



WATER & SEWER PIPELINE CROSSING APPROVAL PROCEDURES

GENERAL NOTES:

- A. A Water & Sewer Pipeline Crossing Permit issued by the City of Greeley Public Works Department **ONLY** allows the crossing of a Water & Sewer pipeline. Water & Sewer pipelines include water, sewer, non-potable, and service pipelines.
- B. If a proposed installation project will cross a City right-of-way or a City-owned easement unrelated to Water & Sewer pipelines, a separate permit must be obtained from the City of Greeley Public Works Department for that crossing. The owner of the installation or contractor (referred to jointly in these instructions as "Applicant") is responsible for determining the permits and/or approvals that must be obtained from the City.
- C. The City **CANNOT** issue permits and/or approvals for the crossing of private property or that of another public agency. Applicant is responsible for determining which permits and/or approvals must be obtained from a private property owner or a public agency.
- D. If a proposed installation project is an oil and gas pipeline, a design for special review by Engineering Development Review (EDR) must be submitted to the City of Greeley Community Development Department a minimum of two (2) weeks prior to the anticipated start of construction.
- E. If a proposed project damages a Water & Sewer pipeline, even if a Water & Sewer Pipeline Crossing Permit has been issued, the owner of the installation is liable for the damage. Should a Water & Sewer pipeline be damaged, the Water & Sewer Department will repair the damage and invoice the Owner of the installation for the cost of the repair (typically, that amount is approximately \$7,000). Therefore, it is required that existing Water & Sewer pipelines be potholed prior to construction, following the procedures outlined below.
- F. Parking lots, sidewalks, streets, alleys, and other paved services may be constructed in City of Greeley right-of-way easements upon approval of the City of Greeley. It is understood and agreed between the parties hereto that in the event it become necessary to repair, maintain, or install pipelines the city shall **NOT** replace any street, alley, parking area, turf or utility lines and the city shall **NOT** be liable for damages to the property.
- G. If you are utilizing boring, after the procedure is complete, submit your boring log to the City of Greeley. It shall show from one easement edge to the other and include the location of the easement and the existing water line.

APPLICATION PROCEDURES:

STEP 1: Applicant submits a location map showing where proposed installation will be crossing a Water & Sewer pipeline to the Public Works Department.

STEP 2: Based on the information contained in the location map and an inspection of the site, the Public Works Department will issue an "OK to Pothole."

STEP 3: Applicant completes the required potholing. The potholing must be witnessed by a representative of the Water & Sewer Department.

STEP 4: At least two (2) weeks before anticipated start of construction, Applicant completes and submits (1) PIPELINE CROSSING APPROVAL APPLICATION and (2) PLAN AND PROFILE DRAWING referring to the attached MINIMAL STANDARDS FOR UTILITIES CROSSING OR PARALLELING and sample Plan and Profile Drawings. Refer to 'Plane and Profile Drawing' criteria on following page for complete directions.

STEP 5: The Water & Sewer Department will review the PIPELINE CROSSING APPROVAL APPLICATION and PLAN AND PROFILE DRAWING and may inspect the site. The review will include verification of easement width and proposed clearance. Additional information and/or drawing revisions will be requested from Applicant if necessary.

STEP 6: If approved, Public Works will (1) issue a CROSSING APPROVAL, (2) provide any Approval Conditions that apply, (3) Stamp, Sign and Date as approved the Plan and Profile Drawing, and (4) provide those documents to the Applicant. Those documents must be displayed on-site during construction.

STEP 7: Contractor/Owner to arrange for Water & Sewer inspector prior to any construction activities, including potholing, within the Water & Sewer Easements and/or Water & Sewer Pipelines in a public Right of Way.



MINIMAL STANDARDS FOR WATER & SEWER PIPELINES CROSSING OR PARALLELING

PLAN AND PROFILE DRAWING (After Potholing is Completed):

- (a) Location information and placement of facility being installed, incorporating location and depth of pipelines identified by pothole.
- (b) How facility will be installed (bore, trench, other).
- (c) Type, size, material, etc. of facilities being installed, including crossing tape, marker posts, etc.
- (d) Location of Water & Sewer pipelines with any easement width shown on the drawing; and
- (e) The actual distance of clearance, both vertical and horizontal, from new facility to the existing Water & Sewer pipelines.

The following requirements are standard and pertain to every utility that intends to cross or parallel the Water & Sewer Pipelines (shall be defined as water, sewer, non-potable, and service pipelines). These minimal standards were developed to meet the State of Colorado Design Criteria for Potable Water Systems per Colorado Department of Public Health & Environment. These are minimal standards that may be adjusted by Water & Sewer upon plan review due to field conditions, soil conditions, service line connections, maintenance/repair of pipelines, burial depth, type of utility crossing, and adjacent manholes.

MINIMAL REQUIREMENTS:

Parallel Installation

- Parallel installations shall maintain a minimum of 10 feet clear horizontal separation from a Water & Sewer pipeline within a City right of way (Any variance below the 10 feet clear horizontal separation requires approval by Water & Sewer).

