

SECTION 01 11 00

SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

- A. The work to be done under this contract is located on Mission Street from Geneva Avenue to Ney Street, Mission Street from Trumbull Street to Bosworth St, and Geneva Avenue from Mission St to Prague Street in San Francisco, California and consists of pavement renovation, curb ramp construction, pedestrian and transit bulb-outs construction, sewer replacement, settlement monitoring, structural work, traffic signal upgrade work, and traffic routing and striping, and all associated work, as shown on the drawings and as specified in these Specifications.

1.2 PROJECT DESCRIPTION

- A. Paving Work to be performed under this contract is located at the following locations:
1. Mission Street, from Geneva Avenue to Ney Street
 2. Mission Street, from Ney Street to Bosworth Street
 3. Geneva Avenue, from Mission St to Prague Street
- B. Paving Work includes, but is not limited to:
1. Mobilization and demobilization work;
 2. Traffic routing work;
 3. Excavating, removing and disposing of existing pavement, concrete base, parking strip, curb and sidewalk;
 4. Supporting and working around existing utilities;
 5. Handling all drainage or ground water;
 6. Removing surplus material;
 7. Cleaning project site;
 8. Furnishing and placing of backfill material;
 9. Constructing 2-inch thick asphalt concrete wearing surface over 10-inch thick concrete base, 3-½-inch thick concrete sidewalk, 4-inch, 6-inch or 8-inch wide concrete curb, 10-inch thick concrete parking strip or gutter, combined 6-inch wide concrete curb and 1 or 2-foot wide concrete gutter, concrete curb ramps with concrete detectable surface tiles, 10-inch thick concrete pavement for concrete streets and raised crosswalks, concrete detectable surface tiles, 10-inch thick concrete bus pad, class II aggregate base, metal handrails, and concrete stairs with rebars;
 10. Pruning of overgrown trees and/or bushes;
 11. Adjusting and/or installing pull boxes;
 12. Resetting existing granite curb;
 13. Adjusting and paving around brick cistern identification ring;
 14. Adjusting City-owned manhole frame and cover to grade;
 15. Adjusting City-owned catch basin frame and grating to grade;
 16. Adjusting City-owned castings to grade;
 17. Adjusting City-owned hydrant and water main valve box casting to grade;
 18. Reconstructing City-owned hydrant and water main valve box casting to grade;
 19. Performing all related and incidental work, all where and as shown on the Drawings and in accordance with the Project Manual.
- C. Sewer Work to be performed under this contract is located at the following locations:
1. Mission Street, from Geneva Avenue to Ney Street

2. Geneva Avenue, from Mission St to Moscow Street
- D. Sewer Work includes, but is not limited to the following:
1. Mobilization and demobilization work;
 2. Performing traffic routing and trench support work related to sewer and drainage work;
 3. Constructing 12-inch, 15-Inch and 18-inch, diameter bell and spigot type extra strength vitrified clay pipe (VCP) on crushed rock bedding wrapped in geotextile fabric;
 4. Clean and televise inspection of existing main sewers prior to lining with cured-in-place liner;
 5. Lining existing 18-inch inside diameter sewer pipe with cured-in-place liner;
 6. Mortaring reinforced 2'-6" x 3'-9" reinforced concrete sewer and 3' x 4'-6" reinforced concrete sewer.
 7. Cleaning and mortaring manholes;
 8. Constructing cast-in-place or precast concrete manholes and catch basins;
 9. Constructing 6-inch or 8-inch diameter side sewer connections to VCP and RCP sewers;
 10. Constructing side sewer vent and air trap assembly;
 11. Constructing 4-inch diameter CIP side sewer;
 12. Televising existing active side sewers and culverts;
 13. Repair, replacement or construction of 6-inch or 8-inch diameter side sewer and 10-Inch diameter VCP culverts;
 14. Plugging and filling existing sewer facilities with slurry grout as indicated on contract plans;
 15. Abandoning, removing, and disposing existing sewers and related structures, where indicated on contract plans;
 16. Post-construction TV inspection of newly lined or constructed main sewers, side sewers, and culverts;
 17. Furnishing and installing connections to and between sewers, structures, and culverts;
 18. Saw cutting, removing, and disposal of existing pavement;
 19. Excavation, backfilling and compaction of trench;
 20. Restoring concrete base inside and outside of sewer trench limit as necessary per San Francisco Street Excavation Regulations;
 21. Bypassing sewer flow from main sewers, side sewers, and culverts during construction;
 22. Furnishing and installing detection warning tape as detailed on SW-Drawing for trench restoration.
 23. Providing exploratory holes and potholes;
 24. Handling, transportation and disposal of hazardous excavated materials and contaminated soils, if encountered and if disposal is necessary;
 25. At conclusion of work, cleaning existing catch basins located within contract limits;
 26. Performing necessary work due to unforeseen conditions;
 27. Performing all related and Incidental Work;
 28. Supporting, working around and protecting certain San Francisco Water Department, Fire Department and other utility agency and company facilities in conjunction with the work under this contract; and all appurtenant work required in accordance with the Contract Documents and in accordance with San Francisco DPW Standard Specifications, dated November 2000.
- E. Structural Work to be performed under this contract is located at the following locations:
1. Mission Street, from Geneva Ave to Ney Street
 2. Mission Street, from Trumbull Street to Bosworth Street
 3. Geneva Avenue, and Mission Street

