



DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT  
 ENVIRONMENTAL COORDINATOR  
 450 100<sup>th</sup> Ave NE., P.O. BOX 90012  
 BELLEVUE, WA 98009-9012

**DETERMINATION OF NON-SIGNIFICANCE**

**PROPONENT:** Andy Swayne, Puget Sound Energy

**LOCATION OF PROPOSAL:** Within the City Right-of-Way from the intersection of 140th Ave SE and Lake Hills Connector, west on Lake Hills Connector, west on SE 8th Street, under I-405, north on 114th Ave SE, west on SE 6th Street, north 112th Avenue SE, west on NE 2nd Street, north on 110th Ave NE and west on NE 10th Street.

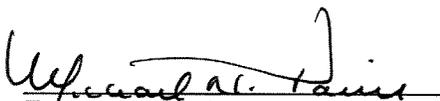
**NAME & DESCRIPTION OF PROPOSAL:** PSE- Lake Hills Connector to NE 10<sup>th</sup> Street PSE Gas Main  
 Application for a Preliminary SEPA Determination for proposed Puget Sound Energy project consisting of installation of 3.5 miles of new natural gas distribution main within City of Bellevue public Right-of-Way between an existing main located in 140<sup>th</sup> Ave SE and an existing distribution system district regulator located on the north side of NE 10<sup>th</sup> Street, approximately mid-block between 108<sup>th</sup> Ave NE and 110<sup>th</sup> Ave NE. The installation will be completed via open trenching, horizontal directional drilling and boring.

**FILE NUMBER:** 08-113664-LM

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Department of Planning & Community Development. This information is available to the public on request.

- There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on \_\_\_\_\_.
- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on May 8, 2008.
- This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on \_\_\_\_\_. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5 p.m. on \_\_\_\_\_.

This DNS may be withdrawn at any time if the proposal is modified so that it is likely to have significant adverse environmental impacts; if there is significant new information indicating, or on, a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project); or if the DNS was procured by misrepresentation or lack of material disclosure.

  
 Environmental Coordinator

4/24/2008  
 Date

**OTHERS TO RECEIVE THIS DOCUMENT:**

- State Department of Fish and Wildlife
- State Department of Ecology,
- Army Corps of Engineers
- Attorney General
- Muckleshoot Indian Tribe

## SEPA ENVIRONMENTAL CHECKLIST

### BACKGROUND INFORMATION

**Property Owner:** City of Bellevue

08-113644-LM

**Proponent:** Puget Sound Energy, Inc. (PSE)

08-111777-TJ

**Contact Person:** Larry Tornberg

08-111774-WG

**Address:** P.O. Box 97034  
EST-11W  
Bellevue, Washington 98009-9734

Reviewed by:  
Kevin LeClair  
4/7/08

**Phone:** 425.462.3821

**Proposal Title:** PSE Lake Hills Connector Distribution Natural Gas Main

#### **Proposal Location:**

The project is located within City of Bellevue street rights-of-way, along the following route: From the intersection of 140<sup>th</sup> Avenue SE and Lake Hills Connector Road, west along the north side of Lake Hills Connector Road/SE 8<sup>th</sup> Street, under I-405 along SE 8<sup>th</sup> Street, north along 114<sup>th</sup> Avenue SE, west along SE 6<sup>th</sup> Street, north along 112<sup>th</sup> Avenue SE, west along NE 2<sup>nd</sup> Street, north along 110<sup>th</sup> Avenue NE and west along NE 10<sup>th</sup> Street to the existing district regulator located within the north side sidewalk. Please refer to the vicinity map on the attached plans.

#### **1. General description:**

The proposed PSE project consists of installing 3.5 miles of a new natural gas distribution main within City of Bellevue public road rights-of-way between an existing main located in 140<sup>th</sup> Avenue SE and an existing distribution system district regulator located on the north side of NE 10<sup>th</sup> Street, approximately mid-block between 108<sup>th</sup> Avenue NE and 110<sup>th</sup> Avenue NE.

The purpose of the project is twofold. The first is to provide additional natural gas service capacity to the downtown Bellevue area and points west. This represents development that the City of Bellevue has authorized and permitted; PSE is attempting to be responsive to this growth and provide the needed natural gas capacity. Secondly, PSE must maintain natural gas service to these areas during a period when a natural gas main must be taken out of service to allow construction of improvements to the I-405 corridor by WSDOT. The proposed natural gas improvements must be completed before the I-405 corridor work can proceed. PSE is working hard to coordinate developmental concerns within the City of Bellevue with major transportation and utility infrastructure projects.

The installation of the new gas main will be accomplished via open trenching, a horizontal directional drill, and one bore described as follows:

**a. Trenching**

For the majority of the 3.5 mile route, the new gas main will be installed in a trench approximately 53-inches deep (minimum) to 60 – 72-inches deep (maximum), and 30-inches wide, under existing hard surfaces – paved roads, paved shoulders, and/or sidewalks. Trench restoration will be consistent with City of Bellevue “*Trench Restoration Requirements*”.

**b. Horizontal Directional Drill**

In the vicinity of Kelsey Creek and the Wilburton Tributary, the gas main will be installed via a horizontal directional drill, extending approximately 773 feet along Lake Hills Connector Road. Directional drilling technology uses a drill rig that advances a piloted drill string from an entry point along a planned drill path to an exit point. Drilling fluid, commonly called drilling mud, is circulated through the drill string to help convey drill cuttings away from the cutting bit as the drill head is advanced. The weight and surface coating characteristics of the mud help maintain drill hole stability and keep the drill hole walls from collapsing. The drilling mud also reduces the movement of groundwater into the drill path. The drilling mud is typically a water/bentonite slurry with a specific gravity of about 1.1 to 1.2. Upon completion of the drilled hole, the steel pipeline will be pulled back from the exit pit to the drill entry point.

