



# The City of Burlingame

PUBLIC WORKS DEPARTMENT  
(650)558-7230

CITY HALL 501 PRIMROSE ROAD  
BURLINGAME, CALIFORNIA 94010-3997

CORPORATION YARD  
(650)558-7670

April 18, 2024

**ADDENDUM NO. 1**  
**TO CONTRACT DOCUMENTS FOR THE WEST BURLINGAME TERRACE SUBDIVISION**  
**WATER MAIN REPLACEMENT PROJECT - CITY PROJECT NO. 84893**

**BID OPENING DATE: TUESDAY, APRIL 30th, 2024, AT 2:30 P.M.**

This addendum consists of these 2 pages and Attachment A.

All bidders shall acknowledge receipt and acceptance of Addendum No. 1 by signing in the space provided on this Addendum and submitting the signed Addendum with their proposal. Failure to do so may constitute grounds for rejection of the bid.

Very truly yours,

Weizhi Cheng, P.E.  
Associate Engineer

\_\_\_\_\_  
Contractor Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Company Name

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents as noted below. In the case of difference with previous addenda, this addendum takes precedence. It is the responsibility of the Contractor to notify all parties from whom he accepts proposals for all changes in the Contract documents covering this project. All other conditions remain unchanged. All bidders shall acknowledge receipt of this addendum by signing in the space provided on this addendum and submitting the signed addendum with their proposal. Failure to do so may subject the Bidder to disqualification.

The Bid Set Contract Documents are revised as stated below in this Addendum No. 1.

**A. SPECIFICATION - SECTION 02315**

- 1) Under 1.04 B 1.c. i, DELETE “by Contractor” in this paragraph. Compaction testing will be conducted by a soil testing lab hired by the City through the construction management company.

**ATTACHMENTS:**

- 1) Attachment A – Updated Section 02315

**END OF ADDENDUM NO. 1**

## SECTION 02315

## EXCAVATION AND FILL

## PART 1 - GENERAL

## 1.01 SUMMARY

- A. Section Includes: Perform all excavation, shoring, dewatering, backfilling, compaction and grading necessary or required for the construction of the work as covered by these Specifications and indicated on the Project Engineers' or City's Standard Drawings as submitted to and accepted by the City. The excavation shall include the removal and disposal of all materials of whatever nature encountered, including water and all other obstructions that would interfere with the proper construction and completion of the required work.

## 1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM).
- B. State of California, Department of Transportation, Standard Specifications - 2010.
- C. State of California, Department of Transportation, Manual of Test (California Test).

## 1.03 SUBMITTALS

- A. Submit the following under the Product Information category.
  - 1. Sheeting and Shoring Plan: Refer to Paragraph 1.08 below.
  - 2. Potholing Report as described in Paragraph 3.02.
  - 3. Samples and Test Results: Furnish such quantities of import materials as may be required by the City for test purposes. Cooperate with the City and furnish necessary facilities for sampling and testing of all materials and workmanship. Submit test results for import materials. Tests shall be performed within 30 days of the submission. All material furnished and all work performed shall be subject to rigid inspection, and no material shall be delivered to the site until it has been favorably reviewed by the City.
  - 4. Name and qualifications of independent testing laboratory.

## 1.04 QUALITY ASSURANCE

- A. Source Quality Control: Test import materials proposed for use to demonstrate that the materials conform to the specified requirements. Tests shall be performed by an independent testing laboratory.

B. Field Quality Control:

1. The City will:
  - a. Review materials proposed for use.
  - b. Inspect foundations and site grading.
  - c. Inspect placement and compaction of fill as follow:
    - i The City requires one compaction test to be conducted every 200 linear feet of pipeline installed. More frequent tests may be required if compaction test results do not meet the project requirements, in addition areas not meeting compaction requirements shall be recompacted and retested.

C. Testing Methods:

1. Durability Index: Manual of Test, State of California, Department of Transportation.
2. Specific Gravity: ASTM D854.
3. Laboratory Compaction: ASTM D1557, Method A or C.
4. In-Place Density: ASTM D1556 or ASTM D2922.
5. Particle Size Analysis of Soils: ASTM D422.
6. Plastic Limit and Plasticity Index: ASTM D4318.
7. Soil Classification: ASTM D2487.
8. In-Place Moisture Content: ASTM D3017.

D. Definition:

1. Relative Compaction: In-place dry density divided by the maximum dry density laboratory compaction express as a percentage.

1.05 REFERENCE SPECIFICATIONS

- A. Whenever the words "Standard Specifications" are referred to, the reference is to the State of California, Department of Transportation, and Standard Specifications - 2010 edition.

