

SECTION 01 11 00

SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY

- A. The work to be done under this contract consists of doing traffic routing, constructing curb ramps, pedestrian and transit bulb-outs, traffic signal work, sewer work, water work, and auxiliary water supply system work along 19th Avenue, from Holloway Avenue to Lincoln Way, San Francisco, California, all as shown on the drawings and as specified in these Specifications.

1.2 INVESTIGATION PRIOR TO BIDDING

- A. USGS geologic maps indicate that dune sand (Qd), slope debris and ravine fill (Qsr), sheared rocks, undifferentiated (Ks) is present within the project areas. The Contractor is strongly advised to familiarize him/herself as to the actual conditions that may be encountered by all means available to him/her including, but not limited to, the use of USGS geologic maps.
- B. The Contractor's attention is also directed to the information shown on the City map—1974 edition – prepared by the Department of Public Works entitled “Track Removal Program”, and identified as CDD–SFWD 12/1990, which is on file in the Engineering Office, City Distribution Division, 1990 Newcomb Avenue, San Francisco.
- C. The City assumes no responsibility for the soils investigations or reports, or for any interpretation, deduction or conclusion given therein, or any soil or rock profiles, estimated quantities of rock excavation, etc. which the City or its consultants may have made. Bidders must make their own deductions and conclusions as to the nature and difficulty of excavation of all natural materials.

1.3 PROJECT DESCRIPTION

- A. **Curb Ramp Work** includes, but not limited to:
1. Traffic routing work;
 2. Excavating, removing and disposing of existing pavement, concrete base, parking strip, curb and sidewalk, traffic islands;
 3. Supporting and working around existing utilities;
 4. Handling all drainage or ground water;
 5. Removing surplus material;
 6. Cleaning project site;
 7. Furnishing and placing of backfill material;
 8. Asphalt and base restoration; construction of parking strip, bus pad, curb, sidewalk, asphalt sidewalk, bus shelter foundations, curb ramps, concrete islands and special sidewalk at Irving St as shown in contract documents;
 9. Constructing transit bulb-outs and pedestrian bulb-outs;
 10. Adjusting City-owned manhole frame and cover to grade;
 11. Adjusting City-owned catch basin frame and grating to grade;
 12. Adjusting City-owned castings to grade;
 13. Coordinating adjustment of private-owned castings and manhole covers to grade;
 14. Coordinating with SFMUNI on relocating/isolating/re-energizing MUNI overhead wires and providing MUNI inspectors;
 15. Abandoning loop detector system in order to construct curb ramp related work;
 16. Coordinating with MTA and Clear Channel regarding new bus shelter

foundations, location, and conduit related work.

17. Performing all related and incidental work, all where and as shown on the Drawings and in accordance with the Project Manual.

B. **Traffic Signal Work** includes, not limited to:

1. The work includes, but is not limited to, performing traffic routing work; furnishing and installing poles, conduits, pull boxes, wiring, vehicle, and pedestrian signal faces, signal mounting assemblies, intersection controllers, street lights and interconnect cable 12/c or fiber; doing all necessary or required miscellaneous electrical work and painting; road work including constructing concrete curb ramps with detectable surface tiles; and doing all related and incidental work; all where and as shown on the plans and in accordance with the specifications.
2. Install City Furnished 2070 Intersection Controller "ITS" Cabinet.
3. Coordination with PG&E for service connection.
4. 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.
5. Work related to abandoning traffic loop detector system in place shall be considered incidental.

