1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

KING COUNTY

Signature Report

Ordinance 19894

Proposed No. 2024-0252.1 **Sponsors** Mosqueda

AN ORDINANCE approving the Valley View Sewer District 2023 General Sewer Plan dated February 21, 2023.

STATEMENT OF FACTS:

1. King County has adopted K.C.C. chapter 13.24, which requires approval of comprehensive plans for water and sewer utilities that provide service in unincorporated King County as a prerequisite for operating in unincorporated King County, receiving approval for annexation proposals, being granted right of way franchises, and being given approval for right of way construction permits. K.C.C. chapter 13.24 prescribes the requirements for approval of such plans, including consistency with state and local planning requirements.

2. RCW 57.16.010 requires general comprehensive plans by special purpose district be submitted to, and be approved by, the legislative authority within whose boundaries all or a portion of a utility lies.

3. The Valley View Sewer District's last sanitary sewer system plan was approved in 2012. King County regulations require sanitary sewer system plans to be updated every six years.

4. The Valley View Sewer District's wastewater system has a service area within unincorporated King County and has adopted a comprehensive wastewater system plan ("the plan").

5. King County has adopted a Comprehensive Plan that includes policies F-101 through F-264, the applicable portions of which address sanitary sewer policies for facilities and services; these sanitary sewer policies call for consistency with other adopted plans, pursuit of reclaimed water, water conservation, and protection of water resources.

6. K.C.C. chapter 13.24 requires the utilities technical review committee to review and make a recommendation to the King County executive and council on the plan, the requirements under K.C.C. chapter 13.24, and consistency with the King County Comprehensive Plan. The utilities technical review committee has reviewed the planning data and system operations and has found:

a. The plan utilizes population and employment forecasts developed by the Puget Sound Regional Council;

b. A portion of the system's service area is in unincorporated King County;

c. The capital facility plan is adequate to meet anticipated facility and service needs;

d. The plan is consistent with applicable Washington state water quality laws; and

e. The plan is consistent with other pertinent county adopted plans and policies.

7. Washington state Department of Ecology approved the plan on May 17, 2024.

8. Under the State Environmental Policy Act, the district completed an environmental check list and issued a Determination of Nonsignificance for the plan on March 17, 2023. There were no appeals.

9. The system's operations and facilities meet multiple existing statutory, administrative, and planning standards. As the district's operations, facilities, and planning meet the requirements of the King County Code, and are consistent with the King County Comprehensive Plan, the utilities technical review committee has recommended approval of the plan.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. The Valley View Sewer District 2023 General Sewer Plan dated

February 21, 2023, Attachment A to this ordinance, is hereby approved as a comprehensive wastewater system plan.

Ordinance 19894 was introduced on 9/10/2024 and passed by the Metropolitan King County Council on 3/4/2025, by the following vote:

Yes: 8 - Balducci, Barón, Dembowski, Dunn, Mosqueda, Quinn, von Reichbauer and Zahilay
Excused: 1 - Perry

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON

Signed by:
Girmay Zahilay
1AEA3C5077F8485...
Girmay Zahilay, Chair

ATTEST:

DocuSigned by:
Melani Hay
8DE1BB375AD3422...
Melani Hay, Clerk of the Council

APPROVED this _____ day of 3/7/2025, _____.

Signed by:
Dow Constantine
4FBCAB8196AE4C6...
Dow Constantine, County Executive

Attachments: A. Valley View Sewer District 2023 General Sewer Plan, February 21, 2023

Attachment A

2023
GENERAL SEWER PLAN

Approved by the
Board of Commissioners

February 21, 2023

Valley View Sewer District
3460 S 148th Suite 100
PO Box 69550
Seattle, WA 98168
Telephone: 206.242.3236

DISTRICT MANAGER
Andrew LaRue

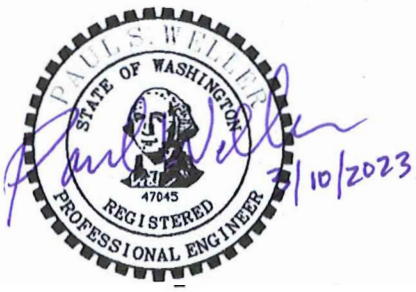
COUNCIL MEMBERS
Deborah McCaslin, President
Pam Fernald, Vice President
Michael West, Secretary

PACE Engineers, Inc.
11255 Kirkland Way, Suite 300
Kirkland, Washington 98033
PACE Project No. 20045

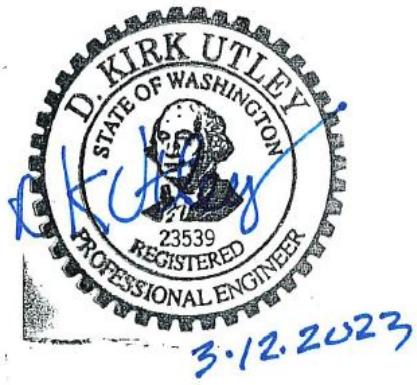
This page is intentionally left blank.