1.06 ADDITIONAL SAFETY RESPONSIBILITIES

- A. The Contractor shall select, install and maintain shoring, sheeting, bracing, and sloping as necessary to maintain safe excavations. The Contractor shall be responsible for ensuring such measures: (1) comply fully with 29 CFR Part 1926 OSHA Subpart P Excavations and Trenches requirements, (2) provide necessary

support to the sides of excavations, (3) provide safe access to the City for sampling and testing within the excavation, (4) provide safe access for backfill, compaction, and compaction testings, and (5) otherwise maintain excavations in a safe manner that shall not endanger property, life, health, or the project schedule. All earthwork shall be performed in strict accordance with applicable law, including local ordinances, applicable OSHA, Cal OSHA, California Civil Code, and California Department of Industrial Relations requirements.

## PART 2 - PRODUCTS

### 2.01 MATERIALS

- A. Crushed Rock: Class 2, 3/4-inch maximum aggregate base, Standard Specifications Section 26.
- B. Bedding Materials:
  - 1. Sand: Standard Specifications, Paragraph 19-3.02E(2).
  - 2. Permeable Material: Standard Specifications, Paragraph 68-2.02F(2) Class I, Type A.
  - 3. Drain Rock: Standard Specifications, Paragraph 68-2.02F(3), Class 2.
- C. Controlled Density Fill (CDF): Shall consist of a ready-mix, 1.5 sack controlled low-strength material with a strength between 100 and 300 psi and shall be suitable for excavation by mechanical means after 30 days. CDF shall comply with the requirements at ACI 229, controlled low strength materials.
- D. Import Backfill: Imported nonexpansive soil with liquid limit no greater than 40% and a plasticity index no greater than 15%, free from clods or rocks larger than 2 inches in greatest dimension, and free from organic material.
- E. Native Backfill: Native soil prepared as necessary to be free from clods or rocks larger than 2 inches in greatest dimension, and free from organic material.
- F. Impervious Material: Clay with a minimum percentage of material passing the No. 200 sieve of 50%. The material shall be free of organics, rocks, or clods greater than 2 inches in diameter.
- G. Water: The water used shall be reasonably free of objectionable quantities of silt, oil, organic matter, alkali, salts and other impurities. Water quality must be acceptable to the City.
- H. Warning Tape: 3-inch-wide, inert, fade-resistant plastic film resistant to acids, alkalis, and other components likely to be encountered in soil. Tape shall be marked "Water".
- I. Tracing wire: #8 Copper, vinyl coated –blue.

J. Geotextile Fabric: Geotextile Fabric: Provide a pervious sheet of polyester, nylon, glass or polypropylene, ultraviolet resistant filaments woven, spun bonded, fused, or otherwise manufactured into a nonraveling fabric with uniform thickness and strength. Fabric shall have the following manufacturer certified minimum average roll properties as determined by ASTM D 4759:

- |  |  |
|--|--|
| 1. Grab tensile strength (ASTM D 4632)<br>machine and transverse direction | min. 200 lbs.                                |
| 2. Grab elongation (ASTM D 4632) machine<br>and transverse direction       | min. 12 percent                              |
| 3. Puncture resistance (ASTM D 4833)                                       | min. 90 lbs.                                 |
| 4. Mullen burst strength (ASTM D 3786)                                     | min. 400 psi.                                |
| 5. Trapezoidal Tear (ASTM D 4533)  | min. 75 lbs.                                 |
| 6. Apparent Opening Size (ASTM D 4751)                                     | 30 – 70 (U.S. Std Sieve)                     |
| 7. Permittivity (ASTM D 4491)  | 0.03 1/second                                |
| 8. Ultraviolet Degradation (ASTM D 4355)                                   | 70 percent Strength<br>retained at 150 hours |

### PART 3 - EXECUTION

#### 3.01 CONTROL OF WATER

- A. All excavations shall be kept free from water and all construction shall be in the dry.
1. It should be presumed that the presence of groundwater will require dewatering operations. Furnish, install, maintain, and operate all necessary pumping and other equipment for dewatering all excavations. At all times have on the project sufficient pumping equipment for immediate use, including standby pumps for use in case other pumps become inoperable.
  2. Provide a sufficient number of pumps so as to hold the groundwater level at an elevation of not less than 1 foot below the lowest elevation of the pipe or other material to be placed.
  3. Dispose of water in such a manner as to cause no injury or nuisance to public or private property, or be a menace to the public health.
  4. The dewatering operation shall be continuous, so that the excavated areas shall be kept free from water during construction, while concrete is setting and achieves full strength, and until backfill has been placed to a sufficient height to anchor the work against possible flotation.