C. **Sewer Work** includes, but not limited to:

1. Mobilization and demobilization work;
2. Performing traffic routing work;
3. Trench and excavation support work;
4. Constructing cast-in-place or precast concrete manholes;
5. Clean and mortar existing manholes;
6. Bypassing sewer flows from main sewers, and diverting side sewers and culvert flows during construction;
7. Constructing 8-inch, 12-inch, 15-inch, 18-inch, 21-inch, 24-inch and 30-inch vitrified clay pipe (VCP) on crushed rock bedding; ;
8. Lining of 8-inch, 12-inch, 15-inch, 18-inch, 21-inch and 2' x 3' existing sewer pipe with cast in place liner (CIPL);
9. Lining of 6-inch and 8-inch existing side sewer with cast in place liner (CIPL);
10. Remove obstruction by internal reaming from existing sewer prior to lining work;
11. Constructing concrete catch basins with new frame and grating, including installation of inlet protection bar and curb inlet, as specified per Contract Drawings;
12. Replacing or constructing 6-inch or 8-inch diameter side sewer connections;
13. Constructing side sewer air vent and trap assembly and 4-inch diameter cast iron pipe (CIP);
14. Televising existing active side sewers and culverts;
15. Repair, replacement or construction of 6-inch or 8-inch diameter vitrified clay pipe (VCP) side sewers and 10-inch diameter vitrified clay pipe (VCP) and ductile iron pipe (DIP) culverts;
16. Furnishing and installing cast iron water traps for new catch basins including cleanout caps within the contract limits;
17. Post-construction TV inspection of newly constructed and rehabilitated main sewers, side sewers and culverts;
18. Connections to and between sewers, structures, and culverts;
19. Internally reinstating connections in lined main sewers;
20. Removing and disposing existing sewers and sewer structures;
21. Restoration of roadway within limits of the sewer T-trench as detailed in contract documents;
22. Conducting exploratory investigation potholes;
23. Saw cutting, removing and disposal of existing pavement;

24. Excavation, backfilling and compaction of trench;
25. Installing controlled density filled bedding material for water mains encountered within the sewer trench prior to backfill;
26. AWSS and Water Department facilities settlement reference and monitoring points, and structural support;
27. Handling, transportation and disposal of hazardous excavated materials and contaminated soils, if encountered and if disposal is necessary;
28. At conclusion of work, cleaning existing catch basins located within project limits;
29. Performing necessary work due to unforeseen conditions related to sewer work;
30. Performing all related and Incidental Work; and
31. 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 these Contract Documents and in accordance with Standard Specifications of Bureau of Engineering, Department of Public Works dated November 2000.

D. **Water Work**, but not limited to:

1. **The work to be performed under this contract includes furnishing and installing approximately 2,100 linear feet of 36-inch joint restraint push-on HDSS ductile iron pipe. (Addendum No. 1)**
2. **The work also includes installing approximately 3,700 linear feet of 8-inch Tyton joint ductile iron pipe and 1,800 linear feet of 16-inch Flex-Ring Joint ductile iron pipe. (Addendum No. 1)**
3. The work also includes excavation, shoring, backfill, water main installation and restoration work associated with relocation of existing water facilities in conflict with the Work at 19th Ave from Holloway to Lincoln Avenue and work with SFWD at various locations.
4. The Contractor shall, unless otherwise specified herein, furnish all labor, tools, equipment and materials and perform all the work necessary to deliver the work complete, in place and ready for service. The work shall include the traffic routing; the removal of pavement; support and work around utility facilities; the excavation of trenches and connection excavations; the loading and hauling of materials to the job site; the installation of the pipeline; the performing of the required hydrostatic tests; the furnishing and placing of backfill; the restoring of pavement; the milling and filling of asphalt; the installation of reinforced concrete bus pads; the cleaning up of the premises, and the performing of all other work as shown on the plans or as modified by orders of the City Representative and in accordance with the terms and conditions of the specifications.
5. The Contractor shall coordinate his/her work with measurement, connection and service renewal work completed by San Francisco Water Department (SFWD). (Refer to Specification Section 33 11 00 – Water Distribution Utility Piping)

E. **Auxiliary Water Supply System (AWSS) Settlement Monitoring and Support Work** shall include but not be limited to:

1. Install, maintain and remove Settlement Reference Points (SRP) and Settlement Monitoring Points (SMP), on the AWSS piping facilities, at the locations as shown on the drawings and as required per the specifications.
2. The work shall include taking initial and final surveys, and surveys at intervals during the construction as required in the specifications, of all points shown to be installed and/or required by the performance of excavation and adjacent work. Submit survey results to the SFWD at the initial, intermediate and final readings as required by the specifications. Repair and replace AWSS facilities where damaged by the contractor's works as stated in the specifications.
3. Support the existing AWSS piping facilities where as shown on the drawings and/or required per the specifications when conditions meet or exceed those as

- required per the specifications in performing excavation and adjacent work for other utilities.
4. The work shall be performed on 19th Avenue, between Ulloa and Irving Streets.
- F. 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.
- G. 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 if Caltrans 2018 Standards do not apply.
 2. Refer to Section 01 42 00 – References for availability of the DPW Standard Plans.

