



8113 WEST GRANDRIDGE BOULEVARD, KENNEWICK, WASHINGTON 99336-7166

March 20, 2015

David Lykken
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 – Bellingham Gate Station Upgrade

Dear Mr. Lykken:

Pursuant to the requirements of WAC 480-93-020 Proximity Considerations, Cascade Natural Gas Corporation (CNGC) requests approval to operate a proposed new twelve inch pipeline and a proposed new regulator station at a Maximum Allowable Operating Pressure (MAOP) of 960 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 Bellingham, Cascade is required to upgrade the existing Bellingham 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 960 psig to an MAOP of 380 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 960 psig. Cascade is proposing to take custody of the gas at an MAOP of 960 psig and immediately reduce the pressure to 380 psig through a regulator station located at the gate.

The proposed new facilities to operate at an MAOP of 960 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 aboveground and the short pipe segment would lie belowground, fully within the gate station grounds.

Proposed Regulator Station:

The proposed regulator station would be installed immediately west 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 960 psig.

The proposed regulator station would be designed with a minimum component rating of 960 psig and would be pressure tested to a minimum of 1440 psig. At the proposed upstream MAOP of 960 psig, the maximum stress level of the pipe and pipeline fittings would be 18.83% of SMYS. At the downstream MAOP of 380 psig, the maximum stress level of the pipe and pipeline fittings would be 12.42% 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-65 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 extra heavy weight, ANSI 16.9 WPHY-65.
- 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:

- 60 feet from existing pipeline metering building owned and operated by NWP
- 165 feet from existing shed at 1405 Mt. Baker Hwy
- 220 feet from existing barn at 1405 Mt. Baker Hwy
- 440 feet from existing single family residence at 1405 Mt. Baker Hwy
- 485 feet from existing commercial building at 4215 Britton Road
- 475 feet from existing commercial building at 4215 Britton Road
- 435 feet from existing garage at 4192 Britton Road

Of the buildings on the above list, the two commercial buildings located at 4215 Britton Road are currently greater 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 within 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 Bellingham Gate Station Upgrade, with a target construction timeline of late spring to early summer 2015. 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

