

Proposed Siting and Infrastructure



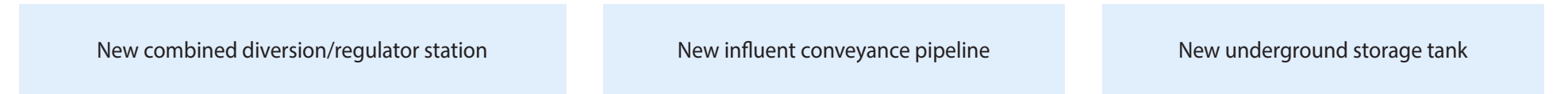
System Description

The Mouth of Duwamish Wet Weather Facilities Program (Program) is proposed to reduce overflows from five King County combined sewer overflow (CSO) basins (Chelan Avenue, Hanford #2, Lander Street, Kingdome, and King Street) and three Seattle Public Utilities (SPU) CSO basins (NPDES 099, 107, and 111) in the Greater Duwamish Neighborhood of Seattle.

The Program will include Chelan Wet Weather Storage, which includes removal of the existing Chelan Regulator Station and replacement with a new combined diversion/regulator station, new influent conveyance pipeline, and a new storage tank. This fact sheet describes the Chelan Wet Weather Storage project.

Chelan Wet Weather Storage Overview

Key Features



The Chelan Wet Weather Storage will divert and store the Chelan Avenue CSO overflows that would otherwise discharge directly to the West Waterway without treatment. Instead, the Chelan Wet Weather Storage allows for combined sewage storage during storm events until capacity within the conveyance system is adequate to release the flows for treatment at the West Point Treatment Plant (WPTP). The Chelan Wet Weather Storage includes the following components:

- **Chelan Diversion/Regulator Station:** The new diversion/regulator station will be in the same location as the existing Chelan Regulator Station, near the intersection of West Marginal Way SW and Chelan Ave SW (Parcel 7666703966). The Chelan Diversion/Regulator Structure includes:
 - » A belowground structure with a diversion weir and gate, rock catcher, and influent sewer isolation gate
 - » An aboveground building to house the gate actuators, new generator, and electrical and mechanical equipment for the gate actuators and level measurement

- **Influent Conveyance Pipeline:** During wet weather when water levels rise in the existing West Duwamish Interceptor, it will be routed to the new 60-inch-diameter influent pipe to flow by gravity to the storage tank. The influent conveyance pipeline is in SDOT right-of-way (ROW) and crosses/parallels BNSF rail lines within SDOT ROW.
- **Storage Tank:** is located on a 1.6-acre County-owned parcel (Parcel 7666703464) near the intersection of SW Dakota Street and West Marginal Way SW. Prior to storage tank construction, demolition of the existing inactive recycling center and site pavement would occur, followed by clearing, grading and covering the site in gravel. The project site would consist of:
 - » A below grade structure that houses a 7.0 MG storage tank, the tipping bucket end walls, chamfers, slope of the flushing channels, collection channel, internal columns, and discharge pumps
 - » Pavement areas and landscaping
 - » Pump station and effluent piping to connect to existing interceptor
- **An above grade building** containing mechanical and electrical systems, a restroom, and a standby generator to operate the facility during power outages and a screened outdoor odor control system.

Mouth of Duwamish Wet Weather Facilities

CHELAN WET WEATHER STORAGE

STORAGE AND FLOW RATES

Chelan Wet Weather Storage: 7.0 MG
Peak flow rate (2-year peak): 54.0 MGD

INFLUENT CONVEYANCE

SEGMENT	LENGTH	DIAMETER	CONST. METHOD
Chelan Diversion to storage tank	1,500 ft	60 in	Microtunnel
	1,000 ft	60 in	Open Cut

EFFLUENT CONVEYANCE

SEGMENT	LENGTH	DIAMETER	CONST. METHOD
Storage tank to West Duwamish Interceptor	90 ft	24 in	Pipe Ramming

ANTICIPATED PERMITS OVERVIEW

The project will require a range of federal, state, and local permits. Some permits are still being evaluated and may depend on funding sources or project refinements.