4. Geneva Avenue, and Moscow Street
- F. Structural Work includes, but is not limited to:
1. Construction of Cast-in-Drilled-Hole (CIDH) Concrete Pier for city standard street light poles and custom traffic signal mast arm poles outside of sub-sidewalk basements, bus shelter mat slab foundations, and special inspections and testing related to the foundations and the steel poles for the custom mast arm traffic signal poles;
 2. Fabrication of steel custom mast arm traffic signal poles;
 3. Bridge deck rehabilitation work, as indicated in the BR Plans, includes, but is not limited to, the following:
 - a) Verification of all controlling field dimensions before ordering or fabricating any material.
 - b) Removal of existing asphalt concrete overlay at Bridge No. 34-0012Y Mission Street over Alemany Boulevard.
 - c) Performing visual and chain dragging inspection of concrete bridge deck to identify deficiencies.
 - d) Removal of unsound concrete, including saw cutting and chipping, and patching with an approved repair mortar.
 - e) Cleaning and preparing concrete bridge deck and applying Methacrylate Resin.
 - f) Cleaning and sealing of bridge expansion joints.
- G. Traffic Signal Work to be performed under this contract is located at the following locations:
1. Mission Street, and Italy Avenue
 2. Mission Street, and France Avenue
 3. Mission Street, between Russia Avenue and Leo Street
 4. Mission Street, and Onondaga Avenue
 5. Mission Street, and Persia Avenue
 6. Mission Street, and Ocean Avenue
 7. Mission Street, and Norton Street/Brazil Avenue
 8. Mission Street, and Santa Rosa Avenue
 9. Mission Street, and Excelsior Street
 10. Mission Street, and Theresa Street/Avalon Avenue
 11. Mission Street, and Silver Avenue
 12. Mission Street, and Castle Manor Avenue/Maynard Street
 13. Mission Street, and Admiral Avenue/Ney Street
 14. Geneva Avenue, and Mission Street
 15. Geneva Avenue, and Moscow Street
 16. Geneva Avenue, and Prague Street
- H. Traffic Signal Work includes, but is not limited to:
1. Performing traffic routing work;
 2. Furnishing conduits and pull boxes;
 3. Doing all necessary or required miscellaneous electrical work and painting;
 4. Road work including constructing concrete curb ramps with concrete detectable surface tiles;
 5. Performing all related and incidental work, all where and as shown on the plans and in accordance with the specifications.
- I. The Work shall include providing all labor, tools, equipment, materials, transportation and services, and performing all operations necessary for and properly incidental to the construction and completion of the Work as indicated on the Contract Documents.
- J. The Drawings indicate the location, extent, design, and details of the Work required to be

performed. The Drawings are listed in the Index of Drawings. When reference is made to “plans” in the Contract Documents, it shall be understood that such reference refers to the Drawings.

1. The Drawings may refer to certain details of Work, which are shown on the Standard Plans of the City and County of San Francisco, Department of Public Works, Bureau of Engineering, dated April 2007. All such referenced details shall be incorporated into the Contract Documents by their reference.
2. Refer to Section 01 42 00 – References for availability of the DPW Standard Plans.