PROJECT CERTIFICATION

The technical material and data contained in this report were prepared by PACE Engineers, Inc. under the supervision of the below listed individuals. Those responsible staff members who are registered professional engineers are licensed in the State of Washington.



Paul Weller, P.E.
Senior Planner/Engineer



Kirk Utley, P.E.

Jaclyn Samson
Junior Planner

This page is intentionally left blank.

EXECUTIVE SUMMARY

This Comprehensive Sewer System Plan is a summary of the conclusions and findings of recent planning and engineering studies completed by PACE Engineers, Inc., for Valley View Sewer District.

The District's current service area reflects the 1995 merger of Rainier Vista Sewer District into Val Vue Sewer District, which was later changed to "Valley View Sewer District." This document provides the District with one consolidated Comprehensive Sewer System Plan which covers the entire District sewer service area. This document updates and supersedes the previous plans and provides the District with one document to guide future development of the sanitary sewer system. It has been prepared in accordance with the requirements of the State of Washington Department of Ecology, King County and the cities within which the District operates.

The primary objectives in developing this document were as follows:

1. To determine the adequacy of the existing sanitary sewer system to meet the current and projected needs of the customers of the District in accordance with all applicable state, federal and local regulations governing the provision of sanitary sewer service;
2. To analyze the sanitary sewer system and identify potential deficiencies and recommended improvements, including potential ways of improving service by interconnecting the sanitary sewer systems of the previous Districts; and,
3. To develop a capital improvements program to serve as a guideline for future development of the sewer system. The future sewer rates will be adjusted in the near future and will be derived from this capital improvement program.

Valley View's sewer service area consists of approximately 6,000 acres of land located north and east of the Sea-Tac International Airport, in southern King County. The service area generally extends from the Seattle City limits on the north, to South 176th and 182nd Streets on the south, and from Interstate Highway 5 and State Route 599 on the east to First Avenue South and State Route 509 on the west. The District serves within the limits of the cities of Burien, SeaTac, Seattle and Tukwila, and within a small area of unincorporated King County.

Land use within the service area is predominantly single family residential with multi-family residential and commercial uses concentrated along major thoroughfares. The northeastern portion of the District, along East Marginal Way South and adjacent to the Duwamish River, is classified as industrial. The District currently serves approximately 8,600 connections. Population within the service area is estimated at 44,684 people and approximately 19,460 people are employed within the service area.

Projected development within the service area is limited to that associated with infill development in the short term, and redevelopment in the future. It is expected that population and employment within the District will increase over the immediate and long-range planning periods. The most significant increases are expected in the multi-family and commercial (including industrial) customer classification. This shift in development is expected as a result of infill development and single-family property redevelopment around the two light rail stations built by Sound Transit. One light rail station is at the intersection of International Boulevard (Pacific Highway South) and Southcenter Boulevard in Tukwila, and the other has been built just west of the City of SeaTac's city center at Sea-Tac International Airport. The biggest

influence on future development and growth within the District is expected to be increased activity and development related to these light rail stations.

A reduction in single family residential uses and an increase in multi-family and commercial uses is anticipated to occur in the future. Based on interpolation of population and employment projections provided by the Puget Sound Regional Council and area City planners, it is estimated that population will increase from approximately 44,684 in 2020 to over 54,000 by the year 2040.

The District's sanitary sewer system has been divided into eleven primary drainage basins and twenty five drainage sub-basins for the purpose of analysis of the system and projection of future needs. Pipe sizes within the District range from 6- to 24-inches and the District currently maintains 19 pump stations to compensate for the hilly terrain within the service area. The District does not maintain wastewater treatment or disposal facilities and instead relies on the service of King County-Metro, Southwest Suburban Sewer District and Midway Sewer District for these services. Delivery of flow to these entities for treatment and disposal of wastewater is accomplished through system connections and in accordance with existing interlocal agreements.

Analysis of the sewer system identified several areas where deficiencies exist, either due to pipe size or condition. The capacity analysis was performed using various tools; including a spreadsheet analysis accomplished using Microsoft Excel™ and a computer model that was constructed to simulate how the sewer system operates under various flow and growth projections. The computer software used in modeling the system is InfoSWMM® by Innovyze. The model produced capacity concerns and operational deficiencies were identified by staff through historic known areas of concern and CCTV records. A significant portion of the recommended improvements outlined in this Plan are for extension of service to areas which are currently unsewered. These areas occur throughout the District, but as indicated on the CIP map, there are large unsewered areas located in the western portion of the service area. It is proposed that these sewers will flow into the Southwest Suburban Sewer District sewer system for treatment and discharge. The unsewered areas in the eastern portion of the District could logically be served by Valley View but extension of service to these areas would only be accomplished at the request of the City of Tukwila.