**c. Boring**

The crossing of Sturtevant Creek will be via a bore approximately 50-feet in length, at a depth of approximately 16-feet.

**2. Acreage of site:**

The project is a gas main within 3.5 miles of public road rights-of-way.

**3. Number of dwelling units/buildings to be demolished:**

No dwelling units will be demolished.

**4. Number of dwelling units/buildings to be constructed:**

No dwelling units will be constructed.

**5. Square footage of buildings to be demolished:**

Not applicable.

**6. Square footage of buildings to be constructed:**

Not applicable.

**7. Quantity of earth movement (in cubic yards):**

Approximately 14,730 cubic yards of material (native materials, plus asphalt and concrete) will be excavated in conjunction with the trenching.

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## **8. Proposed land use:**

The proposed gas main is considered a "Local Utility System" by the City of Bellevue Land Use Code (Chapter 20.50.032) as it serves only the City of Bellevue. It is an element of local distribution system replacing an existing main which must be taken out of service during construction of a WSDOT improvement project. Although the replacement main will be located along a different route and will use a larger pipe size, it will perform the same function as the main it replaces. The larger pipe size is consistent with our current design standards and will provide a measure of increased system capacity, but will not alter the area served by the existing distribution system. Rather the increased capacity will be used to serve increased demand for service within Bellevue, Clyde Hill, Medina, Hunts Point and Yarrow Point.

## **9. Design features, including building height, number of stories and proposed exterior materials:**

The project consists of installation of new steel, cathodically protected gas mains under hard surfaces (paved roads, paved roads shoulders and sidewalks). The new gas mains will include approximately 1.9 miles of a 16-inch diameter main from the intersection at 140<sup>th</sup> Avenue SE and SE 10<sup>th</sup> Street to the intersection of SE 8<sup>th</sup> Street and 114<sup>th</sup> Avenue SE, and 1.6 miles of a 12-inch-diameter main from the end of the 16" main to point on NE 10<sup>th</sup> Street just west of 110<sup>th</sup> Avenue NE..

The gas main will be installed under the Kelsey Creek via a horizontal directional drill, and under the Sturtevant Creek culvert via a bore.

## **10. Other:**

### **a. Estimated date of completion of the proposal or timing of phasing:**

Construction will proceed rapidly upon receipt of the Right-of-Way Use Permit in those areas outside of the designated shoreline. This is necessary to address the city's need for increased natural gas capacity and to minimize traffic concerns leading to major summer and holiday events. Equally important is the need for coordination with the city and WSDOT for important improvements to I-405. Preferably PSE would begin construction by mid-May and conclude by December 2008.

### **b. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

No further activities are proposed in connection with this project at this time. An additional district regulator station may be added to the system at sometime in the future to improve reliability.

### **c. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

Golder Associates, Inc. (January 15, 2008) *Geotechnical Investigation For 16-inch Gas Main Horizontal Directional Drill Crossing of Kelsey Creek – Bellevue, Washington*

White Shield, Inc. (October 2007 – February 2008) *Wetland Edge Delineation and Survey*

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Kleinfelder, Inc. (June 16, 2005) *Geotechnical Engineering Study Report, Proposed SE 6<sup>th</sup> Street Culvert Replacement, Bellevue Washington 98009*

**d. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.**

The Washington State Department of Transportation "I-405 Braids Installation" project is planned for construction in 2009. PSE must complete the proposed Lake Hills Connector project before WSDOT can commence their project. Without the proposed PSE pipeline project, there would not be a source of natural gas to a significant part of Bellevue since the existing main crossing at NE 12th street will be abandoned by the WSDOT project.

The City of Bellevue has identified the following active construction projects along the proposed gas main route:

Residence Inn by Marriott, 605 114<sup>th</sup> Avenue SE

HEI Marriot Hotel, 11009 NE 3<sup>rd</sup> Place

City Center II, 10903 NE 6<sup>th</sup> Street

The Bravern, 11065 NE 8<sup>th</sup> Street

8<sup>th</sup> ST Properties Office Building, 10833 NE 8<sup>th</sup> Street

European Tower, 930 109<sup>th</sup> Avenue NE

1020 Towers, 1020 108<sup>th</sup> Avenue NE

**e. List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.**

City of Bellevue:

Shoreline Substantial Development Permit

Right-of-Way Use Permit

Grading Permit

State of Washington Department of Fish and Wildlife

Hydraulic Project Approval (requirement for HPA has not yet been determined)

**f. Please provide one or more of the following exhibits, if applicable to your proposal. (Please check appropriate box(es) for exhibits submitted with your proposal):**

- Land Use Reclassification (rezone) Map of existing and proposed zoning  
Preliminary Plat or Planned Unit Development  
Preliminary plat map
- Clearing & Grading Permit  
Plan of existing and proposed grading  
Development plans
- Building Permit (or Design Review)  
Site plan  
Clearing & grading plan

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Shoreline Management Permit 08-111774-WG  
Site plan

~~Star~~ ROW-Use v/G+G 08-111777-TJ

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## A. ENVIRONMENTAL ELEMENTS

### 1. EARTH

#### a. General description of the site:

Flat  Rolling  Hilly  Steep slopes  Mountains  Other

#### b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope along the route (approximately 10 to 12 percent) is located within the Lake Hills Connector right-of-way as it descends westerly, down the hill from 140<sup>th</sup> Avenue SE.