Sincerely,
CASCADE NATURAL GAS

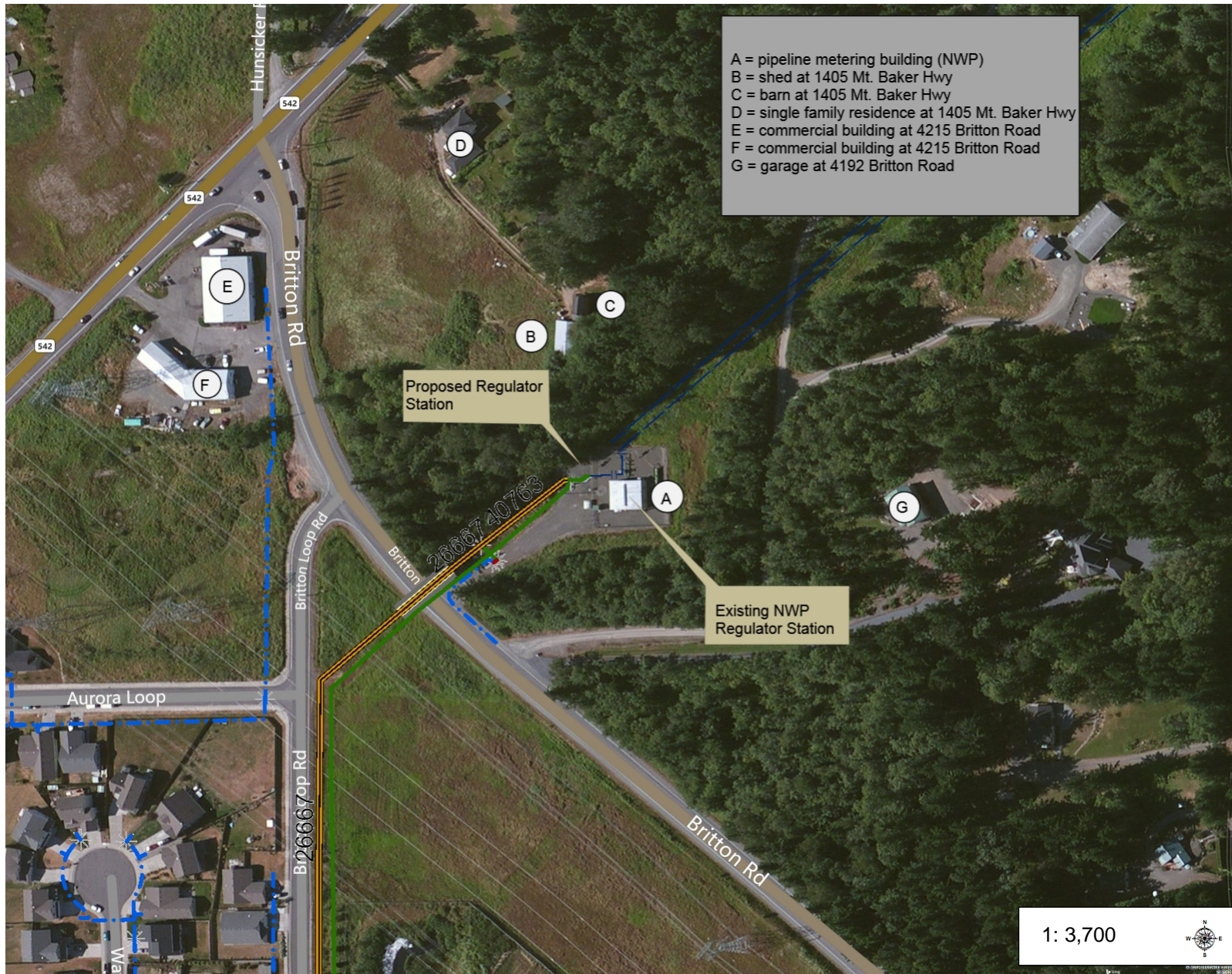


Mike Eutsey
Manager of Standards & Compliance

CC: Eric Martuscelli
Steve Kessie
Jeremy Ogden

Enclosures

Bellingham Gate Station Upgrade Figure 1

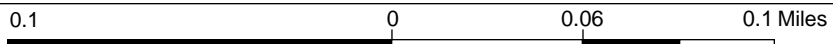


A = pipeline metering building (NWP)
 B = shed at 1405 Mt. Baker Hwy
 C = barn at 1405 Mt. Baker Hwy
 D = single family residence at 1405 Mt. Baker Hwy
 E = commercial building at 4215 Britton Road
 F = commercial building at 4215 Britton Road
 G = garage at 4192 Britton Road

Legend

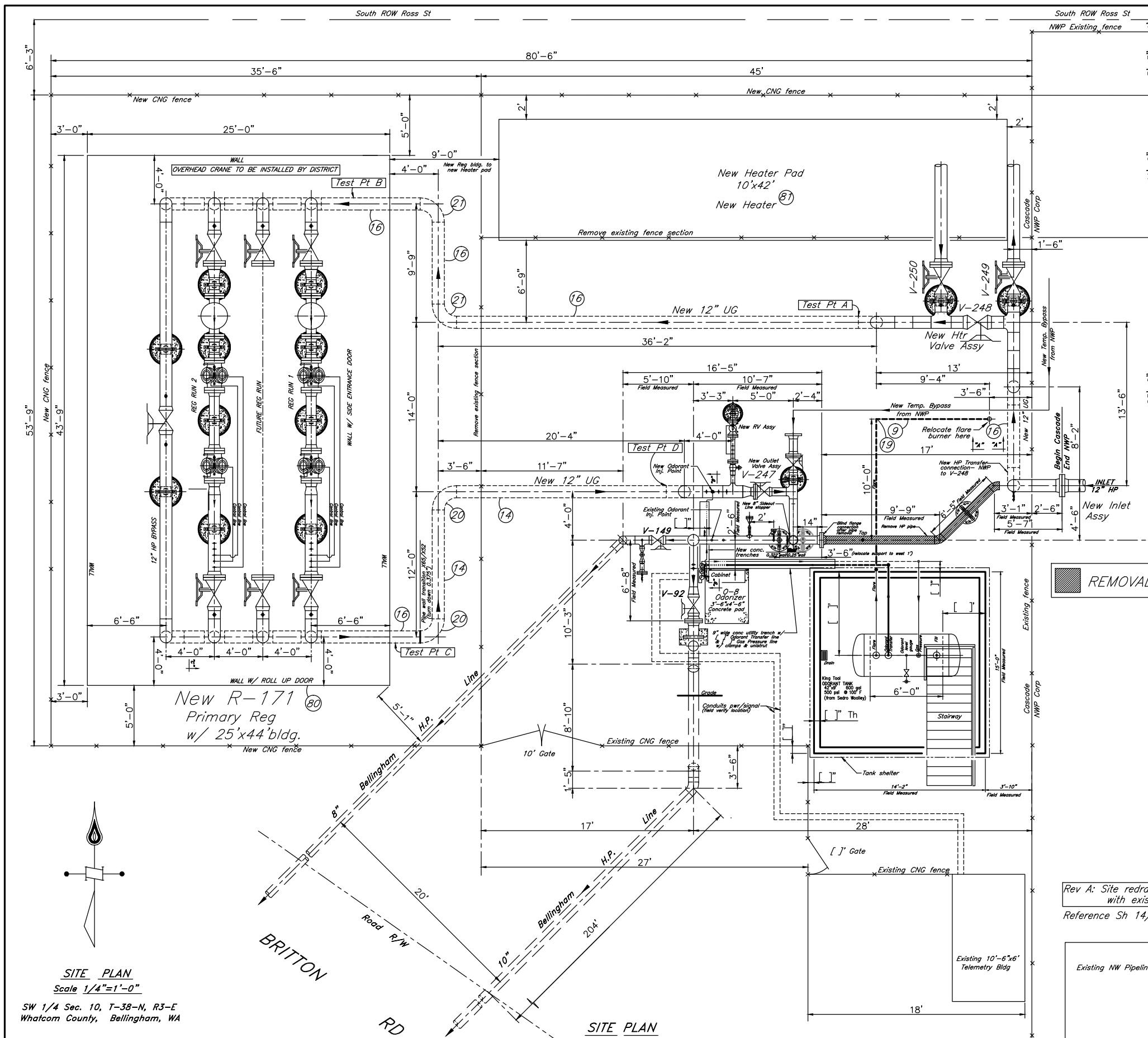
- Transmission Main**
- <all other values>
 - 8"
 - 12"
 - 16"
 - 20"
- Main**
- <all other values>
 - Bare Steel Main
 - Coated Steel Main
 - - - Plastic Main
 - Unknown
- ▬ Gas Pipe Casing
 - - - Abandoned Main
 - | | | Foreign Owned Pipe
 - ✱ Main Job Separator