1.3 ENVIRONMENTAL, HAZARDOUS OR CONTAMINATED MATERIALS WORK

- A. The Contractor shall adhere to the following requirements as written in its specific section:
 1. Available Project Information - Section 00 31 00
 2. Minimum Environmental Procedures – Refer to Section 01 35 49
 3. Additional Environmental Procedures - Refer to Section 01 35 50.
 4. Regulatory Requirements - Refer to Section 01 41 00.
 5. Health & Safety Criteria - Refer to Section 01 35 45.
 6. For Storm water, and erosion and sediment controls requirements - Refer to Section 01 57 13.
 7. Excavation area limits (at any given time) that shall trigger additional requirements of the San Francisco Department of Public Health (SFDPH) Dust Control Ordinance - Article 22B, and the California Code of Regulations, Title 17, Section 93105 - Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations in areas of Serpentine containing Naturally Occurring Asbestos (NOA), and Cal/OSHA. Refer to Sections 01 35 49, 01 35 50, and 02 81 10.
 8. For soil profiling, environmental training, manifest requirements, stockpiling, re-use of excavated soils, import fill criteria handling, transportation and disposal of excavated materials and contaminated soils - Refer to Section 02 81 10.
 9. The Contractor is alerted that soils containing Serpentine (Naturally Occurring Asbestos) may be encountered at the site during the excavation phase of this Contract. Refer to Sections 01 35 49, 01 35 50, and 02 81 10.
 10. For dewatering requirements during construction - Refer to Section 31 23 19.
- B. The Contractor is strongly advised to familiarize itself as to the actual site conditions that may be encountered during construction by available, including, but not limited to, the use of USGS geologic maps.
- C. If the Contractor by its means and methods disturbs, grades or excavates more than one half acre surface area (21780 sq ft) at any given time, then the Contractor shall submit a Site-Specific Dust Control Plan (including Air Monitoring Protocols) for the review and approval from the City Representative and the San Francisco Department of Public Health, prior to start of construction. The Contractor at its own cost shall then furnish all labor, equipment, and means required to conduct the ambient and perimeter air monitoring as

required by the San Francisco Department of Public Health (SFPDH) Dust Control Ordinance - Article 22B, and the Air Quality Monitoring Guidelines for San Francisco Health Code (SFHC) Article 22B, Real Time Dust Monitoring and Reporting. Refer to Sections 01 35 49 and 01 35 50.

- D. If the Contractor by its means and methods disturbs, grades or excavates more than one acre (43560 sq ft) of the site at any given time in an area containing Serpentine/Naturally Occurring Asbestos (NOA), then the Contractor at its own cost shall then furnish all labor, equipment, and means to comply with the BAAQMD's requirements, terms of approval of the Asbestos Dust Mitigation Plan (ADMP) and California Code of Regulations, Title 17, Section 93105. Refer to Sections 01 35 49 and 01 35 50.
- E. Unforeseen hazardous/contaminated material work: In the event that unforeseen hazardous/contaminated material is discovered beyond the above referenced reports, the Contractor shall immediately notify the City Representative both verbally and in writing. In the event that unforeseen Hazardous material is discovered, all work in the affected area will stop pending further direction from the City Representative. Upon receipt of such notification, the City, at its sole option, may either
1. Stop all work in the affected area pending further direction from the City Representative
 2. The City Representative shall determine whether the remediation/abatement and hazard removal process requires suspension of all, none or any part of the work under this Contract.
 3. The City will perform the remediation/abatement work using its own forces or using an outside contractor specializing in remediation/abatement work or direct the Contractor to perform all or any part of the remediation/abatement and hazardous materials removal work.
 4. If the City Representative directs the Contractor to perform the unforeseen remediation/abatement and removal of the hazardous materials, the City Representative will do so by change order, and the Contractor must promptly provide a properly licensed and insured subcontractor (with CSLB hazardous substance removal certification and C-22 license pertinent to the task as per applicable law) to perform remediation/abatement work.
 5. Refer to Section 00 73 16 – Insurance Requirements for a description of the Contractor's required insurance.
- F. All work that affects intact paint with any level of lead will be performed by the Contractor or its sub-contractors under the Cal/OSHA Lead in Construction Standard 8 CCR 1532.1 as well as all Federal, State, and local regulations at no additional cost. If personal exposures to the workers exceed the 8-hr Permissible Exposure Level (PEL) of 50 micrograms/cubic meter, such worker(s) must have received training as a CDPH Certified Lead Worker (as per 17 CCR Division 1, Chapter 8).

1.3 COORDINATION WITH OTHER PROJECTS

- A. Contractor is hereby informed of the following projects that may be in conflict with this Contract. Contractor shall coordinate and schedule its Work with the other Contractors prior to construction work in accordance with Paragraph 5.02 - Coordination of the General Conditions.

Contract No.	Contract Name	Agency	Location	Type of Work	Proposed Construction Dates	Contact Person/ Email Address/ Phone Number
1000016818	PW Geneva Ave Traffic Signal Improvements	SFPW	Geneva Ave: London St to Athens St	Curb Ramps & Traffic Signal	January 2022 - October 2022	Amir Norouzi Amir.Norouzi@sfdpw.org (628) 271-2240
N/A	4840 Mission Street Development	Van Meter Williams Pollack Nibbi Brothers BRIDGE Housing	Mission St & France Ave	Building development, sidewalk improvement	June 2021 – July 2023	Ben Chuaqui (Architect) ben@vmp.com (415) 974-5352 x215 Nick Castillo (Contractor - Project Manager) NickC@nibbi.com (707) 975-5996 Kate Trayner (Project Manager) ktraynor@bridgehousing.com (415) 321-4062