Federal/State

- Advisory Council on Historic Preservation and Dept of Archaeology + Historic Preservation (ACHP/DAHP) Section 106 Historical and Cultural Resources Review (*Chelan Wet Weather Storage will potentially be included in the USACE Section 106 "permit area". In the event that the project is excluded from USACE permit area, and the project receives federal funding, Section 106 Review would be triggered with EPA/Ecology as Federal Lead Agency.*)
- USFWS Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act Review - take authorization (*potentially required*)
- Ecology National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit
- KCWTD State Environmental Policy Act (SEPA) Compliance
- Ecology State Environmental Review Process (SERP) (*potentially required depending on federal funding*)
- USFWS and NMFS Endangered Species Act Section 7 consultation (*Chelan Wet Weather Storage will potentially be included in the USACE ESA Section 7 "action area". In the event that the project is excluded from USACE permit area, and the project receives federal funding, ESA Section 7 consultation would be triggered with EPA/Ecology as Federal Lead Agency*)

Local

- Environmentally Critical Areas Exception (all components)
- King County Industrial Waste (KCIW) Construction Industrial Waste Discharge Authorization
- Puget Sound Clean Air Agency (PSCAA) Asbestos/Demolition Notification
- PSCAA Notice of Construction
- Seattle City Light (SCL) Electrical Service
- SCL Utility Pole Alteration Permit (TBD)
- Seattle Dept of Construction & Inspections (SDCI) Construction (Building) Permit
- SDCI Demolition Permit
- SDCI Grading Permit
- SDCI Master Use Permit
- SDCI Preliminary Application/ Pre-Application Site Visit
- SDCI Shoreline Substantial Development Permit
- SDCI Tree Removal Permit
- Seattle Dept of Transportation (SDOT) Street Improvement Permit
- SDOT Term Permit (Long, TBD)
- Urban Forestry Tree Removal in ROW (TBD)

Private/Other

- BNSF Approval (site crosses rail) – long lead, encroachment and crossing permits.
- Port of Seattle Public Use lease/ easement — required for conveyance on Port of Seattle property. (*for Chelan Diversion/Regulator Station*)

ENVIRONMENTAL CONSIDERATIONS

The project is located in a highly urbanized industrial area with limited natural habitat. Key nearby features include:

- West Duwamish Greenbelt: A designated biodiversity corridor located west of the site
- Nearby Parks: tu?əlatx™ (toolalt) Village Park and Shoreline Habitat Terminal

No in-water work is included in this project. However, a portion of the tank (pending the outcome of field-verified OHWM) and influent conveyance system may be within the shoreline jurisdiction of the Lower Duwamish Waterway, and the tank site is near wetlands. The project is also in a liquefaction prone area. A critical areas report will be prepared to meet local requirements.

Potential impacts to migratory birds and bald eagles will be assessed. If active nests are found near construction zones, monitoring or relocation may be required.