#### c. What general types of soil are found on the site (for example, clay, sand, gravel, peat, and muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The proposed route is located entirely within constructed road rights-of-way, and construction activities will encounter both man-made and native materials.

Eleven individual soil-mapping units are identified by the United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) within the proposed project vicinity: Alderwood gravelly sandy loam, 0 to 6 percent slopes (AgB), Alderwood gravelly sandy loam, 6 to 15 percent slopes (AgC), Alderwood gravelly sandy loam, 15 to 30 percent slopes (AgD), Arents, Alderwood material, 6 to 15 percent slopes (AmC), Bellingham silt loam (Bh), Everett-Alderwood gravelly sandy loams, 6 to 15 percent slopes (EwC), Kitsap silt loam, 15 to 30 percent slopes (KpD), Norma sandy loam (No), Seattle muck (Sk), Tukwila muck (Tu), and Urban land (Ur). Fill soils, noted as underlying improved road right-of-ways within the project site, comprise the majority of the soils within the proposed alignment.

The soils encountered at the crossing of Kelsey Creek consist of fill, marsh deposits, recessional outwash, till and proglacial lacustrine sediments (see attached Golder Associates, Inc. 2008 report).

The soils encountered at the crossing of Sturtevant Creek consist of fill, peat deposits, alluvium, recessional outwash, till and advance outwash (Kleinfelder, 2005).

#### d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

City of Bellevue mapping data shows an area of "Low to Moderate Liquefaction Hazard" crossing Lake Hills Connector within Kelsey Creek Park, east of Richards Road. King County mapping data also shows two areas of potential Erosion Hazard - along the east boundary of Kelsey Creek Community Park crossing the Lake Hills Connector, and an area crossing SE 8<sup>th</sup> Street, east of I-405.

Because the new gas main will be located entirely within constructed roads, the City of Bellevue does not consider the project to be located within a designated Critical Area or its buffer.

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**e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.**

Installation of the new gas main requires the excavation, filling and grading of native and man-made materials (i.e., concrete, asphalt-concrete pavement, etc.). Excavations will occur through the use of standard construction equipment (i.e., track hoe, bulldozer, etc.). Trench excavation of approximately 14,730 cubic yards (cy) of materials will occur during construction and installation of the natural gas main. Excavated materials from the roadway sections will be hauled from the project site to approved sites, and imported material provided by PSE's contractor from local commercial sources will be used as backfill and pipe bedding to replace excavated material.

Upon completion of this project, all surfaces disturbed during construction will be restored as required by the City of Bellevue.

**f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**

As noted, erosion hazard areas are identified within the project vicinity by King County Sensitive Area mapping. Areas of erosion hazards are located along SE 8<sup>th</sup> Street for 2000 feet east of I-405, along the south side of Lake Hills Connector between SE 9<sup>th</sup> Place and Richards Road SE, and along the east boundary of Kelsey Creek Community Park between 134<sup>th</sup> Avenue SE and SE 8<sup>th</sup> Street (King County, 2008). Because the gas main will be constructed within the public rights-of-way under existing hard surfaces (paved roads, paved roads shoulders and sidewalks), the erosion hazards will be reduced.

The Kelsey Creek crossing will be horizontally directionally drilled and will have no stream scour effects. The HDD drilling process is more fully described in the General Project Description. The Sturtevant Creek crossing will be a bore, also with no stream scour effects. The gas main will cross above the Wilburton Tributary culvert.

C + G BMPs will be required per 23.76  
BCC

**g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

There will be no change in impervious surfaces - the entire project will be located under existing paved surfaces.

**h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

Erosion hazards will be addressed with particular care, including strict adherence to the methods and procedures detailed in the Temporary Erosion and Sedimentation Control Plan (TESCP) to be approved by the City of Bellevue prior to commencement of construction. A draft TESCP Plan is attached to this application.

The TESC describes environmental protection measures, including BMPs, which will be used by PSE's contractor to limit erosion potentials and impacts to the earth within the project site. TESC measures identified for use during construction include but are not limited to erosion control barriers (i.e., silt fence, straw/hay bales), temporary construction entrances and temporary cover.

The proposed natural gas main has been located to minimize trench excavation widths and depths, minimize exposed soil surfaces and reduce sedimentation impacts to adjacent sensitive

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habitats. Immediate backfill of excavations, along with timely restoration of the disturbed surface will further reduce erosion potentials.

Soils excavated from the roadways will be hauled off-site to approved locations and will not be stockpiled for use as backfill. Upon installation of the proposed gas main, the excavated trench will be backfilled first with compacted pipe bedding materials and then road fill materials.

PSE representatives will monitor and review the use and maintenance of TESC measures employed during construction, and if needed, monitoring and maintenance of TESC measures may be transferred to PSE's operating section upon completion of construction and restoration activities. The TESC and specific restoration proposals will be submitted to the City of Bellevue (as required) for review and approval prior to the start of construction.

## **2. AIR**

**a. What types of emissions to the air would result from the proposal (i.e. dust, automobile odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

### **Construction Phase**

Sources of emissions during construction include fugitive dust and construction equipment exhaust. Sources of dust will be from excavation along the pipeline route, and from traffic to and from the construction site. The quantities of emissions generated and transported off-site from the construction corridor will depend upon wind and weather conditions, but are anticipated to be minor and of short duration.

### **Operational Phase**

Small volumes of natural gas may be vented to the atmosphere during the initial gasification and occasionally during maintenance and operation of the gas main.

**b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

There are no known off-sites sources of emissions or odors that would affect this project.