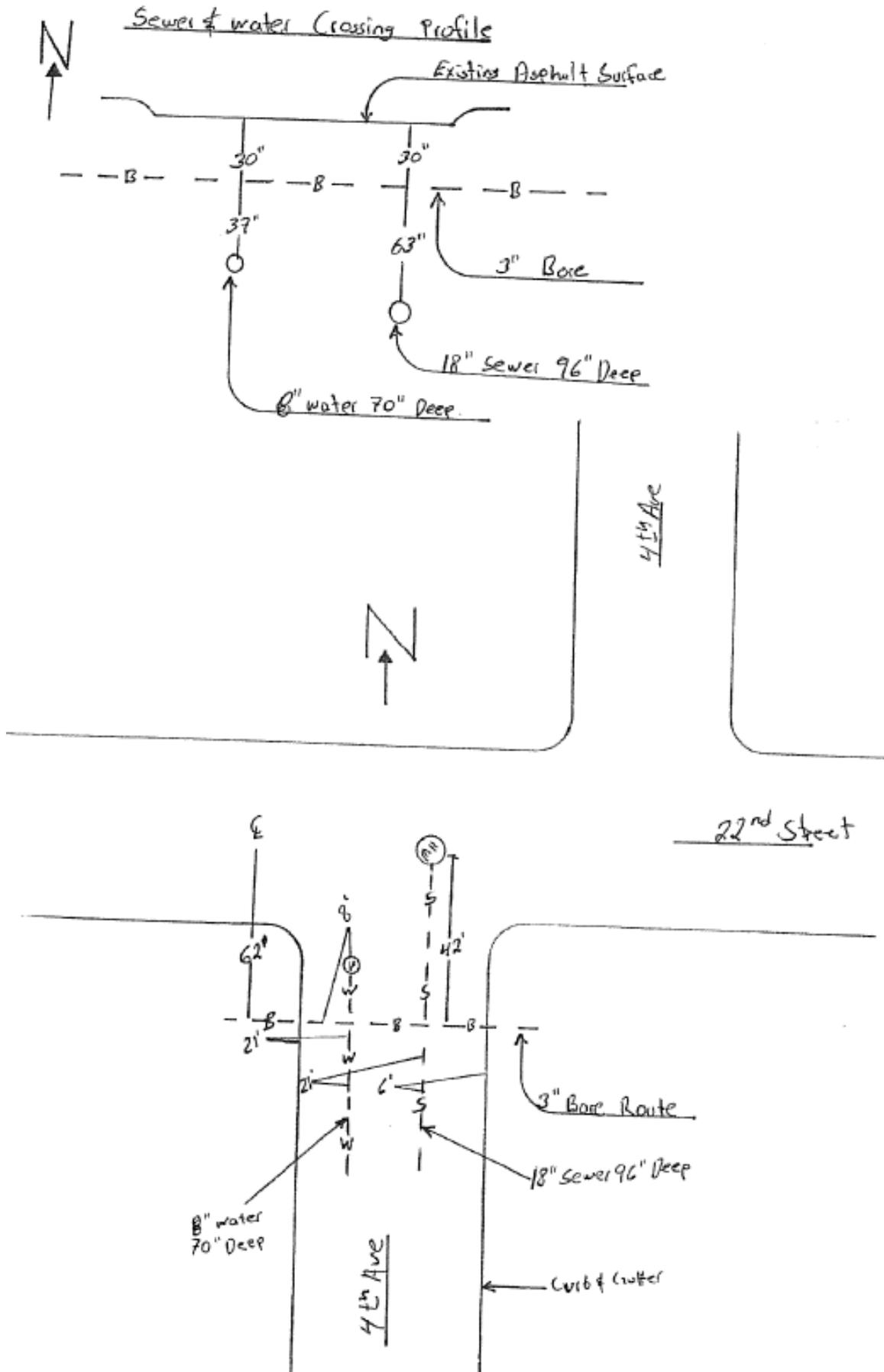
Perpendicular Crossings Installation

- For bored crossings, there shall be a minimum of 2 feet clear separation above or a minimum of 3 feet clear separation below an existing Water & Sewer pipeline. When reaming, you must allow for the outside diameter of the reamer plus the applicable 2 or 3 feet clear separation.
- For open cut crossings, a minimum of 18" clear separation above or 3 feet clear separation below an existing Water & Sewer pipeline. (NOTE: The **exact** clearance distance, **not the minimum**, must be shown on the profile drawing.)
- The encasement piping shall span a minimum of 10 feet on both sides and be centered on the existing water or sewer main.
- Any crossing that spans an exclusive water or sewer easement shall span the entire easement with the casing.
- All crossings must be at a 90-degree angle to the water or sewer main.
- All crossings shall be contained in an encasement pipe consisting of any of the following:
 - DIP CI 51
 - Steel, minimum of .25 wall or Schedule 40
 - HDPE, SDR 11
 - (NOTE: Any variation from above conduits must be reviewed and approved by Water & Sewer prior to construction)
 - PVC, Schedule 80
 - Smooth-Cor Flex
 - Bore-Gard
- A Water & Sewer representative shall verify all potholing and crossings. To schedule this service, call 350-9320 **forty eight (48) hours** prior to needing the representative.

Crossing Fees

- Utility Crossing application is \$50.00 and Utility Crossing Inspection is \$100.00 per Crossing.

Sample Crossing Approval Plan and Profile in Public ROW



Sample Crossing Approval Plan and Profile in Private Easement