1.4 COORDINATION WITH LOCAL RESIDENTS, AND BUSINESSES

- A. Contractor is required to coordinate construction efforts with neighborhood residents and businesses to minimize any construction impacts. This shall be incidental to the Work, except graffiti removal within an approved and secured storage area may be compensable under a bid allowance, if explicitly included as a bid item.
- No area within the public right of way (from property line to property line and including but not limited to streets, parking strips, bicycle lanes, gutters, curbs, paths and sidewalks) shall have restricted public access for more than five (5) calendar days, with the exceptions of areas of new curb ramp and bus pad construction if specified in Section 01 55 26. Contractor shall restore and reopen to the public any and all areas of the public right of way within these specified time limits.
 - Work shall not prevent pedestrians from entering operating businesses or residences.
 - At any time that the Contractor occupies the sidewalk along any block, the Contractor shall coordinate with the businesses that are located on or require access through occupied area to maintain daily delivery access and access to garbage/recycling removal services. If the Contractor's activities prevent a business from placing its garbage or recycling on the curb for pickup, Contractor shall at its expense assist the business with handling and transport of garbage and recycling refuse to nearby designated garbage/recycling collection locations. The Contractor's attention is directed to the existing garbage/recycling collection times, which are typically at night or early morning.
 - Contractor shall coordinate with and assist businesses that receive deliveries at night or early morning to ensure that delivery areas, including sub-sidewalk access doors, are accessible.
 - Contractor shall daily remove all graffiti on all barricades, equipment, buildings and pavement in the Work area. Contractor shall no less than daily and as often as may be required by the Engineer to remove trash, litter, and debris from businesses along the alignment when Contractor is performing Work in front of or

immediately adjacent to said businesses. Contractor is not expected to provide litter and trash removal services to the businesses not directly impacted by Contractor's immediate Work. However, Contractor shall take all reasonable measures to ensure that the business entrances and public areas immediately adjacent to where it is performing Work are to be kept, clean, orderly, and accessible to the public.

6. Contractor shall coordinate and provide access to businesses for window cleaning and if safe access is not available, the Contractor shall make safe access within 24 hours of request, which shall be incidental to the Work.

1.5 SUBMITTALS, PUBLIC NOTIFICATION, AND MEETINGS BEFORE NOTICE TO PROCEED (NTP)

- A. Contractor shall submit the required Traffic Control Plans, HASP, and Schedule as soon as possible after NTP in order to ensure said submittals are reviewed and approved by the City prior to start of field work. Contractor may request to submit after date of Award.
- B. Contractor shall submit to the City for review and approval all 30-Day and 10-Day Public Notices as soon as possible after NTP, and providing 21 calendar days for City review. Refer to DPW Order No. 187,005, Regulations for Excavating and Restoring Streets in San Francisco, and Section 00 73 27 – Specific Project Requirements for more details on issuing Notices prior to the start of field work.
- C. The City Representative will schedule a Pre-Construction meeting as soon as possible after NTP in order to discuss schedules and sequence of operations with the Contractor.

1.6 SEQUENCING OF CONSTRUCTION

- A. After award and certification of the contract, a pre-construction meeting will be scheduled with the Contractor to determine the official date for commencement of the work. No fieldwork can begin prior to the Contractor's receipt of written permission from the City Representative. The City shall have full jurisdiction and responsibility of the property until the commencement date for fieldwork.
- B. Maximum durations within which to complete units of work in the field are identified below.
 1. Curb Ramp: Each curb ramp is one unit. Four (4) calendar days per unit.
 2. Bus Pad: Each bus pad is one unit. Eleven (11) calendar days per unit.
 3. Bulb Out: Each bulb out is one unit. Four (4) calendar days per unit.
 4. Concrete Sidewalk: Each flag is one unit. Seven (7) calendar days per unit.
 5. Manhole or Other Structure: Each manhole or structure is one unit.
 - a. Excavation, installation and/or repair complete within fourteen (14) calendar days per unit.
 - b. Full restoration, including but not limited to backfill, compaction, base and repaving complete within one hundred twenty (120) hours after installation or repair of manhole or structure.
 6. Buried utilities (e.g. sewer, water, electrical, etc.): Six hundred (600) lineal feet (inclusive of work through intersections, side sewers, services, etc.) is one unit.

