

Exhibit A - GENERAL INFORMATION

Background:

In order to better serve the needs of the firm customer base in Tacoma and improve HP system reliability, Puget Sound Energy has completed multiple projects in the area. This project proposes a limit station and a 12" HP pipeline. The pipeline and limit station will be connected to the North Tacoma HP supply system via a 250 psig pipeline, which will be constructed at the same time.

Scope

The scope of this request is to operate a new one mile 12" HP main segment and a new Limit Station at an MAOP of 490 psig. The locations are as follows:

- NEW- Golden Given Limit Station at 964 99th St E in Tacoma- will operate at 490 psig
- NEW- 1.07 miles of 12" HP pipe from the existing 12" HP main near 112th and Golden Given Road E, that will travel north to 99th St E, and west to the Golden Given Limit Station- will operate at 490 psig

The new pipeline, station piping, and all appurtenances will operate at less than 20% SMYS at 490 psig.

MAOP:

The new pipeline and the station piping will be designed, constructed, and tested to establish a MAOP of at least 490 psig.

Pipe and Fitting Specifications:

Golden Given Pipeline

The proposed pipeline will be constructed from 12 inch X52 steel pipe with 0.312" wall thickness and a fusion bonded epoxy (FBE) coating. For horizontally drilled portions of the main, an abrasion resistant overlay (ARO) will be added over the FBE coating. The pipe and fitting specifications with the corresponding percentage of specified minimum yield strength at MAOP are shown in the table below.

Material Specification	% SMYS @ MAOP (490 psig)
12" x 0.312" w.t. API 5L X52 Pipe	19.26
12" x 0.375" w.t. WPHY 52 Fittings	16.02

All other pipeline components will have a pressure rating of at least 490 psig.

Golden Given Limit Station

A preliminary list of proposed pipe and fitting specifications, with the corresponding percentage of specified minimum yield strength at MAOP, is shown in the table below:

Material Specification	% SMYS @ MAOP (490 psig)
12" x 0.312" w.t. API 5L X52 Pipe	19.26
8" x 0.322" w.t. API 5L X42 Pipe	15.63
6" x 0.280" w.t. API 5L X42 Pipe	13.81
4" x 0.237" w.t. API 5L X42 Pipe	11.08
12" x 0.375" w.t. WPHY 52 Fittings	16.02
8" x 0.322" w.t. WPHY 52 Fittings	12.63
8" x 0.322" w.t. ASTM A234 WPB Fittings	18.75
6" x 0.280" w.t. WPHY 52 Fittings	11.15
4" x 0.237" w.t. WPHY 52 Fittings	8.95

2" and smaller pipe (NPS) will use PSE stock materials which will operate at less than 20% SMYS at the proposed 490 psig MAOP. All rated components will have a working pressure rating of at least 740 psig.

Damage Prevention:

Pipeline markers will be installed and monitored in accordance with PSE Gas Operating Standard 2525.2500 and 2575.1100. PSE is an active member in the local One-Call System and works closely with the local municipalities and permitting agencies prior to any construction starting in the vicinity of its facilities. Additionally, it is PSE standard practice to monitor construction work taking place in the vicinity of its high pressure systems.

Construction Details:

All construction shall conform to standards and codes applying to Class 4 locations.

Cover - All buried mains will be installed with a minimum of 3 feet of cover. Four feet of cover will be achieved wherever possible.

Backfill - All shading and bedding material will be free of sharp rocks with a maximum particle size of ½" unless an approved rock shield material is utilized. When rock shield material is used, the backfill material shall be free from sharp objects and large clods that could damage the pipe.

Clearance - At least 12 inches of separation will be maintained between the pipeline and other underground facilities. If 12 inches separation is not possible, the pipeline will be protected from damage caused by proximity to the other structure, by using an approved method.

Cathodic Protection:

The corrosion control program will be designed and installed in accordance with the requirements of section 2600 of the PSE Gas Operating Standards. The following standards will be followed where applicable to the supply main:

2600.1000 Cathodic Protection Requirements

2600.1100 Field Coatings for Pipe and Fittings

2600.1200 Test Stations Requirements

2600.1300 Designing and Installing Cathodic Protection Systems

- 2600.1400 Electrical Isolation and Grounding Requirements
- 2600.1500 Monitoring Cathodic Protection
- 2600.1700 Monitoring and Remedial Measures for Internal Corrosion
- 2600.1900 Remedial Measures for Corrosion Control
- 2600.2000 Galvanic Anode Installation Requirements

Coating:

As outlined in Operating Standard 2600.1100 an external protective coating shall be applied to all piping. Any field joints and fittings not factory-supplied with protective coatings will have field-applied coating. All above-ground piping will be painted in accordance with written specifications. Field-applied coatings will meet the requirements of Operating Standard 2600.1100, Field Coatings for Pipe and Fittings.