1.4 HAZARDOUS OR CONTAMINATED MATERIALS

- A. The Contractor is alerted to the possibility that hazardous waste and/or contaminated material may be discovered in the site during the demolition phase of this Contract. In the event that such hazardous/contaminated material is discovered, the Contractor shall immediately notify the City Representative both verbally and in writing. Upon receipt of such notification, the City, at its sole option, may either (a) perform the abatement work using its own forces or using an outside contractor specializing in abatement work or (b) direct the Contractor to perform all or any part of the abatement and hazardous materials removal work.
- B. If the City Representative directs the Contractor to perform the abatement and removal of the hazardous materials, the City Representative will do so by change order. The Contractor must promptly provide a properly licensed and insured subcontractor (with CSLB hazardous substance removal certification) to perform abatement work. Refer to Section 00 73 16 - Insurance Requirements for a description of the Contractor's required insurance.
- C. In the event that Hazardous/Contaminated material is discovered, then all work in the affected area will stop pending further direction from the City Representative. The City Representative shall determine whether the abatement and removal process requires suspension of all, none or any part of the work under this Contract.

1.5 HAZARDOUS OR CONTAMINATED SOILS, DUST CONTROLS, & EXCAVATION LIMITATIONS

- A. Work will involve working in contaminated soils and environments. The Contractor shall adhere to the following requirements as written in its specific section:
1. Health & Safety Criteria - Refer to Section 01 35 45.
 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. For stormwater, and erosion and sediment controls requirements - Refer to Section 01 57 13 – Stormwater Pollution Prevention Controls.

6. Excavation area limits (at any given time) that shall trigger additional requirements of the San Francisco Department of Public Health (SFPDH) 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) - Refer to Section 01 35 50 – Additional Environmental Procedures.
 7. Providing HAZWOPER trained workers - Refer to Section 02 81 10.
 8. For handling, transportation and disposal of excavated materials and contaminated soils - Refer to Section 02 81 10.
 9. For pre-excavation soil profiling, environmental training, manifest requirements, stockpiling, re-use of excavated soils, import fill criteria - Refer to Section 02 81 10.
 10. For dewatering requirements during construction - Refer to Section 31 23 30.
 11. The Contractor is alerted that hazardous and/or contaminated soil, and Serpentine (Naturally Occurring Asbestos) will be encountered at the site during the excavation phase of this Contract - Refer to Section 01 35 50 and 02 81 10.
 12. This project is located within 1,000 feet of a Sensitive Use, as set forth in Chapter 25 of the Environment Code and Section 6.25 of the Administrative Code. Therefore, Section 01 35 50 incorporates additional requirements of the San Francisco Clean Construction Ordinance ("Ordinance") for projects that meet the requirements of Environment Code Section 2504(a).
- B. USGS geologic maps indicate that Holocene dune and beach sand (QHS) is present within the project areas. The Contractor is strongly advised to familiarize itself as to the actual site conditions that may be encountered during construction by all means available including, but not limited to, the use of USGS geologic maps.
- C. The Contractor's attention is also directed to the information shown on the City map—1974 edition – prepared by the Department of Public Works entitled "Track Removal Program", and identified as CDD—SFWD 12/1990, which is on file in the Engineering Office, City Distribution Division, 1990 Newcomb Avenue, San Francisco.
- D. If the Contractor by its means and methods disturbs, grades or excavates more than one half acre surface area (21,780 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 Section 01 57 19.
- E. If the Contractor by its means and methods disturbs, grades or excavates more than one acre (43,560 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 Section 01 57 19.
- F. 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
 4. Direct the Contractor to perform all or any part of the remediation/abatement and hazardous materials removal work.
 5. 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.
 6. Refer to Section 00 73 16 – Insurance Requirements for a description of the Contractor's required insurance.
- G. 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.

