

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 18% 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 six locations throughout Mercer Island.

PROJECT DESCRIPTION

The Applicant is proposing to install water meter data collection equipment on utility poles or other structures in six 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 six locations are in the Town Center Zone.

The data collection equipment at Location 5 is proposed for installation in the City right-of-way (ROW) adjacent to Roanoke Park (W Mercer Way), a public park on the north end of the island, north of I-90. 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 an antenna panel that is approximately 7'8" tall x 8" wide x 5.9" deep. Installation of the data box and antenna would be on a Puget Sound Energy (PSE)-owned pole in the ROW. A new 55' pole will be installed by PSE at 47.59328918, -122.2451974 (See Figure 1) to replace an existing PSE pole. The data box will be installed on the pole approximately fifteen feet from the ground and the antenna will be installed at the top of the 55-foot pole (reaching a total height of 62 feet 8 inches) (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

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).

According to our desktop review, the project is not located within any critical areas.

CONSTRUCTION

The new pole upon which the equipment will be mounted will be designed and installed by PSE, who will coordinate the permitting of said effort with the City through permit requirements established in its franchise agreement. As that design/construction effort will be initiated by PSE, the construction notes provided here do not address installation of the pole itself; rather, the focus of this discussion is upon the attachment of the data box and associated antenna to the pole.

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 Q3 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.