CASCADE NATURAL GAS CORPORATION
A Subsidiary of MDU Resources Group, Inc.

8113 WEST GRANDRIDGE BOULEVARD, KENNEWICK, WASHINGTON 99336-7166

October 5, 2012

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 – 6" Mount Vernon HP Line Uprate

Dear Mr. Lykken:

Pursuant to the requirements of WAC 480-93-020 Proximity Considerations, Cascade Natural Gas Corporation (CNGC) requests approval to operate an existing six inch gas pipeline and a proposed regulator station at a Maximum Allowable Operating Pressure (MAOP) of 400 psig within 100 feet of existing structures intended for human occupancy.

Proposed Scope of Work:

In order to serve the growing communities in and around the City of Mount Vernon, Cascade is required to increase the operating pressure on the six inch Mount Vernon High Pressure Line from an MAOP of 250 psig to an MAOP of 400 psig. Cascade would be completing the uprate in full compliance with DOT 192, Subpart K "Uprating", in addition to WAC 480-93-155 "Increasing maximum allowable operating pressure".

The proposed uprate would be controlled through two new regulator stations. The first, at the east end of the pipeline at the Mount Vernon Gate Station, would regulate pressure from an MAOP of 960 psig to an MAOP of 400 psig. The second, at the west end of the pipeline near State Route 9 and Gunderson Road, would regulate pressure from an MAOP of 400 psig to an MAOP of 250 psig.

Existing Six Inch Pipeline:

The existing 12,800 foot Mount Vernon HP Line, installed in 1995, is located in rural Skagit County east of the City of Mount Vernon. The pipeline runs between the Mount Vernon Gate Station on Beaver Lake Road to the intersection of State Route 9 and Gunderson Road. The pipeline location is depicted on Figure 1. It should be noted that the six inch pipeline roughly

parallels an existing four inch pipeline which also currently operates at an MAOP of 250 psig. Cascade is not proposing to change the MAOP of this four inch pipeline

The six inch pipeline is designed with a minimum component rating of 400 psig and has been pressure tested to a minimum of 600 psig. At the proposed MAOP of 400 psig, the maximum stress level of the pipe and pipeline fittings would be 16.78% of the specified minimum yield strength (SMYS); thus, the pipeline would be classified as high pressure distribution main.

Specifications of the six inch pipeline are as follows:

- 12,800 feet of 6" x 0.188" API 5L Grade X-42 Steel line pipe with extruded polyethylene coating.
- All fittings (elbows, tees, caps etc.) a minimum 0.188" wall thickness (standard weight), ANSI 16.9 WPHY-42 to meet or exceed the design rating of the 6" line pipe
- All components (valves, line stoppers, etc.) are Class 300 with a maximum working pressure rating of 740 psig

Proposed Regulator Station:

The proposed station at the west end of the pipeline would be designed with a minimum component rating of 400 psig and would be pressure tested to a minimum of 600 psig. At the proposed MAOP of 400 psig, the maximum stress level of the pipe and pipeline fittings would be 9.10% of SMYS. Thus, the station would be classified as a high pressure distribution facility.

Specifications of the regulator station would be as follows:

- All pipe would be API 5L Grade X-52 Steel line pipe. All buried pipe will be hand wrapped with below ground Trenton.
- All fittings (elbows, tees, caps etc.) would be standard weight, ANSI 16.9 WPHY-52.
- All components (valves, regulators, etc.) would be ANSI 300 class with a maximum working pressure rating of 720 psig.

Design and specifications of the proposed regulator station at the Mount Vernon Gate Station is included in Cascade's letter to the WUTC: "WAC 480-93-020 – Request for Approval – Mount Vernon Gate Station Upgrade".