**c. Proposed measures to reduce or control emissions or other impacts to the air, if any:**

### **Construction Phase**

Standard emission control devices, in conformance with federal and state air quality standards for the specific class and type of equipment, will be utilized by equipment during construction phases of the project. Dust control BMPs will include street sweepers on asphalt streets to limit dust-generating sources on road surfaces. Efficient construction practices and timely restoration will further reduce dust-generating sources. PSE representatives will monitor dust-generating sources during construction and when necessary will address excessive emissions with appropriate control techniques.

Natural gas is comprised of approximately 94 percent methane, 4 percent ethane and 2 percent other inert gasses and is ignitable only within a narrow range (approximately 4 to 14 percent) of gas to air mixture. Above and/or below the narrow range, combustion cannot occur. Natural gas has a specific gravity of 0.6 relative to air. In the event that natural gas is released from the gas

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distribution facilities, it is likely to rise quickly, dissipate in the air, and reach a non-ignitable concentration. Likewise, natural gas is not toxic and, unlike liquid fuels, does not contaminate soils or water bodies when released from pipelines.

### 3. WATER

#### a. Surface

**(1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

The gas main route crosses three culverted creek crossings: Kelsey Creek and the Wilburton Tributary at the Lake Hills Connector, and Sturtevant Creek at SE 6<sup>th</sup> Street. The Washington State Department of Natural Resources (DNR, 2008), identifies these three creeks as Type F streams. Kelsey Creek crosses under Lake Hills Connector Road and converges with Richards Creek. Richards Creek then flows west, crosses under I -405 and is joined by Sturtevant Creek before flowing into South Mercer Slough. All three creeks are contained within culverts at the gas main crossings.

All  
Streams  
are  
Type F  
per  
LUC 20.25H

King County and National Wetland Inventory (NWI) maps identify several wetlands in the immediate vicinity of the site:

- North of SE 8<sup>th</sup> Street, between the Railroad Trestle and Lake Hills Connector Road (PSSC and PABH)
- South of SE 8<sup>th</sup> Street between SE 12<sup>th</sup> Street and Lake Hills Connector (PSSA)
- North and south of Lake Hills Connector in the vicinity of 123<sup>rd</sup> Avenue SE, extended (PSSA and PEMF)
- North and south of Lake Hills Connector east of Richards Road (PFOC, PSSC and PEMF).

Those wetland edges that have been previously delineated along the Lake Hills Connector are shown on the attached plans.

**(2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If Yes, please describe and attach available plans.**

The project will cross below culverted sections of Kelsey Creek and the Wilburton Tributary along the Lake Hills Connector, and below a culverted section of Sturtevant Creek along SE 6<sup>th</sup> Street. The Kelsey Creek crossing will be horizontally directionally drilled and the Sturtevant crossing will be bored (see attached plans). The project is also located within 200-feet of the above described wetlands, but will not impact those wetlands.

The HDD crossing of Kelsey Creek will have a plan length of approximately 773 feet, with the HDD entrance located approximately 300-feet west of the Kelsey Creek culvert, and the exit approximately 425-feet east of the culvert. As shown in the attached plans, the drill path extends up to 40- feet below Kelsey Creek.

Initially for the HDD, there will be no required excavations except the displacement of soil along the drill path. Excavated cuttings will be transported to a PSE and City of Bellevue

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approved upland site. At the point that the drill has been completed and pulled back through the drill hole, the entrance and exit pits will be enlarged in order to cut back the ends of the gas main and join it with the remainder of the gas main. The volume excavated for each of these pits will not be significant. The excavated native materials will be stored in an upland area near the site of the excavation and will later be reused to fill the drill entry and exit pits. The drill entry and exit holes will be filled with suitable backfill. Remaining excavation material will be transported to a PSE and City of Bellevue approved upland site.

No impacts to the Wilburton Tributary, Kelsey Creek, or Sturtevant Creek are anticipated.

**(3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

No work will occur within adjacent surface waters or wetlands; all work and staging areas will be located within the constructed road. The Kelsey Creek crossing will be horizontally directionally drilled and will have no effects on surface water and/or wetlands. The Sturtevant Creek crossing will be bored.

**(4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

No surface water withdrawals or diversions are proposed.

**(5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

A portion of the route along the Lake Hills Connector, in the vicinity of Kelsey Creek, lies within a 100-year floodplain. The Kelsey Creek crossing will, however, be horizontally directionally drilled and will have no impact on the 100-year floodplain. The HDD drilling process is more fully described in the General Project Description.

**(6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

No waste materials will be discharged into surface waters. The TESC and BMPs will prevent deleterious materials from entering any surface waters. Dewatering is described in item b. below.

#### **b. Ground**

**(1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.**

Shallow groundwater from regional high water tables may be encountered during trenching for the pipeline route. Shallow groundwater could also be encountered adjacent to wetlands and streams.

During construction, dewatering of excavated trenches may be required in areas of natural shallow groundwater; the groundwater will be collected in a Baker Tank and tested for water quality parameters prior to a controlled release to the stormwater drainage system.

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Groundwater encountered during the HDD crossing of Kelsey Creek will be similarly collected and tested. Drilling mud will be collected and stored for reuse or off-site disposal.

Water used for pipeline pressure testing will be discharged into the sanitary sewer system.

**(2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

Not Applicable.

**c. Water Runoff (Including storm water)**

**(1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Runoff could occur along the pipeline route if significant precipitation occurs during the construction period. It is anticipated that the project will be subject to Rainy Season restrictions for any work between November 1 and April 30.

Construction sequencing is planned to include sectional trench construction, pipeline placement and trench backfill on a daily basis within the ROW. Following construction and resurfacing, runoff patterns along the pipeline route will be the same as occurred prior to construction since no permanent grade changes will have occurred.