In addition to the system analyses completed for the planning process, a specific infiltration and inflow study was accomplished as part of previous planning effort to compile the results of flow monitoring in the system. This study can be found at the District office and outlines the District's program for future infiltration and inflow reduction.

Approximately $85 million dollars in improvements for rehabilitation or replacement and $58 million dollars for sewer extension project are recommended for the sanitary sewer system for the next thirty years. This prepares the District to update their rate study and adjust its monthly rates, general facility charges and local facility charges in response to the Capital Improvements Plan outlined in Chapter 7. Projects not funded by rates and charges are anticipated to be financed by developers extensions, ULIDs, and/or Grants or low interest loans. It is recommended that the District continue to support ULIDs and extension of sewers into unsewered areas in accordance with the Growth Management Planning mandate that an urban level of services be provided to all areas within the urban growth area.

All developments within urban growth area served by sewer unless on-site systems are temporarily allowed per KCC 13.24.136 and 13.08.070.

TABLE OF CONTENTS

CHAPTER 6 SYSTEM ANALYSIS AND RECOMMENDATIONS

CHAPTER 7 CAPITAL IMPROVEMENTS PLAN

CHAPTER 8 OPERATIONS AND MAINTENANCE

CHAPTER 9 FINANCING

APPENDICES

LIST OF TABLES

LIST OF FIGURES

GLOSSARY OF TERMS

ACRONYMS

AAF	Average Annual Flow; the average day flow for the entire year
AC	Asbestos-Cement
ADD	Average Daily Demand
ADWF	Average Dry Weather Flow
APWA	American Public Works Association
AWWF	Average Wet Weather Flow
BOD_5	Biochemical Oxygen Demand
CBOD	Carbonaceous Biochemical Oxygen Demand
ccf	One hundred cubic feet
cfs	Cubic Feet per second
CFP	Capital Facilities Plan
CI	Cast Iron
CT	Census Tract
DOE	Washington State Department of Ecology
DOH	Washington State Department of Health
EPA	United States Environmental Protection Agency
ERU	Equivalent Residential Unit
ES	Equalizing Storage
FAZ	Forecast Analysis Zone
gpad	Gallons per acre per day
gpcd	Gallons per capita per day
gpd	Gallons per day
gpm	Gallons per minute
GFC	General Facility Charge
GMA	Growth Management Act
GWI	Groundwater-Related Infiltration
HGL	Hydraulic Grade Line
I & I	Infiltration and Inflow
LFC	Local Facility Charge
MCL	Maximum Contaminant Level
MDD	Maximum Daily Demand
MG	Million Gallons
MGD	Million gallons per day
mg/l	Milligrams per liter
OFM	Office of Financial Management
PHD	Peak Hour Demand
PHF	Peak Hour Flow
PMF	Peak Month Flow
ppb	Parts per Billion
ppm	Part per Million
PSRC	Puget Sound Regional Council
psi	Pounds per square inch

PVC	Polyvinyl Chloride
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SPU	Seattle Public Utilities
ULID	Utility Local Improvement District
USGS	United States Geological Survey
WAC	Washington Administrative Code
WUTC	Washington Utilities and Transportation Commission
WWTP	Wastewater Treatment Plant

TERMS

Activated Sludge Process	A biological wastewater treatment process whereby a mixture of wastewater and activated sludge is agitated and aerated. The activated sludge is subsequently separated from the treated wastewater (mixed liquor) by sedimentation, and wasted or returned to the process as needed.
Aeration	A process that mixes and/or infuses air into a liquid by one or more methods, such as spraying the liquid in the air, forcing air bubbles through the liquid, or agitating the liquid to promote surface absorption of the air.
Anaerobic	An environment devoid of oxygen.
Anoxic	An environment devoid of oxygen where nitrate acts as the electron acceptor.
Aquifer	A porous, water bearing geologic formation. Generally restricted to materials capable of yielding an appreciable supply of water.
Average Annual Flow (AAF)	The average day flow for the entire year.
Average Dry Weather Flow (ADWF)	ADWF is the flow for an average day during the dry weather months of May through October, and represents the baseline of sewage flow for the service area. The ADWF includes sewage discharges plus the average amount of groundwater infiltration (base GWI) which occurs throughout the dry season. In the absence of actual data, 100 gallons per capita per day is often used to predict the ADWF for a new service area. Peaking factors for existing flows are derived on the basis of ADWF.
Average Wet Weather Flow (AWWF).	AWWF is the flow for an average day during the wet weather months of November through April. The AWWF includes sewage discharges, groundwater infiltration and stormwater inflow which occurs throughout the wet season.