Proximity:

The existing six inch pipeline is located within 100 feet of the following buildings as shown on Figures 2 and 3:

- 50 feet from existing small shed at 14853 Beaver Lake Road

- 85 feet from existing barn at 14853 Beaver Lake Road
- 50 feet from existing single family residence at 14770 Beaver Lake Road
- 75 feet from existing single family residence at 14750 Beaver Lake Road
- 95 feet from existing small storage shed at 14750 Beaver Lake Road
- 100 feet from existing barn at 23125 Gunderson Road
- 100 feet from existing single family residence at 23125 Gunderson Road
- 70 feet from existing shed at 23121 Gunderson Road
- 65 feet from existing single family residence at 23033 Gunderson Road
- 60 feet from existing single family residence at 23005 Gunderson Road
- 85 feet from existing detached garage at 23005 Gunderson Road
- 100 feet from existing single family residence at 22839 Gunderson Road
- 70 feet from existing single family residence at 22757 Gunderson Road
- 70 feet from existing single milk house at 22321 Gunderson Road

Cascade personnel conducted a field survey and verified that as of March 19, 2012, no additional buildings have been constructed or are under constriction since the date of the aerial photograph.

Alternatives:

As an alternative to operating the Mount Vernon HP Line at 400 psig, Cascade would be required to extend the pipeline several miles further into the City of Mount Vernon at an operating pressure of 250 psig. Although the pipeline would not require a proximity study per WAC 480-93-020, the line would be required to pass through congested urban areas with homes, businesses, and schools. Due to urban construction, the pipeline installation would have considerable impacts on the neighborhoods at a much higher cost as compared to the uprate proposal. Cascade believes the proposed plan is the best approach for expanding capacity while reducing operating costs and safety delivering gas to the Mount Vernon community.

Closing:

Cascade respectfully requests your approval to move forward with the installation of the proposed Mount Vernon uprate project, which is scheduled for a completion by end of December 2012. If you have any questions or require additional information, feel free to contact me at (509) 734-4550 or via email at mike.hardesty@cngc.com

Sincerely,
CASCADE NATURAL GAS

Michael Hardesty, P.E.
Engineer

CC: Eric Martuscelli
Steve Kessie
Tina Beach

Enclosures

Mount Vernon 6" HP Uprate - Figure 1

Cascade Natural Gas

0 50 100 200 300 400 Feet

Mount Vernon 6" HP Uprate - Figure 2

(Beaver Lake Road Detail)

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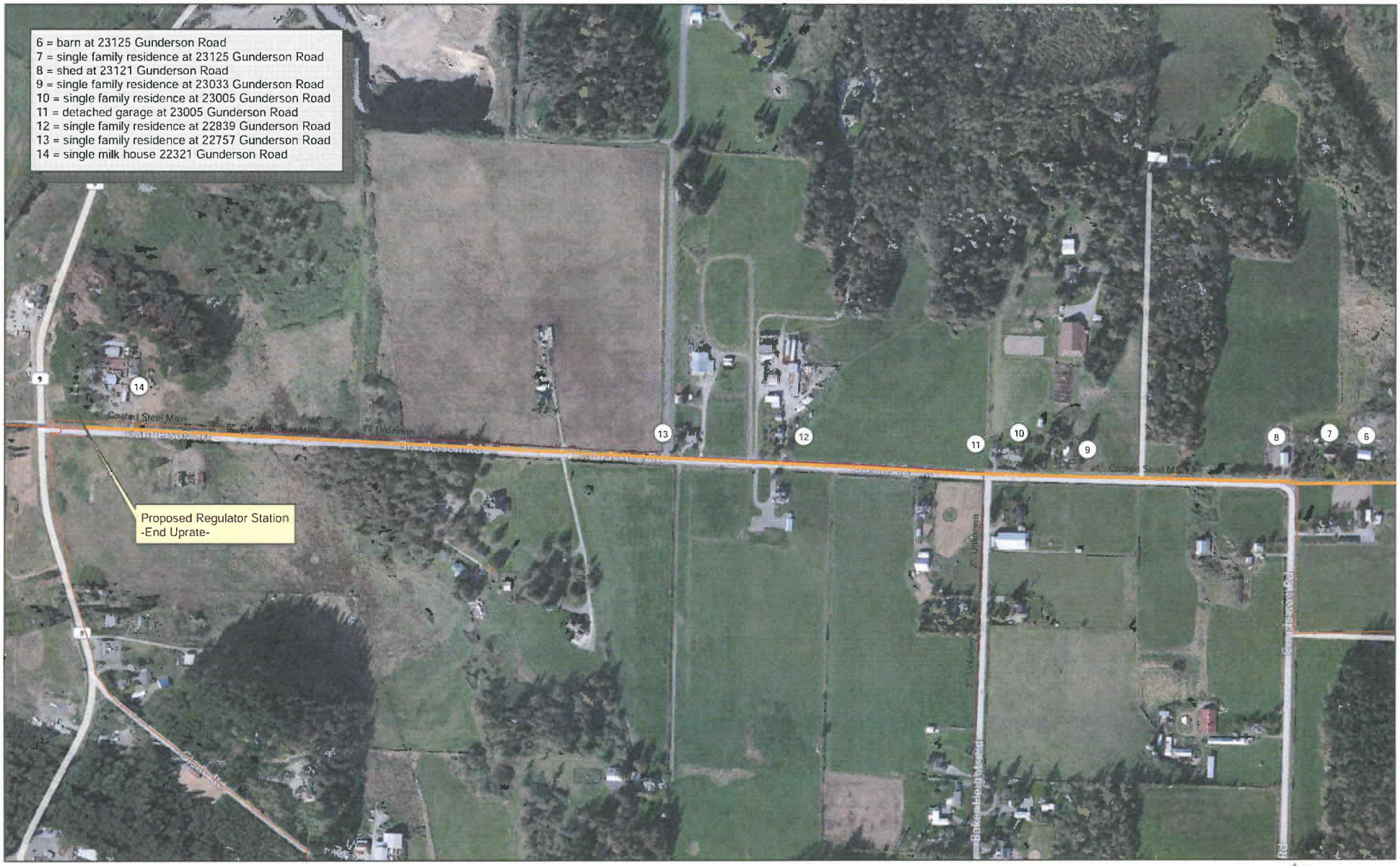

