

NPDES Permit Application Information

Treatment Process description

Wastewater enters the influent lift station through a 30-inch gravity sewer pipe and is lifted over 20 feet by the screw pumps. Additional wastewater flow is introduced just upstream of the screen through an 18-inch sewer force main from the CSO Pump Station. Influent wastewater is mechanically screened and then fed by gravity to Lagoon No. 1. From Lagoon No. 1, the wastewater travels through each of Lagoons No. 2, 3, and 4 where the SFF modules are installed. As the wastewater travels through each of these lagoons, the wastewater is detained for biological oxidation of organic matter and ammonia, and subsequent settling of biomass.

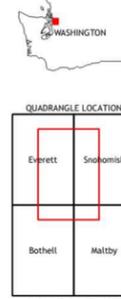
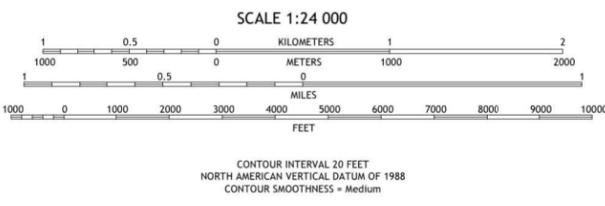
The wastewater exits Lagoon No. 4 through the outlet structure into the effluent control structure. The filters are used to reduce effluent TSS, and subsequently effluent CBOD₅, particularly during the critical warmer dry weather months (July through October). The filters can treat effluent flow up to 0.9 MGD, which is conveyed by the filter pump station. The effluent from the filters flows to the mixing manhole and is mixed with the remaining flow from Lagoon No. 4. Any flow not treated through the filters is conveyed directly to the mixing manhole. At the mixing manhole, peracetic acid is added for disinfection. From the mixing manhole, the effluent flow proceeds to the contact tank where sufficient contact time is provided to reduce the fecal coliform count. After leaving the contact tank, the disinfected effluent is conveyed through an outfall pipe to discharge into the Snohomish River.



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and 1 000-meter grid: Universal Transverse Mercator, Zone 10T
Data is provided by The National Map (TNM), is the best available at the time of map generation, and includes data content from supporting themes of Elevation, Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover, and Orthorectification. Refer to associated Federal Geographic Data Committee (FGDC) Metadata for additional source data information.

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands. Temporal changes may have occurred since these data were collected and some data may no longer represent actual surface conditions.

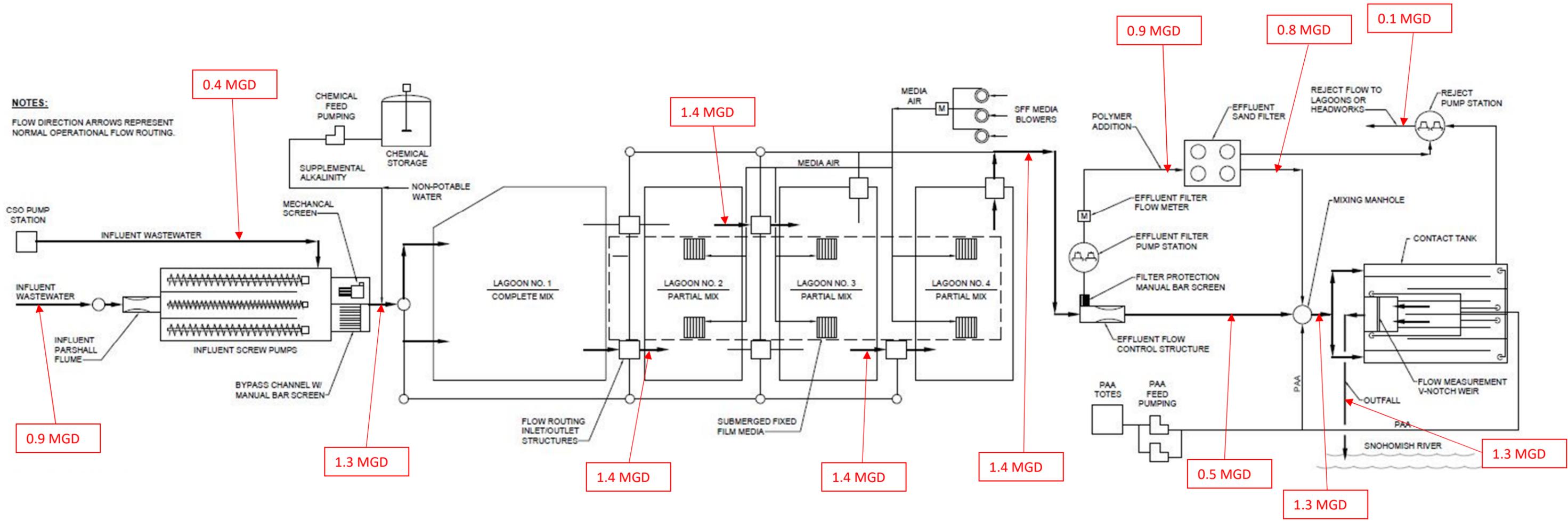
Learn About The National Map: <https://nationalmap.gov>

