of regional mass transit and the continued development of an integrated, reliable, regional public transportation system.
- 7. The City and County shall encourage innovative solutions to meet public transportation needs wherever possible and where the provision of such service will not adversely affect the service provided by the Municipal Railway

PAGE 3.

8. Parking policies for areas well served by public transit shall be designed to encourage travel by public transit and alternative transportation.

DESCRIPTION

Background:

The Van Ness Corridor Transit Improvement Project, formally known as the Van Ness Bus Rapid Transit (BRT) Project (Project), will implement the first BRT service in San Francisco, which will improve transit reliability for the 47 and 49 Muni routes and provide reliable transit connections to transfer routes. The transit service and infrastructure changes are expected to reduce transit travel times by over 30 percent and increase ridership by about 33 percent.

Van Ness Avenue is a high-injury corridor; to improve safety, the Project will install pedestrian countdown timers, pedestrian bulb-outs, and eliminate the majority of left turns that currently exist along the corridor. In addition, the Project is replacing the 100-year-old sewer and water system along the length of the corridor, as well as selected sections of the auxiliary water supply system. The Project will enhance the urban design of Van Ness Avenue. This is a joint project between SFMTA and San Francisco Public Utility Commission (SFPUC). The support cost will be shared between SFMTA and SFPUC per the Memorandum Of Understanding (MOU).

The Project is being constructed through the use of the Construction Manager/General Contractor (CM/GC) project delivery method. The CM/CG for the Project is Walsh Construction. The current project schedule shows substantial completion in early spring of 2022 which is beyond the approved contract substantial completion date of July 21, 2020. Unforseen conditions in the field and some design changes to accommodate current design standards delayed the project completion. No major incidents have been reported during the construction.

On February 6, 2018, the SFMTA Board of Directors adopted Resolution No. 180206-021 authorizing the Director of Transportation to execute SFMTA Contract No. CS-174, Professional Project Management and Construction Management Support Services for Van Ness Corridor Transit Improvement Project, with HNTB Corporation, for a total amount not to exceed \$5,701,475, and a term not to exceed three years. The contract with HNTB will expire on February 28, 2021, and this contract extension will provide the key support personnel to continue to provide critical support to the Project through June 30, 2022.

The original scope of the services was:

Task 1 Maintain and Analyze Project Schedule

Provide Project schedule analysis for time extensions related to change orders and claims on as-needed basis. Address concerns raised by the Federal Transit Administration(FTA) Project Management Oversight Consultant (PMOC) on the current Project schedule.

PAGE 4.

Review monthly schedule update provided by the contractor.

Task 2 Risk Management

Provide support to the SFMTA during PMO and FTA reviews; prepare other presentations, as required

Task 3 Quality Assurance/Quality Control (QA/QC) Assistance for Offsite Fabricated Materials

Provide assistance to the SFMTA throughout the Project, as directed by the SFMTA. This may include coordination with the laboratory providing the testing services and coordination with Caltrans personnel

Task 4 Construction Management

Consultant shall provide one full-time employee collocated at the Project office to perform the following:

- 1. Supervise professional and technical engineering personnel, including Subconsultants, in the preparation of contract documents for a wide variety of work related to the Project's construction; ensure that the contract documents comply with federal, regional and local requirements.
- 2. Assist with development or updates to project Operations and Maintenance Plan, as requested
- 3. Support Testing and Start-Up Plan, as requested
- 4. Prepare safety and security checklists and procedures
- 5. Monitor Walsh's compliance with all contract provisions.
- 6. Assist SFMTA in negotiating and preparing contract modifications; help resolve any claims and disputes that may arise.
- 7. Assist the SFMTA with the supervision and monitoring of the inspection of a wide variety of construction-related issues.
- 8. Provide construction support to ensure compliance with engineering designs, drawings and specifications, and project objectives; prepare cost estimates of labor, equipment, and materials; perform engineering calculations.
- 9. Analyze and solve complex engineering and process-related problems, which may involve water/wastewater construction, traffic systems, and civil, chemical (environmental/sanitary), structural, electrical, and mechanical issues.
- 10. Write, review, and/or approve project correspondence, reports and other related documents, which will be kept and stored in the Project file.
- 11. Conduct meetings and make presentations to agency staff and the public.
- Task 5 Project Management Plan (PMP) and Construction Management Plan (CMP) Support Review the current PMP and CMP used by the SFMTA and assist with their ongoing evolution, management, and as-needed reporting/Project updates. Provide Project PMP and CMP additions, edits, and updates on an annual basis. Incorporate proposed responses to FTA comments on the PMP/CMP submittals or related queries.

PAGE 5.

Task 6 Technical Writing Support

Provide one full-time technical writer to assist the SFMTA with completion of various tasks including, but not limited to, the following:

- 1. Draft letters that involve technical scope
- 2. Prepare meeting minutes involving design issues
- 3. Prepare contract change documents, especially relating to technical scope, such as proposed change orders, and records of negotiations
- 4. Sort, log, and distribute incoming documents from Walsh for in-house review
- 5. Collect, consolidate, and edit the technical comments/responses to queries when requested
- 6. Coordinate project testing and training classes
- 7. Other construction office duties as assigned by the Construction Manager
- Task 7 Office Engineering Support

Provide one full-time Office Engineer to perform various duties, including assisting the SFMTA to:

- 1. Manage submission of samples, shop drawings, O&M manuals, and other submissions among construction contractors and design stakeholders.
- 2. Oversee the responses to requests for information. This includes maintaining a log of requests, preparing non-technical responses, and expediting technical responses from the appropriate parties.
- 3. Manage and monitor exception activities from submittals, test reports, inspection reports, non-compliance reports, and meetings.
- 4. Provide document control support:
 - i. maintain the Project files, including data, correspondence, reports, contracts, Project drawings, specifications, changes, photographs, and other records pertaining to the Project;
 - ii. compile closeout documents, including contract documents, test reports and testing and commissioning documentation, manuals and warranties.
- 5. Other construction office duties assigned by the Engineer.

Task 8 Construction Inspector Support

On an as-needed basis, provide Construction Inspector(s) to ensure compliance with contract plans, specifications, applicable codes, and safety regulations. Engineering construction inspection.

Task 9 Independent Cost Estimate

On an as-needed basis, provide independent cost estimates for contract change orders and claim settlements consistent with FTA guidelines.

Task 10 Contract Administration Support/Claims Engineer Services

On an as-needed basis, work with the Project team to prepare contract change orders, modifications, and/or claims packages that are consistent with FTA requirements.

PAGE 6.

The primary objective of this professional services contract is to obtain resources and expertise to supplement SFMTA staff in managing the CM/GC in delivering this major capital project. These services include providing daily project management support services to the SFMTA Project Manager, and construction management services, including claims engineering services.

This amendment is for three full time construction management staff and four part-time construction supporting staff.

Scope of Contract:

The scope of services provided under HNTB's contract included the following tasks:

1. Maintain and analyze Project schedule

Van Ness BRT is a major construction project and needs a dedicated project scheduler to review the monthly schedule and assist the construction management team with claims. This service is critical for analysing contractor project delay claims. The current scheduler with all the knowledge of the history of the contract issues will continue to provide the schedule services until Project completion.

- 2. <u>Provide risk analysis and management services</u> The SFMTA does not have a staff risk analyst on staff; therefore, the current consultant staff will continue to provide the necessary quarterly risk report to the construction management team and Federal Transit Administration (FTA).
- 3. <u>Provide quality assurance/quality control (QA/QC) assistance for offsite fabricated materials</u> The Consultant will continue to provide (QA/QC) services on an as-needed basis for the project.
- 4. <u>Provide construction management support services</u> This complex Project needs an experienced management team to coordinate with the contractor and all the stakeholders to deliver the Project. The Consultant is familiar with the history of the Project and the lesson learned over the years and will support the SFMTA management team to bring the Project to a successful conclusion.
- 5. <u>Maintain and update the Project Management Plan and the Construction Management Plan</u> Updaten the Project Management Report for the Federal Transit Agency, and the current consultant staff will continue to work on the final report. The SFMTA does not have additional staff to work on this report.
- 6. Provide technical writing support

The volume of correspondence and tracking/compiling the necessary documents for the claims needs additional help from the consultants. The contractor submitted eight claims so far and SFMTA settled four of the claims with the contractor. The Consultant staff currently working on this Project with SFMTA staff will continue to provide these services as needed.

