

CITY OF KIRKLAND

123 FIFTH AVENUE • KIRKLAND, WASHINGTON 98033-6189 • (425) 587-3800

DEPARTMENT OF PUBLIC WORKS PRE-APPROVED PLANS POLICY

Policy D-9: STORMWATER PUMP SYSTEM REQUIREMENTS

Pump systems may be used for conveyance of stormwater flows from a project site, if no other feasible option exists. If the Public Works Department approves the use of a pump system, it shall meet the following minimum requirements:

- 1) The pump system must be privately owned and maintained. The pump system must have a dual pump (alternating), unless otherwise approved by the Public Works Department.
- 2) The pump system shall be used to convey water from one location or elevation to another within the project site, prior to gravity discharge to the public storm drainage system.
- 3) The pump system shall be connected to a natural gas generator system. For all other alternatives, such as battery powered systems, may be proposed for review as a stormwater adjustment (see Policy D-11). A minimum of 48 hours of backup power is required onsite. Show the location of the generator pad on the site plan (the Planning Department must approve the location).
- 4) To determine the flow to size the pump, use an approved model per the 2021 King County Surface Water Design Manual at a 15-minute time step.
- 5) All pumps shall be equipped with an external visual and audible alarm system.
- 6) The pump system shall not violate any City ordinances or codes.
- 7) The gravity-flow components of the drainage system to and from the pump system must be designed so that pump failure does not result in flooding of a building or emergency access, or overflow to a location other than the natural discharge point for the project site. An overflow/flooding hold-harmless agreement may be required at the discretion of Public Works.
- 8) The pump system shall be designed by a licensed Civil Engineer. At a minimum, the civil plans should specify the catch basin structure size/type, pump size/type, rim and invert elevations, and a plan view of the force main and the transition to gravity sewer.
- 9) No forced main system shall be directly connected to the City's storm conveyance. All forced main from pump systems shall connect to a CB or yard drain on site and gravity to the storm system in the right-of-way.