COMMUNITY AND EQUITY IMPACTS

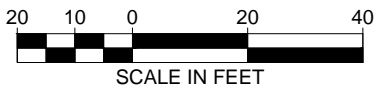
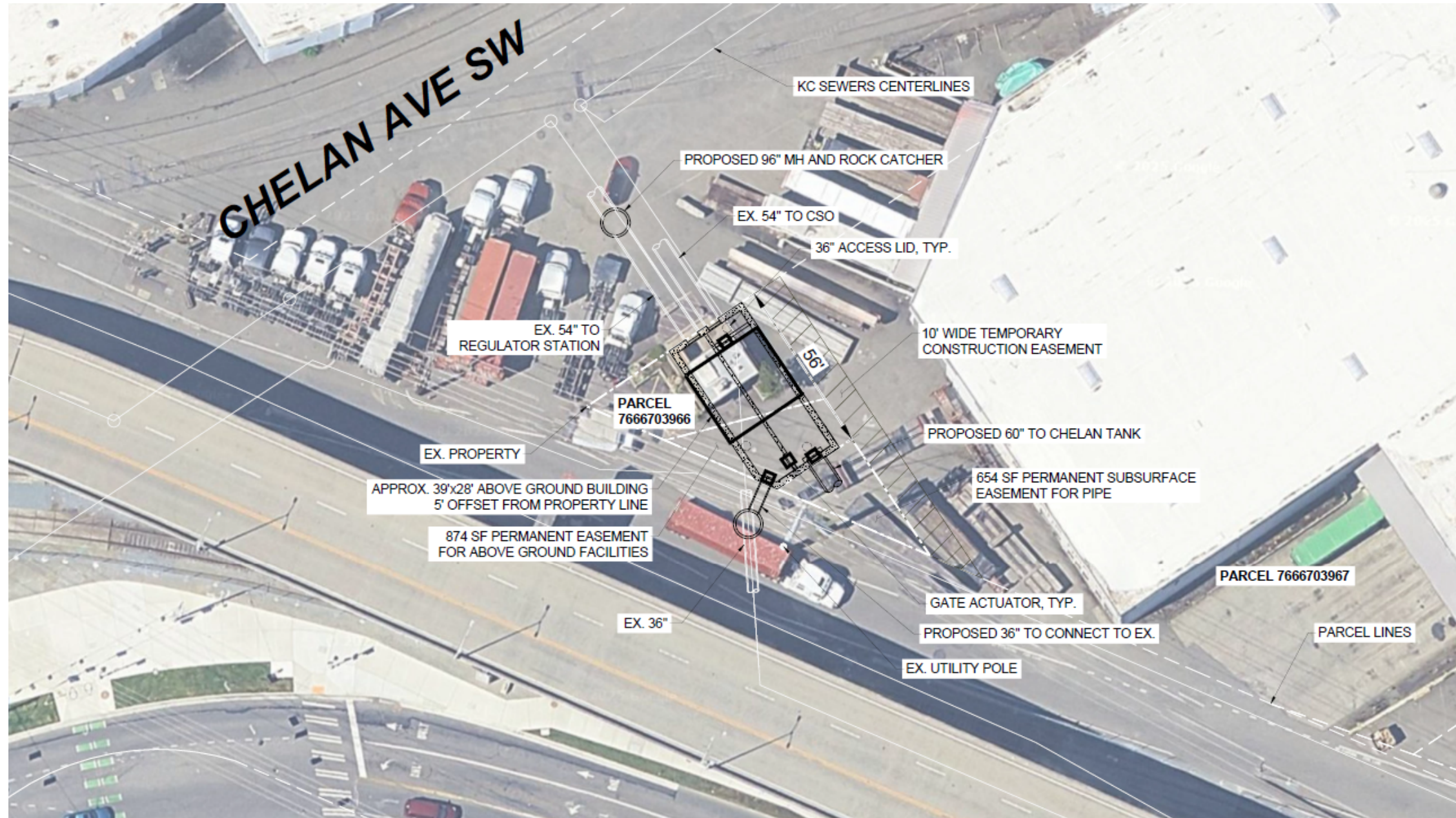
Short-term (*During Construction*)

Construction projects can be disruptive to the community. We anticipate that the staging and construction of the storage tank, new pipes, and supporting facilities may result in short term noise, vibrations, and delays or detours for near neighbors and people traveling through the area.

Long-term (*Post-Construction*)

One business was displaced and relocated when King County acquired the site, following King County policy and state and federal law. King County has the opportunity to develop facilities that are informed by community input, fit into the neighborhood character, and provide benefits in alignment with community priorities.

