



memorandum

date December 8, 2022

to City of Mercer Island Department of Community Planning & Development

from Jimmy Kralj, ESA

subject Mercer Island Sewer SCADA Systems Replacement—Pump Station 1 (8002 SE 20th Street) - **Critical Areas Technical Memo**

Introduction

Environmental Science Associates (ESA) is under contract with Brown & Caldwell to assist with the City of Mercer Island Sewer supervisory control and data acquisition systems (SCADA) Replacement project at Pump Station Site 1. The pump station is located at 8002 SE 20th Street (King County parcel 545230-2217), within the City of Mercer Island. The project area includes the pump station and associated emergency generator and the areas immediately surrounding both structures.

The pump station is located within a sewer utility easement on a parcel containing a single-family residential building, landscaping, and unmaintained vegetation with the pump station located in the northwest portion of the parcel and access facilitated by the sewer utility easement located along the western parcel boundary. Interior work at the pump station will include control panel replacement, instrument demolition and replacement, go/no-go panel installation, and associated electrical work. Exterior work will include installation of an 8-foot tall antenna and 40-inch vent stack. Interior work at the pump station emergency generator, located within a separate, aboveground generator enclosure within the SE 20th Street right-of-way, includes control panel installation and associated electrical work. Work will occur primarily belowground with limited disturbance above grade. Temporary lay down areas will be required at both sites.

Based on the scope of work described above, the project is a “minor expansion of a public utility structure and conveyance system and their associated facilities” (MICC 19.07.120.D.2). As such, per MICC 19.07.120.D.2, it is exempt from review and compliance with this chapter, provided all activities shall use reasonable methods to avoid and, if avoidance is not possible, minimize impacts to critical areas and buffers to the greatest extent feasible consistent with MICC 19.07.100, mitigation sequencing.

The purpose of this technical memorandum is to document all critical areas within 200 feet of the project area and address how the project will avoid or minimize impacts to critical areas and buffers in accordance with MICC 19.07.120.D.2.

Methods

Based on discussions with the City of Mercer Island’s Department of Community Planning and Development staff on February 4, 2022, the critical areas assessment is limited to a desktop assessment of geographic information system (GIS) data given the minor nature of the work activities within existing developed sites.

Mitigation Sequencing

Mercer Island City Code (MICC) 19.07.100 requires applicants to avoid, minimize, and mitigate impacts to environmentally critical areas and associated buffers. To that end, Contractor will access the pump station and generator and bring in materials in a manner to avoid and minimize impacts to the project area. Laydown areas will be required to stage control panels and electrical equipment; however, no vegetation clearing or ground disturbance is proposed as part of this work. Minor pruning of woody vegetation may be necessary to allow access through an unmaintained area of vegetation to access the pump station. No compensatory mitigation is proposed as part of the project.

Critical Areas

A critical areas field investigation was not conducted due to the nature of the work and lack of site disturbance. City planning staff determined that a delineation was not required during a pre-application meeting (L. Anderson, personal communication, February 4, 2022). Rather, the review is based on publicly available critical areas information, as documented in this memo.

Wetlands and Streams

No wetlands are mapped within 200 feet of the project area. A Type Ns piped watercourse is mapped along the western parcel boundary, in proximity to Pump Station 1, which does not require a buffer (MICC 19.07.180(C)(1)) (Figure 1).

Landslide Area and Seismic Hazard Area

The area surrounding Pump Station 1, including the entire parcel and beyond, is identified by Mercer Island as a landslide area and seismic hazard area (Mercer Island, 2022). According to MICC 19.07.160.D, Development Standards – Seismic Hazard Areas, development within landslide hazard areas requires an approved critical area study. However, per MICC 19.07.120.D.2, projects that involve minor expansion of public utility facilities, both above and below ground, are exempt from review and approval, but must comply with code requirements to avoid or minimize impacts to the greatest extent feasible. The project will meet the requirements of MICC 19.07.120.D.2, through the following methods.

- The project area will be accessed by foot without the use of any vehicles.

- No soil disturbance, including excavation will be conducted at the project area; all work at the pump station will be contained within existing in-ground vault/dry well structures.

Accordingly, the project will not exacerbate conditions related to landslide and seismic hazards and no geotechnical report is required (MICC 19.07.160.B.3).

Fish and Wildlife Habitat Conservation Areas

Past land use applications indicate the presence of bald eagle nests in the vicinity of the project area and the entire parcel is located within the 660-foot bald eagle management area (Wetland Resources, 2017). According to MICC 19.07.170.B.1, General Review Requirements, for Fish and Wildlife Habitat Conservation Areas, a wildlife habitat assessment in the form of a critical area study is required for activities within 660 feet of known bald eagle nesting sites.

According to MICC 19.07.170 areas where state or federally listed endangered, threatened, sensitive, or candidate species, or species of local importance, have primary association are designated as Fish and Wildlife Habitat Conservation Areas (FWHCA). Priority habitats and areas associated with priority species identified by the Washington State Department of Fish and Wildlife (WDFW) are considered FWHCA as well.

However, no work will occur below the ordinary high water mark of Lake Washington and per MICC 19.07.120.D.2, projects that involve minor expansion of public utility facilities, both above and below ground, are exempt from review and approval, but must comply with code requirements to avoid or minimize the impacts to the greatest extent feasible. The project will meet the requirements of MICC 19.07.120.D.2, through the following methods.

- The project area will be accessed by foot without the use of vehicles or heavy machinery.
- Noise associated with the work will be minimal and will not exceed background levels at the project area.
- Additionally, no trees within the project area will be disturbed.