- a. Excavation, installation and/or repair complete within forty (40) calendar days per unit.
 - b. Full restoration, including but not limited to backfill, compaction, base and repaving within one hundred twenty (120) hours after installation or repair of facilities.
- 7. All other units of work: Five (5) calendar days per unit.
- C. Whenever completion is dependent on and delayed by work of others (e.g. SFWD connection, testing, etc.), additional time for completion will be allowed for this delay, provided the contractor complies with its requirements including but not limited to have work area ready and available, providing required notification and coordinating with all other parties. Should said work by others result in a critical path delay, any contract duration time extension would be non-compensable.
- D. Failure to comply with maximum construction durations will result in liquidated damages per calendar day as shown in Specification Section 00 73 03 – Additional Liquidated Damages.
- E. Order of Work: Work shall be completed for the following locations within the construction time limits and the start dates specified below. Contractor shall complete all work at each location continuously from start to final paving, including pole foundations and conduit installation (excluding erecting poles and subsequent above ground work). The duration shall include completion of Final Paving and completion of punch list for all work at the location. Maximum duration includes two weeks of time for the City to process, review and approve post construction videos. Failure to complete all construction at each location within the allotted time will result in liquidated damages. Refer to 00 73 02 – Contract Time and Liquidated Damages.

Phasing/Location Start and End Limits	Maximum Continuous Construction Duration Calendar Day (CD)	Start Date
<u>Segment 1:</u> Geneva Avenue from Prague Street to Mission Street*	339	
<u>Segment 2:</u> Mission Street from Geneva Avenue to Russia Avenue**	295	304 days after start of Segment 1 OR After Geneva Ave, Prague Street to London Street is complete (<i>whichever comes first</i>)
<u>Segment 3:</u> Mission Street from Russia Avenue to Theresa Street**	331	261 days after start of Segment 2 OR after Mission Street, Geneva Avenue to Onondaga Avenue is complete (<i>whichever comes first</i>)
<u>Segment 4:</u> Mission Street from Avalon St to Admiral Avenue/Ney Street, and Mission St from Trumbull Street to I-280 Bridge**	278	319 days after start of Segment 3 OR After Mission Street, Russia Avenue to Cotter Street is complete (<i>whichever comes first</i>)

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Note: NTP means Notice to Proceed for the project as described in Section 00 73 02.

*Location listed above requires construction be phased at the intersection of Geneva Avenue & Moscow Avenue, and Geneva Avenue & Munich Street/South Hill Boulevard as such:

- (a) Area 1 – Triangular median island at Geneva Avenue & Munich Street
- (b) Area 2 – Concrete Curb and buspad at median transit island at Geneva Avenue & Munich Street
- (c) Area 3 – Median transit island at Geneva Avenue & Munich Street
- (d) Area 4 – Southern bulb-out/curb ramps at Geneva Avenue & Moscow Street
- (e) Area 5 – Northern curb ramps at Geneva Avenue & Moscow Street

**The Contractor must work with MUNI to ensure overhead pans and de-energization plans are finalized before commencing work that requires de-energization. See 01 55 26 – Traffic Control for more information.

- F. After notification of the commencement date, the Contractor shall be allowed ninety (90) calendar days for shop drawings submittal and approval, procurement and delivery of the custom fabricated site furnishings.
- G. Contractor shall be familiar with the terms, conditions, and payment schedule required by suppliers prior to submitting bid. Any delays to the custom fabricated item procurement schedule caused by incomplete or inaccurate shop drawing submittals and/or failure to comply with these terms, conditions and payment schedule required by the material suppliers, shall be the responsibility of the Contractor.

1.7 WORK SCHEDULING

- A. Refer to schedule, Temporary Street Closures, appended to this Section for traffic lane requirements that may affect the Contractor's schedule of operations.
- B. The Contractor shall coordinate its operations with the City and shall incorporate in its Progress Schedule activities for all special events that will require the Contractor to suspend its operations at the project site.
- C. The Contractor's working hours shall be as specified in Section 00 72 00 - General Conditions, subparagraph 1.01A.67, except as specified otherwise in these Specifications.
- D. The Contractor shall not commence site work prior to receiving the Engineer's approval of the Construction Schedule. No Work shall commence prior to the approval of applicable traffic control plans, storage and parking plans, and flagger resumes and certificates. The Contractor will be levied damages, as specified in Section 00 73 03 - Additional Liquidated Damages for delay of Work.
- E. The Contractor shall not commence any excavation in the public right-of-way without a valid excavation permit issued by the San Francisco Department of Public Works, Bureau of Street Use and Mapping. The Contractor shall submit a copy of the excavation permit.

