



## CHAPTER 6: UTILITIES

### 6.1 Introduction

This section describes the public utilities present in the Missing Link study area, potential impacts related to construction and operation, and potential mitigation measures. Utilities addressed in the analysis include water, wastewater, storm drainage, solid waste, electricity, natural gas, and telecommunication services.

### 6.2 Affected Environment

Numerous utilities are located in the highly industrialized study area. This section describes the utilities currently identified within or adjacent to the alternative alignments. Additional site-specific identification of utilities would be required prior to any construction activity. Only the locations of utilities that would potentially be disrupted or relocated by the project are described.

SCL provides electrical service within the study area. Electrical lines run along and across all roads included in the five Build Alternatives and connector segments. Natural gas service is provided by Puget Sound Energy (PSE).

SPU provides sanitary sewer and potable water service within the study area. Wastewater and water lines run along and across all roads included in the five Build Alternatives as well as the connector segments. SPU also provides storm drainage and solid waste collection. The study area drains to the combined sewer system. In a combined sewer system, stormwater is diverted with other wastewater to the sanitary sewer system and then onto a wastewater treatment plant. During wet weather conditions, stormwater runoff from streets, parking lots, and roof drains can exceed the capacity of the sewer system. If flow rates in the combined sewer exceed the capacity of the system, the excess flow of stormwater and untreated sewage is discharged into water bodies through permitted outfalls, resulting in a combined sewer overflow event. In the study area, untreated flows discharge into the Lake Washington Ship Canal during high flow events. SPU has adopted the *Plan to Protect Seattle's Waterways* (SPU 2015) and is pursuing projects to reduce combined sewer overflow events in the study area.

Telecommunication services in the study area are provided by private companies including CenturyLink and Comcast.

### 6.3 Potential Impacts

#### 6.3.1 No Build Alternative

Under the No Build Alternative, a multi-use trail segment would not be constructed in the study area. There would be no disruption or relocation of any public or private utility lines or facilities related to the BGT.

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#### ***Changes from the DEIS***

Chapter 6 includes analysis of the newly developed Preferred Alternative, which was not included in the DEIS. No other substantive revisions were made to this chapter, relative to the DEIS.

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### 6.3.2 Impacts Common to all Build Alternatives

#### **Construction**

Construction of the Build Alternatives has the potential to impact utilities. Construction would occur in segments. Construction duration in any one location would depend on the extent of utility relocations required, storm drainage improvements needed, and the existing roadway reconfigurations. During construction, temporary utility outages could occur. Utility relocations during construction could include movement of fire hydrants, stormwater catch basins, and overhead utilities as well as the installation of new drainage structures. Because all utilities are present on all streets in the Build Alternatives, all utilities have the potential to be impacted by construction activities.

The Missing Link project could require the relocation of overhead power lines, light poles, or fire hydrants in some locations where the roadway would shift into areas that are currently occupied by a parking strip or parking areas. Areas where this could occur are described below under each alternative. Where this would occur, SDOT would coordinate with SPU and/or SCL and would relocate any affected utilities. Long-term operation of the utilities would not be impacted.

In some locations, solid waste, recycling, and yard waste receptacle placements may need to be temporarily relocated to accommodate construction equipment. SPU would identify temporary locations and communicate with property and business owners.

#### **Operation**

The trail would not impact the long-term operation of utilities. In some locations, solid waste, recycling, and yard waste receptacle placements may need to be permanently relocated. SPU would identify new locations and communicate with property and business owners.

### 6.3.3 Preferred Alternative

#### **Construction**

Construction impacts would be the same as described in Section 6.3.2 for all Build Alternatives.

The following above-ground utilities may need to be relocated:

- Street lights on the north side of NW 46<sup>th</sup> St;
- Utility poles, overhead power lines, and street lights on the south side of NW Market St; and
- Street lights and a fire hydrant on NW 54<sup>th</sup> St.

#### **Operation**

Operational impacts would be the same as described in Section 6.3.2 for all Build Alternatives.

