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memorandum

date	November 10, 2022
to	City of Mercer Island Department of Community Planning & Development
from	Jimmy Kralj, ESA
subject	Mercer Island Sewer SCADA Systems Replacement—Pump Station 20 (8790 85th Avenue SE) - **Critical Areas Technical Memo**

Introduction

Environmental Science Associates (ESA) is under contract with Brown & Caldwell to assist with the City of Mercer Island Sewer SCADA Systems Replacement project at Pump Station Site 20. The pump station is located at 8790 85th Avenue SE 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 the ROW at a street end park (South Point Landing) adjacent to the Lake Washington Shoreline. Access to the pump station is provided from 85th Avenue SE, immediately adjacent to the pump station. The generator is located in a belowground hatch near the pump station at the intersection of SE 87th Street and 85th Avenue SE (Attachment 1). Interior work at the pump station will include control panel replacement, instrument demolition and replacement, go/no-go panel installation, and associated electrical work. Interior work at the pump station emergency generator includes control panel installation and associated electrical work. Exterior work at the pump station will include antenna installation (8 feet tall); exterior work will not occur at the generator. Work will occur primarily belowground and within the generator enclosure with limited disturbance above grade.

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 review of 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 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 (Figure 1). Additionally, there are no piped or un-piped water courses within 200 feet of the project area.

Landslide, Seismic, and Erosion Hazard Areas

Portions of the area surrounding Pump Station 20 are identified by Mercer Island as a landslide, seismic and erosion hazard area (Mercer Island, 2022). According to MICC 19.07.160.C, Development Standards – Landslide Hazard Areas and MICC 19.07.160.D, Development Standards – Seismic Hazard Areas, development within landslide hazard areas requires an approved critical area study. Additionally, according to MICC 19.07.160.E, Development Standards – Erosion Hazard Areas, all developments must comply with the stormwater management program. However, under 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 with vehicle access restricted to paved areas.
- No soil disturbance, including excavation will be conducted at the project area; all work at the pump station will be contained to existing in-ground vault/dry well structures.

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

Fish and Wildlife Habitat Conservation Areas

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 any Fish and Wildlife Conservation Areas within the vicinity of the project area.

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 MICC19.13.D.1 exemptions and exceptions within shoreline jurisdiction are found in WAC173-27-040, 173-27-044, and 173-27-045. This project, as normal maintenance or repair of an existing structure, meets the criteria of WAC173-27-040(2)(b) and, therefore, is exempt from a substantial development permit.

Summary

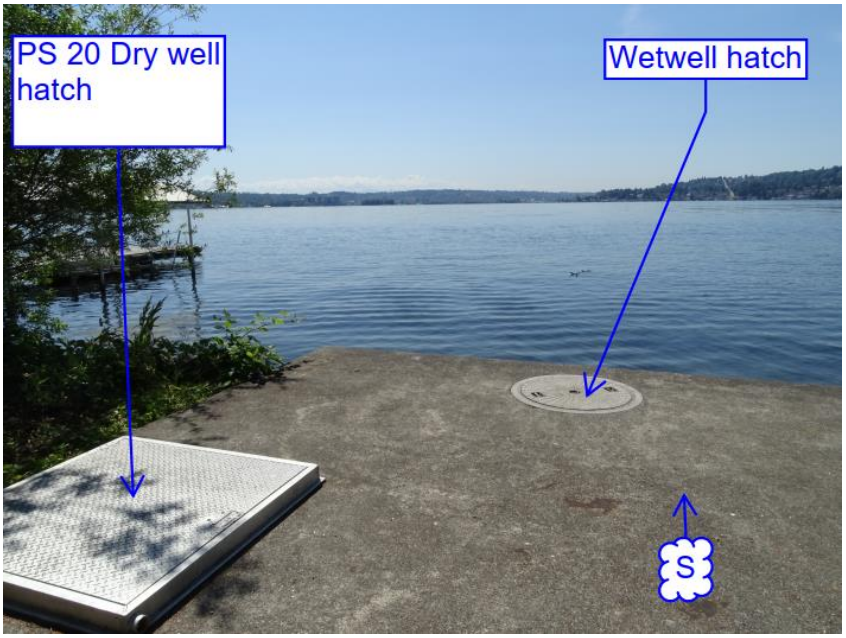
All proposed activities will be performed to avoid impacts to designated critical areas and their buffers in conformance with the mitigation sequencing standards contained in MICC 19.07.100. Therefore, the project is compliant with the critical area development standards defined in MICC 19.07.