**(2) Could waste materials enter ground or surface waters? If so, generally describe.**

There is a limited potential for hydraulic fluids or fuel to reach the ground surface during construction and enter surface water bodies.

**d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:**

To insure that all work adjacent to streams and/or wetlands will occur within the existing road, the edge of all <sup>Improved Rights-of-way</sup> fights-of-way adjacent to any waterbody will be flagged prior to construction. Fueling of construction equipment will not occur within 100 feet from designated aquatic resources.

Runoff will be reduced by limiting the area of soil disturbance to the smallest area required for safe construction. The practice of trenching, placing pipe and backfilling the trench within the ROW on the same day will significantly limit the area of actively exposed trench.

Measures will be implemented to control runoff within pipeline trenches. Surface water is best controlled by installing catch basin inserts, straw waddles, straw bales, sand bags, sediment traps, filter fences, and trench breakers or other erosion control devices as needed depending on site-specific conditions. If high groundwater levels in trenches are encountered, this may require a straw bale dewatering structure, geotextile filter bags or pumps equipped with filters before allowing water to be returned to drainage facilities or

surface waters. PSE's contractor will be responsible for determining appropriate trench dewatering methods and will be responsible for complying with applicable permit conditions.

The 2008 Golder *Geotechnical Investigation for 16-inch Gas Service Main Horizontal Directional Drill Crossing of Kelsey Creek* Report states that there is a potential for "hydraulic fracturing" (resulting in drilling mud being released through fractured bedrock into the surrounding rock and sand and traveling toward the surface of a stream or river), as the pilot bore approaches the exit location. All recommendations of the Geotechnical Report will be implemented, including preparation of a "Frac-Out" Contingency Plan. This Plan will describe how any frac-outs will be controlled and contained. The contractor will also be required to place drilling fluid containment equipment and materials at the exit location as the drill approaches the exit. The contractor will also provide erosion and sedimentation control consisting of silt fences or hay bales.

#### 4. PLANTS

**a. Check or circle types of vegetation found on the site:**

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

Not applicable. The proposed gas main will be installed within constructed roads, under existing hard surfaces (paved roads, paved roads shoulders and sidewalks).

**b. What kind and amount of vegetation will be removed or altered?**

None.

**c. List threatened or endangered species known to be on or near the site.**

None.

**d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:**

Not applicable.

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## 5. ANIMALS

a. Check or circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

- Birds: hawk, eagle, songbirds, other: woodpeckers, waterfowl
- Mammals: deer, squirrels, raccoons, mice, rats, opossums, gophers, moles, rabbits, skunks
- Fish: salmon, other:

Wildlife-Habitat Relationships in Oregon and Washington (Johnson and O'Neil, 2001) includes a detailed description of reptiles, amphibians, birds and mammals that are likely to occur within the urban zone of Bellevue.

Kelsey Creek and Sturtevant Creek are fish bearing streams that cross Lake Hills Connector along the route of the gas main. Kelsey Creek flows along the north side of Lake Hills Connector for approximately 2,000 feet before crossing Lake Hills Connector. Richards Creek, also a fish bearing stream, is a tributary of Kelsey Creek and flows into Kelsey Creek just south of the gas main on the south side of Lake Hills Connector Road.

Sturtevant Creek crosses Lake Hills Connector west of I- 405. Both Sturtevant Creek and Kelsey Creek flow into Mercer Slough East. Kelsey Creek, Richards Creek, Sturtevant Creek and Mercer Slough East are listed fish bearing streams within or adjacent to the gas main route. Kelsey Creek, Mercer Slough and Richards Creek, are mapped as supporting coho (*Oncorhynchus kisutch*), Chinook (*O. tshawytscha*) and sockeye (*O. nerka*) (WDFW 2006). Sturtevant Creek is mapped as only supporting Coho (WDFW 2006).

b. List any threatened or endangered species known to be on or near the site.

The National Marine Fisheries Service lists steelhead and Chinook salmon as federally threatened species and coho salmon as a federal species of concern. There are no other threatened or endangered species known to be on or near the site.

c. Is the site part of a migration route? If so, explain.

Yes, Kelsey Creek and Sturtevant Creek support populations of anadromous fish that use these creeks for migration, spawning and rearing.

d. Proposed measures to preserve or enhance wildlife, if any:

All work associated with installation of the gas main will be located under existing hard surfaces, and above or below culverted streams. No vegetation clearing or disturbance to existing natural areas is proposed.

## 6. ENERGY AND NATURAL RESOURCES

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy need? Describe whether it will be used for heating, manufacturing, etc.

The completed distribution project will provide natural gas to the Bellevue downtown area.

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**b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

The new gas main will be located underground, so will not affect the potential use of solar energy by adjacent properties.

**c. What kinds of energy conservation features are included in the plans of the proposal? List other proposed measures to reduce or control energy impacts, if any:**

Not applicable.

**7. ENVIRONMENTAL HEALTH**

**a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.**

During construction, there is a potential risk from the normal hazards associated with machinery operation and general construction practices. Spills of machine fluids and/or similar and other normal construction hazards potentially exist.

The new gas main will cross the buried Olympic Pipe Line Co. petroleum pipeline and METRO sewer; construction plans have addressed protection of these facilities.

During operation phases of this project, natural gas will be contained within the distribution facilities. The natural gas mixture is comprised of approximately 94 percent methane, 4 percent ethane and 2 percent other inert gasses and is ignitable only within a narrow range (approximately 4 to 14 percent) of gas to air mixture. Above and/or below the narrow range, combustion cannot occur. Natural gas has a specific gravity of 0.6 relative to air. In the event that natural gas does escape from the pipeline, it is likely to rise quickly, dissipate in the air and reach a non-ignitable concentration.