PAGE 7.

7. Provide office engineering support

The volume of submittals and requests for information from the contractor needed an Office Engineer (OE) experienced in major projects. The SFMTA does not have an additional dedicated experienced OE for this Project, as most SFMTA OEs are assigned to other on-going projects. The current Consultant OE will continue to assist the construction management team until Project completion.

8. <u>Provide claims analysis and engineering services</u> This is a specialized claims service, and the SFMTA does not have a claim specialist on staff; therefore, the SFMTA will retain the claim specialist for as-needed support for this Project.

STAKEHOLDER ENGAGEMENT

For the Project, there are ongoing construction public outreach activities conducted for business communities, property owners, community centers, public officials, and the general public, as noted below:

- Weekly 14-day Construction Forecast (web, email, text message)
- Weekly "Weekend Release" press release
- 72-hour noticing for night work
- Monthly briefing to public officials
- Quarterly newsletters

These outreach activities will continue throughout the construction of the Project. No specific outreach was done for this amendment.

ALTERNATIVES CONSIDERED

None. This contract will be used when specialized expertise is not available in-house or when Project demand exceeds staff availability.

FUNDING IMPACT

This contract will be funded through the existing approved budget for the Project for an amount not to exceed \$7,380,000. The Project budget and financial plan is attached.

ENVIRONMENTAL REVIEW

On January 27, 2021, the SFMTA, under authority delegated by the Planning Department, determined that the Van Ness Project Management and Construction Support Services, Contract No. CS-174 - Extension is not a "project" under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b).

PAGE 8.

A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

On January 4, 2021, the Civil Service Commission approved the contract amendment under Personal Services Contract (PSC) request No. 40149-16/17.

The Contract Compliance Office has determined that HNTB is on pace to meet the 20% Small Business Enterprise and 8% Woman-owned Disadvantaged Business Enterprise participation goals established for this contract. The Contract Compliance Office also determined that HNTB is in compliance with the Non-discrimination Equal Employment requirements of the contract and with the City's Equal Benefits ordinance.

The City Attorney Office has reviewed this Calendar Item.

No other approvals are required to award this amendment.

RECOMMENDATION

Staff recommends that the SFMTA Board of Directors authorize the Director of Transportation to execute Amendment No. 1 to SFMTA Contract No. CS-174, Professional Project Management and Construction Management Support Services for Van Ness Corridor Transit Improvement Project, with HNTB Corporation, in the amount of \$1,678,925, for a total contract amount not to exceed \$7,380,000, and to extend the term of the contract by 16 months to June 30, 2022.

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY BOARD OF DIRECTORS

RESOLUTION No.

WHEREAS, The SFMTA Capital Programs & Construction Division requires technical and professional project management and construction management support services to supplement SFMTA staff to complete the Van Ness Corridor Transit Improvement Project; and,

WHEREAS, On February 6, 2018, the San Francisco Municipal Transportation Agency Board of Directors adopted Resolution No. 180206-021, authorizing the Director of Transportation to execute SFMTA Contract No. CS-174, Professional Project Management and Construction Management Support Services for Van Ness Corridor Transit Improvement Project (Project), with HNTB Corporation, for a total amount not to exceed \$5,701,475, and a term not to exceed three years; and,

WHEREAS, On January 4, 2021, the Civil Service Commission approved the amendment to the contract pursuant to Personal Services Contract (PSC) request No. 40149-16/17; and,

WHEREAS, The SFMTA Capital Programs & Construction Division requires technical and professional project management and construction management support services to supplement SFMTA staff to complete the Van Ness Corridor Transit Improvement Project; and

WHEREAS, The SFMTA continues to need additional consultant services to oversee the work, due to delays in completion of the construction of the Van Ness Corridor Transit Improvement Project; and,

WHEREAS, On January 27, 2021, the SFMTA, under authority delegated by the Planning Department, determined that the Van Ness Project Management and Construction Support Services, Contract No. CS-174 - Extension is not a "project" under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations Sections 15060(c) and 15378(b); and,

WHEREAS, A copy of the CEQA determination is on file with the Secretary to the SFMTA Board of Directors and is incorporated herein by reference; and,

WHEREAS, The SFMTA's Contract Compliance Office has determined that HNTB has committed to meeting the 20% Small Business Enterprise participation and 8% Woman-owned Disadvantaged Business Enterprise; now, therefore, be it

RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to execute Amendment No. 1 to SFMTA Contract No. CS-174, Professional Project Management and Construction Management Support Services for Van Ness Corridor Transit Improvement Project, with HNTB Corporation, in the amount of \$1,678,925, for a total contract amount not to exceed \$7,380,000, and to extend the term of the contract by 16 months to June 30, 2022.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of February 16, 2021.

Secretary to the Board of Directors San Francisco Municipal Transportation Agency

CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

Amendment No. 1 to

Agreement with HNTB Corporation for Professional Project Management And Construction Management Support Services for the Van Ness Corridor Transit Improvement Project

Contract No. CS-174 CCO No. 17-1436

This First Amendment to Agreement is made by and between HNTB Corporation (Consultant), and the City and County of San Francisco (City), acting by and through its Municipal Transportation Agency (SFMTA).

Recitals

- A. On February 6, 2018, the San Francisco Municipal Transportation Agency Board of Directors adopted Resolution No. 180206-021, authorizing the Director of Transportation to execute SFMTA Contract No. CS-174, Professional Project Management and Construction Management Support Services for Van Ness Corridor Transit Improvement Project, with HNTB Corporation, for a total amount not to exceed \$5,701,475, and a term not to exceed three years (the Agreement).
- B. Due to delays in completion of the construction of the project, the SFMTA continues to need additional consultant services to support the work.
- C. The SFMTA and HNTB have agreed to amend the Agreement to increase the contract amount by \$1,678,925, for a total amount not to exceed \$7,380,400, reallocate funding for task budgets, and extend the term of the contract by 16 months to June 30, 2022.
- D. On August 21, 2017, the Civil Service Commission approved the contract pursuant to Personal Services Contract (PSC) request No. 40149-16/17 in the amount of \$5,400,000.

On January 4, 2021, the Civil Service Commission approved modifications to the original contract increasing the amount to \$7,800,000 and extending the duration cumulatively five years from July 1, 2017 (PSC request No. 40149-16/17).

NOW, THEREFORE, It is mutually understood and agreed that the Agreement is amended as expressly set forth below, and that all the terms and conditions of the Agreement, as amended, shall remain in full force and effect:

1. Section 2.1 of Article 2 (Term of the Agreement) is amended to read as follows:

2.1 The term of this Agreement shall commence on the Effective Date, and expire on June 30, 2022, unless earlier terminated as otherwise provided herein.

2. Subsection (a) of Section 3.3.1 (Total Amount) is amended to increase the total amount of compensation, as follows:

(a) The total amount of compensation under this Agreement for all Services performed by Consultant, shall not exceed Seven Million, Three Hundred Eighty Thousand, Four Hundred Dollars (\$7,380,400), which includes lump sum payment items, and Cost-Plus-Fixed Fee payment items. The Cost-Plus-Fixed-Fee includes a total Fixed Fee of Three Hundred Seventy-One Thousand, Six Hundred Dollars (\$371,600). A summary of tasks and the costs attributed to each task, as well as a breakdown of the Fixed Fee for each task, is set forth in Appendix B (Calculation of Charges).

- **3.** Appendix A (Scope of Work) is replaced by a new Appendix A attached hereto.
- 4. Appendix B (Calculation of Charges) is replaced by new Appendix B attached hereto.
- 5. Appendix C (Direct Rates) is replaced by a new Appendix C attached hereto.

Except as expressly modified by this Amendment, all of the terms and conditions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties have executed this First Amendment to Agreement on the date first mentioned above.

CITY

CONSULTANT

MUNICIPAL TRANSPORTATION AGENCY

Jeffrey P. Tumlin Director of Transportation Darline Gu

Darlene K. Gee, P.E. Vice President HNTB Corporation

SFMTA Board of Directors

Resolution No.

Dated: _____

Attest:

Secretary, SFMTA Board

Approved as to Form Dennis J. Herrera, City Attorney

By:_____

Robin M. Reitzes Deputy City Attorney

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APPENDIX A Scope of Services

I. Description of Services

Task 1 Maintain and Analyze Project Schedule:

 Provide Project schedule analysis for time extensions related to change orders and claims on as-needed basis. Address concerns raised by the FTA Project Management Oversight Consultant (PMOC) on the current Project schedule.