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

References:

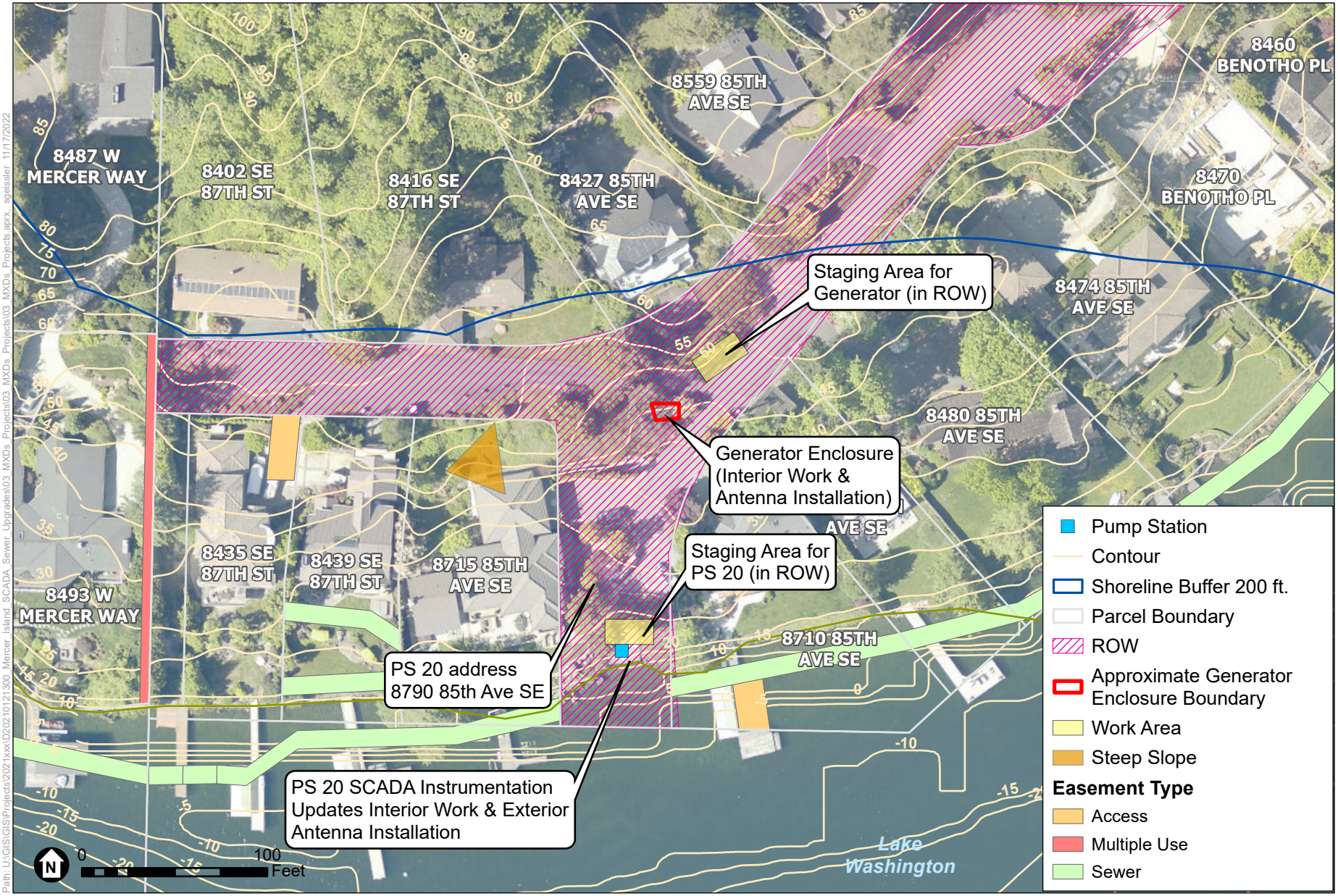
City of Mercer Island. 2022. Information and Geographic Services GIS Portal. https://chgis1.mercergov.org/Html5Viewer/Index.html?viewer=PubMaps&viewer=PubMaps.

Attachment 1



PS 20 – Pump Station

PS 20 – 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 #20
Site Plan Overview

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