1.8 CONTRACTOR USE OF SITE

- A. Use of Site: Limit use of the site for construction operations necessary to perform the Work indicated on the Drawings. Obtain prior written approval from the City for access to areas of the site occupied by the City. Protect and repair or restore to the existing condition surrounding areas damaged by the Contractor's operations.
- B. Contractor's Work Area: The Contractor's work area is limited to the areas included within the limits of work as shown on the Contract Drawings and as adjusted by the temporary construction fencing.
 - 1. Refer to Section 01 50 00 - Temporary Facilities and Controls for work area maintenance requirements.
- C. Parking and Storage Location Plan
 - 1. Only one storage location shall be used on the project at one time. If an additional parking and storage location is desired, Contractor must submit request for the additional location. The City may require the Contractor to cease or modify parking and storage plans, even if previously approved, and may rescind approval of all parking and storage areas. Refer to Section 01 55 26-1.4.C for additional requirements.
 - 2. Tow Away / No Parking (TANS) zones are allowed only in area of approved parking and storage plans and/or as indicated on the applicable traffic control plan and only while the applicable work is being performed. Prior approval in writing of each instance of posting and tow away activation must be obtained from the City Representative. If prior written approval is not obtained, the City may remove signage and/or may deactivate tow away authorization. Refer to Section 01 55 26-3.9 for additional requirements.
 - 3. Do not utilize City streets for additional staging and storage areas.
 - 4. Do not enter upon or use any property not under control of the City until a written temporary construction easement agreement has been executed by the Contractor and the property owner, and a copy of said agreement furnished to the City Representative prior to said use. Neither the City nor the City Representative shall be liable for any claims or damages resulting from the Contractor's unauthorized trespass or use of any such properties.
- D. Maintenance of Work Area: Maintain the work areas in a safe condition at all times. Remove all graffiti and accumulated rubbish and debris material deposited within the construction site at the end of each work day. The Contractor is responsible to maintain the project area for the entire duration of the Contract. Clean and restore the work site at completion of the work to the condition that existed prior to the start of work.
- E. Security Of Contractor's Work Areas: Security of the Contractor's work areas and its property, equipment, construction materials and all other items contained in the Contractor's staging areas or elsewhere on the construction site shall be the Contractor's sole responsibility at all times.

1.9 AS-NEEDED TRANSIT SUPPORT PROVIDED BY CONTRACTOR

- A. De-Pole / Re-Pole Operations is the work of retracting and reattaching the trolley pole (attached to the bus) from and to the Overhead Contact System (OCS).
- B. Contractor shall perform all De-Pole / Re-Pole Operations with its own forces, who shall be trained and certified to perform said Work, as provided below. All coordination work

with SFMTA staff for De-Pole / Re-Pole Operations shall be Incidental Work.

- C. Contractor shall provide appropriate labor force(s) as required by the SFMTA Transit Operations through the City Representative to supplement the City's transit and service support work related to De-Pole / Re-Pole Operations at specified locations within the project site limits.
- D. Contractor shall submit an initial list of personnel designated for the De-Pole / Re-Pole Operations to the City Representative for review and approval fifteen (15) days in advance of the work to be executed. Suggested personnel background and qualifications shall include flagger certification.
- E. Contractor personnel designated for said operations is intended solely for De-Pole / Re-Pole operations; NOT traffic controls for the project site.
- F. SFMTA shall provide basic training and certification to Contractor's labor forces to perform De-Pole / Re-Pole Operations. At the completion of the training, personnel shall receive proof of certification.
- G. Contractor shall sign SFMTA Safety Training Waiver for OCS DeEnergization with respect to the safety training (Refer to Appendix C to this Section 01 11 00)
- H. Only certified personnel may perform De-Pole / Re-Pole Operations. All such designated personnel must have valid certification in their possession at all times; and be able to provide proof of certification at the site when requested by SFMTA personnel. If non-certified personnel are performing such work, the SFMTA has the right to stop work.
- I. The SFMTA, at its sole discretion, may determine the level of support needed to safely and efficiently perform De-Pole / Re-Pole Operations based on the Contractor's submitted work plan. If the Contractor's work plan is modified, the SFMTA will reassess the level of support required to determine whether the level of support should change.
- J. The Contractor shall be paid for actual time spent by its workforce on De-Pole / Re-Pole Operations. Training shall be considered Incidental Work.
- K. Certification shall last for two years. The SFMTA may revoke certification at its discretion based on the performance of the Contractor's personnel.
- L. The Contractor or Sub-Contractor performing the work must be approved by the SFMTA Overhead Lines and Traction Power Group. Contact Chris Spain at (415) 554-9206 or Christopher.Spain@sfmta.com or the appropriate representative from that group with the qualification of said contractor or subcontractor for approval.

1.10 AS-NEEDED OVERHEAD CONTACT SYSTEM (OCS) ISOLATION SUPPORT PROVIDED BY CONTRACTOR

- A. In the event SFMTA cannot perform the work to locally de-energize OCS wires when the Contractor has scheduled the work, the Contractor shall provide as-needed Overhead Contact System (OCS) isolation support. The Contractor or Sub-Contractor performing the work must be approved by the SFMTA Overhead Lines and Traction Power Group. Contact Chris Spain at (415) 554-9206 or Christopher.Spain@sfmta.com or the appropriate representative from that group with the qualifications of said contractor or subcontractor for approval. The work may require the Contractor to perform, but not limited, to the following tasks:
 - 1. Traffic control work for de-energization and re-energization related to OCS isolation work;