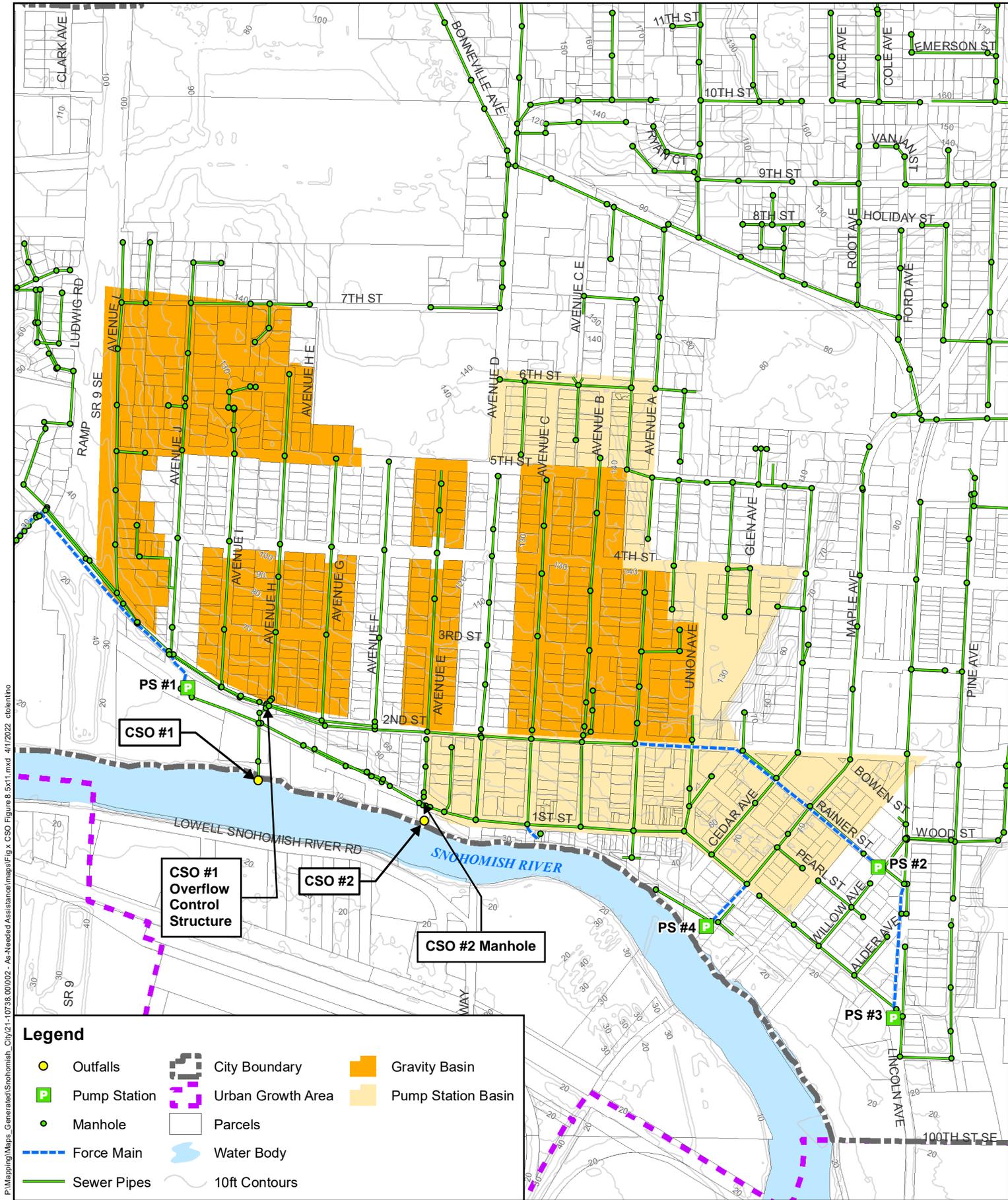


ROAD CLASSIFICATION

Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route

Snohomish WWTP Process Diagram



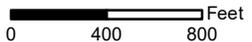


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Legend

	Outfalls		City Boundary		Gravity Basin
	Pump Station		Urban Growth Area		Pump Station Basin
	Manhole		Parcels		
	Force Main		Water Body		
	Sewer Pipes		10ft Contours		

This map is a geographic representation based on information available. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.



CSO Figure
 Snohomish WWTP
 O&M Manual Update
 City of Snohomish, Washington
 April 2022