At least one section of the proposed pipeline will be installed via directional drill. That pipe will have an abrasion resistant overlay (ARO) coating applied per Operating Standard 2600.1100.

Testing:

The test medium for the pipeline will be water and the test pressure will be at least 735 psig. The route is relatively flat and slopes from elevation 406 on the north end to 372 on the south end of the new main. The HDD portion of the main could be up to 70 feet deep. Therefore, the test pressure at the lowest elevation will be at least three atmospheres higher (approximately 780 psig) to ensure 735 psig is obtained at the highest point on the pipeline. The test medium for the station will be water or nitrogen, and the test pressure will be at least 735 psig. All testing will be done in accordance with PSE Gas Operating Standard 2525.3300 and in accordance with an approved procedure.

Welding:

All welding and welding inspection will conform to the following PSE Gas Operating Standards and Welding Manual:

- 2525.2700 Installation Requirements for Steel Pipe and Fittings
- 2700.1100 Welder Qualification Requirements
- 2700.1200 Weld Inspection and Repair
- 2700.1300 Weld Inspector Qualification Requirements
- 2700.1400 Welder Qualification Test Requirements

In addition, PSE has a comprehensive set of welding procedures that are included in the Welding Manual. All welding to be done on this project will be governed by these procedures. If any new procedures are required for the welding on this project, they will be qualified in accordance with PSE Operating Standards and added to the Gas Field Procedures Manual. The 12" supply main welds will be performed using Welding Manual Procedure 4900.1320.

A minimum of 90 percent of the girth welds in 4 inch and larger pipe sizes will be radiographically examined, and 100% of all tie-in girth welds.

Pressure Monitoring:

The pressure in this system will be monitored by remote telemetry units (RTUs). These pressures will be monitored 24 hours per day in PSE's 24 Hour Operations Center.

Leakage Surveys:

Leakage surveys will be conducted in accordance with PSE Gas Operating Standard 2625.1100 (Leakage Survey Program). This Operating Standard requires leak surveys to be conducted every year for supply mains (supply mains are all high pressure mains other than transmission mains). This provides more frequent surveying than required by state and federal regulations.

Exhibit B – Route and Facilities Map

Golden Given road natural gas pipeline



Legend

- | | |
|--|---|
| Existing pipeline | New intermediate (IP) pressure pipeline |
| New natural gas pipeline | Existing regulator station |
| Portion of new pipeline with pressure increase | Golden Givens new limit station |

 **PUGET SOUND ENERGY**

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Golden Give Pipeline Exhibit C
Addresses, Land Use, and Distance of Structures from the Proposed Pipeline