5. Continue dewatering during backfilling operations such that the groundwater is at least 1 foot below the level of the compaction effort at all times. No compaction of saturated materials will be allowed.
  6. Dewatering devices must be adequately filtered to prevent the removal of fines from the soil.
  7. The Contractor shall be responsible for any damage to the foundations or any other parts of existing structures or of the new work caused by failure of any part of the Contractor's protective works. After temporary protective works are no longer needed for dewatering purposes, they shall be removed by the Contractor.
  8. If pumping is required on a 24-hour basis, requiring engine drives, then engines shall be equipped in a manner to keep noise to a minimum in accordance with Section 7 of the City of Burlingame, General Conditions, latest edition.
  9. Prevent disposal of sediments from the soils to adjacent lands or waterways by employing whatever methods are necessary, including settling basins.
- B. The Contractor shall be responsible for furnishing temporary drainage facilities to convey and dispose of surface water falling on or passing over the site.
- C. These requirements are intended to be consistent with the Bay Area Air Quality District standard mitigation requirement, Federal Clean Water Act, the Porter-Cologne Water Quality Control Act, and the San Mateo County Stormwater Prevention Program. Notwithstanding any other provision of this Agreement, Contractor shall also comply with the General Construction Activity Permit.
1. The Contractor shall maximize the control of erosion and sediment by using the BMP's for erosion and sedimentation in the California Storm Water Best Management Practice Handbook-Construction Activity (published by the Storm Water Quality Task Force) or Manual of Standards for Erosion & Sediment Control Measures (published by the Association of Bay Area Governments (ABAG)).
  2. The Contractor shall prepare a Storm Water Pollution Prevention Plan in conformance with the requirements of the State Water Resources Control Board (SWRCB). The Contractor shall file the required Notice of Intent (NOI) with the SWRCB.

### 3.02 EXISTING UTILITIES

- A. General: The known existing utilities and pipelines shall be shown on the Drawings prepared by the Project Owner's Engineer. The Contractor shall exercise care in avoiding damage to all utilities as he/she will be held responsible for their repair if damaged.

1. Contact Underground Services, Alert (USA), (800) 642-2444 to mark utilities, 48 hours prior to excavating.

B. Check on Locations (Potholing):

1. Contact all affected utility owners and requests them to locate their respective utilities prior to the start of "potholing" procedures. The utility owner shall be given 7 days written notice prior to commencing potholing. If a utility owner is not equipped to locate its utility, the Contractor shall locate it.
2. Clearly paint the location of all affected utility underground pipes, conduits and other utilities on the pavement or identify the location with suitable markers if not on pavement. In addition to the location of metallic pipes and conduits, non-metallic pipe, ducts and conduits shall also be similarly located using surface indicators and detection tape, if present and shall then be similarly marked.
3. After the utility survey is completed, commence "potholing" to determine the actual location and elevation of all utilities where crossings, interferences, or connections to the new pipelines are as shown on the Project Engineer's Drawings, marked by the utility companies, or indicated by surface signs. Prior to the excavating for any new pipelines or structures, the Contractor shall locate and uncover these existing utilities including services and laterals to a point 1 foot below the utility. Submit a report identifying each underground utility and its depth and station. Any variation in the actual elevations and the indicated elevations shall be brought to the City's attention.
4. Excavations around underground electrical ducts and conduits shall be performed using extreme caution to prevent injury to workmen or damage to electrical ducts or conduits. Similar precautions shall be exercised around gas lines, telephone and television cables.

C. Existing Traffic Loops:

1. If the excavation area conflicts with any existing traffic loops or signal interconnect or if any traffic loop or signal interconnect is damaged during construction, the contractor must make the appropriate repairs. For traffic loops the contractor must replace the entire traffic loop system, including all connected traffic loops, conduits, and related appurtenances. Existing conflicting components shall be removed and a new traffic loop system shall be installed in the same location. All repairs and new system components and installation of traffic loops and signal interconnect must comply with the current State (Caltrans) Standard Specifications.

D. Interferences:

1. If interferences occur at locations other than shown on the Project Engineer's Drawings, the Contractor shall notify the City, and a method for correcting said interferences shall be supplied by the Project Owner's Engineer.



2. Any necessary relocations of utilities, whether shown on the Project Engineer's Drawings or not, shall be coordinated with the affected utility. The Contractor shall perform the relocation only if instructed to do so in writing from the City.

