



8113 WEST GRANDRIDGE BOULEVARD, KENNEWICK, WASHINGTON 99336-7166

September 8, 2016

Alan Rathbun  
Director, Pipeline Safety  
Utilities & Transportation Commission  
1300 S. Evergreen Park Dr. S.W.  
PO Box 47250  
Olympia, WA 98504-7250

**Subject: WAC 480-93-020 – Request for Approval – Sunnyside Gate Station Upgrade**

Dear Mr. Rathbun:

Pursuant to the requirements of WAC 480-93-020 Proximity Considerations, Cascade Natural Gas Corporation (CNGC) requests approval to operate a proposed new four inch pipeline and a proposed new regulator station at a Maximum Allowable Operating Pressure (MAOP) of 850 psig within 500 feet of existing structures intended for human occupancy.

**Proposed Scope of Work:**

In order to better serve the growing communities in and around the City of Sunnyside, Cascade is required to upgrade the existing Sunnyside Gate Station at its interconnect with Northwest Pipeline (NWP). Aside from custody transfer of the gas, the gate station also odorizes the gas for distribution and reduces pressure from an MAOP of 850 psig to an MAOP of 200 psig.

The proposed upgrade would require Cascade to take over the responsibility of pressure control from NWP, and in doing so; Cascade would be required to operate facilities at an MAOP of 850 psig. Cascade is proposing to take custody of the gas at an MAOP of 850 psig and immediately reduce the pressure to 200 psig through a regulator station located at the gate.

The proposed new facilities to operate at an MAOP of 850 psig would include the inlet of the regulator station, a pipeline heater, and a short segment of pipe from the custody transfer point leading into the heater and regulator station. The regulator station and heater would lie above ground and the short pipe segment would lie below ground, fully within the fenced gate station grounds.

### **Proposed Regulator Station:**

The proposed regulator station would be installed immediately east of NWP's existing regulation facilities, as shown on figure 1, effectively replacing the NWP regulator station. The existing NWP station, along with the NWP mainline, operates with an MAOP of 850 psig.

The proposed regulator station would be designed with a minimum component rating of 850 psig and would be pressure tested to a minimum of 1275 psig. At the proposed upstream MAOP of 850 psig, the maximum stress level of the pipe and pipeline fittings would be 15.52% of SMYS. At the downstream MAOP of 200 psig, the maximum stress level of the pipe and pipeline fittings would be 4.55% of the SMYS. Thus, the pipeline would be classified as a high pressure distribution facility. The relief for the regulator station will be odorized and 100% NDT will be performed on the facility.

Specifications of the regulator station, including the pipe segment from the custody transfer point to the outlet of the station, would be as follows:

- All pipe upstream of the regulator would be API 5L Grade X-52 Steel line pipe.
- All pipe downstream of the regulator would be API 5L Grade X-52 Steel line pipe.
- All fittings (elbows, tees, caps etc.) upstream of the regulator would be standard weight, ANSI 16.9 WPHY-52.
- All fittings (elbows, tees, caps etc.) downstream of the regulator would be standard weight, ANSI 16.9 WPHY-52
- All components (valves, regulators, etc.) upstream of and including the regulator devices would be Class 600 with a maximum working pressure rating of 1440 psig.
- All components (valves, regulators, etc.) downstream of the regulator devices would be Class 300 with a maximum working pressure rating of 720 psig.

### **Proximity:**

The proposed regulator station will be located within 500 feet of the following buildings as shown on Figure 1:

- 30 feet from existing pipeline metering building owned and operated by NWP
- 175 feet from existing single family residence at 9431 Emerald Rd
- 182 feet from existing single family residence at 9381 Emerald Rd
- 266 feet from existing commercial building at 9381 Emerald Rd
- 215 feet from existing shed at 40 Portview Ln
- 230 feet from existing shed at 40 Portview Ln
- 245 feet from existing single family residence at 40 Portview Ln
- 317 feet from existing garage at 40 Portview Ln
- 228 feet from existing garage at 60 Portview Ln

- 284 feet from existing shed at 60 Portview Ln
- 298 feet from existing single family residence at 60 Portview Ln
- 386 feet from existing single family residence at 9461 Emerald Rd
- 418 feet from existing commercial building at 81 S. Wells Rd

All of the buildings on the above list are currently closer than 500 feet from an existing pipeline facility operating at a pressure above 500 psig.

**Alternatives:**

Transfer of pressure control from NWP to Cascade is a requirement by NWP in order to complete the proposed gate upgrade. Cascade believes the proposed regulator station location is the most practical as it is adjacent to existing Cascade Right of Way, minimizes the length of pipe that Cascade would operate at Pipeline pressure, and minimizes the level of new proximity concerns to homes.