2. Preparing Site Specific Work Plan (SSWP) per Section 01 71 43 – Site Specific Work Plan (SSWP);
3. Attend all necessary safety training and be certified by SFMTA as required before starting said work;
4. Contractor shall sign a SFMTA Safety Training Waiver for OCS DeEnergization with respect to the safety training (Refer to Appendix C to this Section 01 11 00);
5. Obtain approval of submittals and clearance permit from SFMTA Operations Control Center (OCC) before beginning said work. SFMTA OCC permit application procedure will be discussed as part of the SFMTA safety training;
6. Isolation: De-energization and re-energization of OCS including installation and removal of sectional insulators per Section 34 23 16.18 – Overhead Cable Isolation;
7. Perform all related and incidental work required for the isolation of wires in accordance with the Project Manual and GO 95 Cal-OSHA requirements.
8. Contractor or subcontractor performing OCS work throughout the duration of the project shall have demonstrated experience self-performing work on at least three (3) OCS projects with the last five (5) years for trolley vehicles with 600 volts DC or greater in a mixed used street ROW urban environment.

1.11 SPECIAL INSTRUCTIONS

- A. Refer to Section 01 55 26 - Traffic Control for other special instructions.
- B. The Contractor's attention is directed to Article 37 of General Order 95 of the Public Utilities Commission State of California. CAL OSHA regulations require that any equipment that moves vertically must maintain a 10 feet radial clearance, and any other equipment must maintain a 6 feet clearance from MUNI overhead electric wires. The Contractor shall observe these regulations during the entire duration of the construction work unless isolation/re-energizing is provided in Section 01 55 26 – Traffic Control. The Contractor shall choose the appropriate construction means and methods to meet all CAL-OSHA rules and regulations while accommodating MUNI's operational and facility's requirements.
- C. Unless provided in Section 01 55 26 – Traffic Control, relocating or isolating/re-energizing MUNI overhead wires will not be allowed for roadway related work, which includes, but is not limited to curb ramps, curbs, gutters, sidewalk, parking strips, paving, and adjustment of castings.
- D. Temporary Bus Platforms: The Contractor shall be responsible for the installation of temporary bus platforms during construction to ensure a safe path of travel for passengers using public transit between the sidewalks and bus platforms.
 1. Temporary raised bus platforms shall be:
 - (a) 40 feet long and 7.5 feet wide minimum with a height of 4 inches
 - (b) With non-skid surfaces that meet Americans with Disabilities Act (ADA) regulations with less than 0.5% slope
 - (c) Provide ADA accessibility from/to temporary raised bus platforms located at the end of blocks or mid-blocks
 - (d) Include appropriate means to allow for proper drainage
 - (e) 4" reflective yellow striping to be painted along all edges of platform

- except against traffic lane which will be 4" reflective red striping
- (f) Channelizers shall be placed at 1-foot from center to center at edge of the platforms (facing traffic) to signify start and end of platforms.
- 2. Contractor shall be responsible to provide minimum 5 calendar days of advanced notification to Traffic Engineer through City Representative to review the temporary bus platform prior to putting into use.
 - (a) Contractor shall be responsible for scheduling onsite reviews and obtaining written approval of each temporary bus platform from City Representative before putting the temporary bus stops into use.
 - (b) Written approval of temporary bus platforms will be required in addition to the approval of temporary bus stop relocation forms required in Section 01 55 26.
 - (c) Any delays to the project associated with lack of notification, untimely submittals or adjustments needed to approve temporary bus stops will be borne by the Contractor.
 - 3. Submittals
 - (a) Within 10 days of NTP, Contractor is to submit shop drawings showing materials, dimensions and layout of temporary raised bus platforms that meet contract requirements.
 - (b) All temporary raised bus platforms shall be shown on submitted traffic control plans for City review and approval.
 - (c) Contractor shall be required to incorporate temporary bus stop relocation installation and City review schedule into project baseline schedule.
 - 4. Contractor will be responsible for proper maintenance of temporary raised platforms, including daily graffiti abatement and daily trash abatement, as required.
- E. Initial Curb Ramps: The Contractor shall complete the construction of the initial curb ramps at two curb returns and have them inspected and approved by the City Representative prior to proceeding with construction of the other curb ramps. No additional curb ramps shall be constructed until the City Representative has approved the initial curb ramps. Inspection will include workmanship, color, finishes, and to verify that the curb ramps conform to the plans and specifications. The approved initial curb ramps shall be a standard of comparison for all curb ramps work.
 - F. The Contractor shall ensure that the existing fire hydrants on site are not removed or relocated prior to curb ramp layout. The existing fire hydrant and flange shall be removed prior to final curb ramp or concrete finishing.
 - G. The Contractor shall ensure there is proper coordination of new fire hydrant and water meter box locations with new curb ramp construction locations, so that new fire hydrants and water meter boxes do not negatively impact the curb ramp design requirements in accordance with SFDPW Standard Plans 102,854 thru 102,864.
 - H. The Contractor shall use proper equipment to prevent unnecessary damages to facilities at the project site such as no heavy equipment on the top of sidewalks.
 - I. The Contractor shall use temporary hot mix asphalt concrete to provide longitudinal and/or transverse transitions with a slope of 1:18 between the newly constructed