1: 3,700



This map is a user generated static output from the CNG GIS Silverlight mapping website and is for reference only. It is not to be relied upon for construction purposes. It is provided for planning purposes only. FIELD LOCATES ARE REQUIRED FOR LOCATION OF GAS FACILITIES

Notes



FIELD TEST Inlet & Outlet Mains	
STEP 1 PRESSURE TEST TEST PRESSURE 100 P.S.I.G. TEST MEDIUM WATER TEST DURATION 1 HR HOURS LEAK SURVEY BY DATE TIME	
STEP 2 PRESSURE TEST CERTIFICATION PRESSURE 1000 P.S.I.G. TEST PRESSURE 1500 P.S.I.G. TEST MEDIUM WATER TEST DURATION 24 HOURS DATE COMPLETED BY ATTESTED	
STEP 1 PRESSURE TEST TEST PRESSURE 100 P.S.I.G. TEST MEDIUM WATER TEST DURATION 1 HR HOURS LEAK SURVEY BY DATE TIME	
STEP 2 PRESSURE TEST CERTIFICATION PRESSURE 500 P.S.I.G. TEST PRESSURE 750 P.S.I.G. TEST MEDIUM WATER TEST DURATION 24 HOURS DATE COMPLETED BY ATTESTED	

NW Pipeline Corp Building

Sheet Index

- SITE PLAN
- FUTURE HEATER PLAN
- MATERIAL LIST
- NEW ODORANT INJ. PT.
- REGULATOR RUNS
- RELIEF VALVE ASSY.
- OUTLET VALVE ASSY.
- HEATER VALVE ASSY.
- INLET VALVE ASSY.
- 4" PIPE GUIDE SUPPORT
- 8" PIPE GUIDE SUPPORT
- 10" PIPE GUIDE SUPPORT
- 12" PIPE GUIDE SUPPORT
- TEMPORARY REGULATOR RUNS
- TRENCH DRAIN DETAIL
- FUTURE HEATER ASSY. (TBD)

REMOVAL

Rev A: Site redrawn to align new CNG fence with existing CNG fence on South side
Reference Sh 14/16 for temporary Reg runs

Addendum A: Bldg permit
Existing NW Pipeline Shed

SITE PLAN
Scale 1/4"=1'-0"

SW 1/4 Sec. 10, T-38-N, R3-E
Whatcom County, Bellingham, WA

Note: All underground bare steel pipe to be field wrapped during installation.