

DIVISION 1 GENERAL REQUIREMENTS

SECTION 01500

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Temporary Electricity
 2. Temporary Communications.
 3. Temporary Water
 4. Fences
 5. Protection of Public and Private Property
 6. Temporary Sanitary Facilities
 7. Temporary Barriers and Enclosures
 8. Water Control
 9. Pollution Control
 10. Reduction of Construction Emissions and Particulate Matter
 11. Construction Aids
 12. Erosion Control
 13. Noise Control
 14. Traffic Control
 15. Removal of Temporary Facilities and Controls

1.2 TEMPORARY ELECTRICITY

Contractor shall provide and maintain electrical power at the Sites for construction purposes and for Contractor's and Construction Manager's trailers. Power may be obtained from District, but Contractor must provide all necessary wiring and appurtenances for connection to District's system.

1.3 TEMPORARY COMMUNICATIONS

Provide, maintain, and pay for all applicable communications and data services (including without limitation telephone, facsimile, e-mail and internet) to field office commencing at time of Project mobilization, including all installation and connection charges. In addition, the Contractor shall provide, maintain and pay for a high speed internet service (such as DSL) at the Sites. It is anticipated that connection to SBC may be made at Building 17.

1.4 TEMPORARY WATER

- A. Provide and maintain- suitable quality water service required for construction operations.
- B. All water required for and in connection with the Work, including without limitation for dust control, shall be furnished by and at the expense of Contractor. Contractor shall be allowed to utilize water from the District for domestic uses. Water shall not be provided for dust control or street cleaning.. However, District does not guarantee availability of this water. There will be no charge to Contractor for water used. Contractor shall furnish necessary pipe, hose, nozzles and tools and perform all necessary labor. Unnecessary waste of water will not be permitted. Special hydrant wrenches shall be used for opening and closing fire hydrants; in no case shall pipe wrenches be used for this purpose.

1.5 FENCES

- A. All existing fences affected by the Work shall be maintained by Contractor until Final Completion. Fences which interfere with construction operations shall not be relocated or dismantled until District gives written permission to do so, and the period the fence may be left relocated or dismantled has been agreed upon. Where fences must be maintained across the construction easement, adequate gates shall be installed. Gates shall be kept closed and locked at all times when not in use.
- B. On completion of the Work across any tract of land, Contractor shall restore all fences to their original or to a better condition and to their original locations.

1.6 PROTECTION OF PUBLIC AND PRIVATE PROPERTY

- A. Contractor shall protect, shore, brace, support, and maintain all underground pipes, conduits, drains, and other underground construction uncovered or otherwise affected by its construction operations. All pavement, surfacing, driveways, curbs, walks, buildings, utility poles, guy wires, fences, and other surface structures affected by construction operations, together with all sod and shrubs in yards, parkways, and medians, shall be restored to their original condition, whether within or outside the easement. All replacements shall be made with new materials.
- B. Contractor shall be responsible for all damage to streets, roads, highways, shoulders, ditches, embankments, culverts, bridges, and other public or private property, regardless of location or character, which may be caused by transporting equipment, materials, or workers to or from the Work, Sites or any part thereof, whether by Contractor or Subcontractors. Contractor shall make satisfactory and acceptable arrangements with the District, or the agency or authority having jurisdiction over the damaged property, concerning its repair or replacement or payment of costs incurred in connection with the damage.
- C. All fire hydrants and water control valves shall be kept free from obstruction and available for use at all times.

1.7 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required temporary buildings with sanitary toilets for use of all workers. At a minimum, sanitary facilities shall be located at trailer sites, staging area, and adjacent to work area.
- B. Sanitary facilities shall be of reasonable capacity, properly maintained throughout the construction period, and obscured from public view to the greatest practical extent. If toilets of the chemically treated type are used, at least one toilet will be furnished for each 20 persons. Contractor shall enforce the use of such sanitary facilities by all personnel at the Sites.
- C. Comply with all minimum requirements of the Health Department or other public agency having jurisdiction; maintain in a sanitary condition at all times.

1.8 TEMPORARY BARRIERS AND ENCLOSURES

- A. Provide barriers to prevent unauthorized entry to construction areas to allow for District's use of Sites, and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades required by governing authorities for public access to existing buildings.
- C. Protect vehicular traffic, stored materials, Sites, and structures from damage.

1.9 WATER CONTROL

- A. Comply with all local agency requirements and analysis of data as outlined in the *Summary of Existing and Future Storm Drainage Conditions* by Sandis Humber Jones.
- B. Grade Sites to drain.
- C. Maintain excavations free of water.
- D. Protect Sites from puddling or running water.
- E. Provide water barriers as required to protect Sites from soil erosion.
- F. Provide for drainage of storm water and such water as may be applied or discharged on the Sites in performance of the Work. Drainage facilities shall be adequate to prevent damage to the Work, the Sites, and adjacent property.
- G. Clean, enlarge and/or supplement existing drainage channels and conduit as necessary to carry all increased runoff attributable to Contractor's operations. Provide sediment tanks and other features to avoid increased runoff, to protect District's facilities and the Work, and to direct water to drainage channels or conduits. Provide ponding as necessary to prevent downstream flooding.
- H. To prevent water quality degradation to nearby surface waters during construction the District will:
 - 1. Submit a Notice of Intent to the State Water Resources Control Board to have project construction activities covered under NPDES General Permit CAS000002 (General Permit).
 - 2. In accordance with the terms of the General Permit, the District will prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will identify effective Best Management Practices (BMPs) to be implemented throughout project construction.
 - 3. Before and during storm events, an approved construction monitor will check the effectiveness of stormwater pollution prevention BMPs at the construction sites. The District will modify or replace ineffective BMPs that do not sufficiently prevent stormwater pollution.

1.10 POLLUTION CONTROL

- A. Contractor shall prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris, and other substances resulting from construction activities. No sanitary wastes shall be permitted to enter any drain or watercourse other than sanitary sewers. No sediment, debris, or other substance shall be permitted to enter sanitary sewers without authorization of the receiving sanitary sewer service, and all possible Best Management Practices (BMPs) shall be taken to prevent such materials from entering any drain to watercourse.
- B. Alternate: Rate of discharge for storm water may not be increased by the Project during or following construction. Comply with all local agency requirements and analysis of data as outlined in the *Summary of Existing and Future Storm Drainage Conditions* by Sandis Humber Jones.
- C. The Contractor shall implement BMPs during construction activities as specified in the California Storm Water Best Management Practices Handbook (Stormwater Quality Task Force, 1993) and/or the Manual of Standards for Erosion and Sediment Control Measures (ABAG, 1995). Erosion and sedimentation control practices shall include installation of silt fences, straw wattle, soil stabilization, revegetation, and runoff control to limit increases in sediment in stormwater runoff, including but not limited to, detention basins, straw bales, silt fences, check dams, geofabrics, drainage swales, and sand bag dikes.
- D. In the event that dewatering of excavations is required, Contractor shall obtain the necessary approval and permits for discharge of the dewatering effluent from the local jurisdiction. Contractor shall be responsible for assuring that water quality of such discharge meets the appropriate permit requirements prior to any discharge.

1.11 REDUCTION OF CONSTRUCTION EMISSIONS AND PARTICULATE MATTER

Construction activities must comply with the "Basic Control Measures" for dust emissions as outlined in the Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines. These requirements include:

- 1. Water all active construction sites at least twice daily.
- 2. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- 3. Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- 4. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- 5. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- 6. Minimize idling time (5-minute maximum).
- 7. Maintain properly tuned equipment.
- 8. Hydroseed or apply non-toxic soil stabilizers to inactive construction areas (previously graded areas inactive for 10 days or more).
- 9. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- 10. Suspend excavation and grading activities when winds (instantaneous gusts) exceed 25 mph.

1.12 CONSTRUCTION AIDS

- A. Contractor shall furnish, install, maintain, and operate all construction aids required by it and its Subcontractors in the performance of the Work, except as otherwise provided herein. Such construction aids shall include elevators and hoists, cranes, temporary enclosures, swing staging, scaffolding and temporary stairs. Construction aids shall be furnished without charge to the Subcontractors, and all necessary erection, maintenance, and operating personnel shall be included. In the event of conflict, the contractor furnishing the equipment shall determine priorities in the best interest of the Project.

1.13 EROSION CONTROL

- A. Contractor shall prevent soil erosion on the Sites and adjacent property resulting from its construction activities to the maximum extent practical, including implementation of Best Management practices. Effective measures shall be initiated prior to the commencement of clearing, grading, excavation, or other operations that will disturb the natural protection.
- B. Work shall be scheduled to expose areas subject to erosion for the shortest possible time, and natural vegetation shall be preserved to the greatest extent practicable. Temporary storage and construction buildings shall be located, and construction traffic routed, to minimize erosion. Temporary fast-growing vegetation or other suitable ground cover shall be provided as necessary to control runoff.

1.14 NOISE CONTROL

- A. When required by OSHA Standards, construction workers shall be provided with ear protection to operate equipment.
- B. Contractor shall take reasonable measures to avoid unnecessary noise. Such measures shall be appropriate for the normal ambient sound levels in the area during working hours. All construction machinery and vehicles shall be equipped with practical sound-muffling devices, and operated in a manner to cause the least noise consistent with efficient performance of the Work. During construction activities on or adjacent to occupied buildings, and when appropriate, Contractor shall erect screens or barriers effective in reducing noise in the building and shall conduct its operations to avoid unnecessary noise which might interfere with the activities of building occupants.
- C. Ensure and provide certification to District that all construction equipment and vehicles used for the Work are:
 - 1. Maintained in good mechanical condition
 - 2. Equipped with properly installed engine mufflers
- D. Construction operations at the College of San Mateo will comply with the San Mateo Noise Ordinance.
 - 1. Construction activities will comply with the hourly and noise level limits as stated in the San Mateo Noise Ordinance.
 - 2. If construction occurs during nighttime hours, all equipment will utilize the best available noise control techniques, which may include mufflers, intake silencers, ducts, engine enclosures and acoustically attenuating shields.
 - 3. If construction occurs during nighttime hours, impact equipment (jack hammers, pavement breakers, and rock drills) used for project construction will be hydraulically or electrically powered to reduce noise associated with pneumatically powered tools.
 - 4. Trucks travelling to and from the site will utilize the best available noise control techniques to minimize noise impacts to adjacent neighborhoods.
 - 5. Stationary noise sources, such as generators, will be located as far from classrooms and other sensitive receptors as possible.

1.15 TRAFFIC CONTROL

All traffic associated with the construction, including without limitation delivery and mail trucks, shall enter the Contractor's access gate and shall use the route indicated in 1010 - Summary of Work. Sign types and locations shall be reviewed by the District's Representative. Contractor shall provide signs directing construction and delivery traffic to this gate. Construction truck traffic shall be limited to off-peak traffic hours, between the hours of 10:00 a.m. and 4:00 p.m., Monday through Friday.

1.16 REMOVAL OF TEMPORARY FACILITIES AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, and materials prior to final inspection.
- B. Remove underground installations.
- C. Clean and repair damage caused by installation or use of temporary work.
- D. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

END OF SECTION