Deliverables:

- 1. Time extension analysis resulting from Walsh's request for change orders and/or claims
- 2. Supporting documentation to address PMOC concerns and comments
- Review monthly schedule update provided by Walsh as described below.
 - 1. Review Project schedule and analyze schedule updates/changes
 - 2. Review construction scheduling submittals and identify any anomalies or manipulations
 - 3. Generate back-up to support schedule analyses/recommendations made
 - 4. Update the existing Project schedule by entering actual completion dates and showing schedule slip
 - 5. Attend monthly meetings with Walsh to resolve comments
 - 6. Document all findings in a schedule review and prepare for transmittal to Walsh for review and corrective action.
 - 7. Notify the SFMTA of any critical changes made by Walsh

Deliverables:

1. Provide comments to Walsh's monthly update.

Note:

1. After monthly meeting with Walsh, and if no further changes are needed to be made to the monthly schedule update comments, the Deliverable will be deemed accepted.

Duration: 52 months

Task 2 Risk Management:

A. Provide support to the SFMTA during PMO and FTA reviews; prepare other presentations, as required.

Deliverables:

- 1. Provide presentations/documentation as requested by the SFMTA
- B. Update Risk Management Report four times a year and address the concerns raised by the FTA PMOC on continued implementation of a Risk and Contingency Management Program that is consistent with FTA requirements for ongoing identification, assessment analysis, mitigation, monitoring and controlling of risks. This task includes, but is not limited to, the following activities/duties:
 - 1. Reconcile estimate, schedule, and risks consistent with FTA Risk Management Guidelines.
 - 2. Update the Risk and Contingency Management Program, with specific actions and owners of risks identified, including the identification of the five highest Project risks.
 - 3. Prepare contingency draw-down curve

Deliverables:

1. Four updated Risk Management Reports per year

Note:

1. Consultant shall provide a draft of the Deliverable. The SFMTA will provide comments within two weeks after delivery of the draft report. If the SFMTA has no comments to the draft, the Deliverable will be deemed accepted.

Duration: 52 months

Task 3 Quality Assurance/Quality Control (QA/QC) Assistance for Offsite Fabricated Materials:

- A. Provide assistance to the SFMTA throughout the Project, as directed by the SFMTA. This may include coordination with the laboratory providing the testing services and coordination with Caltrans personnel. It is currently anticipated that the following matters will need to be reviewed:
 - 1. Welding QC program
 - 2. Testing facility QC program
 - 3. Walsh's and fabricators' QC programs
 - a. Prior to material fabrication (e.g., poles, pole attachments, pole anchoring systems, traffic signal cabinets), Consultant shall provide the following services:

- i. Assist SFMTA with preparing for and performing prefabrication meetings, as needed, for each fabrication facility where offsite fabrication will be performed.
- ii. Discuss and coordinate with key stakeholders such as Caltrans, Walsh, and City representatives on testing protocol and the amount of non-destructive testing (NDT) that will be required.
- Develop process for resolution of questions (RFI or other process) to ensure compliance with Caltrans requirements, if such a process is not already in place.
- iv. Develop a submittals process (e.g., shop drawings, NDT reports, daily fabrication reports, welding reports) to ensure compliance with Caltrans requirements, if such a process is not already in place.
- b. During fabrication, Consultant shall visit the site, as needed, to perform QA for NDT and address quality issues that may arise. There will be up to 15 site visits to fabrication site(s) and 60 tests of either high-strength fasteners or anchor bolts . For NDT, Consultant shall anticipate that the following tasks may be required:
 - 1. Electroliers: welding NDT (e.g., visual testing (VT); paint (thickness and adhesions).
 - 2. Sign posts: welding NDT (e.g., magnetic particle testing (MT), VT, ultrasonic testing (UT)); paint (thickness and adhesions).
 - 3. Oversight review of Walsh's submittal of QC documents pertaining to offsite production at fabrication facilities.
 - 4. Assist SFMTA in resolution of fabrication issues.
 - 5. Sampling and testing of high-strength fasteners. Testing lab to be accredited by American Association of State Highway and Transportation Officials (AASHTO) for the testing performed.
 - 6. Sampling and testing of anchor bolts. Test lab to be AASHTOaccredited for the testing performed.
- c. After fabrication, Consultant shall assist the City with final review of submittals and questions/RFI's that are related to fabrication.

Deliverables:

- 1. Provide review comments for QC documentation reviewed
- 2. Process for resolution of questions (if required)
- 3. Submittals process (if required)
- 4. Each inspection and test performed under this task must be memorialized in a detailed report with supporting documentation (e.g., non-compliance reports or NCRs, inspection reports, test reports, submittal review comments). These

reports shall be submitted no later than five business days after each inspection/test.

Duration: 52 months

Task 4 Construction Management:

- A. Consultant shall provide two full-time employee collocated at the Project office to perform the following:
 - 12. Supervise professional and technical engineering personnel, including Subconsultants, in the preparation of contract documents for a wide variety of work related to the Project's construction; ensure that the contract documents comply with federal, regional and local requirements.
 - 13. Assist with development or updates to project Operations and Maintenance Plan, as requested
 - 14. Support Testing and Start-Up Plan, as requested
 - 15. Prepare safety and security checklists and procedures
 - 16. Monitor Walsh's compliance with all contract provisions.
 - 17. Assist SFMTA in negotiating and preparing contract modifications; help resolve any claims and disputes that may arise.
 - 18. Assist the SFMTA with the supervision and monitoring of the inspection of a wide variety of construction-related issues.
 - 19. Provide construction support to ensure compliance with engineering designs, drawings and specifications, and project objectives; prepare cost estimates of labor, equipment, and materials; perform engineering calculations.
 - 20. Analyze and solve complex engineering and process-related problems, which may involve water/wastewater construction, traffic systems, and civil, chemical (environmental/sanitary), structural, electrical, and mechanical issues.
 - 21. Write, review, and/or approve project correspondence, reports and other related documents, which will be kept and stored in the Project file.
 - 22. Conduct meetings and make presentations to agency staff and the public.

Deliverables:

- 1. Final Safety and Security Checklist and Procedures
- 2. Other relevant documentation prepared as described above
- B. On an as-needed basis, provide other construction management services, including, but not limited to, the following:
 - 1. Contract administration

- 2. SharePoint technical support
- 3. Safety Manual support
- 4. Other construction management-related services.

Duration: 52 months

Task 5 Project Management Plan (PMP) and Construction Management Plan (CMP) Support:

A. Review the current PMP and CMP used by the SFMTA and assist with their ongoing evolution, management, and as-needed reporting/Project updates. Provide Project PMP and CMP additions, edits, and updates on an annual basis. Incorporate proposed responses to FTA comments on the PMP/CMP submittals or related queries.

Deliverables:

- 1. One updated PMP per year for FTA (four in total)
- 2. One updated CMP per year for FTA (four in total)

Note:

1. The Consultant shall provide a draft of each Deliverable. The SFMTA will provide comments within two weeks after delivery of the draft report. If the SFMTA has no comments, the Consultant shall submit a final report and the Deliverable will be considered accepted.

Duration: 52 months

Task 6Technical Writing Support:

- B. Provide one full-time technical writer to assist the SFMTA with completion of various tasks including, but not limited to, the following:
 - 1. Draft letters that involve technical scope
 - 2. Prepare meeting minutes involving design issues
 - 3. Prepare contract change documents, especially relating to technical scope, such as proposed change orders, and records of negotiations
 - 4. Sort, log, and distribute incoming documents from Walsh for in-house review
 - 5. Collect, consolidate, and edit the technical comments/responses to queries when requested
 - 6. Coordinate project testing and training classes
 - 7. Other construction office duties as assigned by the Construction Manager

Duration: 52 months

Task 7Office Engineering Support:

- A. Provide one full-time Office Engineer to perform various duties, including assisting the SFMTA to:
 - 6. Manage submission of samples, shop drawings, O&M manuals, and other submissions among construction contractors and design stakeholders.
 - 7. Oversee the responses to requests for information. This includes maintaining a log of requests, preparing non-technical responses, and expediting technical responses from the appropriate parties.
 - 8. Manage and monitor exception activities from submittals, test reports, inspection reports, non-compliance reports, and meetings.
 - 9. Provide document control support:
 - maintain the Project files, including data, correspondence, reports, contracts, Project drawings, specifications, changes, photographs, and other records pertaining to the Project;
 - iv. compile closeout documents, including contract documents, test reports and testing and commissioning documentation, manuals and warranties.