### 3.03 GENERAL CONSTRUCTION REQUIREMENTS

- A. Site Access: Access to the site will be over public and private roads. Exercise care in the use of such roads and repair at own expense any damage thereto caused by Contractor's operations. Such repair shall be to the satisfaction of the owner or agency having jurisdiction over the road. Conform to Caltrans requirements relative to SWMPP Best Management Practice to prevent tracking of mud onto existing roads and keep roads free of debris.
- B. Traffic Regulation: Provide such flagmen, patrols, pilot cars, drivers, lighted barricades, flares, lights, warning signs, and safety devices as may be required for control of traffic adjacent to all areas of work. A minimum of one lane of traffic shall be kept open at all times on public roads.
- C. Barriers: Barriers shall be placed at each end of all excavations and at such places along excavations as may be necessary to warn all pedestrian and vehicular traffic of such excavations. Lights shall also be placed along excavations from sunset each day to sunrise of the next day until such excavation is entirely restored.
- D. Access: Free access must be maintained to all fire hydrants, water valves and meters, and private driveways.
- E. Open Trench Limitations: The City shall have the authority to limit the amount of trench to be opened or left open at any one time. In public roads, excavation and pipe laying shall be coordinated to the end that a minimum of interference with public traffic will result. In existing streets, no more than 200 feet of trench shall be open at any time on any single heading. An open trench in existing streets shall be defined as any trench which has not been completely backfilled, satisfactorily compacted, and capped with at least 1-inch of temporary paving (hot asphalt). Contractor may request use of cutback in place of hot asphalt. Approval is at City's discretion.
- F. Demolition of Pavement: Where trenching or excavation occurs in paved areas, the pavement shall be saw-cut and removed ahead of the trenching or excavation operation. The extent of paving removed shall be limited to the minimum necessary for the excavation. See 3.08 for disposal of excavated materials.
- G. Dust Control: Employ measures to prevent the creation of dust which may produce damage or nuisance to property or persons. Be responsible for all damage resulting from dust produced by construction operations. Periodically wet down unpaved areas where vehicles are operated. When required by the City, the Contractor shall furnish and operate a self-leading motor sweeper with spray

nozzles at least once each working day for the purpose of keeping paved areas acceptably clean wherever construction, including restoration, is incomplete.

- H. Permits: Obtain all required permits and pay associated fees.
- I. Storage of Materials: Excavated materials unsuitable for backfill shall not be stored on existing streets, and shall be disposed of immediately. Keep the materials shaped so as to cause the least possible interference with drainage or the normal use of adjacent properties, structures or roadways. Work shall comply with Section 6 of the City of Burlingame General Conditions, latest edition, and City of San Mateo and County of San Mateo's requirements.
- J. Temporary Pavement: Place temporary pavement on trenches in existing streets at the end of each day unless the un-backfilled portion of trench is shored and covered with steel plates, properly shimmed, steel spiked, and ramped with temporary asphalt with traffic control signage in accordance with the current edition of CAMUTCD. Maintain temporary pavement until permanent pavement is to be placed. All temporary asphalt to be hot asphalt.

### 3.04 TRENCH EXCAVATION

- A. Excavation for pipe shall be in open cut. The trench shall be as wide as necessary for sheeting and bracing and the proper performance of the work up to the maximum width permitted by the typical cross-sections shown on the City's Standard Drawing. The sides of the trenches shall be vertical in existing streets. The bottom of the trench shall be constructed to the grades and shapes indicated on the Project Engineer's Drawings. Should the Contractor desire to use other equivalent methods, he shall submit his method of construction to the City for favorable review prior to its use.
- B. Take care not to overexcavate. Accurately grade the bottom of the trenches to provide uniform bearing and support for each section of the pipe at every point along its entire length, except for the portions of the pipe sections where it is necessary to excavate for bell holes and for the proper sealing of pipe joints, and as hereinafter specified. Dig bell holes and depressions for joints after the trench bottom has been graded, and, in order that the pipe rest on the bedding for as nearly its full length as practicable, bell holes and depressions shall be only of such length, depth and width as required for properly making the joint. Remove stones as necessary to avoid point bearing.
- C. Notification of Change in Condition of Soil: Pursuant to Public Contract Code section 7104, when trenches or other excavations must be dug pursuant to this contract that extend deeper than four (4) feet below the surface, the Contractor shall promptly, and before the following conditions are disturbed, notify the City in writing of any:

1. Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health & Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law; or,
2. Subsurface or latent physical conditions at the site differing from those indicated; or,
3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in the Contract.

The City will promptly investigate the conditions identified by the Contractor, and if the City finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work will issue a change order under the procedures described in the Contract.