concrete base, manhole, etc. and existing pavement (whenever the difference in the grade of the pavement and the concrete base, manhole, etc. exceeds 3/4 inch) by the end of the work shift or before opening the lanes to traffic. Temporary hot mix asphalt paving shall conform to Section 211.01 of DPW Standard Specifications. Installing and removing temporary paving shall be considered incidental work.

- J. Prior to the start of construction, the Contractor shall provide the Engineer with sufficient spray paint, at no cost to the City and as Incidental Work, for markings necessary for the Contract.
- K. Five working (5) days prior to construction work, Contractor shall notify Mark Middleton of the San Francisco Public Utilities Commission at (415) 262-2144 or (415) 254-3538 to schedule removal of flow meters installed in sewer manholes, if encountered within the work scope.
 - 1. Three days (3) after completion of sewer work, Contractor shall contact Mark Middleton for PUC to reinstall flow meters at affected locations.
- L. Through the City Representative, the Contractor shall contact Nicholas Fagundes at (925) 518-7042 and Margeaux Casillas at (510) 446-7259 of Clear Channel and Gail Stein of SFMTA at 415-646-2308 for bus shelter work. Clear Channel will coordinate the removal of existing bus shelter with Contractor in order to minimize bus shelter down time. Contractor shall verify the new bus shelter locations with Clear Channel on site. After demolition and removal of the existing concrete pavement, Contractor shall allow a maximum of five (5) working days for Clear Channel to install the underground electrical conduits and pull boxes at each bus shelter location. Contractor is to contact Clear Channel through the City Representative for the new bus shelter installation after sidewalk construction has been completed.
- M. If completion of the Work will require temporary closure of the roadway. Such closure shall be coordinated so that neighbors are as minimally impacted as possible in multiple phases of construction.
- N. Contractor shall coordinate with Recology for neighborhood garbage collection. Through the City Representative, contact Tom Lavazolli, Operations Manager for Recology at (415) 330-1300.
- O. Contractor shall coordinate with neighbors to allow for ingress and egress to properties during construction.
- P. Contractor shall not have more than 0.5 acres open with active construction at any one time.
- Q. Contractor shall notify the MTA Meter Shop ten (10) business days prior to demolition work in areas with parking meters and once parking areas are reopened to the public. Refer to Specification Section 01 55 26 – Traffic Control for details.
- R. Contractor shall notify the MTA Meter Shop ten (10) business days in advance of new concrete sidewalk pours to coordinate the installation of parking meter sleeves in new concrete sidewalk areas. Refer to Specification Section 01 55 26 – Traffic Control for details.
- S. Tree trimming, replanting and removal shall be coordinated with BUF (Bureau of Urban Forestry). Provide ninety (90) calendar day notice. Tree trimming and tree removal shall be part of incidental cost. Tree removal or relocation shall require a permit application and fee to BUF. Refer to Section 01 55 26-3.11 for additional requirements.
- T. Contractor shall notify owners of sub-sidewalk basements in writing at least 30 days prior

to performing any work within sub-sidewalk basements to coordinate access to the basements.

- U. Contractor shall be solely and fully liable for any and all sanctions, fines, penalties, incidental and consequential damages arising out of Contractor's failure to comply with all applicable requirements referenced in this Section. Contractor shall be solely and fully liable regardless of whether the City Representative is or is not present on site at the time of such violation, and regardless of whether the City Representative has or has not identified, noticed, and/or alerted the Contractor of the violation.
- V. Supporting, working around and protecting of all utility facilities owned and operated by the City and County of San Francisco are considered as incidental work per provisions of the Contract Requirements Section 00 73 20 – Existing Utility Facilities and Section 00 73 21 – Utility Crossings Specifications.
- W. Surface-Accessible Sewer Assets
 - 1. Contractor shall inspect all catch basins, manholes and other surface-accessible sewer assets within the project limit before and after construction.
 - 2. Sediment Barriers shall be installed, monitored and maintained over all catch basins which might receive runoff from the construction area.
 - 3. Contractor shall remove all construction-related debris from surface-accessible sewer assets at the Contractor's expense.
- X. Only temporary overlay pavement markers shall be placed on top of the micro-surfacing finished work areas. Temporary tape traffic striping may be placed in areas after the permanent striping has been removed. Temporary tape traffic striping shall be removed before the area has micro-surfacing work performed.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION