

#### **EBMUD**

# Pre-Construction Meeting Agenda Contractor Installed Clean Utility Corridors for Water Main Extensions and Services

Date:
Meeting Location:
Applicant Agreement:
Tract:
Applicant:
Contractor:
Engineer:
People Present: Sign attendance sheet and Introductions

# **OVERVIEW OF PROJECT DRAWINGS AND PLANS**

- Any changes to Site Improvement Drawings (IF included with complete Water Service Application [WSA])?
- Has the governing local regulatory oversight agency provided final approval of the Clean Utility Corridor Installation Plan, or has an equivalent approved plan been provided and approved by EBMUD Regulatory Compliance Office?
- Will a Qualified Environmental Professional (QEP) be required to oversee and document the work?
- Road Sections? Deep lift road sections area a concern to the District due to excessive loads being placed on the new pipeline. Note: 24" of construction cover must be maintained over pipelines at all time.
- Will there be stamped, or, decorative concrete, concrete pavers, or concrete valley gutter on this project? If so what locations:
- Status of project grade, what utilities are in?
- Any known contaminated soil? If so, how has it been addressed?



- Identify Connections and Feed
- Storm/Sewer crossings offsets



# **CONTRACTOR'S CONSTRUCTION PLAN**

Water pipeline and/or ser Working hours / weekend	rvice lateral including CUC's start date: ds:
Overtime:	Sequence of work:
1	tend work notify the District Area Service Center contact, by e construction work performed at the option of, or for the



SUBMITTALS
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PRIOR TO OBTAINING DISTRICT FURNISHED MATERIAL OR THE START OF

	PIPELINE CONSTRUCTION, COMPLIANCE WITH THE FOLLOWING PRECONSTRUCTION REQUIREMENTS ARE NECESSARY - SECTION 1000.1-1.2
į	FURNISH TO DISTRICT AREA SERVICE CENTER CONTACT:
	Competent Persons:  Furnish written designation of competent persons working on the job site along with a current competent person training certification in regard to trench and excavation safety
	Qualified Environmental Professional(s) (QEPs): Applicant is responsible for complying with all regulatory oversight requirements and reporting per the approved Clean Utility Corridor (CUC) Installation Plan (or approved equivalent plan). When necessary the Applicant will provide a QEP to provide oversight and documentation according to the plan and to confirm worker health and safety.
	The QEP shall have working knowledge of Federal, State, and local laws and regulations governing environmental compliance including hazardous materials management and disposal requirements. A person also with experience conducting environmental investigations including applicable methods and techniques of environmental sampling, analysis, and modeling.
	Site Safety Plan: Applicant shall furnish a site safety plan if known safety or environmental contamination hazards are present, or suspected, for all workers and the general public.
	<b>Permits:</b> Applicant shall obtain all necessary permits for doing work and provide copies to the District, including but not limited to encroachment and drilling permits in preparation for installation of a CUC. Where requirements of a permit differ from those of the District the more stringent requirement shall apply.
	Traffic Control Plans: Applicant shall furnish copies of the approved traffic control plans.
	<b>Sub-grade Certification:</b> Applicant's engineer to certify, <b>in writing,</b> that the pipeline alignment is at or within 0.5 feet above subgrade.
	Survey Cut Sheets: Furnish survey cut sheets for the pipeline. District Area Service Center contact will review the field staking and cut sheets prior to the District releasing furnished materials.
	Parts and Material Submittals: (Furnish manufacturer's affidavit stating that materials delivered to the site meet the District specifications.



Demarcation fabric to line CUC trench

Backfill Materials:
Furnish required samples of backfill materials, to be imported. Submit product data sheets for preliminary review. Upon conditional approval, submit 50lb samples Materials Testing Laboratory
located at 1100 21 <sup>st</sup> Street, Oakland. Prior to delivery, call (510) 287-1990 between 8:00 a.m. and 10:00 a.m. to make an appointment.
Source of Class I/Sand (no marine-based product is permitted):
Source of Aggregate base:

### **Survey**

Furnish survey cut sheets for the pipeline which shall include as a minimum all information required for each section surveyed. District Crew will review submittal and field staking for acceptance prior to releasing District furnished material. Changes in finish grade changes (and the limits and depths) of all related deep lift road sections are to be reflected in the survey staking and related cut sheets.

Survey stakes shall be established by a California licensed land surveyor as follows: Set offset stakes along the pipeline alignment at an offset distance of not more than 17 feet from the centerline of the alignment, and not more than 50 feet apart.

Set offset stakes at forward and back tangents of angle points and at all grade breaks. Set offset stakes at all valves, tees, test stations, air valves, services 4" and larger, and any other appurtenances. Offset stakes required at all storm drain and sewer crossings and shall indicate cut/fill to top of curb/finish grade elevation for both water line and crossing utility.

Offset stakes shall indicate the offset distance, pipeline alignment survey stationing, and top of curb/finish grade elevation. In addition, where profile is shown on project drawings, provide cuts to outside bottom of pipe.

Carefully preserve all survey stakes and reference points, and keep them accessible during the construction of the pipeline.

#### **Survey for Hydrants:**

Each fire hydrant shall have offset staking with cut/fill to top of curb or finish grade. Set two stakes (straddlers) at a maximum of 10' perpendicular to hydrant run.

Applicant shall ensure that the centerline of each fire hydrant maintains proper setback distances from face of curb (20"-24"), back of sidewalk (12"-16") if walk is less than 6' wide, and edge of driveway (5'). Hydrants shall be set 5" to 6" above finish grade at hydrant. Costs to relocate hydrants shall be borne by the applicant.

## **Backfill and Compaction -- Section 02316.1**

Applicant is responsible for hiring a soils engineer to perform all necessary tests for compaction, in accordance with CSS Section 26, and as required by the agency having jurisdiction. Test results shall be available to EBMUD District Area Service Center contact upon request.

Install aggregate base backfill material where excavation is in a paved public road unless otherwise specified by



the agency having jurisdiction.

No motor driven mechanical compacting equipment in excess of 1000 pounds shall be used over pipelines until the backfill has been compacted to 24" over the crown of the pipe.

Remove loose material and rocks from bottom of trench.

Place 3" class 1 pipe bedding. If more than 6" then compaction is required prior to placing pipe in trench.

Place class 1 bedding around pipe and between 6" and 12" above.

Native backfill material shall be approved by the District Area Service Center contact and shall be free of organic and other unsuitable materials and shall not have masses larger than 3".

## Public Safety -- Section 01000.1-1.0SC

Provide all necessary safety equipment and manpower to safely manage the work site that protects the general public during all phases of the project.

## **Excavation Safety -- Cal OSHA permit required**

District Area Service Center workers will not perform inspections in unsafe conditions and will notify the Applicant when they have safety concerns.

All excavation work and all work in the vicinity of an excavation shall be in full conformance to Article 6, Excavations of the Construction Safety Orders, in addition to applicable safety requirements.

Designate in writing along with certification one or more individuals as a competent person Written designation shall certify that each designated competent person has training, knowledge, and authority required of a competent person under Article 6, Excavations of Construction Safety Orders.

All excavations greater than 5 feet in depth, or where the hazard of a potential cave-in exists, shall have a protective system to prevent earth movement Protective systems shall, at a minimum, conform to Cal/OSHA standards for sloping and benching, or for timber or aluminum shoring for trenches; all shall be constructed in accordance with tabulated data as allowed by article 6 of the Construction Safety Orders.

#### **Contaminated Soils 02221.1-1.04Cl**

If contaminated soils are known, suspected, or encountered, see General Conditions, No. 10, for Applicant's responsibility.

Immediately notify District Area Service Center contact of presence or suspected presence of contaminants. Notification is for safety of District personnel, contractor's personnel, and the general public.

## Excavations -- Section 02316.1 -- In existing paved roads

Notify city, county or state, three working days prior to work when survey monuments will be disturbed.

Saw cut pavement as required by permit. Properly dispose of A.C. slurry required by the agency having jurisdiction.



Store materials to minimize obstruction to traffic.

Trench shall be backfilled, compacted, and paved at the end of the day's work where excavation is in public road.

Sloping side of the trench excavation will not be permitted in public streets.

Existing improvements of any kind shall be fully protected from damage.

## **Pavement Replacement -- Section 02500.1**

Replace all cut or damaged street pavement sections, curbs, gutters, driveways, and sidewalks following the completion of pipeline trench backfill.

Install or replace structural pavement section (pavement and base materials) to match the existing section or as required by the local agency permit.

Repair all pavement damaged by the work to "as found" or better condition.

# **Temporary Pavement:**

The surface of the trench shall be relatively smooth and maintained at all times at a grade level with the adjacent existing paving.

Maintain inspection of trench areas; place and maintain warning lights and barriers where unsafe 'conditions exist.

Place temporary asphaltic plant mix (cutback) on trench surface immediately after backfilling has been completed; minimum thickness shall be 1 1/2-inches.

#### **Permanent Pavement:**

Install permanent replacement pavement within 14 calendar days after the backfill and all other work in the area to be paved is completed.

The thickness of permanent pavement shall be equal to the adjacent permanent pavement thickness, minimum thickness shall be 2 inches or as required by the local agency permit, whichever is larger.

Conform to CSS 39 and applicable city/county specifications for asphalt concrete installations.

Replace all removed or destroyed street markings.

#### **Utilities -- Section 02316.1**

What utilities are in place along the pipeline alignment?

The Applicant is responsible for having all underground utilities and structures located by the owners in advance of excavation.



Notify all known owners of underground utilities in area of proposed work and Underground Service Alert (U.S.A.) at least two work days before start of actual work; update (USA) as needed. Workers protection is provided as required by Cal/OSHA.

Field verify that all utilities shown on drawings or street trench scars seen along alignment are identified prior to excavation in area.

Hand excavation is required within 24" on either side of the exterior surface of any underground utility.

If utility is damaged immediately notify the utility owner and District Area Service Center contact. For a gas leak notify Fire Dept. and shutdown equipment and take appropriate actions.

## **Miscellaneous Installation Requirements -- Section 02511.1**

Connections to Existing Pipelines:

Only one connection to the source main is permitted until the pipeline has successfully passed the water quality testing.

Advance Notice: The Applicant shall give a written minimum 5 working day notification to the District Area Service Center contact, to schedule any connection operations to be performed.

Scheduling of shutdowns and connections shall be prepared jointly by the Applicant and the District Area Service Center contact. District personnel will direct the operation of all valves in the in-service system for flushing, shutdowns and connections.

All source valves connected to or installed by the Applicant shall be accessible at all times.

Final connections to existing pipelines shall be less than 6'.

Contractor to set up and assist in main connection flushing and water quality testing.

#### **Hydrostatic Pressure and Leakage Test -- Section 02511.1-3.7**

The District Area Service Center will furnish all necessary testing equipment and personnel required for completing the tests per Section 02609.1-3.07E.

The District assumes no liability for Applicants additional costs resulting from District furnished valves that are found to be leaking during the pressure testing. If a valve is damaged during backfilling operations, it will be at the Applicants cost to excavate for EBMUD to change the damaged valve.

#### Flushing, Chlorinating, Sampling, Dechlorinating, and Disposing

District will not perform flushing, chlorinating, or sampling on weekends, District holidays or after 4:30pm.

All flushing, chlorinating, and sampling shall be performed by the District Area Service Center and performed in compliance with AWWA C651, EBMUD standard specifications, and federal, state, and local agencies as their rules apply to water discharge regulations.



Take the necessary precautions to comply with all water discharge regulations of the Department of Fish and Game, Regional Water Quality Control Board, and federal and local agencies (especially) when discharging dechlorinated water into storm drains, creeks, channels, and water courses.

Take the necessary precautions to prevent any erosion along the water discharge flow or cause sedimentation to enter into the watercourse or storm inlet.

### Fire Hydrant Installation -- Section 02511.1-3.2

All fire hydrants shall be installed by District Area Service Center per standard drawing 9496-GB with 6" ML&PCS steel (material furnished by the District).

Applicant shall ensure that each fire hydrant maintains proper setback clearance from the face of curb (20"-24"), back of walk (12"-16") and edge of driveway (driveway clearance 5' minimum) and 5" to 6" above finish grade at hydrant by reviewing improvement drawing submitted to District.

Hydrants shall be bagged until main has passed water quality testing and is placed in service.

# **Coordination with District Crews**

District crews will be fully supported when on site to make service transfers, connections, and kills.

This includes the contractor completing and backfilling all required excavations, shoring, providing traffic control and removing (and replacing) plates.

The scheduling of service transfers, connections, and kills will be based on obtaining passing water quality samples and the availability of District crews. The availability of District crews is not guaranteed as District has responsibilities to respond to unforeseen emergences such as main breaks.