All proposed facilities will be owned and operated by PSE as regulated by the Washington Utilities and Transportation Commission. The design, construction and operation of these facilities will meet or exceed all state and federal pipeline safety standards.

**(1) Describe special emergency services that might be required.**

No special emergency services will be required for the completed natural gas distribution facilities.

In the event of a construction and/or operational emergency, appropriate response personnel may be required including, but not limited to, personnel from PSE, local police, fire, aid or rescue units.

**(2) Proposed measures to reduce or control environmental health hazards, if any.**

**Construction Phase**

Trench boxes, bracing, sump pumps and other associated construction safety equipment and procedures will be utilized at the PSE contractor's discretion as required by the Washington Industrial Safety and Health Act (WISHA), Occupational Safety and Health Administration

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(OSHA) and WAC 296-155 (*Safety Standards for Construction Work*). Sound engineering and construction techniques will ensure the proposed natural gas main is properly installed.

#### **Operational Phase**

Under CFR Title 49, Part 192 (*Transportation of Natural and other Gas by Pipeline: Minimum Federal Safety Standards*), the U.S. Department of Transportation-Office of Pipeline Safety regulates all natural gas pipelines. For pipelines that operate only within the state of Washington, the Washington Utilities and Transportation Commission (WUTC) adopts and enforces additional state regulations. PSE natural gas pipelines comply with all applicable WUTC and federal regulations. The WUTC regularly inspects PSE facilities to ensure compliance with WUTC regulations.

PSE designs all natural gas pipelines to meet or exceed the most stringent federal and state requirements. PSE will radiographically inspect 100 percent of all welds. The natural gas pipeline will be hydrotested to 1.5 times its maximum design pressure. PSE installs valves along its pipeline system, thereby providing a means to shut off the flow of natural gas, if necessary, when responding to control an emergency or to maintain the pipeline.

All natural gas distributed by PSE is odorized to ensure a leak is readily detectable and natural gas pressure is regulated by mechanical equipment to ensure the pressure in each system is less than or equal to the maximum design pressure. Every pressure regulator station has a backup system to ensure that this pressure is not exceeded.

Historically, over half of all operational natural gas pipeline incidents resulting in a release of natural gas or pipeline repair have been caused by outside sources, such as earth moving and excavating equipment. To reduce this risk, pipeline markers will be posted along the pipeline route and at all major crossing points. Also, routine inspections of the pipeline route are performed to help identify any unauthorized excavation near the pipeline. PSE actively participates in the state and local underground utilities coordinating councils and participates in and promotes the "Call Before You Dig" program. All excavators are required by law (Revised Code of Washington [RCW] 19.122) to use these services.

#### **b. Noise**

**(1) What types of noise exist in the area which may affect your project (for example, traffic, equipment, operation, other)?**

None.

**(2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

Construction activities will generate a short-term increase in noise levels from use of heavy equipment used in trenching, assembling and laying pipe. Noise levels will be highest during the initial cutting and movement of pavement, but will then be reduced.

**(3) Proposed measures to reduce or control noise impacts, if any:**

Required Noise control  
by BCC 9.18

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It is recognized that the gas main route passes through residential areas and although the increase in noise levels will be temporary, the noise can disturb local residents; PSE will work with the City of Bellevue to minimize the noise impacts.

All construction equipment will be equipped with standard sound attenuation devices and will meet or exceed Bellevue City Code noise standards (BCC 9.18). Construction will be limited to normal working hours as required by City of Bellevue regulations, unless construction or traffic considerations require an alternative schedule in a particular area.

## **8. LAND AND SHORELINE USE**

### **a. What is the current use of the site and adjacent properties?**

The proposed 3.5 mile distribution gas main (defined as a "local utility system" by Bellevue Code Chapter 20.50.032) will be located within existing public street rights-of-way, under existing hard surfaces - paved roads, paved roads shoulders and sidewalks.

Adjacent properties are occupied by a variety of uses – residential, office, business/commercial, parks, open space, a Park and Ride lot, and City of Bellevue Fire Station 7.

### **b. Has the site been used for agriculture? If so, describe.**

The project site is within constructed roads.

### **c. Describe any structures on the site.**

No structures exist within the rights- of-way; paved surfaces and underground utilities are found within the rights-of-way.

### **d. Will any structures be demolished? If so, what?**

No structures will be demolished as part of this project.

### **e. What is the current zoning classification of the site?**

The gas main routes traverses through multiple zoning districts. East of I-405, the zoning is generally Single-family and Multi-family residential. West of I-405, the route lies within a mix of Downtown, Office, and Residential districts.

More specifically, the land use districts include:

Downtown - Multiple Use (DNTN-MU), Office District 1 (DNTNO-1), Office District 2 (DNTNO-2), Office and Limited Business District (DNTNOLB), Residential (DNTN-R),

Light Industrial (LI)

Office and Limited Business (OLB)

Professional Office (PO)

Single Family Residential - R-1.8, R-3.5, R-4 ,R-5 and R-7.5

Multifamily Residential - R-10 and R-20

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Overlays – Downtown, OLB, Shoreline

**f. What is the current comprehensive plan designation of the site?**

The gas main routes traverses through areas designated as Single Family Low and High Density, Park, Multi-Family (L and M), Public Facility, Office- Limited Business, and Downtown Core and Downtown Perimeter.