10. Other construction office duties assigned by the Engineer.

Duration: 52 months

Task 8 Construction Inspector Support:

- A. On an as-needed basis, provide Construction Inspector(s) to ensure compliance with contract plans, specifications, applicable codes, and safety regulations.
 Engineering construction inspection includes, but is not limited to, the following activities/duties:
 - 1. Monitor and inspect the work of Walsh and its subcontractors for compliance with plans, specifications and schedules.
 - 2. Prepare and maintain Project documentation, including daily reports, force accounts, materials testing, and other construction records.
 - 3. Participate in and/or conduct planning, preconstruction, coordination, progress, scheduling and field staff meetings.
 - 4. Review plans, specifications, submittals, shop drawings, change orders, constructability reviews and contract closeout records.
 - 5. Assist in detecting and resolving disputes and/or problems
 - 6. Respond to complaints from the public.
 - 7. Ensure that all required tests, operations, measurements, and inspections are scheduled, ordered, satisfactorily completed, and documented for quality assurance/quality control
 - 8. Assist SFMTA staff working on progress payments by verifying and preparing quantity and progress estimates.
 - 9. Review change orders for implementation.

- 10. Make field measurements and maintain as-built drawing records.
- 11. Conduct and/or witness testing of contract material, equipment, and installations.
- 12. Report safety and traffic hazards, defective work and debris to the contractor for correction.

Deliverables:

- 1. Daily Inspection Reports
- 2. Daily/monthly quantity sheets

Duration: 52 months

Task 9 Independent Cost Estimate:

A. On an as-needed basis, provide independent cost estimates for contract change orders and claim settlements consistent with FTA guidelines (e.g., using standard cost categories),.

Deliverables:

- 1. Bottom-up estimate with labor, equipment, material, surcharges, and taxes.
- 2. Independent cost estimate consistent with FTA guidelines and project SCC codes.

Duration: 52 months

Task 10 Contract Administration Support/Claims Engineer Services:

- A. On an as-needed basis, work with the Project team to prepare contract change orders, modifications, and/or claims packages that are consistent with FTA requirements. The Claims Engineer and support staff will perform the following services:
 - 1. Evaluation of the merit of Walsh-requested change orders
 - 2. Prepare cost analysis (including analysis of proposed profit)
 - 3. Prepare schedule analysis
 - 4. Provide pre-negotiation strategy
 - 5. Negotiations, including preparing records of negotiations
 - 6. Assemble final change order/modification package
 - 7. Prepare position paper for claims
 - 8. Prepare defensive argument against claims and recommendation for settlement

Deliverables:

1. Independent cost estimates

- 2. Cost analysis (including analysis of proposed profit)
- 3. Schedule analysis
- 4. Records of negotiations
- 5. Evaluations of change order requests
- 6. Position paper for claims
- 7. Support documents for defensive argument against claims and recommendation for settlement

Duration: 52 months

II. **Services Provided by Attorneys.** Any services to be provided by a law firm or attorney must be reviewed and approved in writing in advance by the City Attorney. No invoices for services provided by law firms or attorneys, including, without limitation, as subcontractors of Contractor, will be paid unless the provider received advance written approval from the City Attorney.

III. Deliverables

Contractor shall submit written Deliverables as requested by the SFMTA. Format for the content of such Deliverables shall be determined by the SFMTA. The timely submission of all deliverables is a necessary and material term and condition of this Agreement. The Deliverables, including any copies, shall be submitted on recycled paper and printed on double-sided pages to the maximum extent possible.

IV. Department Liaison

In performing the Services provided for in this Agreement, Contractor's liaison with the SFMTA will be Peter Gabancho, P.E.

APPENDIX B

CALCULATION OF CHARGES

| Task | Sub- Task | Sub-Task Description | Method of Payment | To | tal Revised Cost |
|--|--------------|---|----------------------|----|------------------|
| Task 1 - Maintain and Analyze | 1A | As-Needed Specialized Schedule Services | Cost + Fixed Fee | \$ | 326,527.28 |
| Project Schedule | 1B | Monthly Schedule Services | Unit Price | \$ | 222,956.16 |
| | 2A | As-Needed FTA Presentation Services | Cost + Fixed Fee | \$ | 112,109.67 |
| Task 2 - Risk Management | 2B | Quarterly Risk Management Services | Unit Price | \$ | 154,766.70 |
| Task 3 - QA/QC for Offsite Fabricated Materials | 3A | As-Needed Offsite Materials Testing | Cost + Fixed Fee | \$ | 75,821.59 |
| Task 4 - Construction | 4A | Full-Time Construction Manager | Cost + Fixed Fee | \$ | 3,573,925.02 |
| Management | 4B | As-Needed Construction Management Support Services | Cost + Fixed Fee | \$ | 198,299.44 |
| Task 5 - PMP/CMP Support | 5A | Annual PMP/CMP Update | Unit Price | \$ | 184,889.99 |
| Task 6 - Technical Writing Support | 6A | Full-Time Technical Writer | Cost + Fixed Fee | \$ | 1,033,698.43 |
| Task 7 - Office Engineering Support | 7A | Full-Time Office Engineer | Cost + Fixed Fee | \$ | 708,489.57 |
| Task 8 - Construction Inspector Support | 8A | As-Needed Construction Inspection Support Services | Cost + Fixed Fee | \$ | 660,957.77 |
| Task 9 - Independent Cost Estimate | 9A | As-Needed Cost Estimating Services | Cost + Fixed Fee | \$ | - |
| Task 10 - Contract Administration Support/Claims Engineer Services | 10A | As-Needed Claims Engineering Services | Cost + Fixed Fee | \$ | 127,908.83 |
| | | | TOTAL AMOUNT | \$ | 7,380,350.45 |
| | | | Rounded to | \$ | 7,380,400.00 |

| DESCRIPTION OF COST ELEMENTS | | | | | | | | | |
|--|-----------------------------|--|-------------|---------|----|------------|--|--|--|
| Direct Labor (Specify) | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direct Hour | ly Rate | | Cost | | | |
| Sub-Task 1A: As-Needed Specialized Schedule Services | | - | L | | | | | | |
| PRIME: HNTB Corporation | | | | | | | | | |
| Alex Hein, Scheduler - Year 1 | 76.50 | | \$ | 54.16 | \$ | 4,143.24 | | | |
| Sean Luong - Year 2 | 129.00 | | \$ | 80.00 | \$ | 10,320.00 | | | |
| SUBCONSULTANT(S): Acumen Building Enterprise | | | | | | | | | |
| David Folkman-Moore, Scheduler - Year 1 | 387.75 | | \$ | 43.45 | \$ | 16,847.74 | | | |
| David Folkman-Moore, Scheduler - Year 2 | 284.00 | | \$ | 43.45 | \$ | 12,339.80 | | | |
| David Folkman-Moore, Scheduler - Year 2 | 540.00 | | \$ | 44.75 | \$ | 24,166.89 | | | |
| David Folkman-Moore, Scheduler - Year 3 | 500.00 | | \$ | 46.10 | \$ | 23,050.00 | | | |
| David Folkman-Moore, Scheduler - Year 4* | 480.00 | | \$ | 61.80 | \$ | 29,664.00 | | | |
| David Folkman-Moore, Scheduler - Year 5* | | 160.00 | \$ | 63.65 | \$ | 10,184.00 | | | |
| Total Direct Labor | 2191.75 | 160.00 | | | \$ | 130,715.67 | | | |
| Overhead for HNTB | 147.34% | | \$ 14, | 463.24 | \$ | 21,310.14 | | | |
| Overhead for Acumen | 131.27% | | \$ 116. | 252.43 | \$ | 152,604.56 | | | |
| Total Direct Labor and Overhead | | | | | \$ | 304,630.37 | | | |
| Other Direct Costs (ODC) - Year 1 | | | | | \$ | 116.58 | | | |
| Other Direct Costs (ODC) - Year 2 | | | | | \$ | 80.33 | | | |
| Other Direct Costs (ODC) - Year 3 | | | | | \$ | 200.00 | | | |
| Other Direct Costs (ODC) - Year 4 | | | | | \$ | 200.00 | | | |
| Fixed Fee/Profit | | | | | \$ | 21,300.00 | | | |
| Total Estimated Cost for Sub-Task 1A | | | | | \$ | 326,527.28 | | | |
| *Pending SFMTA approval of 3% rate escalation | | | | | | | | | |

