

## **SECTION 3 – CONTRACTOR'S CONSTRUCTION REQUIREMENTS**

### **3.1. GENERAL CONSTRUCTION STANDARDS**

All excavations affecting or involving any part of the District System, and all work on Main Extensions, Service Connections, or other District facilities shall be performed in conformity with and are subject to the requirements and conditions set forth herein. Whenever any provision of these Specifications or the Rules and Regulations imposes a duty addressed in this Section 3 upon a Contractor, the term "Contractor" in such context shall be deemed to apply also to the Property Owner.

#### **3.1.1. COMPLIANCE**

Contractor shall comply with all District, City of Englewood, State and Federal Rules, Regulations, Standards and Specifications.

#### **3.1.2. PERMITS**

The Contractor shall be solely responsible for determining and obtaining any and all permits required for the work from other governmental entities or agencies having jurisdiction, and shall perform the work in accordance with any and all applicable ordinances, regulations, laws and orders of, or permits issued by such entities or agencies.

#### **3.1.3. SUBSURFACE STRUCTURES**

The District will make available to the Contractor record drawings showing the general location of its facilities and such information as it has about other subsurface structures in the vicinity of the work, but the Contractor shall be finally and solely responsible for notifying all owners or operators thereof of the Contractor's intent to excavate in the area, and verifying the existence and horizontal and vertical location of all subsurface structures in such area.

If a Contractor damages any District facilities during construction, they shall immediately notify the District. The Contractor shall provide bypass pumping, at their own expense, until the District reviews the damage and proposes remedial measures. All costs to repair the District facilities shall be borne by the Contractor. Repairs shall be performed in accordance with the "Sanitary Sewer Line Repair" detail found in Section 5 of these Specifications and/or the District site specific recommendations.

Any Contractor who damages District facilities shall indemnify and hold the District harmless against any and all claims for damage resulting there from, and shall indemnify and hold the District harmless against any and all claims for damages to any such structures.

#### **3.1.4. WARRANTY**

All materials and workmanship furnished by the Contractor shall conform to these System Specifications and to all plans and designs accepted by the District, and shall be free from all defects due to faulty or non-conforming materials or workmanship.

### 3.1.5. INDEPENDENT INVESTIGATION

Contractor shall thoroughly examine the work site to ascertain for themselves all soil, geological, groundwater and other conditions to be encountered which might affect the work being undertaken. The Contractor shall enter into such work relying on their own investigation and information, and not on any statements or representations, if any, that have been made by the District.

### 3.1.6. INDEMNIFICATION

By undertaking any work subject to this section, Contractor agrees to indemnify and hold harmless the District from any and all liability, claims, and demands, on account of injury, loss, or damage, including without limitation claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, or any other loss of any kind whatsoever, which arise out of or are in any manner connected with any work subject to this section if such injury, loss, or damage is caused in whole or in part by, or is claimed to be caused in whole or in part by, the act, omission, error, professional error, mistake, negligence, or other fault of Contractor, or which arise out of any Workmen's Compensation claim of any employee of the Contractor. Contractor agrees to investigate, handle, respond to, and to provide defense for and defend against such liability, claims or demands at the sole expense of Contractor. The Contractor also agrees to bear all other costs and expenses related thereto, including court costs and attorney fees, whether or not any such liability, claims, or demands alleged are groundless, false, or fraudulent. Nothing in this subsection shall be deemed to impose upon Contractor any obligation to defend or hold the District harmless against claims for damages legally caused by any unlawful act or omission of the District.

## 3.2. REQUIRED SUBMITTALS

No Contractor shall begin work on any Main Extension, Service Connection, or other District facilities until they have obtained the prior authorization of the District therefore, and has submitted, in addition to any other materials required elsewhere herein, the following, accepted as to form by the District:

### 3.2.1. WRITTEN AGREEMENT

If required by the District, a writing duly signed by Contractor (1) acknowledging their consent to be bound by the provisions of Section 3.1; (2) warranting that the work will conform to such provisions and will be free from defects due to faulty or non-conforming materials and workmanship; (3) agreeing to indemnify the District as provided in 3.1.6, and (4) agreeing to pay any and all applicable fees and charges provided by these Specifications and the Rules and Regulations in connection with the work.

### 3.2.2. FEES

The full amount of all fees payable in advance, or any required costs deposits, or both. Owner/Developer is responsible for being aware of all applicable fee required by the District. It will be the responsibility of the Owner/Developer to contact the District for the latest fees and schedule of payments to avoid delays. Fees are subject to change.