**g. If applicable, what is the current shoreline master program designation of the site?**

The Shoreline Master Program designation is considered "Urban".

**h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.**

The project site is wholly within constructed public road rights-of-way. That portion of the route along Lake Hills Connector and SE 8<sup>th</sup> Street is adjacent to, but not within, designated critical areas.

*Shoreline Overlay District for that portion east of Wilburton trestle on SE 8<sup>th</sup> Street and east along Lake Hills Connector.*

**i. Approximately how many people would reside or work in the completed project?**

None.

**j. Approximately how many people would the completed project displace?**

This project will not cause any displacement.

**k. Proposed measures to avoid or reduce displacement impacts, if any:**

Not applicable.

**i. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**

Maintaining and enhancing the availability of natural gas service within the City of Bellevue is fully consistent with all relevant land use plans and the following Goals of the Utilities Element of the *City of Bellevue Comprehensive Plan* (updated through April 2, 2007).

**Utility Element Goals**

*1. To facilitate the development and maintenance of all utilities at the appropriate levels of service to accommodate the City of Bellevue's projected growth.*

*2. To facilitate the provision of reliable utility service in a way that balances the public's concerns about safety and health impacts of utility infrastructures, consumers' interest in paying no more than a fair and reasonable price for the utility's product, Bellevue's natural environment and the impacts that utility infrastructures may have on it, and the community's desire that utility projects be aesthetically compatible with surrounding land uses.*

Project related actions will conform to the requirements of all applicable City of Bellevue, State of Washington and federal laws and regulations.

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## 9. HOUSING

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

None.

## 10. AESTHETICS

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The new gas main will be located underground.

b. What views in the immediate vicinity would be altered or obstructed?

Not applicable.

c. Proposed measures to reduce or control aesthetic impacts, if any:

None.

## 11. LIGHT AND GLARE

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Construction during evening hours would result in a temporary source of light and glare. Because the construction will move through individual areas as quickly as possible, it is not anticipated that this light and glare would be significant.

The completed project will not produce any light or glare.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

The proposed project would not result in new light or glare.

c. What existing off-site sources of light or glare may affect your proposal?

Not applicable.

d. Proposed measures to reduce or control light or glare impacts, if any:

Not applicable.

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## 12. RECREATION

**a. What designated and informal recreational opportunities are in the immediate vicinity?**

Sidewalks along the route are used by pedestrians. The route also passes along the edge of Kelsey Creek Park, but in an area largely covered by wetlands. Bannerwood Ballfield Park is located along the south side of Lake Hills Connector, east of 134<sup>th</sup> Avenue SE. A park is also located along the north side of NE 10<sup>th</sup> Street, at the end of the project.

**b. Would the proposed project displace any existing recreational uses? If so, describe.**

No recreational uses will be displaced by this project.

**c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

Any sidewalks disturbed during construction activities will be restored to original or better condition.

## 13. HISTORIC AND CULTURAL PRESERVATION

**a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

No such sites are known.

**b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.**

The proposed project is located entirely within constructed roads, under existing pavement.

**c. Proposed measures to reduce or control impacts, if any:**

If archeological deposits are encountered at any time during the course of ground disturbance, work would be halted and local authorities and the State Historic Preservation Office (SHPO) would be notified immediately. Construction would remain halted until proper measures were undertaken as deemed necessary by consultation with SHPO.

## 14. TRANSPORTATION

**a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

The new gas main will be located within City of Bellevue street rights-of-way, along the following route: From the intersection of 140<sup>th</sup> Avenue SE and Lake Hills Connector Road, west along the north side of Lake Hills Connector Road/SE 8<sup>th</sup> Street, under I-405 along SE 8<sup>th</sup> Street, north along 114<sup>th</sup> Avenue SE, west along SE 6<sup>th</sup> Street, north along 112<sup>th</sup> Avenue SE, west along NE 2<sup>nd</sup> Street, north along 110<sup>th</sup> Avenue NE and west along NE 10<sup>th</sup> Street to the existing district regulator located within the north side sidewalk.

During construction phases of this project, installation of the proposed natural gas main will temporarily interfere with normal traffic usage of impacted roads. The magnitude of impact is

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expected to vary depending upon existing road use characteristics, the duration of construction activities, and the specific requirements of the approved Traffic Control Plan.

**b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

Metro Transit serves routes on NE 10<sup>th</sup> Street, 110<sup>th</sup> Avenue NE, 112<sup>th</sup> Avenue NE, Lake Hills Connector, and 140<sup>th</sup> Avenue SE, along the proposed gas main corridor.

**c. How many parking spaces would be completed project have? How many would the project eliminate?**

The completed project will not create nor eliminate any parking.

**d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

No new roads would be constructed as a result of this project.

**e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The route for the gas main crosses under a BNSF railroad trestle east of I-405 on SE 8<sup>th</sup> Street.

**f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

The completed project will not generate new vehicular trips.

**g. Proposed measures to reduce or control transportation impacts, if any:**

A Traffic Control Plan will be developed for approval by the City of Bellevue. The Traffic Control Plan will be developed to assure adequate safety for motorists, pedestrians and construction workers while minimizing transportation inconvenience. In all cases, the plan would conform to the latest edition of the U.S. Department of Transportation's (USDOT's) *Manual on Uniform Traffic Control Devices* (MUTCD), Washington State Modifications to MUTCD and the Washington State Department of Transportation's *Standard Plans for Road and Bridge Construction*. During development of the traffic control plan, PSE will consult with applicable regulatory agencies, landowner, tenants, police, fire, school and other public and private entities affected by the project.

