TARRANT REGIONAL WATER DISTRICT P.O. Box 4508 Fort Worth, TX 76164

Construction Criteria along Existing Tarrant Regional Water District Pipeline Right-of-Ways

8 August 2011

A. Pamphlet Purpose. This pamphlet provides guidance to individuals, developers, architect-engineering firms, and local governmental agencies for the construction of new facilities or the modification of existing facilities within the limits of Tarrant Regional Water District's (District) Pipeline Right-of-Way (R.O.W). The guidance contained in this pamphlet applies to activities described herein in most cases. However, TRWD reserves the right to reconsider this guidance at any time due to unknown or unforeseen circumstances, technological advances, additional information, etc.

B. Applicability. This pamphlet applies to any TRWD land owned or controlled by fee ownership or easement along the Pipeline R.O.W.

C. Project Purpose. The pipeline operating system is designed to safely carry raw water within the pipelines and through developed and agriculture areas. As such, any proposed encroachment or encumbrance within the R.O.W., must keep the safe passage of water supply within the system as the first priority. The role of the TRWD is to maintain the integrity of the pipeline operating systems in order to provide sufficient water supply to our current and future customers.

D. Utility Crossings

1. Aerial Crossings

- a. No structure (pole or otherwise) shall be located within the district R.O.W.
- b. Aerial crossing shall provide a minimum vertical clearance of 20 feet between the existing ground and the low point of the wire.

2. Subsurface Crossings

a. Pothole TRWD's existing pipelines or pipeline to determine actual depth of lines

- b. It is the responsibility of the permittee or the contractor to notify Dig Tess before work may begin.
- c. A TRWD representative must be present during the pothole process.
- d. Provide GPS coordinates for top of existing pipelines or pipeline within the construction plans in NAD 83, TX 4202 North Central Texas state plane coordinates. Coordinates are to be grid, not ground; no adjustment factors are to be applied.
- e. Provide an aerial view illustrating the District's R.O.W., existing pipelines and center line of proposed utilities crossing the District's R.O.W.
- f. The proposed utility shall cross the District's R.O.W. at a 90 degree angle. Any deviation from the 90 degree rule must be approved by the TRWD Engineering Department.
- g. Plan and Profile sheets of proposed utility crossings must be provided, illustrating the location and depth of existing District pipelines within the R.O.W. The District will provide a station number for the location of existing pipelines within our R.O.W.
- h. An electronic submittal and one (1) hard copy of all plans, profiles, and specifications shall be submitted to TRWD in AutoCAD format or in georeferenced shape files. Adobe PDF files (or equivalent) are acceptable as a supplement to the electronic submittal. All specifications shall be submitted in Adobe PDF format or equivalent.
- i. Proposed utilities shall be bored at a minimum of 10 vertical feet below the outside diameter of the District's deepest pipeline for the entire width of the R.O.W.
- j. Warning signs with company's contact information shall be installed just outside of the District's R.O.W., on both sides depicting the center line of the constructed utilities within the District's R.O.W.

- k. Install one Test Station just outside of the District's R.O.W. on proposed utilities that may interfere with the District's Cathodic Protection on existing and future pipelines.
- 1. Reimburse TRWD for the installation of test stations on TRWD pipelines at the rate of \$500 each and also require reimbursement of any damaged anode beds within the construction site.
- M. All disturbed areas must be returned to existing or better condition.
 Vegetation shall be established per EPA guidelines. Contractor shall water grass until 90% of coverage is established along the District's ROW.
- n. Crop and or surface damage shall be paid directly to the property owner or tenant by the contractor in the event claim is submitted.
- o. If proposed project is approved, a comprehensive work schedule shall be submitted to TRWD.
- p. On District Fee Owned property, provide a Survey Plat and Legal Description for the easement in NAD 83 format.

E. Roadways, Highways, Driveways, Slab Bridges, Temporary Crossings and, Parking Lot Encroachments within TRWD R.O.W.

- 1. Pothole the District's existing pipelines or pipeline to determine actual depth of the lines or line
- 2. Provide GPS coordinates for top of the District's existing pipelines or pipeline within the construction plans in NAD 83, TX 4202 North Central Texas state plane coordinates. Coordinates are to be grid, not ground; no adjustment factors are to be applied.
- 3. Provide an aerial view illustrating the width of TRWD's R.O.W., existing pipelines or pipeline, and location with dimensions of proposed encroachments.

- 4. Plan and Profile sheets of the proposed encroachment must be provided, including location and depth of existing TRWD pipelines within the R.O.W. When required, provide drawings of the proposed encroachment stamped by a registered engineer for review and approval by the TRWD engineers. Plan and profile sheets in this section shall be submitted to TRWD in AutoCAD format or in georeferenced shape files. Adobe PDF files are acceptable as a supplement to the electronic submittal.
- 5. TRWD will provide a station number for the location of existing TRWD pipelines within the R.O.W.
- For crossing loads exceeding HS20 loading, provide heaviest gross loads and heaviest axle weights for equipment crossing the District's R.O.W. Manufacturer's specification sheets showing distances between axles and axle widths shall be submitted.
- 7. If proposed project is approved, a comprehensive work schedule shall be submitted to TRWD.
- 8. On District Fee owned property, provide a Survey Plat and Legal Description for the easement in NAD 83 format.

F. Structures on the R.O.W.

- 1. No permanent structures such as, but not limited to, apartments, barns, buildings, homes, garages, sheds, shops, metal fencing, and wooden fences may be installed within or across the R.O.W.
- 2. Agricultural fencing may be installed within or across TRWD's R.O.W. on a case by case basis and required to contain a minimum 16 feet wide gate for TRWD access.
- 3. Provide a comprehensive design for an agricultural fence for TRWD's review

G. Temporary Crossings

1. Aerial Crossings

a. No structure (pole or otherwise) shall be located within the District's R.O.W.

- b. Aerial crossing shall provide a minimum vertical clearance of 20 feet between the existing ground and the low point of the wire.
- For crossing loads exceeding HS20 loading, provide heaviest gross loads and heaviest axle weights for equipment crossing the District's R.O.W.
 Manufacturer's specification sheets showing distances between axles and axle widths shall be submitted

2. Surface Crossings

a. Provide at grade crossing for TRWD maintenance vehicles and equipment

H. Abandoning Existing Pipelines

1. Request to Abandon

- a. Requests to abandon existing buried pipelines or pipeline within the District R.O.W. shall be submitted in writing to TRWD.
- b. No buried lines or line within the R.O.W. may be abandoned without the review and approval of the District.

2. Abandoning

- a. Abandoned pipelines or pipeline shall be removed from the R.O.W. including any appurtenant structures.
- b. Buried pipelines or pipeline must be filled with concrete or grout
- c. Final inspection must be performed by an employee of the District

I. Vegetation within R.O.W.

1. Trees

a. Planting of trees on the R.O.W. will not be allowed

District will process and review all Project Submittals on a case by case basis and reserves the right to approve or deny any such submittal at its sole discretion.