Task 1 - Maintain and Analyze Project Schedule

| DESCRIPTION | NOF UNIT PRICE COST I | ELEMENTS | | |
|--|------------------------|-----------------------------------|----------|------------------|
| Subconsultant: Acumen Building Enterprise | | | | |
| | No. of Deliverables | Agreed Payment Per Deliverable | | Total |
| Schedule Reviews – 12 ea @ \$4,375.56 – Year 1 | 12.00 | \$ | 4,375.56 | \$ 52,506.72 |
| Schedule Reviews – 12 ea @ \$4,375.56 – Year 2 | 12.00 | \$ | 4,375.56 | \$ 52,506.72 |
| Schedule Reviews – 12 ea @ \$4,375.56 – Year 3 | 12.00 | \$ | 4,375.56 | \$ 52,506.72 |
| Schedule Reviews – 12 ea @ \$5,453.00 – Year 4 | 12.00 | \$ | 5,453.00 | \$ 65,436.00 |
| Total Estimated Cost for Sub-Task 1B | | | | \$ 222,956.16 |

| DESCRIPTION OF COST ELEMENTS | | | | | | | | | |
|---|-----------------------------|---|--------------------|----|------------|--|--|--|--|
| Name | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direct Hourly Rate | | Cost | | | | |
| Sub-Task 2A: As-Needed FTA Presentation Services | | | | | | | | | |
| PRIME: HNTB Corporation | | | | | | | | | |
| Chuck Morganson, Risk Manager - Year 2 | 3.00 | | \$ 115.92 | \$ | 347.76 | | | | |
| Chuck Morganson, Risk Manager - Year 2 | 12.00 | | \$ 119.40 | \$ | 1,432.80 | | | | |
| David Norfleet Risk Management Support - Year 1 | 8.25 | | \$ 91.76 | \$ | 757.02 | | | | |
| David Norfleet Risk Management Support - Year 2 | 25.75 | | \$ 91.76 | \$ | 2,362.82 | | | | |
| Kieran Kelly-Sneed Risk Management Support Year 1 | 11.50 | | \$ 63.12 | \$ | 725.88 | | | | |
| Kieran Kelly-Sneed Risk Management Support Year 2 | 3.75 | | \$ 63.12 | \$ | 236.70 | | | | |
| Kieran Kelly-Sneed Risk Management Support Year 2 | 80.00 | | \$ 65.01 | \$ | 5,200.80 | | | | |
| Kieran Kelly-Sneed Risk Management Support Year 3 | 100.00 | | \$ 66.96 | \$ | 6,696.00 | | | | |
| Kieran Kelly-Sneed Risk Management Support Year 4* | 240.00 | | \$ 68.31 | \$ | 16,394.40 | | | | |
| Kieran Kelly-Sneed Risk Management Support Year 5* | | 80.00 | \$ 70.36 | \$ | 5,628.80 | | | | |
| | | | | | | | | | |
| Total Direct Labor | 484.25 | 80.00 | | \$ | 39,782.98 | | | | |
| Overhead for HNTB | 147.34% | | \$ 39,782.98 | \$ | 58,616.24 | | | | |
| Total Direct Labor and Overhead | | | | \$ | 98,399.22 | | | | |
| Other Direct Costs (ODC) -Year 1 | | | | \$ | 2,458.82 | | | | |
| Other Direct Costs (ODC) -Year 2 | | | | \$ | 2,131.63 | | | | |
| Other Direct Costs (ODC) -Year 3 | | | | \$ | 2,020.00 | | | | |
| Other Direct Costs (ODC) -Year 4 | | | | \$ | 200.00 | | | | |
| Fixed Fee/Profit | | | | \$ | 6,900.00 | | | | |
| Total Estimate Cost for Sub-Task 2A | | | | \$ | 112,109.67 | | | | |

Task 2 - Risk Management

*Pending SFMTA approval of 3% rate escalation

| Sub-Task 2B: Quarterly Risk Management Services | | | | | | | | | |
|--|------------------------|-----------------------------------|---------------|--|--|--|--|--|--|
| DESCRIPTION OF UNIT PRICE COST ELEMENTS | | | | | | | | | |
| PRIME: HNTB Corporation | | | | | | | | | |
| | No. of Deliverables | Agreed Payment Per Deliverable | Total | | | | | | |
| Risk Management report - 2 ea @ \$10,866.67 - Year 1 | 2.00 | \$ 10,866.67 | \$ 21,733.34 | | | | | | |
| Risk Management report - 4 ea @ \$10,866.67 - Year 2 | 4.00 | \$ 10,866.67 | \$ 43,466.68 | | | | | | |
| Risk Management report - 4 ea @ \$10,866.67 - Year 3 | 4.00 | \$ 10,866.67 | \$ 43,466.68 | | | | | | |
| Risk Management report - 4 ea @ \$11,525.00 - Year 4 | 4.00 | \$ 11,525.00 | \$ 46,100.00 | | | | | | |
| Total Estimated Cost for Sub-Task 2B | | | \$ 154,766.70 | | | | | | |

| Total Estimated Cost for Task 2 | \$ 266,876.37 |
|---------------------------------|---------------|
|---------------------------------|---------------|

| DESCRIPTION OF COST ELEMENTS | | | | | | | | |
|---|-----------------------------|--|--------------------|----|-----------|--|--|--|
| Name | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direct Hourly Rate | | Cost | | | |
| Sub-Task 3A: As-Needed Offsite Materials Testin | g | | | | | | | |
| PRIME: HNTB Corporation | | | | | | | | |
| Cliff Owyoung, Quality Manager - Year 4* | 40.00 | | \$ 117.14 | \$ | 4,685.60 | | | |
| Chuck Morganson, QA Support - Year 4* | 40.00 | | \$ 126.67 | \$ | 5,066.80 | | | |
| Total Direct Labor | 80.00 | 0.00 | | \$ | 9,752.40 | | | |
| Overhead for HNTB | 147.34% | | \$ 9,752.40 | \$ | 14,369.19 | | | |
| Total Direct Labor and Overhead | | | | \$ | 24,121.59 | | | |
| Other Direct Costs (ODC) | | | | \$ | 50,000.00 | | | |
| Fixed Fee/Profit | | | | \$ | 1,700.00 | | | |
| Total Estimated Cost for Sub-Task 3A | | | | \$ | 75,821.59 | | | |
| *Pending SFMTA approval of 3% rate escalation | | | | | | | | |
| Total Estimated Cost for Task 3 | | | | \$ | 75,821.59 | | | |

Task 3 - Quality Assurance/Quality Control (QA/QC) Assistance for Offsite Fabricated Materials

| DESCRIPTION OF COST ELEMENTS | | | | | | | | |
|---|-----------------------------|---|-------|----------------|----|--------------|--|--|
| Name | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direc | ct Hourly Rate | | Cost | | |
| Sub-Task 4A: Full-Time Construction Manager | | | | | | | | |
| PRIME: HNTB Corporation | | | | | | | | |
| Devang Desai, Construction Management - Year 1 | 1534 | | \$ | 98.88 | \$ | 151,681.92 | | |
| Devang Desai, Construction Management - Year 2 | 771 | | \$ | 98.88 | \$ | 76,236.48 | | |
| Devang Desai, Construction Management - Year 2 | 1150 | | \$ | 101.85 | \$ | 117,127.50 | | |
| Devang Desai, Construction Management - Year 3 | 1760 | | \$ | 104.91 | \$ | 184,633.68 | | |
| Devang Desai, Construction Management - Year 4 | 1950 | | \$ | 109.44 | \$ | 213,408.00 | | |
| Devang Desai, Construction Management - Year 5* | | 650 | \$ | 112.72 | \$ | 73,268.00 | | |
| SUBCONSULTANT(S): Ghirardelli Associates | | | | | | | | |
| Lance Jackson, Construction Manager - Year 2 | 1250 | | \$ | 130.00 | \$ | 162,500.00 | | |
| Lance Jackson, Construction Manager - Year 3 | 1850 | | \$ | 133.90 | \$ | 247,715.00 | | |
| Lance Jackson, Construction Manager - Year 4* | 1950 | | \$ | 137.92 | \$ | 268,944.00 | | |
| Lance Jackson, Construction Manager - Year 5* | | 650 | \$ | 142.06 | \$ | 92,339.00 | | |
| Total Direct Labor | 12215.00 | 1300.00 | | | \$ | 1,587,853.58 | | |
| Overhead for HNTB (Field) | 97.22% | | \$ | 816,355.58 | \$ | 793,660.89 | | |
| Overhead for Ghirardelli | 130.41% | | \$ | 771,498.00 | \$ | 1,006,110.54 | | |
| Total Direct Labor and Overhead | | | | | \$ | 3,387,625.02 | | |
| Fixed Fee/Profit for 4A | | | | | \$ | 186,300.00 | | |
| Total Estimated Cost for Sub-Task 4A | | | | | \$ | 3,573,925.02 | | |

