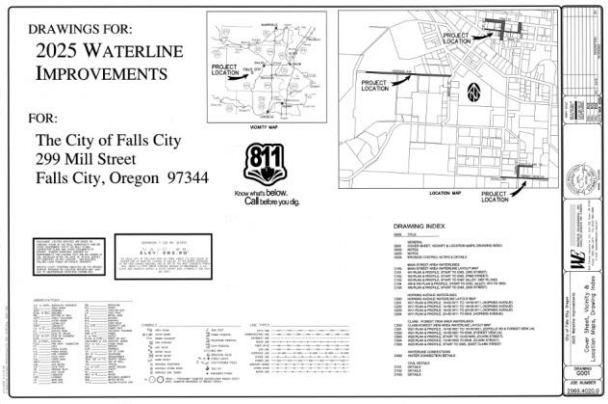
Public Health Division

Center for Health Protection, Drinking Water Services

Tina Kotek, Governor


DRAWINGS FOR:
2025 WATERLINE IMPROVEMENTS

FOR:
The City of Falls City
299 Mill Street
Falls City, Oregon 97344

March 22, 2025

Raymond C. Engel, P.E.
Project Manager
WESTECH ENGINEERING, INC.
rengel@westech-eng.com

Letter sent by email only

Re: 2025 Waterline Improvements (PR#43-2025)
Falls City (PWS ID#00297)
Conditional Approval

Dear Mr. Engel:

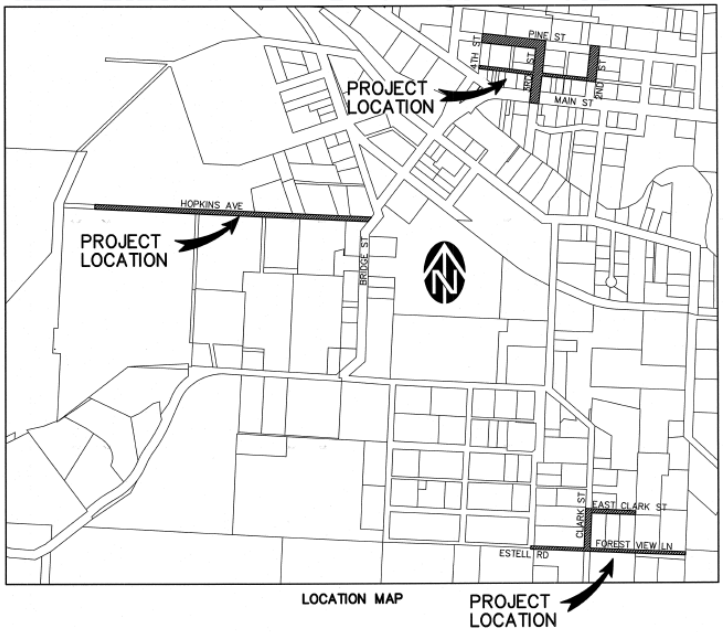
On March 20, 2025 our office received a completed land use compatibility statement (LUCS), plans, and specifications for the *2025 Waterline Improvements* project for Falls City (PWS ID#00297). A payment in the amount of $3,300 for the plan review fee was also received on March 20, 2025.

The work involves waterline improvements in 3 main areas as shown:

1) Main Street Area (2nd St, 3rd St., Pine St, & Alleys from 2nd to 3rd and 3rd to 4th),