### 3.3. STOP WORK ORDERS

#### 3.3.1. ORDER

The District may revoke any authorization for work and issue a Stop Work Order upon a determination that the Contractor has violated or is about to violate any condition of any plan acceptance, any provision of these Specifications or Rules and Regulations, or any other standard, specification, or rule imposed by the District. A Stop Work Order shall take effect immediately upon the entry thereof by the District and notice to the Contractor, and shall remain in full force and effect until rescinded in writing by the District.

#### 3.3.2. EFFECT

It is unlawful for any person to do any work in violation of the terms of any Stop Work Order issued pursuant to this section except such as may be permitted by the District in order to render the construction site safe and secure.

### 3.4. CURE OF DEFECTS

#### 3.4.1. ORDER TO CURE

If the District determines that any part of the work was not performed in conformity with these Specifications, Rules or Regulations or accepted plans, or is defective, of poor or unworkmanlike quality, or is otherwise not in conformity with any applicable warranty, it may give written notice thereof to the Contractor. Such notice shall specify the non-conformity, direct the Contractor at their expense to perform specified remedial work, and specify the period of time determined by the District reasonably necessary for completion of the remedial work.

#### 3.4.2. DISTRICT CURE

If the Contractor fails within the time stated following such notice to cure the non-conformity specified therein, the District, in addition to and without waiving any of its other remedies, may perform the work and charge the Contractor for its actual costs incurred in connection therewith, calculated in accordance with the rates set forth the Rules and Regulations. The provisions of Article 7 of the Rules and Regulations applicable to invoicing and collection of fees and charges shall apply to any charges assessed to Contractor under this section.

### 3.5. PRE-CONSTRUCTION MEETING

A Pre-construction Meeting shall be held at the District Offices prior to the start of any work. The District, Contractor, Surveyor, Soils Engineer, and Developer, or Developer's Engineer, must be represented at this meeting, which shall generally be held at the District Office (3722 East Orchard Road; Centennial, Colorado 80121). Before scheduling the pre-construction meeting, the following requirements must be met:

- Construction plans are approved by the District.
- Construction Observation Fees are paid to the District.
- Improvements Agreement must be signed by the Owner/Developer.
- Easement Agreement has been executed and recorded (if in a private roadway) or the plat has been recorded (if in the public ROW).

After the Pre-construction meeting is held, the Contractor shall, at least 48 hours prior to the start of construction, notify the District of its construction schedule and start date.

### 3.6. CONSTRUCTION PLANS

Construction Plans shall be reviewed and signed by the District or the Districts authorized representative. The signed plans and a copy of these Specifications shall be kept on the project site by the Contractor at all times.

### 3.7. DEFECTIVE MATERIALS

All materials not conforming to the requirements of these Specifications shall be considered defective. Whether in place or not, such material shall be removed immediately from the site of the work, unless otherwise permitted by the District. Rejected material, the defects of which have been subsequently corrected, shall not be used until the District has reviewed them and found them acceptable. The District will not consider conveyance and acceptance of a project if the Contractor fails to comply promptly with any order of the District made under the provisions of this Section.

### 3.8. DESIGN REVISIONS DURING CONSTRUCTION

Should the Contractor encounter field conditions that prevent construction to occur in conformance with the reviewed and signed plans, a meeting shall be scheduled by the Contractor with the Owner's Engineer and the District to discuss an alternative design. The Contractor's construction shall not deviate from the signed plans without the review and approval of the District and the Owner's Engineer.

### 3.9. CONSTRUCTION WATER

The Contractor shall be responsible for obtaining any water required for various phases of construction. Arrangement and coordination of permits shall be made through Denver Water and thereafter the District. A hydrant-specific permit must be applied for through the District and applicable fees shall be paid at the District office. An approved water meter and subsequent meter permit must first be obtained from Denver Water. Information regarding temporary water service through Denver Water can be found at Denver Water Operating Rules Chapter 3 – Temporary Water Service.

### 3.10. TEMPORARY HANDLING OF SEWAGE

Certain work in connection with tying into the existing sanitary sewer facilities may require the temporary handling of sewage either by pumping, bulk heading at low flows, or other means acceptable to the District. Sewage, so diverted, shall be handled in a manner so as not to create a public nuisance or health hazard. Any temporary ditching shall be backfilled and compacted, and the ground elevations restored to original conditions.

Handling of sewage shall conform, and be acceptable to current Colorado Department of Health requirements and/or applicable City/County Health Department requirements.

The District will review the Contractor's written "Bypass Pumping Plan". The plan shall be inclusive of all flow rates, pumping equipment, piping and routing, and all contingencies as required to successfully pump flows around working areas. The system should be able to handle at least twice the maximum month flow. At least one redundant pump and associated backup

equipment shall be provided in the case of failure. Contractor shall be responsible for metering the flow and determining appropriately sized equipment. Metering reports and calculations of flow rates shall be provided as part of this Bypass Pumping Plan.