In the event a dispute arises between the City and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the Contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the Contract documents, but shall proceed with all work to be performed under the Contract. The Contractor shall retain any and all rights provided either by the Contract or by law which pertain to the resolution of disputes and protects between the contracting parties.

- D. Backfill and compact overexcavations to 90% relative compaction with bedding material. Remove unsatisfactory material encountered below the grades shown as directed by the City and replace with bedding material.
- E. Grade trenches so that they are uniformly sloped between the pipe elevations shown on the Project Engineer's Drawings. Comply with the minimum and maximum trench widths shown on the City's Standard Drawings. Notify the City if the trench width exceeds the maximum allowable width for any reason.
- F. Contractor shall comply with California Occupational Safety and Health Regulations (Cal/OSHA) trenches and excavation requirements. For trench excavations five feet deep or deeper, the Contractor shall obtain a permit from the Department of Industrial Relations for such excavation. The Contractor shall submit a copy of the permit to the Engineer prior to initiating any work requiring said permit.
- G. Submit Shoring Plan for review and approval.

### 3.05 BACKFILL AND COMPACTION

- A. Place bedding and backfill materials true to the lines, grades, and cross-sections indicated on the City's Standard Drawings and compacted to the degree specified on the City's Standard Drawings. Place bedding and backfill materials in horizontal lifts not to exceed 6 inches in thickness measured before compaction. The difference in level on either side of a pipe shall not to exceed 4 inches.

Backfill material shall not be placed over the pipe until after it has been inspected by the City. The inside of the pipe shall be maintained in a clean condition at all times; all exposed pipe ends shall be covered and sealed with plastic, and shall not be uncovered until just prior to completing the joint.

- B. It shall be incumbent upon the Contractor to protect the pipe from damage during the construction period. It shall be his responsibility to repair all broken or damaged pipe. Tamping of backfill over the pipe shall be done with tampers, vibratory rollers and other machines that will not injure or disturb the pipe. Carefully place backfill around and over the pipe.
- C. Do not allow construction traffic nor highway traffic over the pipe trench until the trench backfill has been brought back even with existing adjacent grade.
- D. Add water to the backfill material or dry the material as necessary to obtain the optimum moisture content for the compaction shown on the City's Standard Drawings or specified. If the City determines that the nature of the ground in which the trench lies precludes compaction of the backfill to the specified density, the backfill shall be compacted to the maximum practicable density. Employ such means as may be necessary to secure a uniform moisture content throughout the material of each layer being compacted. After the material has been moisture conditioned, compact it with compaction equipment approved by the City to achieve specified compaction. The Contractor shall be responsible for obtaining the densities specified. Should he fail, through negligence or otherwise, to compact to specified density, or to backfill and compact to surface grade, thus permitting saturation of the backfill material from rains or from any other source, the faulty material shall be removed and replaced with approved material which shall be compacted to the specified density at optimum moisture content.
- E. Compaction by flooding, ponding or jetting will not be permitted.

### 3.06 SUPPORT OF EXCAVATIONS

- A. Adequately support excavation for trenches and structures to meet all applicable requirements in the current rules, orders and regulations. Excavation shall be adequately shored, braced and sheeted so that the earth will not slide or settle and so that all existing structures and all new pipe and structures will be fully protected from damage. Keep vehicles, equipment and materials far enough from the excavation to prevent instability.

- B. Take all necessary measures to protect excavations and adjacent improvements from running, caving, boiling, settling, or sliding soil resulting from the high groundwater table and the nature of the soil excavated. Attention is directed to Section 832 of the Civil Code of the State of California relating to lateral and subjacent supports, and wherever structures or improvements adjacent to the excavation may be damaged by such excavation, the Contractor shall comply with this law.
- C. The support for excavation shall remain in place until the pipeline, or structure has been completed. During the backfilling of the pipeline or structure, the shoring, sheeting and bracing shall be carefully removed so that there shall be no voids created and no caving, lateral movement or flowing of the subsoils.

### 3.07 FINISH GRADING

- A. Except where shown otherwise in the Project Engineer's Drawings, restore the finish grade to the original contours and to the original drainage patterns. Grade surfaces to drain away from structures. The finished surfaces shall be smooth and compacted.

### 3.08 DISPOSAL OF EXCAVATED MATERIAL

- A. Suitably dispose of unsuitable material or excavated material in excess of that needed for backfill offsite in accordance with all applicable laws and regulations.
- B. The asphalt grindings contain pavement fabric, engineered paving mat or other contaminated materials in some project streets. It is the Contractor's responsibility to dispose and remove of these materials along with the grindings. There will be no additional compensation allowed.

END OF SECTION