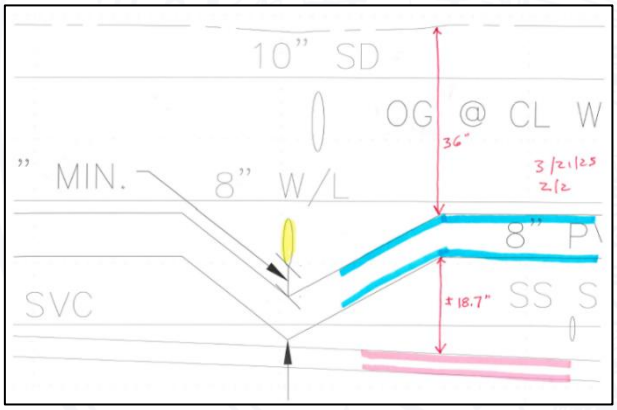
2) Hopkins Avenue, and

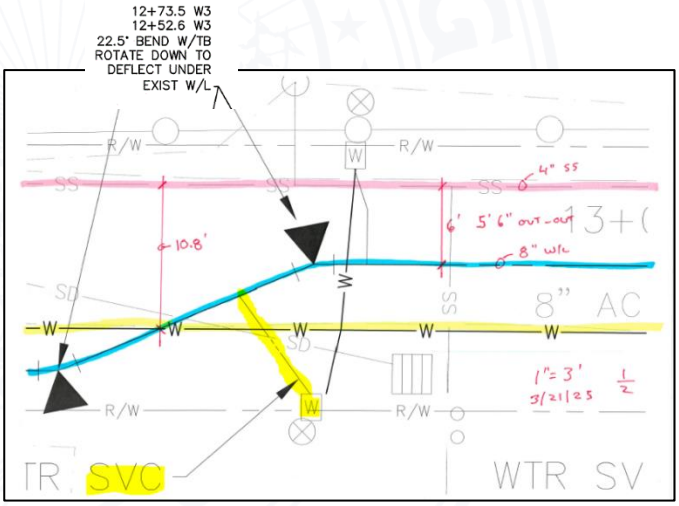
3) Clark-Forest View (Estelle Rd and Forrest View Ln, Clark St & East Clark St).

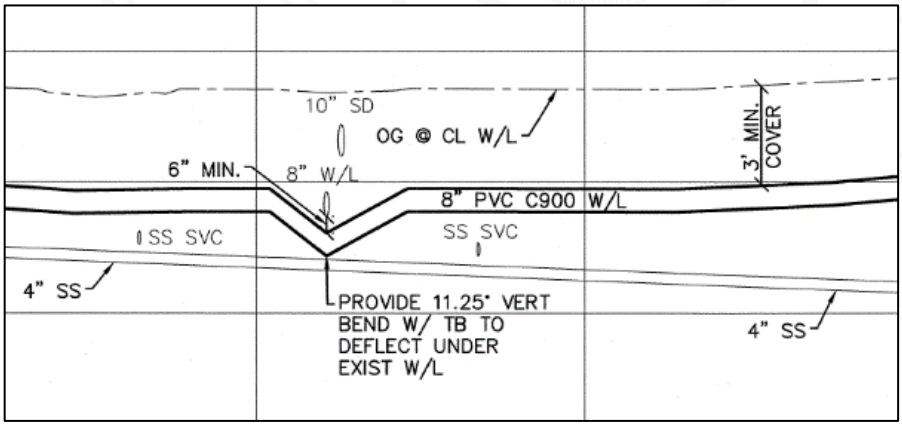


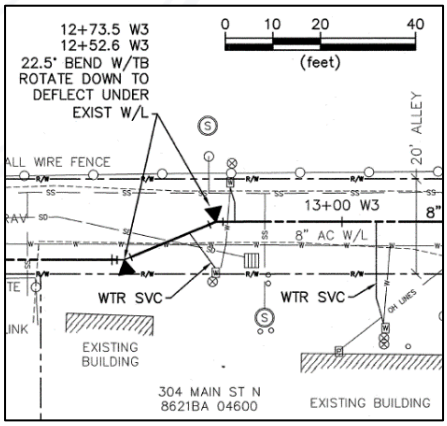
The plans are approved with the following conditions needing to be met prior to Final Approval:

1. All items in contact with potable water must meet NSF Standard 61 or equivalent.
2. The design must allow for 20 psi to be maintained at all service meters.
3. As indicated in construction note #77 on drawing G003, water and sewer line crossings conform to OAR 333-061-0050(9). Waterlines running parallel to sewer lines must also meet OAR 333-061-0050(9) – see enclosure. There are several sewer line crossings in the Main Street Area and a section shown on drawing C103 of the new waterline having less than 10-ft separation from a parallel sanitary sewer line within a 20' wide alley between 2nd and 3rd. **In that same alley is a <u>service line connection shown below that will need to be moved east</u> of the east end of the bend where the new waterline is deflected under an existing AC waterline to ensure it is in Zone 1**.