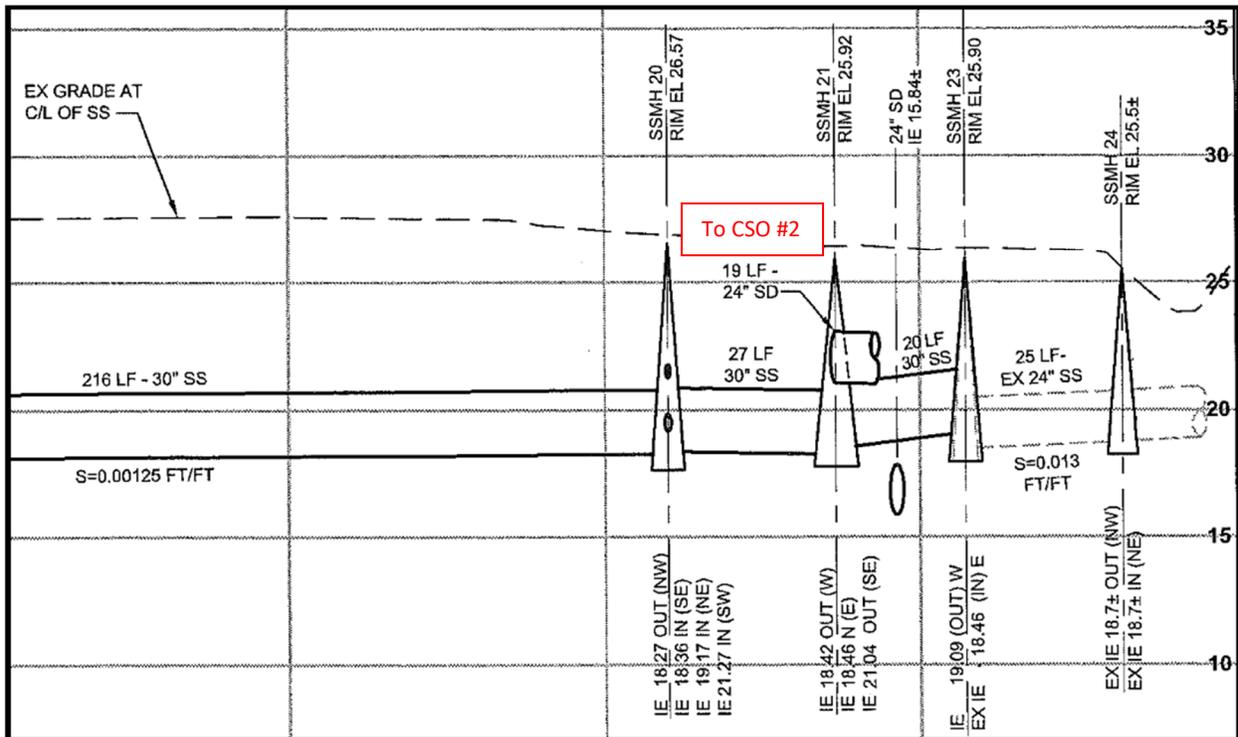
Figure



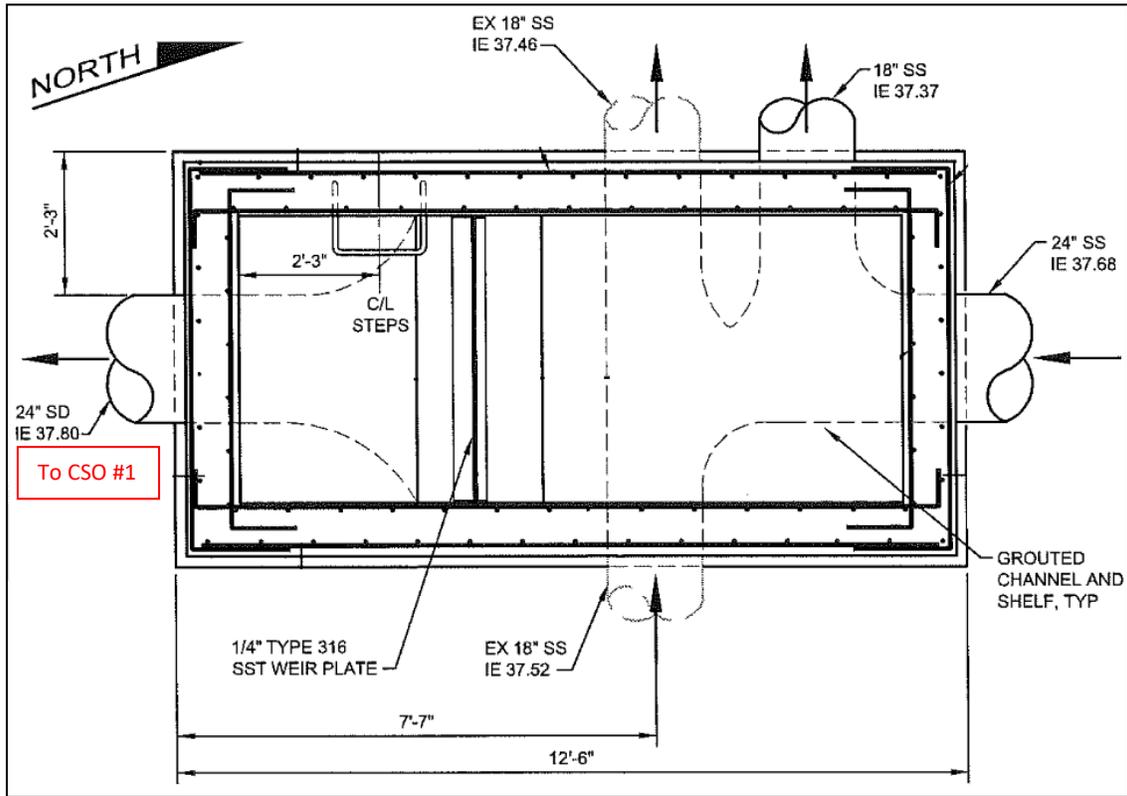
CSO #2 Inlet

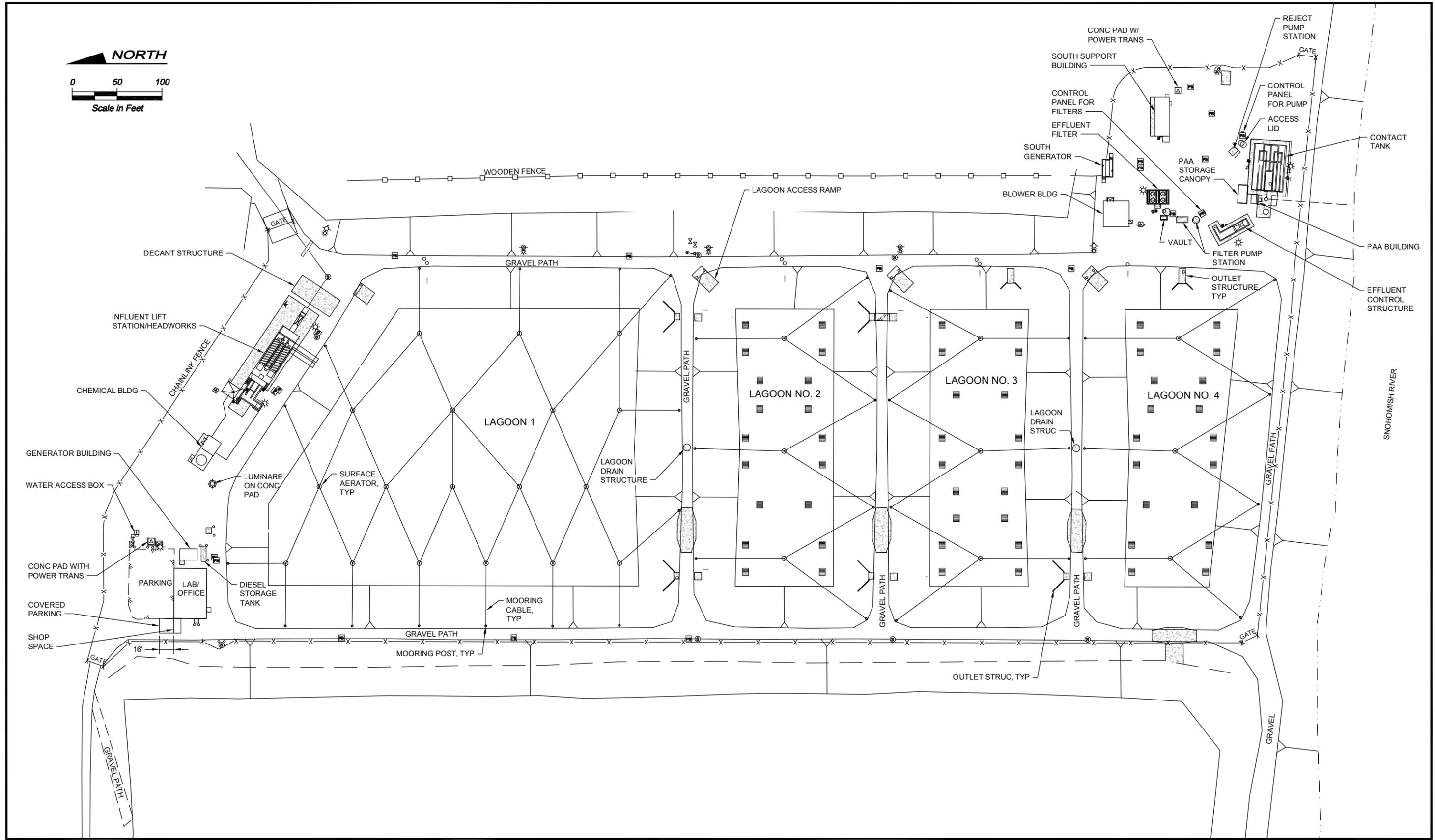
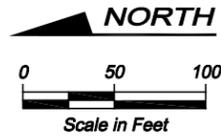


CSO#2 Piping



CSO #1 Overflow Control Structure





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**Existing WWTP
Site Plan**

Snohomish WWTP O&M Manual Update
December 2021

Figure

1-1