1.6 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.
1. **PW Sunset and Parkside Streets Pavement Renovation:** [Ortega St between 20th and 19th Avenues, Ulloa St between 20th and 19th Avenues estimated completion March 2021] Ramon Kong, San Francisco Public Works, (415) 554-8280.
 2. **L-Taraval Improvement Project SF Zoo to Sunset Boulevard:** [SF Zoo to Sunset Boulevard estimated completion November, 2021] Amy Lam, SFMTA, (415) 646-2768
 3. **L-Taraval Improvement Project Sunset Boulevard to West Portal:** [Sunset Boulevard to West Portal estimated completion December, 2022] Amy Lam, SFMTA, (415) 646- 2768.
 4. **Caltrans US 101 Deck Replacement:** [US 101 at Alameny Boulevard estimated duration July 2020] Al B. Lee, Caltrans, (510) 286-7211.
 5. **Caltrans State Route 1 Resurfacing:** [SR 1 and Ruckman to SR 1 and Lincoln; and SR 1 and Holloway to SR 1 and the County Line] Moaid Laymoun, Caltrans, (510) 286-5110.
 6. **Wawona Area Stormwater Improvement and Vicente Street Main Replacement Project [Vicente Street from 15th Avenue to 34th Avenue,**

estimated commencement March 2021] Saed Toloui, San Francisco Public Utilities Commission, (415) 551-4586. (Addendum No. 1)

- 7. PW Various Locations No. 48 Infrastructure Improvements: [Noriega St between 18th Ave, estimated completion August 2021] Ramon Kong, San Francisco Public Works, (415) 554-8280. (Addendum No. 1)**

1.7 COORDINATION WITH LOCAL RESIDENTS, BUSINESSES, AND VISITORS

- A. Contractor is required to Coordinate Construction efforts and minimize impacts to the neighborhood residents, businesses, and visitors. 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.
1. 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.
 2. Work shall not prevent pedestrians from entering operating businesses.
 3. 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.
 4. 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.
 5. 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.

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

- A. Contractor shall submit the required Traffic Control Plans, EHASP, 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 prior to issuance as soon as possible after NTP, provided that said notices are sent out after NTP but no later than 60 calendar days before the start of Work. 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.
- 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.

1.9 SEQUENCING OF CONSTRUCTION

- A. The City will schedule a pre-construction meeting after award, certification and Notice to Proceed.
- B. 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.
- C. Maximum durations within which to complete units of work in the field are identified below. Multiple units of work in the field may occur concurrently and the durations below are not required to be consecutive unless so required elsewhere in these contract documents. Additionally, for work in the field not identified below, Contractor shall propose activity durations based on fully and continuously resourcing the activity such that work in the field is completed without delay or disruption. These activity durations shall be included in the Contract's schedule baseline and all updates and revisions. The City Representative will not unreasonably withhold acceptance of these activity durations.
 - 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. **Concrete Parking Strips: Each location is one unit. Eleven (11) calendar days per unit. (Addendum No. 1)**
 - 6. 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.
 - 7. **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. (Addendum No. 1)**
 - 8. All other units of work: Five (5) calendar days per unit.
- D. Whenever completion of a unit of work in the field is dependent on and delayed by work of others (e.g., SFWD connection, testing, etc.) outside of durations prescribed in the contract documents, additional time for completion of that unit of work in the field will be

allowed for this delay and other liquidated damages as shown in Specification 00 73 03 - Additional Damages will not be assessed, provided the contractor complies with contract 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 contract time extension in accordance with the contract documents, any contract duration time extension would be non-compensable.

- E. "Work in the field" does not include time to apply and obtain permits, exploratory potholing at the direction of the City Representative, approvals from issuing agencies, or Contractor notification of property owners and residents, as long as these are completed prior to start of all other work in the field for that unit of work. Failure to comply with maximum construction durations will result in liquidated damages per calendar day as shown in Specification 00 73 03 - Additional Liquidated Damages.
- F. Once construction begins at a location, all work must be completed. Contractor may have multiple headings at one time, but each location is given a construction duration for the Contractor to complete all work continuously from start to final paving.
- G. The maximum duration of construction work at each location shall not exceed the durations tabulated below. 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.
- H. **Interim Milestones and Locations:**

	Segment	Maximum Continuous Construction Duration Calendar Day (CD)
1	19 th Avenue from Lincoln Way to Noriega Street	381
2	19 th Avenue from Noriega Street to Taraval Street	289
3	19 th Avenue from Taraval Street to Eucalyptus Street	442
4	19 th Avenue from Eucalyptus Street to southern project limit	209