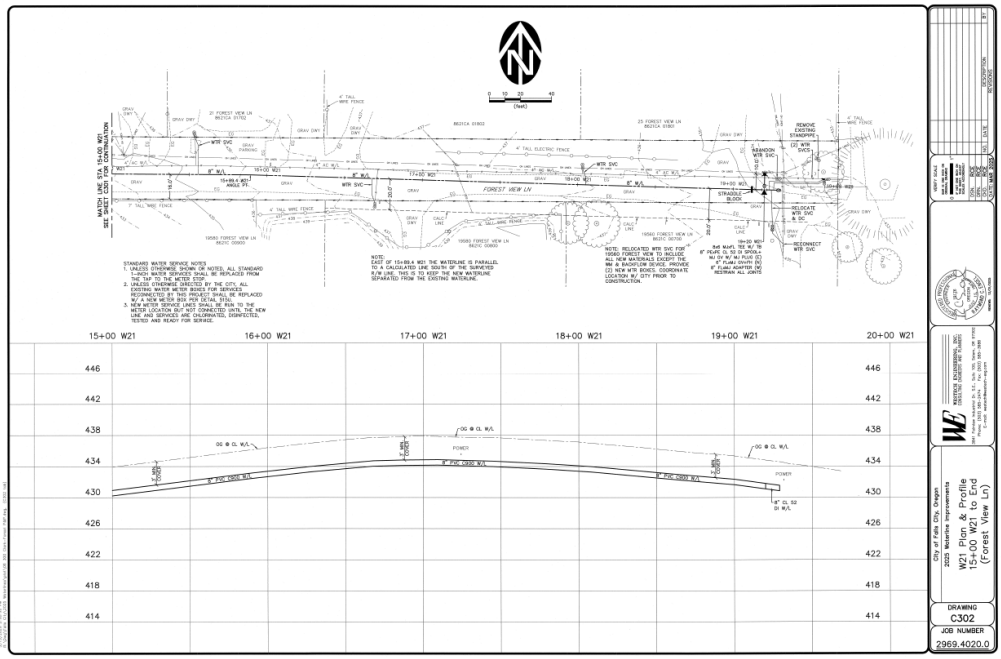








4. Air-relief valves must be installed at high points where air can accumulate such as at the crest on Forest View Lane shown below on drawing C302 (unless otherwise mitigated). The breather tube on air-relief valves must be extended above ground surface and provided with a screened, downward facing elbow.



5. Non-conductive waterlines (e.g., 8" C-900) are installed with tracer wire in accordance with OAR 333-061-0050(8)(k) as shown below.

> (k) Nonconductive water pipe (plastic or other material) that is not encased in conductive pipe or casing must have an electrically conductive wire or other approved conductor for locating the pipe when the pipeline is underground. The wire shall be No. 18 AWG (minimum) solid copper with blue colored insulation. Ends of wire shall be accessible in water meter boxes, valve boxes or casings, or outside the foundation of buildings where the pipeline enters the building. The distance between tracer lead access locations shall not be more than 1,000 feet. Joints or splices in wire shall be waterproof.

General note #59 on drawing G003 did not address the 1,000-ft limit:

> 59. All water, sanitary and storm sewer piping shall have an electrically conductive insulated 12 gauge solid core copper tracer wire the full length of the installed pipe using blue wire for water and green wire for storm and sanitary piping. Tracer wire shall be extended up into all valve boxes, catch basins, manholes and lateral cleanout boxes. Tracer wire penetrations into manholes shall be within 18 inches of the rim elevation and adjacent to manhole steps. The tracer wire shall be tied to the top manhole step or otherwise supported to allow retrieval from the outside of the manhole. All tracer wire splices shall be made with waterproof splices or waterproof/corrosion resistant wire nuts.

6. Disinfection of the waterline must be completed according to AWWA C651. Results from the coliform sampling must be provided to our office.