**Closing:**

Cascade respectfully requests your approval to move forward with the installation of the proposed Sunnyside Gate Station Upgrade, with a target construction timeline of mid to late fall of 2016. If you have any questions or require additional information, feel free to contact me at (509) 734-4576 or via email at [mike.eutsey@cngc.com](mailto:mike.eutsey@cngc.com)

Sincerely,  
CASCADE NATURAL GAS

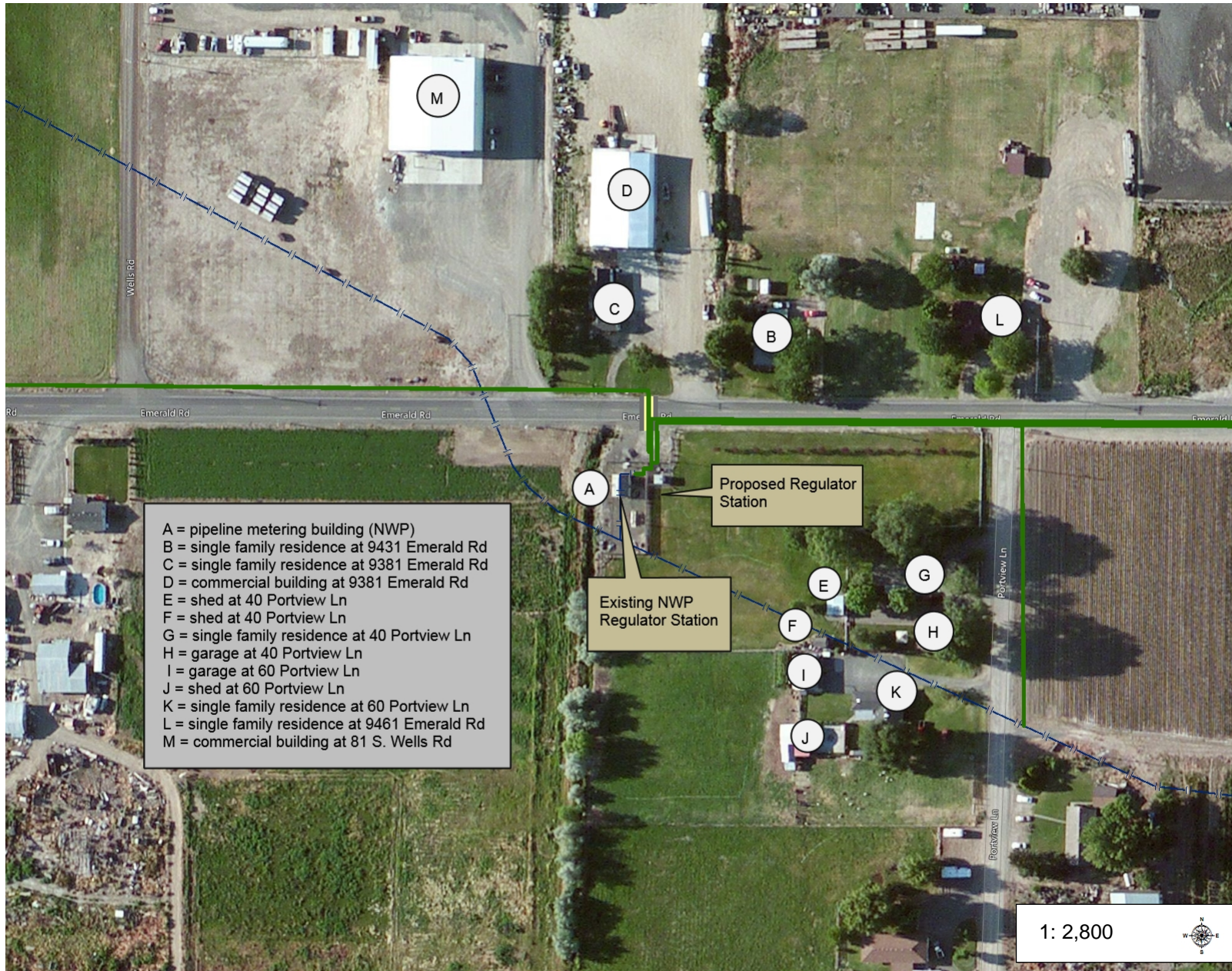
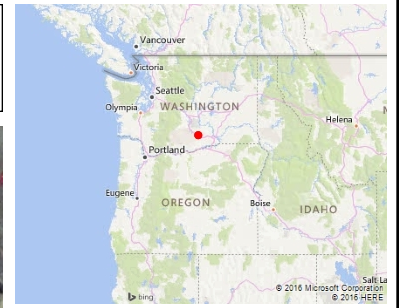


Mike Eutsey  
Manager of Standards & Compliance

CC: Steve Kessie  
Jeremy Ogden

Enclosures

# Sunnyside Gate Station Upgrade Figure 1



- A = pipeline metering building (NWP)
- B = single family residence at 9431 Emerald Rd
- C = single family residence at 9381 Emerald Rd
- D = commercial building at 9381 Emerald Rd
- E = shed at 40 Portview Ln
- F = shed at 40 Portview Ln
- G = single family residence at 40 Portview Ln
- H = garage at 40 Portview Ln
- I = garage at 60 Portview Ln
- J = shed at 60 Portview Ln
- K = single family residence at 60 Portview Ln
- L = single family residence at 9461 Emerald Rd
- M = commercial building at 81 S. Wells Rd

## Legend

- Main**
- <all other values>
- Bare Steel Main
- Coated Steel Main
- - - Plastic Main
- Unknown
- Gas Pipe Casing
- Foreign Owned Pipe
- ▼ Marker

1: 2,800



0.1                      0                      0.04                      0.1 Miles

## Notes