Mount Vernon 6" HP Uprate - Figure 3

(Gunderson Road Detail)

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Subject: WAC 480-93-020 – Request for Approval – Mount Vernon 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 an existing four 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 serve the growing communities in and around the City of Mount Vernon, Cascade is required to upgrade the existing Mount Vernon 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 a proposed MAOP of 400 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 MAOP of 960 psig. Cascade is propsing to take custody of the gas at an MAOP of 960 psig and immediately reduce the pressure to 400 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 and a short segment of pipe from the custody transfer point leading into the regulator station. The regulator station and the short pipe segment would lie aboveground, fully within the gate station grounds.

Proposed Regulator Station:

The proposed regulator station would be installed immediately north 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 17.53% of SMYS. At the proposed downstream MAOP of 400 psig, the maximum stress level of the pipe and pipeline fittings would be 9.10% of the SMYS. Thus, the pipeline would be classified as a high pressure distribution facility.

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

- All pipe would be API 5L Grade X-52 Steel line pipe.
- All fittings (elbows, tees, caps etc.) 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 existing four inch pipeline and the proposed regulator station are located within 500 feet of the following buildings as shown on Figure 1:

- 10 feet from existing pipeline metering building owned and operated by NWP
- 250 feet from existing small shed at 14853 Beaver Lake Road
- 200 feet from existing barn at 14853 Beaver Lake Road
- 150 feet from existing shed at 14853 Beaver Lake Road.
- 100 feet from existing single family residence at 14853 Beaver Lake Road
- 220 feet from existing single family residence at 14895 Beaver Lake Road
- 420 feet from existing single family residence at 14838 Beaver Lake Road

In addition, the pipeline passes under and parallels Beaver Lake Road, a county highway. Cascade personnel conducted a field survey and verified that as of March 19, 2012, no additional buildings have been constructed or are under construction since the date of the aerial photograph.

