

CONDITIONAL USE PERMIT APPLICATION

PROJECT NARRATIVE

INTRODUCTION

The City of Mercer Island (City) Public Works Department (Applicant) is seeking a Conditional Use Permit (CUP) for installation of water meter data collection equipment (Project). The Project is considered an Essential Public Facility (EPF) per Mercer Island City Code 19.16.010.E. An EPF requires a Conditional Use Permit in all zones (MICC 19.06.100(D)).

BACKGROUND AND NEED FOR THE PROJECT

The City operates a water utility meter reading program that involves reading 82% of meters manually and reading the remaining 28% through a radio read system. Water metering information is used in the City's utility billing system, from which utility billing statements are generated. Approximately 64% of the City's water meters are 15 years old or more.

In 2018, the City began evaluating options to improve its water metering practices, which led to a comprehensive Water Meter Replacement Program (the Program). The Program includes implementation of an Advanced Metering Infrastructure (AMI) system to replace the 7,900 existing water meters with new smart meters, standardized in type and technology. This will enable a meter-reading approach that will best support reduced water loss and improved water resource management. The new meters will automatically transmit water usage data to the City on an hourly basis via data collection equipment on utility poles or other structures in a total of seven locations throughout Mercer Island.

PROJECT DESCRIPTION

The Applicant is proposing to install water meter data collection equipment on utility poles or other structures in seven discrete locations across Mercer Island. The proposed locations were identified due to their ability to capture transmissions from water meters across Mercer Island. None of the seven locations are in the Town Center Zone.

The data collection equipment at Location 3 is proposed for installation on an existing City-owned utility pole in Island Crest Park (5801 Island Crest Way) at 47.55022918, -122.2234264 (see Figure 1). The data collection equipment would include two elements: a coated aluminum box approximately 22-inches by 22-inches by 10.5-inches in size (data box) and a fiberglass antenna approximately 9 feet tall and 1.5 inches in diameter. The data box would be installed on the pole approximately 5 feet from the ground and the antenna would be installed at the top of the 80-foot pole (reaching a total height of 89 feet) (see Drawing 1).

CRITICAL AREAS

The City of Mercer Island defines critical areas as geologically hazardous areas, fish and wildlife habitat conservation areas, watercourses, and wetlands (MICC 19.16.010) and requires any development

City of Mercer Island Water Meter Data Collector Installation Project
Location 3 – Island Crest Park
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activity, and all structures and facilities that contain critical areas and/or their buffers to be reviewed prior to authorization of development (MICC 19.07.020).

The project site is not within an area noted as a "landslide area," "protected slope," "steep slope," or "erosion area." The Project is located within a seismic hazard area (geologically hazardous area).

The Project would be exempt from provisions of Chapter 19.07 MICC as a minor expansion of public utility structures and their associated facilities (MICC 19.07.120(D)(2)).

Consultation with the code official occurred during the pre-application meeting for the project where critical area study requirements were waived (pursuant to MICC 19.07.119). Consistent with MICC 19.07.100, reasonable methods are proposed to minimize impacts to the seismic hazard area. Please see compliance with mitigation sequencing under Decision Criteria below. The development proposal is minor in nature and will not increase the risk of landslide, erosion, or harm from seismic activity.

CONSTRUCTION

Installation of the data box and antenna would occur over 1-2 days and include up to three construction workers. The staging and construction area would be approximately 40 feet by 40 feet (160 square feet). Installation machinery would include a manlift. All construction would occur during daylight hours; no nighttime work is proposed.

The existing site is pre-disturbed ground cover; no vegetation is anticipated to be removed or altered. Likewise, no trees are proposed for removal or alteration. There are no anticipated stormwater runoff or surface water issues as the data box and antenna will not create any ground disturbance or impervious surfaces.

OPERATIONS

Post-installation, minimal equipment maintenance is required. In the event of an emergency or malfunctioning equipment, an initial investigation can be completed remotely. If the situation cannot be resolved remotely, a site visit would occur by a professional trained to maintain the data collection equipment, to inspect the unit and make any necessary adjustment/repairs. For onsite inspection/maintenance of the data box and antenna, a lift truck would be used.

STATE ENVIRONMENTAL POLICY ACT

The State Environmental Policy Act (SEPA) is required to be fulfilled for this Project. A SEPA Checklist is included with this submittal.

SCHEDULE

The schedule is highly dependent on receiving permit approvals and lead times on construction materials. The applicant would like the data collection equipment to be in service by the end of Q2 2024 to support the Program schedule.

DECISION CRITERIA

Review of the City of Mercer Island City Code (MICC) development criteria required to be met for proposal approval (MICC 19.06.100, 19.06.110, and 19.06.120) is included in the Code Compliance Matrix document submitted with this application package.

Because the proposed development is within a geologically hazardous area (seismic hazard area), the below would be carried out to ensure the proposal wouldn't impact other critical areas, the subject property or adjacent properties and all impacts are mitigated with best available science to the maximum extent reasonably possible so that the site is determined to be safe.

MICC 19.07.100 Mitigation sequencing.

Except as otherwise provided in this chapter, an applicant for a development proposal or activity shall implement the following sequential measures, listed below in order of preference, to avoid, minimize, and mitigate impacts to environmentally critical areas and associated buffers. Applicants shall document how each measure has been addressed before considering and incorporating the next measure in the sequence:

- A. Avoiding the impact altogether by not taking a certain action or parts of an action. The applicant shall consider reasonable, affirmative steps and make best efforts to avoid critical area impacts. However, avoidance shall not be construed to mean mandatory withdrawal or denial of the development proposal or activity if the proposal or activity is an allowed, permitted, or conditional use in this title. In determining the extent to which the proposal should be redesigned to avoid the impact, the code official may consider the purpose, effectiveness, engineering feasibility, commercial availability of technology, best management practices, safety and cost of the proposal and identified changes to the proposal. Development proposals should seek to avoid, minimize and mitigate overall impacts based on the functions and values of all of the relevant critical areas and based on the recommendations of a critical area study. If impacts cannot be avoided through redesign, use of a setback deviation pursuant to section 19.06.110(C), or because of site conditions or project requirements, the applicant shall then proceed with the sequence of steps in subsections B through E of this section;***

Applicant Response: The action within the critical area cannot be avoided as the entire City of Mercer Island is within the seismic hazard area. However, the site is pre-disturbed ground cover.

Construction methods are also at minimal disturbance, no seismic impacts are anticipated. Any minimization or reduction measures proposed are to comply with best management practices and increase the ability of structures to resist seismic disturbances.

- B. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, using a setback deviation pursuant to section 19.06.110(C), using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;***

Applicant Response: Prior to construction, the contractor should submit a detailed installation plan describing construction methods for review and comment by the City engineer before construction.

C. *Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;*

Applicant Response: The construction footprint will be restored to previous condition once equipment installation is complete. No operational ground disturbance would be required.

D. *Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;*

Applicant Response: Once in operation, the data collection equipment would require minimal on-site presence.

E. *Compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or*

Applicant Response: No impacts are anticipated and replacing, enhancing or substituting resources would not be appropriate.

F. *Monitoring the impact and taking appropriate corrective measures to maintain the integrity of compensating measures.*

Applicant Response: Implementation of the following measure post-construction could reduce or minimize the potential for damage due to seismic activity for the proposed development:

- Implement measures to reduce or minimize any changes during inspection.