Failure to complete all construction at each location within the allotted time will result in liquidated damages. Refer to Section 00 73 02 – Contract Time and Liquidated Damages. (Addendum No. 1)

- I. 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.
- J. 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.
- K. All construction work within Stern Grove shall only be performed from January 1, 2021 to January 31, 2021 or January 1, 2022 to January 31, 2022. Construction work shall

include, not be limited to, mobilization and demobilization, installation of 54" X 36" Tee, 36" ductile iron pipe, 36" gate valve, 8" blow off assembly, 5' diameter manhole within the sidewalk area on Sloat Boulevard, repair and/or reconstruction work to restore sidewalk and roadway, as shown on the contract drawings.

1. Failure to complete all construction within Stern Grove as described above will result in liquidated damages. Refer to Section 00 73 02 – Contract Time and Liquidated Damages
2. Project-specific Requirements for Shutdowns for the work in Stern Grove are in Section 01 69 50.

1.10 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 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.

1.11 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 more than one parking and storage location is desired, Contractor must submit request for multiple locations. 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.
- F. Refer to document 00 72 00 General Conditions – Article 3 Contractor's Responsibilities.

1.12 CITY'S USE OF EQUIPMENT PRIOR TO COMPLETION OF CONTRACT

- A. During the course of construction and before final acceptance of the work of the Contract, City personnel may be required to use various major systems and sub-systems installed under this Contract as provided in Paragraph 9.06 of the General Conditions.
- B. Such use or occupancy by City personnel will be limited to the starting and stopping of such systems, and Contractor shall be solely responsible to provide all interim repair and maintenance of such equipment as recommended by the equipment manufacturers. Contractor's responsibility for repair and maintenance shall continue from the date of beneficial use by the City of any equipment or system installed under this Contract until the date of the City's acceptance of Contractor's Application for Final Payment.
- C. Submit a Certificate of Guarantee secured by Contractor's Performance Bond binding the Contractor to perform all repair and routine maintenance tasks as described above. Refer to Section 01 78 36 - Warranties.
- D. Provide written endorsement from Contractor's insurance carrier and Surety to the City Representative permitting the operation of equipment by City personnel as described above.
- E. Use and occupancy by the City shall not be deemed to constitute a waiver of claims on behalf of the City against the Contractor.
- F. The City will not accept any materials, equipment, systems or sub-systems furnished under this Contract which have been used by Contractor for construction purposes during the course of the Work.

1.13 **NOT USED** (Addendum No. 1)

1.14 **NOT USED** (Addendum No. 1)

1.15 SPECIAL INSTRUCTIONS

1.15 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. 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.
- E. 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.
- F. 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.
- G. 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. Whenever the grade difference between the new concrete base, manholes, etc and the existing AC pavement exceeds 0.75 inches, the Contractor shall use temporary paving (hot asphalt concrete) conforming to Caltrans 2018 Standard Specifications, to provide longitudinal and/or transverse transition from the new concrete base, manholes, etc to AC pavement, at the end of the work shift, before opening the lanes to traffic. A smooth transition of not less than eighteen (18) inches horizontally between the existing pavement and the plate shall be provided.
- H. 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 Caltrans 2018 Standard Specifications. Installing and removing temporary paving shall be considered incidental work.
- I. 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.