Of the buildings on the above list, none are currently greater than 500 feet from a 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 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 Mount Vernon Gate Station Upgrade, which is scheduled for a construction in December 2012. If you have any questions or require additional information, feel free to contact me at (509) 734-4550 or via email at mike.hardesty@cngc.com

Sincerely,
CASCADE NATURAL GAS

Michael Hardesty, P.E.
Engineer

CC: Eric Martuscelli
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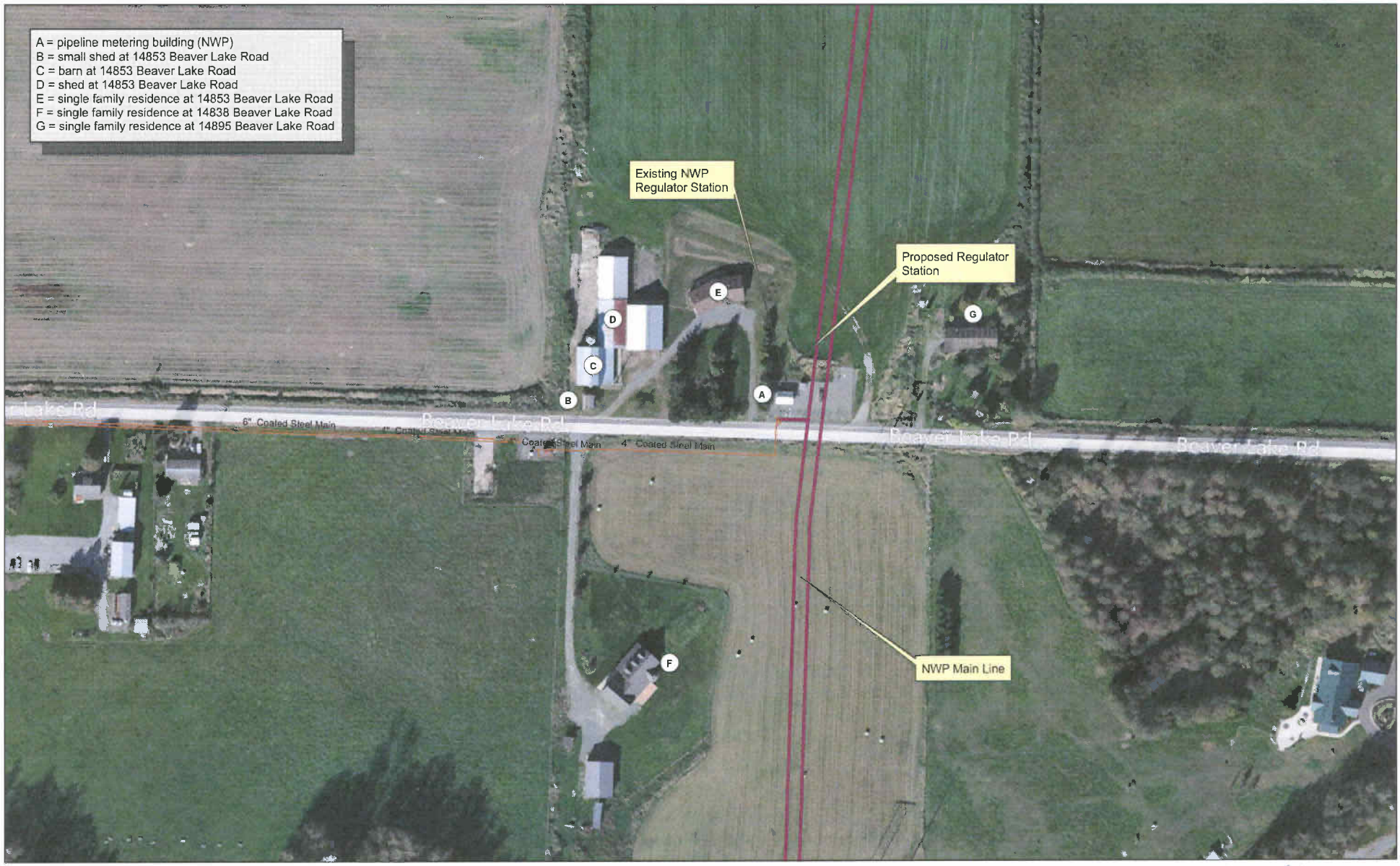
Tina Beach

Enclosures



Mount Vernon Gate Station Upgrade - Figure 1

Cascade Natural Gas