Accordingly, this project will not result in any impacts to bald eagle habitat within the project vicinity.

Shoreline

Projects located within 200 feet of shorelines of the state (Lake Washington) are regulated under the Mercer Island Shoreline Master Program (MICC 19.13). According to MICC 19.13.D.1 exemptions and exceptions within shoreline jurisdiction are found in WAC 173-27-040, 173-27-044, and 173-27-045. This project, as a normal maintenance or repair of an existing structure, meets the criteria of WAC 173-27-040(2)(b) and, therefore, is exempt from a substantial development permit.

Summary

All proposed activities will be performed to avoid impacts to designated critical areas and their buffers in conformance with the mitigation sequencing standards contained in MICC 19.07.100. Therefore, the project is compliant with the critical area development standards defined in MICC 19.07.

If you have any questions, please call Jimmy Kralj at 206.204.6966.

References:

City of Mercer Island. 2022. Information and Geographic Services GIS Portal.

<https://chgis1.mercergov.org/Html5Viewer/Index.html?viewer=PubMaps&viewer=PubMaps>.

Wetland Resources. 2017. Critical Areas Study and Mitigation Plan for NFH-8000 SE 20th Street SFR.

Project #15210. Revision 1: February 13, 2017.

https://publicdocs.mercergov.org/PAV/search/?CQID=114&OBKey_131_1=CAO16-002.

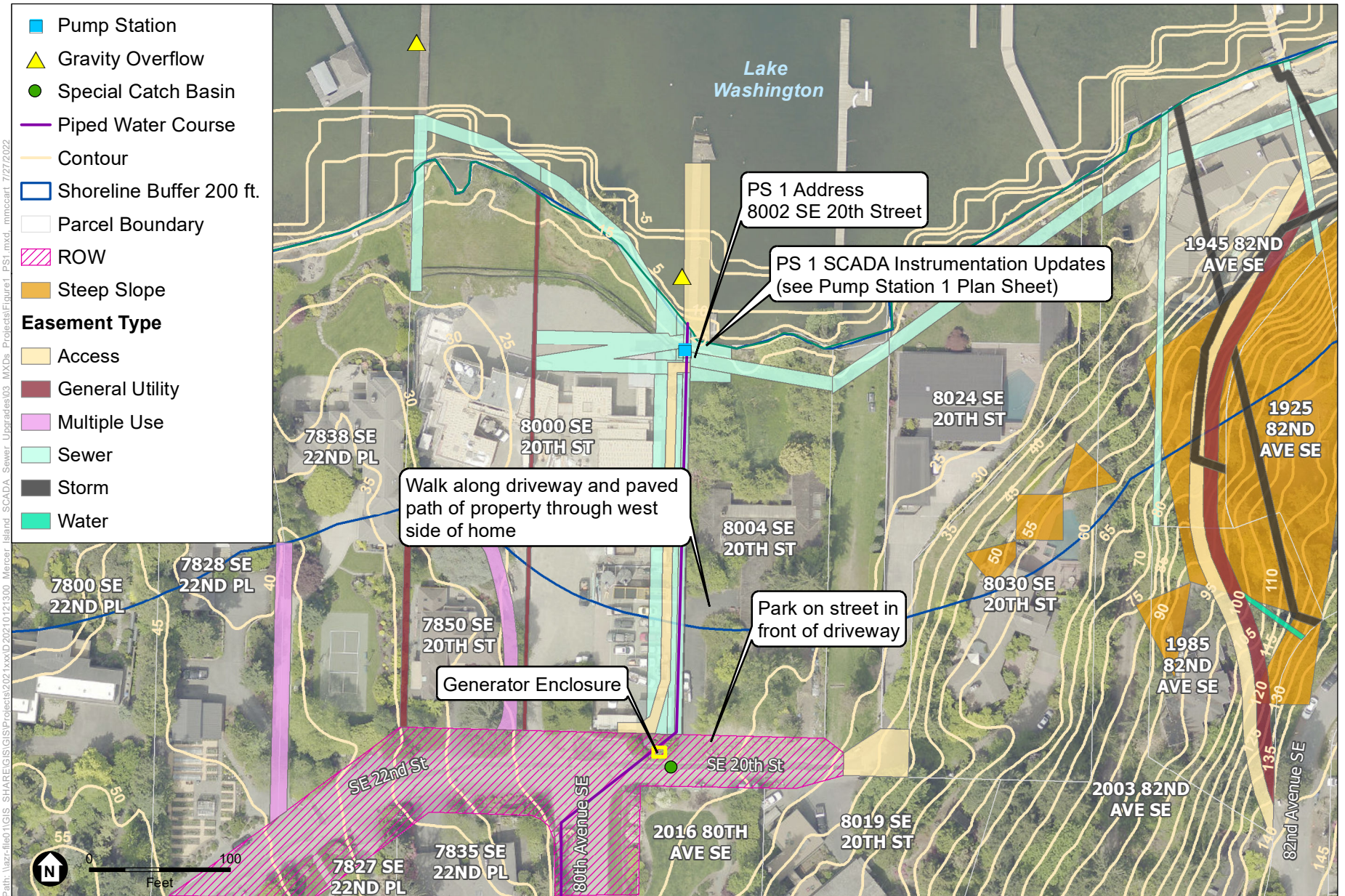
Attachment 1



PS 1 – Pump Station



PS 1 – Generator Enclosure



SOURCE: King County, 2019; Carollo, 2022; City of Mercer Island, 2022

*Seismic, erosion, and potential slide areas not shown

Mercer Island SCADA Sewer Improvements

Figure 1
Pump Station #1
Site Plan Overview