Until we receive verification that the conditions have been met and Final Approval has been issued, the waterlines are not approved for use. Upon completion of the project, the engineer must verify in writing that construction was completed according to the submitted plans and conditions listed above.

Project Final Approval Request Form

To close out the project and request final approval from DWS, please fill out the Project Final Approval request form and email the completed form and a set of as-builts to me at evan.e.hofeld@oha.oregon.gov. Please be sure to reference Plan Review #43-2025.

If you have any questions, please feel free to email or call me at (971) 200-0288.

Sincerely,

Evan Hofeld, Regional Engineer
OHA-Drinking Water Services
Evan.e.hofeld@oha.oregon.gov

CC: Jon Creekmore, Falls City - jcreekmore@fallscityoregon.gov

Encl. - *Project Final Approval Request Form*
- OAR 333-061-0050(9) Crossings – Sanitary Sewers and Water Lines

Oregon Health Authority

Drinking Water Services
Project Final Approval Request Form

Print

Project Name _____ **PR#** _____

Public Water System ID# 41- _____

PWS Name _____

Click to locate PWS ID#

	YES	NO	DATE
1. Was the project undertaken? If so, what was the starting date?	☐	☐	_____
2. If project was not undertaken, has the project been abandoned?	☐	☐	
3. Was the project completed? If so, when? If project not complete, estimated completion date: _____	☐	☐	_____
4. If completed, was the work accomplished in conformance with all conditions listed in the Conditional Approval letter and DWS Construction Standards, Oregon Administrative Rule (OAR) 61-0050? **In the comments below or on a separate sheet please make clear how all conditions specified in the Conditional Approval letter were met.**	☐	☐	
5. If the project was completed, were there any differences between what is shown on the plans and what was actually installed?	☐	☐	
6. If the completed project is different from what is shown on the plans, were the plans modified to show as-built conditions?	☐	☐	
7. Have as-builts been sent to Drinking Water Services? **NOTE: As-builts are not required if there were no significant changes noted in 5.**	☐	☐	
8. Are the facilities operating? If so, starting when?	☐	☐	_____

Signature of Engineer _____ Date _____

Name _____ OR PE# _____

Firm _____ Phone _____

Comments

Revised date 10/2021 Page 1 of 2

OAR 333-061-0050(9) Crossings – Sanitary Sewers and Water Lines

(9) Crossings-Sanitary sewers and water lines:

(a) All reference to sewers in this section shall mean sanitary sewers;

(b) In situations involving a water line parallel to a sewer main or sewer lateral, the separation between the two shall be as indicated in Figure 1;

(c) In situations where a water line and a sewer main or sewer lateral cross, the separation between the two shall be as follows:

(A) Wherever possible, the bottom of the water line shall be 1.5 feet or more above the top of the sewer line and one full length of the water line shall be centered at the crossing;

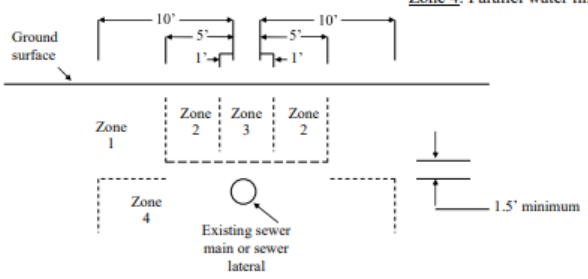
(B) Where the water line crosses over the sewer line but with a clearance of less than 1.5 feet, the sewer line shall be exposed to the sewer line joints on both sides of the crossing to permit examination of the sewer pipe. If the sewer pipe is in good condition and there is no evidence of leakage from the sewer line, the 1.5-foot separation may be reduced. However, in this situation, the water supplier must center one length of the water line at the crossing and must prepare a written report of the findings and indicating the reasons for reducing the separation. If the water supplier determines that the conditions are not favorable or finds evidence of leakage from the sewer line, the sewer line shall be replaced with a full length of pipe centered at the crossing point, of PVC pressure pipe (ASTM D-2241, SDR 32.5), high-density PE pipe (Drisco pipe 1000), ductile-iron Class 50 (AWWA C-51), or other acceptable pipe; or the sewer shall be encased in a reinforced concrete jacket for a distance of 10 feet on both sides of the crossing.