Task 4 - Construction Management Support Services

| Name | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direct | Hourly Rate | Cost |
|---|-----------------------------|---|--------|-------------|------------------|
| Kanishka Kohzad, Contract Administrator - Year 1 | 101.00 | | \$ | 32.24 | \$ 3,256.24 |
| Kanishka Kohzad, Contract Administrator - Year 2 | 116.25 | | \$ | 32.24 | \$ 3,747.90 |
| Josh Bains, Contract Administrator - Year 2 | 75.00 | | \$ | 27.92 | \$ 2,094.00 |
| Josh Bains, Contract Administrator - Year 3 | 120.00 | | \$ | 28.76 | \$ 3,451.20 |
| Grant Martinez Contract Administrator - Year 1 | 2.00 | | \$ | 40.00 | \$ 80.00 |
| Arif Naqvi Construction Support Year 1 | 80.00 | | \$ | 73.36 | \$ 5,868.80 |
| Waleed Patel Contract Administrator - Year 1 | 19.00 | | \$ | 29.36 | \$ 557.84 |
| Kim Franchi, PMP/CMP - Safety Manual Support - Year 1 | 25.75 | | \$ | 109.28 | \$ 2,813.90 |
| Kim Franchi, PMP/CMP - Safety Manual Support - Year 2 | 1.00 | | \$ | 109.28 | \$ 109.28 |
| Kieran Kelly-Sneed Construction Management Support - Year 1 | 61.00 | | \$ | 63.12 | \$ 3,850.32 |
| Kieran Kelly-Sneed Construction Management Support - Year 2 | 30.00 | | \$ | 63.12 | \$ 1,893.60 |
| Kathryn Magee, Project Engineer - Year 2 | 175.00 | | \$ | 78.00 | \$ 13,650.00 |
| Kathryn Magee, Project Engineer - Year 3 | 85.00 | | \$ | 80.34 | \$ 6,828.90 |
| Imani Carson, Engineer - Year 2 | 140.00 | | \$ | 46.08 | \$ 6,451.20 |
| Anderson Ren, Engineer - Year 2 | 120.00 | | \$ | 54.32 | \$ 6,518.40 |
| Anderson Ren, Engineer - Year 3 | 45.00 | | \$ | 55.95 | \$ 2,517.7 |
| Shannon Do, Engineer - Year 2 | 40.00 | | \$ | 34.32 | \$ 1,372.80 |
| Curtis Lau, Engineer - Year 2 | 40.00 | | \$ | 36.56 | \$ 1,462.40 |
| Johnny Chung, Contract Administrator - Year 4* | 210.00 | | \$ | 29.75 | \$ 6,247.50 |
| Johnny Chung, Contract Administrator - Year 5* | | 70.00 | \$ | 30.64 | \$ 2,144.80 |
| Total Direct Labor | 1486.00 | 70.00 | | | \$ 74,916.89 |
| Overhead for HNTB (Home) | 147.34% | | | \$74,916.89 | \$ 110,382.55 |
| Total Direct Labor and Overhead | | | | | \$ 185,299.44 |
| Fixed Fee/Profit for 4B | | | | | \$ 13,000.00 |

| Total Estimated Cost for Sub-Task 4B | | \$ | 198,299.44 |
|---|--|----|------------|
| *Pending SFMTA approval of 3% rate escalation | | | |
| | | | |

| DESCRIPT | ION OF UNIT PI | RICE | COST ELEMENTS | |
|--------------------------------------|------------------------|------|---------------|------------------|
| Sub-Task 5A: Annual PMP/CMP Up | date | | | |
| | No. of Deliverables | 8 | | Total |
| PRIME: HNTB Corporation | | | | |
| Update PMP/CMP Year 1, 2 & 3 | 3.00 | \$ | 45,533.33 | \$ 136,599.99 |
| Year 4 | 1.00 | \$ | 48,290.00 | \$ 48,290.00 |
| Total Estimated Cost for Sub-Task 54 | 4 | | | \$ 184,889.99 |
| | | | | |
| Total Estimated Cost for Task 5 | | | | \$ 184,889.99 |

Task 5 - PMP/CMP Support

| Task 6 - | Technical | Writing | Support |
|----------|-----------|---------|---------|
|----------|-----------|---------|---------|

| DESCRIPTION OF COST ELEMENTS | | | | | | | | |
|--|-----------------------------|---|--------------------|----|--------------|--|--|--|
| Name | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direct Hourly Rate | | Cost | | | |
| Sub-Task 6A: Full-Time Technical Writer | | I | 1 | _ | | | | |
| Prime: HNTB Corporation | | | | | | | | |
| Tim Bessette, Technical Writing Support - Year 1 | 1192.00 | | \$ 70.64 | \$ | 84,202.88 | | | |
| Arif Naqvi Technical Writer - Year 1 | 618.00 | | \$ 73.36 | \$ | 45,336.48 | | | |
| Arif Naqvi Technical Writer - Year 2 | 717.00 | | \$ 73.36 | \$ | 52,599.12 | | | |
| Arif Naqvi Technical Writer - Year 2 | 432.00 | | \$ 75.56 | \$ | 32,641.92 | | | |
| Shannon Do, Engineer - Year 3 | 1960.00 | | \$ 34.32 | \$ | 67,267.20 | | | |
| Curtis Lau, Engineer - Year 3 | 1960.00 | | \$ 36.56 | \$ | 71,657.60 | | | |
| Shannon Do, Engineer - Year 4* | 1960.00 | | \$ 35.35 | \$ | 69,286.00 | | | |
| Curtis Lau, Engineer - Year 4* | 1960.00 | | \$ 37.66 | \$ | 73,813.60 | | | |
| | 10700.00 | 0.00 | 1 | | 10 < 00 1 00 | | | |
| Total Direct Labor | 10799.00 | 0.00 | | \$ | , | | | |
| Overhead for HNTB (Field) | 97.22% | | \$ 496,804.80 | \$ | 482,993.63 | | | |
| Total Direct Labor and Overhead | | | | \$ | 979,798.43 | | | |
| Fixed Fee/Profit | | | | \$ | 53,900.00 | | | |
| Total Estimated Cost for Sub-Task 6A | | | | \$ | 1,033,698.43 | | | |
| *Pending SFMTA approval of 3% rate escalation | | | | | | | | |
| Total Estimated Cost for Task 6 | | | | \$ | 1,033,698.43 | | | |