- J. 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 or Tim Paez at (415) 535-1890 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.
- K. 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.
- L. Prior to construction, contractor shall contact SFWD and coordinate the work plan and support work for SFWD facilities per requirements of Specification Section 01 41 28.
- M. For locations where the restoration of concrete parking strip, concrete curb and concrete sidewalk and driveways are required to be completed by the Contractor due to main sewer replacement work, Contractor shall complete a detailed survey of the existing parking strip, curb, sidewalk and driveways and submit this to the City. This survey shall be used as the basis for the restoration work by the Contractor to ensure conformance to existing grades and elevations.
- N. Lining of the main sewer at 19th and Taraval Avenue Intersection shall only be conducted during the planned shutdown of the L-Taraval SFMTA Muni line and after the lining of the main sewer on Taraval Avenue is completed by the SFMTA L-Taraval Improvement Project Sunset Blvd to West Portal. Contractor shall coordinate with the SFMTA Project Manager, Amy Lam (Amy.lam2@sfmta.com, 415-646-2768) on scheduling the sewer lining work. In an event that the L-Taraval project is terminated, Contractor must conduct lining of 19th Ave at Taraval Avenue intersection during L-Taraval non-revenue hours. The City will not provide any OCS support services and LRV shutdowns. Contractor will be fully responsible for coordinating with SFMTA MUNI Operations for any work during non-revenue hours within the railway right-of-way.
- O. Contractor shall pothole as required at designated locations indicated on the SW-Drawings as directed by the City Representative at the commencement of construction and provide potholing results to the City for review. City shall provide further direction after review of pothole information if necessary.
- P. 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.
- Q. Through the City Representative, Contractor shall coordinate with Recology for neighborhood garbage collection and contact Tom Lavazolli, Operations Manager for Recology at (415) 330-1300.
- R. Through the City Representative, Contractor shall coordinate with neighbors to allow for ingress and egress to properties during construction.

- S. Contractor shall not have more than 0.5 acres open with active construction at any one time.
- T. There may be potential conflict and precaution should be taken during construction to prevent damage to any TOS equipment components (e.g. conduits, loops).
- U. All existing and operational TOS elements and Ramp Metering equipment must be kept operational throughout the construction phase. Any TOS elements that may be affected by this project must be relocated, modified, or fully replaced as necessary.
- V. 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.
- W. Contractor shall have in independent engineering review of the submitted shoring plans performed per Caltrans Local Area Structure Representative Guidelines. Subsequent review and approval shall be performed by Caltrans Geotech Design-West, Branch C, Attn: Mahmood Momenzadeh.
- X. Tree trimming, replanting and removal shall be coordinated with BUF (Bureau of Urban Forestry). Provide ninety (90) calendar days 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.
- Y. 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.
- Z. 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.
- AA. The City will provide drainage of pipeline one time only. The Contractor shall be responsible for all costs incurred for subsequent re-drainage. The City will provide field inspection on all work to be performed by the Contractor, without any charge to the Contractor.
- BB. All backfill shall be compacted as specified on the day it is placed. If the contractor elects to install temporary paving, temporary paving shall be a minimum of three inches thick of hot asphalt concrete and shall be mechanically compacted as directed to provide a smooth, clean surface. Compaction by wheel rolling will not be allowed. Temporary paving shall be removed and permanent paving shall be installed as per contract drawings. Contractor shall provide vertical saw-cut at all cold joints within new paving.
- CC. The use of Vermeer rock wheel cutter and/or similar types of equipment for cutting, trenching or excavating pavement is prohibited unless permitted by Special Orders of the Director of Public Works for specific locations.
- DD. The Contractor's attention is directed to the fact that there may exist inactive and/or obsolete services in the area of work to be done under this contract. Those services may not be marked, and cannot be readily located in the field because of the absence of meters or meter boxes.

- EE. A complete list of all known City Distribution Division services, including inactive or obsolete services, is on file in the Engineering Office of the City Distribution Division, located at 1990 Newcomb Avenue. Please contact Ms. Patricia Mattias at (415) 550-4928.
- FF. Protecting, repairing and working around such services are considered as incidental work under the appropriate bid items, and no separate payment will be made therefore.
- GG. There are MUNI Overhead wires within the boundary of the contract. The Contractor's attention is directed to Article 37 of G.O. Order 95 of the Public Utilities Commission, State of California. The Contractor shall strictly adhere to the CAL OSHA regulations while working under MUNI overhead wires. At a minimum, unless more stringent requirements apply, 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.
- HH. Contractor is solely responsible for ensuring that any and all Contractor officers, employees, agents, subcontractors and suppliers on site fully comply at all times with any and all applicable regulations, regardless of whether Contractor chooses to conduct its compliance enforcement by assigning compliance enforcement duties to its on-site foreman or superintendent, or whether Contractor chooses to retain third party inspection services which shall be paid by the Contractor as incidental work with no additional cost to the City.
- II. 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.
- JJ. In the event that the City Representative identifies and/or places the Contractor on notice of work activity that fails to comply with applicable specifications and/or with applicable regulations, the City Representative shall stop the work and shall require the Contractor to remove the violating equipment and operator(s) from the work site forthwith. Any equipment and operator(s) so removed shall be barred from performing any work in any capacity on the subject project for the duration of the project. The City Representative shall also report any such violation to Cal OSHA. The Contractor shall be barred from filing a claim arising from a work stoppage caused by the Contractor's failure to comply with applicable regulations referenced above and/or with this section.
- KK. Muni trolley service must be maintained at all times. (See Specification Section 01 55 26 – Traffic Control)
- LL. 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.
- MM. The Contractor shall use proper equipment to prevent unnecessary damages for the facilities on the job site such as no heavy equipment on top of sidewalk.