The Preferred Alternative would result in new and replaced impervious surface area as some of the gravel shoulder and roadway would be rebuilt to accommodate the trail. Any additional impervious surface area would increase stormwater runoff. However, the additional area would be relatively small compared to the overall area draining to the combined sewer system, so the impact would not be significant. New stormwater systems and storm drainage improvements, and relocation of stormwater catch basins to manage runoff from the trail, may also improve existing stormwater drainage problems.

### 6.3.4 Shilshole South Alternative

#### **Construction**

Construction impacts would be the same as described in Section 6.3.2 for all Build Alternatives.

#### **Operation**

Operational impacts to utilities from the Shilshole South Alternative are not anticipated.

The Shilshole South Alternative would result in new and replaced impervious surface area as some of the gravel shoulder, and roadway would be rebuilt to accommodate the trail. Any additional impervious surface area would increase stormwater runoff to the combined sewer system. However, the additional area would be relatively small compared to the overall area draining to the combined sewer system, so the impact would not be significant.

### 6.3.5 Shilshole North Alternative

#### **Construction**

The following above-ground utilities may need to be relocated:

- Street lights on the north side of NW 46<sup>th</sup> St;
- Utility poles and overhead power lines on the north side of Shilshole Ave NW;
- Utility poles, overhead power lines, and street lights on the south side of NW Market St; and
- Street lights and a fire hydrant on NW 54<sup>th</sup> St.

#### **Operation**

Operational impacts would be the same as described in Section 6.3.2 for all Build Alternatives.

### 6.3.6 Ballard Avenue Alternative

#### **Construction**

The following above-ground utilities may need to be relocated:

- Utility poles and overhead lines on both sides of NW 56<sup>th</sup> St;
- Utility poles and overhead lines on the east side of 28<sup>th</sup> Ave NW;
- Utility poles, overhead power lines, and street lights on the south side of NW Market St; and
- Street lights and a fire hydrant on NW 54<sup>th</sup> St.

While each Build Alternative would require the installation of new stormwater management facilities, stormwater management would be particularly necessary on Ballard Ave NW. Because Ballard Ave NW is crowned, the roadway portion that includes the BGT would likely need to be built up above its current level. Without changing the existing storm drainage system, it would be too far below the grade of the new trail segment to work properly, and water would likely pond on the sidewalk.

Residential property owners along the south side of NW 56<sup>th</sup> St between 26<sup>th</sup> Ave NW and 28<sup>th</sup> Ave NW could be required to place garbage, recycling, and yard waste receptacles on the other side of the street on pick-up days. This impact would only occur when construction activities were directly adjacent to their properties.

### ***Operation***

Operational impacts would be the same as described in Section 6.3.2 for all Build Alternatives.

## **6.3.7 Leary Alternative**

### ***Construction***

The following above-ground utilities may need to be relocated:

- Utility poles on the east side of 11<sup>th</sup> Ave NW;
- Street lights on the south side of NW Leary Way;
- Street lights and utility poles on the southwest side of Leary Ave NW;
- Utility poles, overhead power lines, and street lights on the south side of NW Market St; and
- Street lights and a fire hydrant on NW 54<sup>th</sup> St.

### ***Operation***

Operational impacts would be the same as described in Section 6.3.2 for all Build Alternatives.

## **6.3.8 Connector Segments**

### ***Construction***

Most connector segments have utility poles and/or street lights that may need to be relocated, depending on trail design.

### ***Operation***

Operational impacts would be similar to those described in Section 6.3.2 for the Build Alternatives.

## **6.4 Avoidance, Minimization, and Mitigation Measures**

### **6.4.1 Measures Common to All Alternatives**

Avoidance, minimization, and mitigation measures related to utilities would include the following:

- Close coordination with utility providers to identify and physically locate utilities prior to any construction activity.
- Communication with property owners prior to any construction activity to obtain input on the locations of utility connections that may not be documented.

- Notification of property owners in advance of disruptions in service to affected utilities.
- Compliance with code requirements to install stormwater systems and storm drainage improvements as well as to relocate stormwater catch basins to manage runoff from the trail, which may also improve existing stormwater drainage problems.