Task 7 - Office Engineer Support

| DESCRIPT | DESCRIPTION OF COST ELEMENTS | | | | | | | | |
|--|------------------------------|---|-------|---------------|----|------------|--|--|--|
| Name | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direc | t Hourly Rate | | Cost | | | |
| Sub-Task 7A: Full-Time Office Engineer | | | | | | | | | |
| Prime: HNTB Corporation | | | | | | | | | |
| Lydia Boumann Office Engineer Support - Year 1 | 366.50 | | \$ | 35.36 | \$ | 12,959.44 | | | |
| Lydia Boumann Office Engineer Support - Year 1 | 287.00 | | \$ | 42.48 | \$ | 12,191.76 | | | |
| Lydia Boumann Office Engineer Support - Year 2 | 803.75 | | \$ | 42.48 | \$ | 34,143.30 | | | |
| Lydia Boumann Office Engineer Support - Year 2 | 1200.00 | | \$ | 44.24 | \$ | 53,088.00 | | | |
| Lydia Boumann Office Engineer Support - Year 3 | 2000.00 | | \$ | 44.24 | \$ | 88,480.00 | | | |
| Lydia Boumann Office Engineer Support - Year 4* | 1950.00 | | \$ | 45.57 | \$ | 88,861.50 | | | |
| Lydia Boumann Office Engineer Support - Year 5* | | 650.00 | \$ | 46.93 | \$ | 30,504.50 | | | |
| SUBCONSULTANT(S): Avila & Associates | | | | | | | | | |
| Kevin Cole, Office Engineer - Year 1 | 333.00 | | \$ | 52.50 | \$ | 17,482.50 | | | |
| Total Direct Labor | 6940.25 | 650.00 | | | \$ | 337,711.00 | | | |
| Overhead for Avila | 129.00% | | \$ | 17,482.50 | \$ | 22,552.43 | | | |
| Overhead for HNTB (Field) | 97.22% | | \$ | 320,228.50 | \$ | 311,326.15 | | | |
| Total Direct Labor and Overhead | | | | | \$ | 671,589.57 | | | |
| Fixed Fee/Profit | | | | | \$ | 36,900.00 | | | |

| Total Estimated Cost for Sub-Task 7A | | \$ 708,489.57 |
|---|--|---------------|
| | | |

*Pending SFMTA approval of 3% rate escalation

Total Estimated Cost for Task 7

\$ 708,489.57

Task 8 - Construction Inspector Support

| DESCRIPTION OF | COST ELE | MENTS | | | |
|---|-----------------------------|--|----------|------------|------------------|
| Name | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direct H | ourly Rate | Cost |
| Sub-Task 8A: As-Needed Construction Inspection Support Services | | | | | |
| SUBCONSULTANT(S): Avila and Associates | | | | | |
| Christian Velasquez, Construction Inspection Support - Year 1 | 1078.00 | | \$ | 65.87 | \$ 71,007.86 |
| Christian Velasquez, Construction Inspection Support (OT) - Year 1 | 3.00 | | \$ | 87.38 | \$ 262.14 |
| Christian Velasquez, Construction Inspection Support - Year 2 | 616.75 | | \$ | 65.87 | \$ 40,625.32 |
| Christian Velasquez, Construction Inspection Support - Year 2 | 1078.00 | | \$ | 67.85 | \$ 73,138.10 |
| Christian Velasquez, Construction Inspection Support (OT) - Year 2 | 10.00 | | \$ | 87.38 | \$ 873.80 |
| Christian Velasquez, Construction Inspection Support - Year 3 | 1200.00 | | \$ | 69.88 | \$ 83,856.00 |
| | | 1 | | | |
| Total Direct Labor | 3985.75 | 0.00 | | | 269,763.22 |
| Overhead for HNTB | 147.34% | | \$ | - | \$ - |
| Overhead for Avila | 129.00% | | \$ | 269,763.22 | \$ 347,994.55 |
| Overhead for Ghirardelli | 130.41% | | \$ | - | \$ - |
| Total Direct Labor and Overhead | | | | | \$ 617,757.77 |
| Fixed Fee/Profit | | | | | \$ 43,200.00 |

| Total Estimated Cost for Sub-Task 8A | | \$ 660,957.77 |
|--------------------------------------|--|---------------|
| | | |
| Total Estimated Cost for Task 8 | | \$ 660,957.77 |

Task 9 - Independent Cost Estimate

| DESCRIPTION OF COST ELEMENTS | | | | | | | | | |
|---|-----------------------------|---|--------------------|----|-----|--|--|--|--|
| Name | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direct Hourly Rate | С | ost | | | | |
| Sub-Task 9A: As-Needed Cost Estimating Services | | | | | | | | | |
| PRIME: HNTB CORPORATION | | | | | | | | | |
| Cost Estimator - Year 1 | 0.00 | | \$ 65.00 | \$ | - | | | | |
| Cost Estimator - Year 2 | 0.00 | | \$ 66.95 | \$ | - | | | | |
| Cost Estimator - Year 3 | 0.00 | | \$ 68.96 | \$ | - | | | | |
| Cost Estimator - Year 4 | 0.00 | | | \$ | - | | | | |
| | | | | | | | | | |
| Total Direct Labor | 0.00 | 0.00 | | \$ | - | | | | |
| Overhead for HNTB | 147.34% | | \$ - | \$ | - | | | | |
| Total Direct Labor and Overhead | | | | \$ | - | | | | |
| Fixed Fee/Profit | | | | \$ | - | | | | |
| Total Estimated Cost for Sub-Task 9A | | | | \$ | - | | | | |
| | 1 | 1 | 1 | • | | | | | |
| Total Estimated Cost for Task 9 | | | | \$ | - | | | | |

| DESCRIPTION OF COST ELEMENTS | | | | | | | | | |
|--|-----------------------------|---|--------------------|----|------------|--|--|--|--|
| Name | Hours through 2/26/22 | Hours for 2/27/22 through 6/30/22 | Direct Hourly Rate | | Cost | | | | |
| Sub-Task 10A: As-Needed Claims Engineering Services | | | | | | | | | |
| PRIME: HNTB Corporation | | | | | | | | | |
| Cynthia Rood, Claims Analyst - Year 1 | 246.00 | | \$ 56.64 | \$ | 13,933.44 | | | | |
| Cynthia Rood, Claims Analyst - Year 2 | 82.00 | | \$ 56.64 | \$ | 4,644.48 | | | | |
| Cynthia Rood, Claims Analyst - Year 2 | 15.00 | | \$ 58.34 | \$ | 875.10 | | | | |
| Cynthia Rood, Claims Analyst - Year 3 | 60.00 | | \$ 60.09 | \$ | 3,605.40 | | | | |
| Cynthia Rood, Claims Analyst - Year 4* | 75.00 | | \$ 61.89 | \$ | 4,641.75 | | | | |
| Cynthia Rood, Claims Analyst - Year 5* | | 25.00 | \$ 63.75 | \$ | 1,593.75 | | | | |
| Wenlong Wang, Engineer, Year 2 | 27.00 | | \$ 40.24 | \$ | 1,086.48 | | | | |
| Brandon Wong, Engineer, Year 2 | 38.50 | | \$ 46.64 | \$ | 1,795.64 | | | | |
| Kieran Kelly-Sneed Construction Management Support - Year 1 | 8.75 | | \$ 63.12 | \$ | 552.30 | | | | |
| Kieran Kelly-Sneed Construction Management Support - Year 2 | 33.00 | | \$ 63.12 | \$ | 2,082.96 | | | | |
| SUBCONSULTANT(S): Cooper Pugeda Management | | | | | | | | | |
| Stephen O'Neill, Claims Analyst, CPM - Year 1 | 176.00 | | \$ 90.00 | \$ | 15,840.00 | | | | |
| Total Direct Labor | 761.25 | 25.00 | | \$ | 50,651.30 | | | | |
| Overhead for HNTB | 147.34% | | \$ 34,811.30 | \$ | 51,290.97 | | | | |
| Overhead for Cooper Pugeda Management | 110.90% | | \$ 15,840.00 | \$ | 17,566.56 | | | | |
| Total Direct Labor and Overhead | | | | \$ | 119,508.83 | | | | |
| Fixed Fee/Profit | | | | \$ | 8,400.00 | | | | |
| Total Estimated Cost for Sub-Task 10A | | | | \$ | 127,908.83 | | | | |

Task 10 - Contract Administration Support/Claims Engineer Services

| *Pending SFMTA approval of 3% rate escalation | |
|---|------------------|
| Total Estimated Cost for Task 10 | \$ 127,908.83 |