NN. Surface-Accessible Sewer Assets

1. Contractor shall inspect all catch basins, manholes and other surface-accessible sewer assets within one block of the scope of work 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.

OO. The SWPPP submittal package must be in the Caltrans format as found here:

<https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control/stormwater-inspection-forms>

PP. The Contractor shall register and train to use the Caltrans lane closure system at <https://lcs-new2.dot.ca.gov/> for all lane closure requests on SR 1 and shall adhere to the Caltrans closure restrictions for designated holidays and special days. (Refer to 01 55 26-3.2.A.15. (Addendum No. 1))**QQ. The Contractor shall maintain access for median landscaping maintenance throughout construction.****RR. Per Caltrans Standard Special Provision No:**

1. Within 2 business days of completing the surveys, submit preconstruction and post-construction surveys sealed and signed by one of the following:
 - (a) Land surveyor licensed in the State
 - (b) Engineer who is registered as a civil engineer in the State
2. For locations shown, perform a preconstruction survey to ensure forms and job site constraints will allow for compliance with required design dimensions and slopes shown. Upon completing the work, perform a post-construction survey to verify design dimensions and slopes requirements are met. The post-construction survey must include a minimum of 3 measurements for each dimension and slope requirement shown. Individual measurements must be equally distributed across the specified slope or dimensional surface. Document and submit these measurements on the Americans with Disabilities Act Compliance Inspection Report form for the facility type shown. Include the equipment and control used to conduct the survey.
3. Before placing concrete, verify that forms and job site constraints allow the required dimensioning and slopes shown. Immediately notify the Engineer if you encounter job site conditions that will not accommodate the design details. Ordered modifications are change order work.

SS. Contractor to adhere to 2018 Standard Plans and Standard Specifications (<https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications>). For roadway related design refer to the P Plans Series and for Electrical refer to the E Plan Series.**1.16 TRACK SAFETY TRAINING AND CERTIFICATION**

- A. Contractor and his employees who will perform work within 72 inches (measured transversely) of MUNI rail tracks shall first receive "On Track Safety Training" and certification from the San Francisco Municipal Transportation Agency (SFMTA) before starting said work. Contractor shall schedule training by contacting Charles D. Kesecker from the SFMTA at (415) 646-2506 or charles.kesecker@sfmta.com. Contractor shall sign a Hold Harmless Agreement with respect to the safety training (see Appendix B to this Section 01 11 00). In addition to the safety training, the Contractor shall obtain a

permit from the Muni's Operations Control Center (OCC) before working within 72 inches of the rail tracks. MUNI OCC permit application procedure will be discussed as part of the SFMTA safety training.

1.16 CONSERVING DISTINCTIVE SIDEWALK ELEMENTS

- A. All distinctive sidewalk elements (such as brick surfacing, brick gutters, granite curbs, cobblestones, non-standard sidewalk scoring and streetscape elements that appear to be 45 years or older) will be treated as potentially character defining features of their respective historic districts.
- B. Historic materials shall be protected in place, salvaged and re-installed, or replaced in kind to match the character of the existing condition as shown on the plans.
- C. Granite curb shall only be replaced with concrete curb on curved sections and as part of the curb ramp construction.
- D. Contractor shall avoid damaging and protect in place any features described above and shall notify the City Representative of any feature not identified on the plans that is in conflict with the proposed work.

1.17 MISCELLANEOUS WORK COMMON TO THE ENTIRE CONTRACT

- A. The Work of this Contract shall be complete and all work, materials, equipment and services not expressly indicated or called for in the Contract Documents which may be necessary for the complete and proper construction of the Work in good faith shall be provided by the Contractor as though originally indicated, at no additional cost to the City.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION