

## PLACEMENT OF BASE MATERIALS

### 301-1 SUBGRADE PREPARATION.

#### 301-1.1 **General.** *Add the following:*

Subgrade soils shall be moisture conditioned to a minimum 2% above optimum moisture content to a depth of at least 12 inches, compacted to 95% relative compaction per ASTM D1557, unless there is underlying untreated base materials in the pavement section. This subgrade soil will be evaluated, for verification and approval by the Engineer, prior to payment. Where highly granular soils are encountered in fills, deviations to this moisture criterion may be considered on a case-by-case basis based on field conditions and review/acceptance by the Geotechnical Consultant.

The City will furnish the first tests at no cost to the Contractor. Any retesting required due to first test failures shall be made by the City's Engineer at the Contractor's expense, cost of which shall be deducted from the Contractor's final payment.

The cost of furnishing and applying water and all other work necessary for subgrade preparation, as directed by the Engineer, shall be included in the Contractor's bid price for other items.

Subgrade soils should be in a stable, non-pumping condition prior to placing proposed improvements.

### 301-1 SUBGRADE PREPARATION

#### 301-1.6 **Adjustment of Manhole Frame and Cover Sets to Grade.** *After the last paragraph, ADD the following text:*

Adjustment of utility appurtenances to grade shall be in conformance with 301-1.6 and 302-5.8 of the Standard Specifications and these Special Provisions:

Adjusting City of Lake Forest storm drain manhole and storm drain cleanout covers to grade shall conform to SPPWC Std. Plan No. 205-2.

All IRWD water can and lids shall be removed and replaced with new cans and lids provided by IRWD and adjusted to grade. Adjusting Irvine Ranch Water District (IRWD) water valves to grade shall conform to IRWD Standard Plan W-7, adjusting IRWD sewer manhole frames and covers to grade shall conform to IRWD Standard Plan S-1.

Contractor shall coordinate with the Telecommunications Company regarding the adjustment of all telecommunication manholes. Telecommunication manholes shall be adjusted to grade based on coordination and shall be accomplished per the Telecommunication Company's latest Standard Plans.

All surface utility covers (even those to be adjusted to grade by others) shall be located in the field prior to beginning any work on this project. The Contractor shall remove existing concrete pads or collars that might interfere with the adjustment of the valve cover to the grade of the asphalt concrete surface. Any damage to existing utility systems or appurtenances by the Contractor shall be replaced at the Contractor's expense.

TECHNICAL SPECIFICATIONS

All IRWD water valves shall be accessible at all times. The Contractor shall notify the Engineer to contact IRWD inspector at (949) 476-7500 for inspection of this work.

The following method shall be utilized to adjust manhole frames and covers, water valve frame and covers (if necessary), and survey well monument covers.

- a) After the asphalt concrete pavement overlay has been completed, circular holes shall be cut where the cover exists. The diameter of the circular hole shall be at least twenty-four inches (24") larger than the outer diameter of the cover.
- b) The cover shall then be raised to the finished pavement grade and suitably blocked and concreted in place to the satisfaction of the Owner’s Representative.
- c) A PCC collar shall be poured around the cover to an elevation no more than two inches (2”) below finished pavement grade. Said PCC collar shall have a minimum depth of eight inches (8”) or (as shown per plan) and be placed over four inches (4”) of crushed aggregate base (CAB), thoroughly compacted to 95% minimum relative compaction.
- d) After the concrete has cured sufficiently, a tack coat shall be applied and ARHM-GG-C surface course material shall be placed to finished pavement grade.

All utility facilities other than City, IRWD facilities, or County Monumentation Wells within the paving limits shall be protected in place by the General Contractor. Existing SCE vaults/manholes existing within the project limits shall be adjusted by the respective Utility Company. Temporary asphalt ramping shall be required around each vault/manhole until the completion of the final paving operations. Temp AC ramping to be included in traffic control costs and no additional compensation will be allowed. Adjustment of said utility manhole covers will be conducted by the utility owner.

All existing SCG slip can lids shall slipped/raised to grade during the paving operations.

Adjustment of monument well frame and cover to grade shall include the protection of the existing monument in place. Any damage caused to the monument shall require the Contractor to re-set and file the existing monument per County of Orange Surveyor requirements.

The contact information for the utility agencies notified and present within the project limits are as follows:

Utility Agency	Utility Coordinator	Phone Number
AT&T - DISTRIBUTION	Bob Fleisher	(949) 480-6066
CLEAR CHANNEL OUTDOOR	Fred Garcia, Jr.	(949)546-2750
COX COMMUNICATIONS	Debbi Borroel	(949)546-2750
IRVINE RANCH WATER DISTRICT	Belisario Rios	(949)453-5394
MCI – VERIZON BUSINESS	Sir/Madam	(949)453-5394
ORANGE COUNTY PUBLIC WORKS OCFCD	Sal Gutierrez	(704)647-3992
SC GAS - ALISO VIEJO	Brad Morrison	(714)634-3061
SCE - TELECOM	Eric Lopez	626-422-9256

**SCG Valve Can & Lid Adjustments:**

It will be the Contractor's responsibility to adjust all SCG slip can and lids to grade during paving operations. Contractor shall be responsible to coordinate with SCG representative ahead of any demolition and adjustments.

**SCE Manhole & Vault Adjustments:**

SCE manholes & Vault lids will require adjustment and/or protection in place as noted on the plans. Where manholes/vaults are noted as adjusted to grade, SCE will be responsible for conducting all necessary utility adjustments. Contractor shall coordinate directly with SCE to verify the construction timelines necessary for adjusting the noted vault lids to grade. Notice should be given to SCE upon award of the contract to coordinate anticipated construction timelines by the City's Contractor.

It will be the Contractor's responsibility to adjust construction schedule and work zones based on SCE's utility adjustment schedules. It is the intent of this project that the SCE utility adjustments be conducted concurrently with the contractor's operations (no extension of working days). Should delays be encountered solely as a result of the SCE utility vault and manhole adjustments, contract working days will not be charged to the contractor for the given delays, however, no Contract work may be conducted during the given delay/grace period.

**Verizon Manhole Adjustments:**

Verizon manhole lids will require adjustment and/or protection in place as noted on the plans. Where manholes are noted as adjusted to grade, Verizon will be responsible for conducting all necessary utility adjustments. Contractor shall coordinate directly with Verizon to verify the construction timelines necessary for adjusting the noted vault lids to grade. Notice should be given to Verizon upon award of the contract to coordinate anticipated construction timelines by the City's Contractor.

It will be the Contractor's responsibility to adjust construction schedule and work zones based on Verizon's utility adjustment schedules. It is the intent of this project that the Verizon utility adjustments be conducted concurrently with the contractor's operations (no extension of working days). Should delays be encountered solely as a result of the Verizon manhole adjustments, contract working days will not be charged to the contractor for the given delays, however, no Contract work may be conducted during the given delay/grace period.

Payment for **Adjust Sewer/Storm Drain/Telephone Manholes To Grade** shall be included in the unit price bid per Each (EA). The contract unit price shall include full compensation for furnishing labor, tools, equipment, and materials necessary for doing the work, complete in place, and no additional compensation will be allowed therefor.

Payment for **Remove And Replace IRWD Water And RW Valve Box And Cover** shall be at the unit price bid per Each (EA). The contract unit price shall include full compensation for picking up the valve box and covers at the IRWD, furnishing labor, tools, equipment, and materials necessary for doing the work, complete in place, and no additional compensation will be allowed therefor.