Route / Street	Parcel Number	Address	City	State	Zip Code	Side of Route (N, E, S, or W)	Distance in feet of Structure from CL	Distance in feet of Structure from Pipeline	Land Use
WOODS TREVOR	7745003322	PO BOX 1411	ORTING	WA	98360-1411	E	74	59	Residential
CURRENT OCCUPANT	7745003322	10205 GOLDEN GIVEN RD E	TACOMA	WA	98445	E	75	60	Residential
FRAD SUSAN M TTEE	7745003341	14017 19TH DR SE	MILL CREEK	WA	98012-1311	E			
CURRENT OCCUPANT	7745003341	10107 GOLDEN GIVEN RD E	TACOMA	WA	98445	E			
CURRENT OCCUPANT	7745003341	10110 11th Ave E	TACOMA	WA	98445	E	100	85	Residential
CURRENT OCCUPANT	7745003341	10112 11th Ave E	TACOMA	WA	98445	E	82	67	Residential
CURRENT OCCUPANT	7745003341	10114 11th Ave E	TACOMA	WA	98445	E	83	68	Residential
CURRENT OCCUPANT	7745003341	1104 101st St Ct E	TACOMA	WA	98445	E	109	94	Residential
CURRENT OCCUPANT	7745003341	1102 101st St Ct E	TACOMA	WA	98445	E	105	90	Residential
NITSCH ANTHONY J & DOLO	7745003351	10301 GOLDEN GIVEN RD E	TACOMA	WA	98445	E	132	117	Residential
LANDSHAPES NORTHWEST	7745003381	1151 112TH ST F	TACOMA	WA	98445	F	144	129	Residential
CURRENT OCCUPANT	7745003381	10307 GOLDEN GIVEN RD E	TACOMA	WA	98445	E	144	129	Residential
PARKER CRAIG	7810000844	10156 GOLDEN GIVEN RD E	TACOMA	WA	98445	W	78	93	Residential
KIM KUN SUN	9007130010	10010 GOLDEN GIVEN RD E APT 1	TACOMA	WA	98445	W	65	80	Residential
HALL DANIELLE M	9007130020	10010 GOLDEN GIVEN RD E UNIT 2	TACOMA	WA	98445	W	65	80	Residential
CRIDLEBAUGH JULIE	9007130030	7239 TURQUOISE DR SW	LAKewood	WA	98498-6442	W	65	80	Residential
CURRENT OCCUPANT	9007130030	10010 GOLDEN GIVEN RD E UNIT 3	TACOMA	WA	98445	W	65	80	Residential
COLLINS DANIELLE	9007130040	10010 GOLDEN GIVEN RD E UNIT 4	TACOMA	WA	98445	W	65	80	Residential
BUTLER JONETTE E	9007130050	10010 GOLDEN GIVEN RD E UNIT 5	TACOMA	WA	98445	W	65	80	Residential
BOYD OK CHA	9007130060	10010 GOLDEN GIVEN RD E UNIT 6	TACOMA	WA	98445	W	65	80	Residential
BYRAN JUSTIN & MINDY	9007130070	PO BOX 1445	SUMNER	WA	98390-0300	W	65	80	Residential
CURRENT OCCUPANT	9007130070	10010 GOLDEN GIVEN RD E UNIT 7	TACOMA	WA	98445	W	65	80	Residential
GARNER-COOPER RENIA J	9007130080	10010 GOLDEN GIVEN RD E APT 8	TACOMA	WA	98445	W	65	80	Residential
HCS DEVELOPMENT LLC	9007130330	6111 HAZEL AV SE APT A	AUBURN	WA	98092	W	61	76	Residential
CURRENT OCCUPANT	9007130330	10018 GOLDEN GIVEN RD E UNIT 33	TACOMA	WA	98445	W	61	76	Residential
CURRENT OCCUPANT	9007130340	10018 GOLDEN GIVEN RD E UNIT 34	TACOMA	WA	98445	W	61	76	Residential
ARIMIZU RICHARD H	9007130350	941 WAIOLI ST	HONOLULU	HI	96825	W	61	76	Residential
CURRENT OCCUPANT	9007130350	10018 GOLDEN GIVEN RD E UNIT 35	TACOMA	WA	98445	W	61	76	Residential
CURRENT OCCUPANT	9007130360	10018 GOLDEN GIVEN RD E UNIT 36	TACOMA	WA	98445	W	61	76	Residential
1020 O RENTALS LLC	9007350010	2824 196TH AVENUE CT E	LAKE TAPPS	WA	98391-9097	W	51	66	Residential
CURRENT OCCUPANT	9007350150	1020 108TH ST CT E APT 106	PARKLAND	WA	98445	W	51	66	Residential
CURRENT OCCUPANT	9007350150	1020 108TH ST CT E APT 105	PARKLAND	WA	98445	W	51	66	Residential
CURRENT OCCUPANT	9007350150	1020 108TH ST CT E APT 108	PARKLAND	WA	98445	W	51	66	Residential
CURRENT OCCUPANT	9007350150	1020 108TH ST CT E APT 107	PARKLAND	WA	98445	W	51	66	Residential
CURRENT OCCUPANT	9007350150	1020 108TH ST CT E APT 110	PARKLAND	WA	98445	W	51	66	Residential
CURRENT OCCUPANT	9007350150	1020 108TH ST CT E APT 109	PARKLAND	WA	98445	W	51	66	Residential
GARRITY GREGORY	9007380180	1022 109TH STREET CT E UNIT 60	TACOMA	WA	98445	W	51	66	Residential
HOOPES JOSHUA A & FONT	9007380190	1022 109TH STREET CT E UNIT 61	TACOMA	WA	98445	W	51	66	Residential
CURRENT OCCUPANT	0319036030	9823 10th Ave E	Tacoma	WA	98445	N	111	104	Residential
ELTON J GARY & VIERA M TT	0319036030	32069 41ST PL SW	Federal Way	WA	98023	N	111	104	Residential
CURRENT OCCUPANT	0319033066	1010 104th St E	TACOMA	WA	98445	W	105	120	Residential
CARTER THURMAN	0319033066	12258 CAPONERA CT	RIVERSIDE	CA	92505	W	105	120	Residential

Distances are from proposed pipeline as shown on design plans provided. Where no plans have been developed, distances shown are based on the following assumptions:

* Distance from Pipeline at an assumed 5 feet south of center-line ROW

** Distance from Pipeline at an assumed center-line ROW

*** Distance from Pipeline at an assumed 10 feet west of center-line ROW