It is anticipated that this Plan will address:

- Length/timing of lane closures
- Necessary detours where single-lane traffic cannot be maintained. Where possible, one lane of traffic will be maintained through the use of appropriate construction practices and traffic control devices. Traffic delays should be expected to occur.
- Maintenance of emergency access, including access to Fire Station 7.
- Maintenance of pedestrian access

At the completion of the project, there will be no permanent transportation impacts.

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**15. PUBLIC SERVICES**

**a. Would the project result in an increased need for the public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.**

The project itself will not result in an increased need for public services. After construction, PSE will assume primary responsibility for inspecting, maintaining and operating the proposed natural gas distribution system.

This project will, however, provide additional gas service capacity to downtown Bellevue and points west, and will thus indirectly allow for further growth which may increase the ultimately increase the need for public services.

**b. Proposed measures to reduce or control direct impacts on public services, if any.**

Emergency access will be maintained to all residences and businesses, as well as City of Bellevue Fire Station 7, at all times during construction.

Future growth within the City of Bellevue is anticipated by the City of Bellevue Comprehensive Plan and Zoning Regulations.

**16. UTILITIES**

**a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.**

**b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

Existing utilities are present along a majority of the gas main route; these utilities are shown on the project plans. The design of the gas main installation adheres to all vertical and horizontal separation requirements and avoids all conflicts to the extent possible. Where necessary, the gas main will cross existing utilities and will maintain the minimum separation necessary for safe construction and operational requirements.

**Signature**

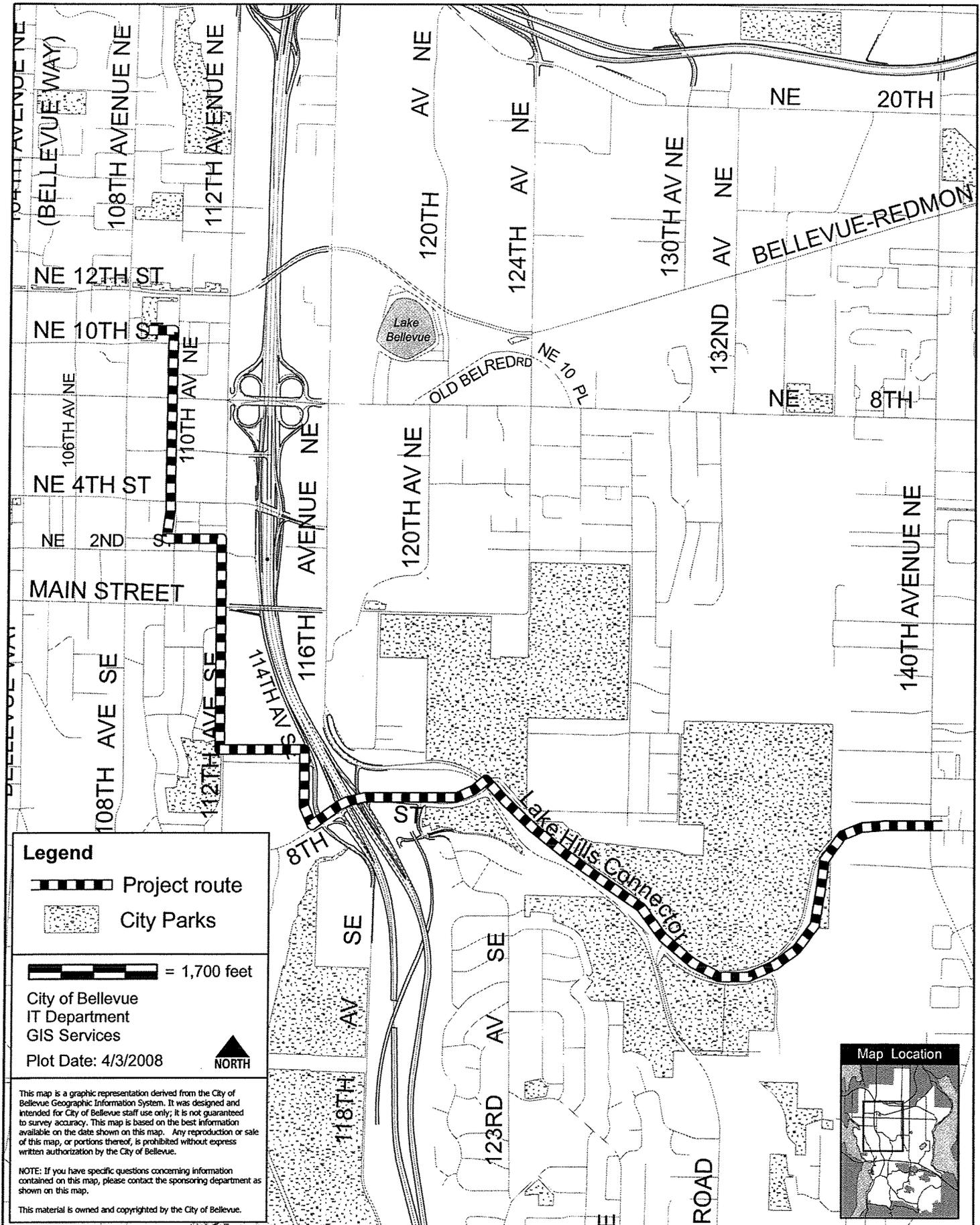
The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature Larry Torberg

Date Submitted 2-26-08

Reviewed by:  
PL  
4-7-08

# Lake Hills Connector to NE 10th Street PSE Gas Main



**Legend**

- Project route
- City Parks

= 1,700 feet

City of Bellevue  
IT Department  
GIS Services

Plot Date: 4/3/2008 NORTH

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