Appendix C

| | Direct Hourly Rates | | | | | | | | | |
|---------------------|---------------------|--|----------|----------|----------|----------|----------|--|--|--|
| Company | Employee Name | Position Title/Class Description | FY2017 | FY2018 | FY2019 | FY2020 | FY2021 | | | |
| | | | | | | | | | | |
| HNTB Corporation | Asitha Seneviratne | Scheduler | \$64.00 | \$65.92 | \$67.90 | \$69.94 | \$72.04 | | | |
| HNTB Corporation | Alex Hein | Scheduler III | \$54.16 | N/A | N/A | N/A | N/A | | | |
| HNTB Corporation | Chuck Morganson | Risk Manager | \$115.92 | \$119.40 | \$122.98 | \$126.67 | \$130.47 | | | |
| HNTB Corporation | Cliff Owyoung | Quality Manager | \$107.20 | \$110.42 | \$113.73 | \$117.14 | \$120.66 | | | |
| HNTB Corporation | Cynthia Rood | Claims Analyst | \$56.64 | \$58.34 | \$60.09 | \$61.89 | \$63.75 | | | |
| HNTB Corporation | David Norfleet | Risk Management Support | \$91.76 | \$94.51 | \$97.35 | \$100.27 | \$103.28 | | | |
| HNTB Corporation | Devang Desai | Construction Manager | \$98.88 | \$101.85 | \$104.90 | \$109.44 | \$112.72 | | | |
| HNTB Corporation | Kim Franchi | PMP/CMP | \$109.28 | \$112.56 | \$115.94 | \$119.42 | \$123.00 | | | |
| HNTB Corporation | Grant Martinez | Contract Administrator | \$40.00 | N/A | N/A | N/A | N/A | | | |
| HNTB Corporation | Tim Bessette | Construction Inspection Support | \$70.64 | N/A | N/A | N/A | N/A | | | |
| HNTB Corporation | Todd Hoekstra | Offsite QA Materials | \$98.00 | \$100.94 | \$103.97 | \$107.09 | \$110.30 | | | |
| HNTB Corporation | TBD | Cost Estimator | \$65.00 | N/A | N/A | N/A | N/A | | | |
| HNTB Corporation | TBD | Systems Safety/Operations | \$100.00 | N/A | N/A | N/A | N/A | | | |
| HNTB Corporation | Ria Doshi | Sharepoint Technical Support | \$44.80 | N/A | N/A | N/A | N/A | | | |
| HNTB Corporation | Linda Rolfes | Sharepoint Technical Support | \$86.88 | N/A | N/A | N/A | N/A | | | |
| HNTB Corporation | Aaron Ford | Sharepoint Technical Support | \$72.72 | N/A | N/A | N/A | N/A | | | |
| HNTB | Kanishka Kohzad | Contract | \$32.24 | N/A | N/A | N/A | N/A | | | |

Direct Salary Rates by Position or Class for Consultant and all Subconsultants

| Corporation | | Administrator | | | | | |
|----------------------------------|-------------------------|---|---------|---------|---------|---------|---------|
| HNTB Corporation | Waleed Patel | Project Analyst I | \$29.36 | N/A | N/A | N/A | N/A |
| HNTB Corporation | Lydia Boumann | Document Controls Specialist II | \$42.48 | \$44.24 | \$44.24 | \$45.57 | \$46.93 |
| HNTB Corporation | Arif (Haider) Naqvi | Assistant Resident Technical Spec | \$73.36 | \$75.56 | N/A | N/A | N/A |
| HNTB Corporation | Kieran Kelly Sneed | Project Manager I | \$63.12 | \$65.01 | \$66.32 | \$68.31 | \$70.36 |
| HNTB Corporation | Josh Bain | Contract Administrator | \$27.92 | N/A | \$27.92 | \$28.76 | \$29.62 |
| HNTB Corporation | Sean Luong | Scheduler | N/A | \$80.00 | \$80.00 | \$82.40 | \$84.87 |
| HNTB Corporation | Wenlong Wang | Civil Engineer II | N/A | \$40.24 | N/A | N/A | N/A |
| HNTB Corporation | Brandon Wong | Civil Engineer | N/A | \$46.64 | N/A | N/A | N/A |
| HNTB Corporation | Kathryn Magee | Project Engineer | N/A | \$78.00 | \$78.00 | \$80.34 | \$82.75 |
| HNTB Corporation | Imani Carson | Engineer II | N/A | \$46.08 | \$46.08 | \$47.46 | \$48.89 |
| HNTB Corporation | Anderson Ren | Engineer II | N/A | \$54.32 | \$54.32 | \$55.95 | \$57.63 |
| HNTB Corporation | Shannon Do | Engineer | N/A | \$34.32 | \$34.32 | \$35.35 | \$36.41 |
| HNTB Corporation | Curtis Lau | Engineer | N/A | \$36.56 | \$36.56 | \$37.66 | \$38.79 |
| HNTB Corporation | Johnny Chung | Contract Administrator | N/A | N/A | \$28.88 | \$29.75 | \$30.64 |
| Acumen Building Enterprise | David Folkman- Moore | Scheduler | \$43.45 | \$44.75 | \$60.00 | \$61.80 | \$63.65 |
| Acumen Building Enterprise | Te-Chuan Chang | Scheduler | \$81.64 | N/A | N/A | N/A | N/A |
| Avila and Associates | David Bodganoff | Inspector | \$73.54 | \$75.75 | \$78.02 | N/A | N/A |
| Avila and Associates | Kevin Cole | Office Engineer | \$52.50 | N/A | N/A | N/A | N/A |
| Avila and Associates | Christian Velasquez | Inspector | \$65.87 | \$67.85 | \$69.89 | N/A | N/A |
| Chaves & Associates | Linda Royce | Claims Support | \$46.80 | N/A | N/A | N/A | N/A |
| Cooper Pugeda Management, | Bernard Layco | Independent Cost Estimate | \$63.41 | \$65.31 | \$67.27 | N/A | N/A |

| Inc. | | | | | | | |
|---|------------------|------------------------------|----------|----------|----------|----------|----------|
| Cooper Pugeda Management, Inc. | Stephen O' Neill | Claims Analyst | \$90.00 | \$92.70 | \$95.48 | N/A | N/A |
| Ghirardelli Associates, Inc. | Vanessa Garland | Technical Writing Support | \$57.00 | \$58.71 | \$60.47 | N/A | N/A |
| Ghirardelli Associates, Inc. | Sayna Durst | Office Engineer | \$47.61 | \$49.04 | \$50.51 | N/A | N/A |
| Ghirardelli Associates, Inc. | Teck Low | Inspector | \$62.10 | \$63.96 | \$65.88 | N/A | N/A |
| Ghirardelli Associates, Inc. | Lance Jackson | Construction Manager | \$130.00 | \$130.00 | \$133.90 | \$137.92 | \$142.06 |
| TBD Consultants | Sam Evison | Independent Cost Estimate | \$77.08 | N/A | N/A | N/A | N/A |

Enclosure 3 Van Ness Corridor Transit Improvement Project Contract No. 1289 Project Budget and Financial Plan

| Project Budget (by Type of Work) | Amount | |
|--|-----------|--|
| Core Bus Rapid Transit (BRT) | \$185.5 M | |
| Water Line Replacement | \$26.8 M | |
| Sewer Replacement | \$20.6 M | |
| SFGo Traffic Signals | \$24.6 M | |
| Muni Forward | \$4.3 M | |
| Emergency Firefighting System Replacement | \$6.2 M | |
| Bus Procurement | \$4.0 M | |
| Bus Power Overhead Contact System and Pole | | |
| Replacement | \$30.3 M | |
| Lighting Replacement | \$13.0 M | |
| Green Infrastructure | \$1.2 M | |
| Total | \$316.4 M | |

| Project Budget (by Phase) | Amount |
|---------------------------|-----------|
| Environmental | \$6.0 M |
| Conceptual Engineering | \$8.9 M |
| Detailed Design | \$15.9 M |
| Construction | \$281.7 M |
| Total | \$316.4 M |

| Funding Sources | Amount | | |
|--|---------------|--|--|
| FTA 5309 Small Starts | \$74,999,999 | | |
| Active Transportation Program | \$4,058,000 | | |
| California Pacific Medical Center Contribution | \$5,000,000 | | |
| Central Freeway Parcel Revenues | \$12,654,135 | | |
| FTA 5307 Formula Funds | \$3,980,000 | | |
| FTA 5309 State of Good Repair Funds | \$23,871,440 | | |
| FTA Congestion Mitigation and Air Quality | \$20,000,000 | | |
| PPM: Planning, Programming and Monitoring funds | \$197,907 | | |
| Prop B Population based General Fund Set Aside | \$8,134,232 | | |
| Prop K Sales Tax | \$44,898,444 | | |
| PUC Local Funds | \$61,543,618 | | |
| SFMTA Series 2013 Revenue Bonds | \$1,765,751 | | |
| SFMTA Series 2016 Revenue Bonds | \$48,000,000 | | |
| State Highway Operation and Protection Program (SHOPP) | \$7,304,868 | | |
| TOTAL | \$316,408,394 | | |