



Shoreline Exemption Project Narrative

Special Catch Basin MH 40-2 Rehabilitation Project Project No. 23-21

BACKGROUND

There are a total of 51 special catch basins within the City of Mercer Island's sewer system. These special catch basins are considered critical infrastructure as they are the last line of defense in preventing solids and debris from entering the difficult to maintain lake line system located in Lake Washington. Special Catch Basin Manhole (MH) 40-2 is accessed through the Mercerwood Shore Club waterfront parking lot, located at 4266 E Mercer Way (See Attachment A). The manhole sits approximately 48 feet from the edge of Lake Washington and has an approximate rim elevation of 25' and sump of 15' (See Attachment B).

MH 40-2 receives the entirety of sewer basin 40. Flows are typically of high velocity. Under normal flow conditions, sanitary sewer enters the manhole from the northeastern invert and exits through the southern invert. Sanitary sewer then gravity flows 300' through 12" cast iron lakeline before discharging into pump station 25. Under surcharge conditions, a weir located within the manhole allows sewer flows to exit through a third western invert, which emergency discharges into Lake Washington.

Construction of MH 40-2 is believed to have occurred sometime pre-1964. In late 2016, portions of the inner concrete structure failed requiring modifications to both the weir and emergency outlet (Refer to Attachment C). Cracks in the weir were grouted over and an 8" diameter PVC riser pipe was grouted into the emergency outlet. Since the top of the new riser pipe replaced the weir height as the set point for emergency discharges, the manhole could now handle larger surcharge events. A baffle plate added to the outflow in 2018 eased maintenance and prevented larger solids and debris from entering the lakeline.

Recently, operations and maintenance staff noticed excessive scouring of the existing weir structure and 2016 grout work. Large cracks have opened near the invert of the emergency outflow, and water from Lake Washington appears to be infiltrating the manhole.

PROJECT INFORMATION

The City of Mercer Island, Washington is requesting bid proposals for Special Cath Basin MH 40-2 Rehabilitation, Project No. 23-21. The intent of base bid items is to provide mobilization, cleanup and demobilization, handling existing flows, cleaning and preparation of surfaces, removal and patching of loose and/or unsound material, repair of inverts, bench, and walls, and chemical grout sealing of sewer manhole cone, wall, sump, bench, inverts, holes, and pipe connections at one (1) special catch basin manhole. An Add Alternate bid item allows for structural enhancement through application of a cementitious interior liner.

Work primarily consists of activities within MH 40-2, so no disturbance to areas surrounding MH 40-2 is expected. Rehabilitation activities do not expand the utilities existing footprint or capacity. All activities are landward of the Ordinary High Water Mark (OHWM).

SHORELINE EXEMPTION REQUEST

The project is subject to compliance with criteria for developments exempt from substantial development permits (MICC 19.13; WAC 173--27-040) and standards and requirements included in MICC 19.13.050(A) - Table C, and MICC 19.13.050(K)(2). Compliance with these rules and standards is described below.

MH 40-2 is located within 200 feet of Lake Washington's OHWM, placing the project within the shoreline jurisdiction and subject to the regulations defined in the City of Mercer Island's shoreline code (MICC 19.13).

This project qualifies for a shoreline exemption under WAC 173-27-040(2)(b) which states:

(2) The following developments shall not require substantial development permits:

(b) Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "Normal repair" means to restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment.

Deterioration of the existing manhole 40-2 has materialized in the form of scouring, cracks, and infiltration. Repair is required to reinstate the manhole to its original form. Grout sealing, patching, and cementitious liner applications are industry standards for repair and rehabilitation of existing manholes. The repair is critical to maintain the existing level of service for the sewer utility. There will be no increase in capacity or expansion of use because of this project.

The project is subject to shoreline development standards included in MICC 19.13.050(A) - Table C, Setbacks for All Structures (Including Fences over 48 Inches High) and Parking (a) 25 feet from the OHWM and all required setbacks of the development code.

MH 40-2 is located 48 feet from the OHWM and therefore conforms to the requirements of MICC 19.13.050(A) – Table C.

The project is subject to general requirements outlined in MICC 19.13.050(K)(2) for utilities on shorelines.

i. Utilities shall be placed underground and in common rights-of-way wherever economically and technically practical.

The sewer manhole already exists. The project is solely to repair and rehabilitate the existing damaged structure. No new utilities are being constructed as part of this project.

ii. Shoreline public access shall be encouraged on publicly owned utility rights-of-way, when

such access will not unduly interfere with utility operations or endanger public health and safety. Utility easements on private property will not be used for public access, unless otherwise provided for in such easement.

The project does not change the location or access characteristics of shoreline public access where it currently exists.

iii. *Restoration of the site is required upon completion of utility installation.*

No vegetation clearing or ground disturbance is needed as part of this work. Therefore, restoration is not required.

DEVELOPMENT APPLICATION SHEET

Attached.

TITLE REPORT

Attached. Title Report is dated December 16, 2022. Request that the requirement for Title Report not less than 30 days old be waived.

DEVELOPMENT PLAN SET

Attached.

Request certain items in the Site Plan be waived and have all of the Landscaping Plans waived, due to location and nature of the work to existing facilities.

CRITICAL AREAS STUDY

This project is exempt from this section and does not require review for compliance under MICC 19.07.120 (E)(2), which says.

The following activities are exempt from city review and approval but must comply with the standards of this chapter

(2) Repair and maintenance of existing utility facilities. Repair, maintenance, reconstruction and replacement of public utility structures and conveyance systems and their associated facilities, including but not limited to service lines, pipes, mains, poles, equipment and appurtenances, both above and below ground.

ARBORIST REPORT

Not applicable; no trees are impacted by project activities.

SEPA CHECKLIST

This project is categorically exempt from SEPA under WAC 197-11-800 (3), which states:

(3) Repair, remodeling and maintenance activities. The following activities shall be categorically exempt: The repair, remodeling, maintenance, or minor alteration of existing private or public structures, facilities or equipment, including utilities, recreation, and transportation facilities involving no material expansions or changes in use beyond that previously existing; except that, where undertaken wholly or in part on lands covered by water, only minor repair or replacement of structures may be exempt (examples include repair or replacement of piling, ramps, floats, or mooring buoys, or minor repair, alteration, or maintenance of docks).