### 3.11. RECORD DRAWINGS

See APPENDIX D for a complete listing of how record drawings shall be processed by the Owner and approved by the Engineer.

### 3.12. REPLACEMENT OF EXISTING STREET IMPROVEMENTS

In areas where existing pavements, concrete improvements, storm or drainage improvements, etc. are removed during construction, all facilities shall be replaced in kind to the limits disturbed by the sewer line construction. All replacement shall be in accordance with the appropriate City, County, or State Highway Department Standards.

### 3.13. SAFETY & TRAFFIC CONTROL

The Contractor shall determine, initiate, maintain, and supervise all measures necessary to protect the public during construction. It is the Contractor's responsibility to obtain and maintain any necessary permits as required by the jurisdictional City, County, or State Highway Department.

Traffic shall be controlled at those locations throughout the project area in order to maintain an efficient and orderly vehicular and pedestrian traffic flow. All traffic control, construction signing, and residential access, etc., shall be handled in conformance with the Uniform Traffic Control Manual and the appropriate City, County, or State Highway Department Standards.

The Contractor shall furnish, construct, maintain, and remove detours, road closures, lights, signs, fences, barricades, flares, miscellaneous traffic devices, flagmen, drainage facilities, reconstruct paving and such other items and services as are necessary to adequately safeguard the public, both traveling and otherwise, from hazard and inconvenience. The Contractor shall erect and maintain such warnings and directional signs as may be required by the City, County, or State Highway Department.

Should the progress of construction require closure of residential access, the Contractor shall notify the residents which may be affected at least 24 hours in advance of such closure, and provide temporary access. Prior to the start of construction, the Contractor shall notify affected residents as well as the appropriate police and fire departments, giving the approximate starting date expected, completion date, and the name and telephone number of a responsible person representing the contractor who may be contacted at any hour.

### 3.14. CONSTRUCTION OBSERVATION

The District shall decide any and all questions that may arise during construction as to the quality and acceptability of the materials furnished, the work performed, or the manner of performance of the work.

No observation or testing will be performed by the District on weekends, holidays, or at night without the express agreement of the District secured in advance. Whenever any observation or testing is required by any specific provision of these Specifications or the Rules and Regulations, or by the terms of any permit or plan acceptance, the Contractor shall give the District such notice

as is required and shall not cover or otherwise obscure the work until the observation or testing has been made. The Contractor shall, at their expense, uncover or otherwise make such work accessible for observation or testing when ordered to do so by the District if they violate this requirement.

The observations, testing and reviews performed by the District are for the sole and exclusive benefit of the District. No liability shall attach to the District by reason of any observations, testing, or reviews required or authorized by these Specifications or the Rules and Regulations, or by reason of the issuance of any acceptance or permit for any work subject to this section.

The District is not a guarantor of the construction Contractor's obligations and performance of contract.

Observations of work in progress and on-site visits are not to be construed as a guarantee by the District of the Contractor's performance.

The District is not responsible for safety in, on, or about the Project site, or for compliance by the appropriate party of any regulations relating thereto.

The District exercises no control of the safety or adequacy of any equipment, building components, scaffolding, forms, or any other work aids used in or about the project, or in the superintending of the same.

3.15. GEOTECHNICAL OBSERVATION

Geotechnical observation and backfill density tests will be performed by the Contractor's Soils Engineer to provide acceptable fill control, bedding compaction, and foundation suitability. All supervision necessary to control fill and compaction tests will be at the expense of the Contractor. If the first compaction test does not meet with the Specifications, the sub-standard areas shall be reworked and additional compaction tests will be performed until the Specification is met. Any deviation from the Plans, Specifications, or soils report must be corrected by the Contractor to the satisfaction of the District. Copies of all compaction tests shall be provided to the District on the working day following the test. The location and frequency of compaction testing shall be per the City, County, or District Specifications, whichever is more stringent. The minimum testing interval is as follows:

Minimum Testing Interval		
Location	Horizontal Interval	Vertical Interval
Sanitary Sewer Main	150 feet	Every 1 foot
Sanitary Sewer Structure	Every Structure	Every 1 foot
Service Line	Every 3 <sup>rd</sup> Service	Every 1 foot

3.16. FEES

Contractor will pay the District all fees imposed and assessed by the District for reviews, observation, tests, acceptance, and any other undertakings performed by the District or its professional consultants in connection with the administration and enforcement of these Specifications and the Rules and Regulations, as provided by Article 7 of the Rules and Regulations.