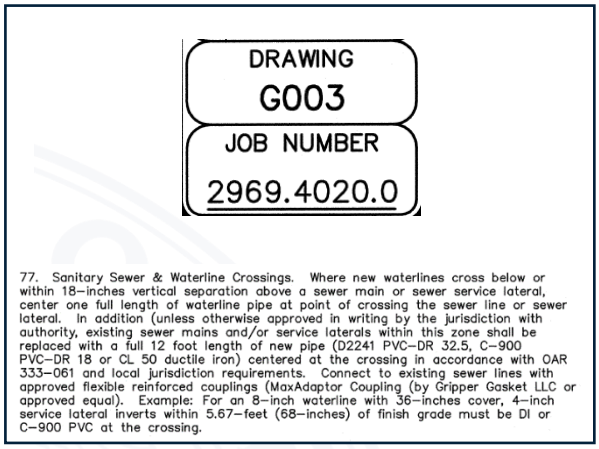
(C) Where the water line crosses under the sewer line, the water supplier shall expose the sewer line and examine it as indicated in paragraph (9)(c)(B) of this rule. If conditions are favorable and there is no evidence of leakage from the sewer line, the sewer line may be left in place, but special precautions must be taken to assure that the backfill material over the water line in the vicinity of the crossing is thoroughly tamped in order to prevent settlement which could result in the leakage of sewage. In this situation, the water supplier must center one length of the water line at the crossing and must prepare a written report recording the manner in which the sewer line was supported at the crossing and the material and methods used in backfilling and tamping to prevent settlement of the sewer. If the water supplier determines that conditions are not favorable or finds evidence of leakage from the sewer line, the provisions of paragraph (9)(c)(B) of this rule apply.

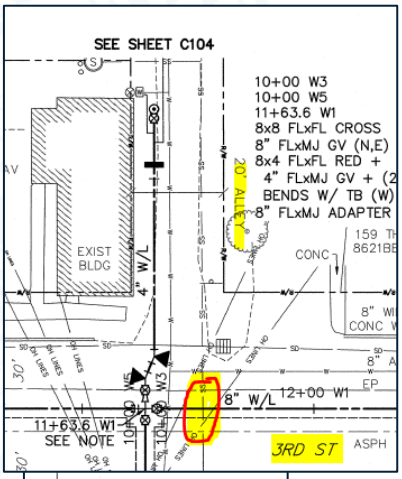
(d) When a water main is installed under a stream or other watercourse, a minimum cover of 30 inches shall be provided over the pipe. Where the watercourse is more than 15 feet wide, the pipe shall be of special construction with flexible watertight joints, valves shall be provided on both sides of the crossing so that the section can be isolated for testing or repair, and test cocks shall be provided at the valves.

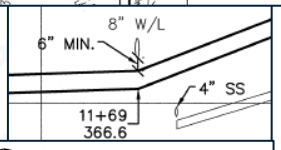
Figure 1: Water Line-Sewer Line Separation

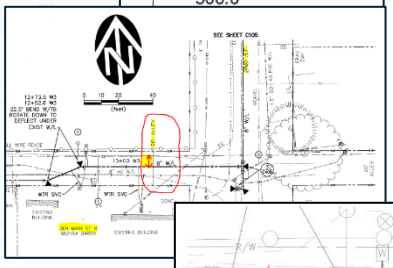
Zone 1: Only crossing restrictions apply
Zone 2: Case-by-case determination
Zone 3: Parallel water line prohibited
Zone 4: Parallel water line prohibited

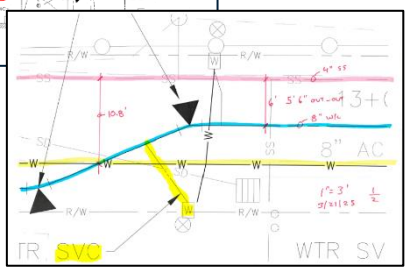












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