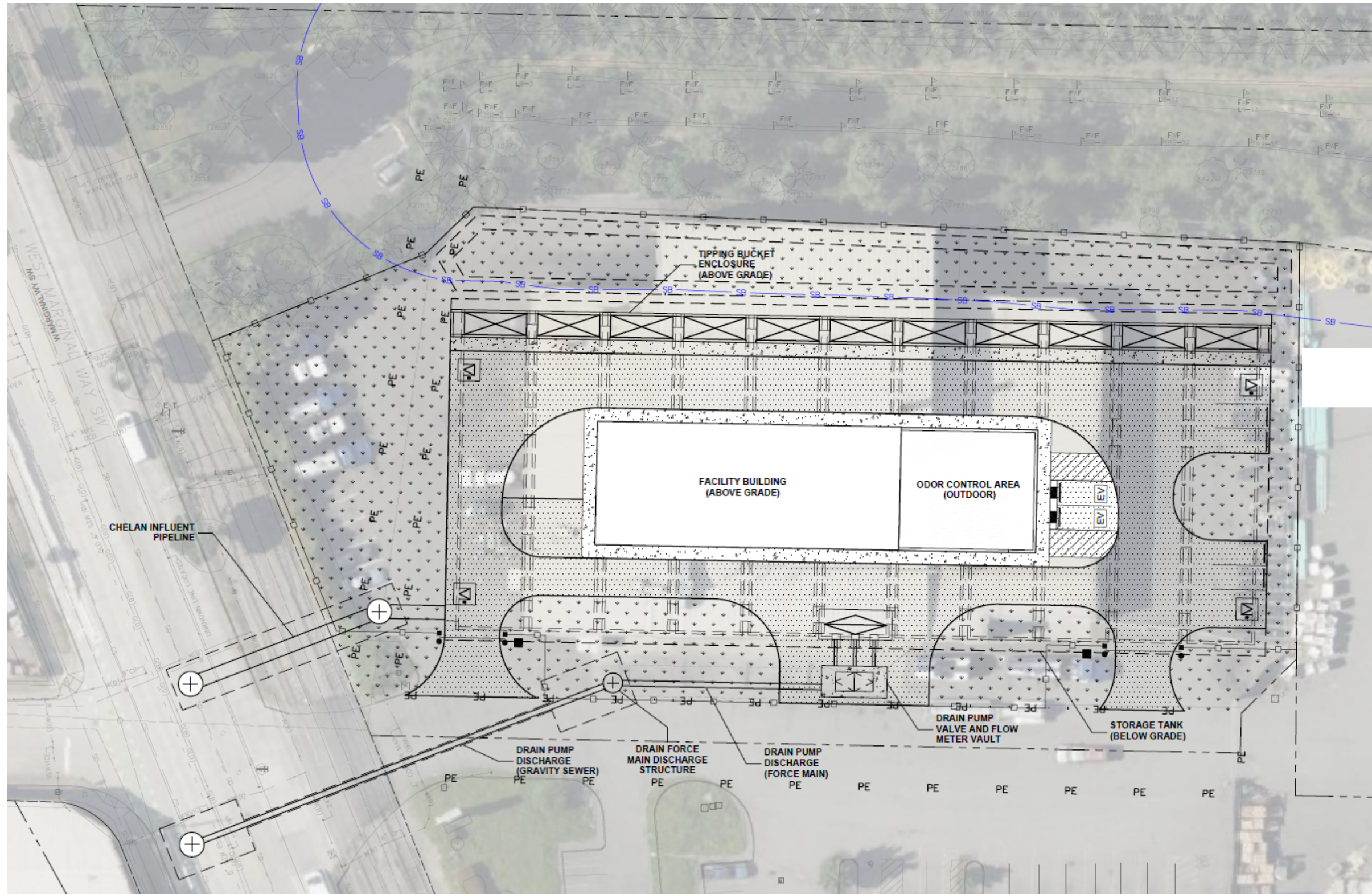
**Chelan Diversion Structure /
 Regulator Station**



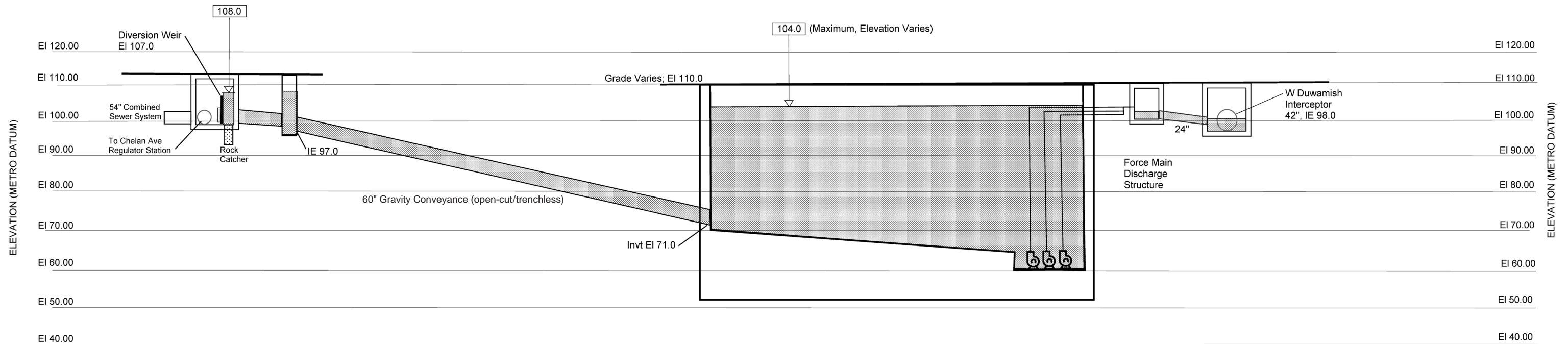
Mouth of Duwamish Wet Weather Facilities

CHELAN WET WEATHER STORAGE

Chelan Storage Tank



Chelan Hydraulic Grade Line



System Flow Rates

Influent Flow	54 mgd
Return Flow	12 mgd

Notes:

1. Influent and Effluent Conveyance profile shown as representative of typical system. Pipe profiles in development.

117.5 = Water Surface Elevation (Metro Datum)