Biochemical Oxygen Demand (BOD_5)	The quantity of oxygen required to support biological oxidation of the organic matter contained in wastewater. Usually referred to as BOD, this characteristic defines the strength of a wastewater and often determines the type and level of treatment which must be provided to produce a required effluent quality. BOD is commonly expressed as the amount of oxygen utilized in the oxidization of organic matter over a five day period at 20°C and is typically represented as (BOD_5).
Carbonaceous Biochemical Oxygen Demand (CBOD)	Similar to biochemical oxygen demand, except that nitrification is excluded from the oxygen demand calculation. CBOD is measured using nitrification inhibiting agents.
Combined Sewer	A sewer which receives both wastewater and storm or surface water.
Commercial Wastewater	Wastewater generated in predominantly business or commercial areas, including both sanitary wastes and wastes from the commercial activities. Typically, commercial wastewater includes, but is not limited to, wastes from restaurants, laundromats, and service stations.
Denitrification	Removal of nitrogen from wastewater by conversion of nitrate into nitrogen gas under anoxic conditions.
Domestic Wastewater	Wastewater principally derived from the sanitary conveniences of residences or produced by normal residential activities.
Dry Weather Flow	Wastewater flow during periods of little or no rainfall; in the Puget Sound area, this typically occurs during the months May through October. Rates of flow exhibit hourly, daily, and seasonal variations. A certain amount of infiltration may also be present.
Dry Well	The dry compartment in a pumping station, near or below pumping level where the pumps and/or motors and controls are located.
EPA	The United States Environmental Protection Agency.
Force main	A sewer pipeline that flows full under pressure, discharging from a pump station (as opposed to an inverted siphon).
GMA	State of Washington Growth Management Act.
Hydrogen Sulfide	A potentially toxic and lethal gas (chemical symbol H_2S) produced in sewers and digesters by anaerobic decomposition. Detectable in low (<0.0001 percent) concentrations by its characteristic "rotten egg" odor, it deadens the sense of smell in higher concentrations or after prolonged exposure.
Industrial Wastewater	Wastewater generated predominately from industrial area, including both sanitary wastes and waste from the industrial activity.

Infiltration	The quantity of groundwater that leaks into the wastewater collection system from the surrounding soil. Common points of entry include broken pipes and defective joints in the pipe or in walls of manholes. Infiltration may result from defective sewers being located below the groundwater table or from saturation of the soil by rain or irrigation water. Infiltration is divided into two categories: Groundwater-related Infiltration (GWI) which occurs throughout the year, and Rainfall-Dependent Infiltration (Rain GWI) which occurs during and shortly after storm events as a result of temporarily raising the groundwater table.
Inflow	Rainwater which enters the collection system through roof drain connections, catch basin connections, and holes in the tops of manhole covers in flooded streets. Inflow is generally distinguished from infiltration by the rapidity with which inflow begins and ends after a period of rainfall.
Interceptor	A sewer that receives flow from a number of main or trunk sewers, force mains, etc.
Inverted siphon	Inverted Siphon is defined as a sewer that dips below the hydraulic grade line to avoid an obstruction such as a creek, ravine or other utility.
King County-Metro	Refers to the operator of a regional wastewater treatment and disposal which was formerly known as “Metro” but is now under the jurisdiction of the King County government.
Lateral	A sewer that has no other common sewers discharging into it.
Main	A sewer that receives flow from one or more laterals. Also referred to as "trunk”.
Nitrification	The process of converting organic and ammonia nitrogen into nitrate nitrogen by nitrifying autotrophic bacteria.
Nitrogen	An essential nutrient that is often present in wastewater as ammonia, nitrate, nitrite, and organic nitrogen. The concentrations of each form and the sum, total nitrogen, are expressed as mg/l elemental nitrogen. Also present in some ground water as nitrate and in some polluted ground water in other forms.
Peak Day Flow (PDF)	The maximum flow received over a calendar day, usually occurring during the wet weather.
Peak Design Flow Peak Hour Flow (PHF)	The largest estimated flow sustained over a 60 minute period in the design year of the wastewater facility.

pH	A measure of the hydrogen ion concentration in a solution, expressed as the logarithm (base ten) of the reciprocal of the hydrogen ion concentration in gram moles per liter. On the pH scale (0 14), a value of 7 at 25°C represents a neutral condition. Decreasing values, below 7, indicate increasing acidity; increasing values, above 7, indicate increasing alkalinity.
Peak Month Flow (PMF)	The largest estimated flow rate sustained over a calendar month.
Phosphorus	An essential chemical element and nutrient for all life forms. Occurs in orthophosphate, pyrophosphate, tripolyphosphate, and organic phosphate forms. Each of these forms is expressed as mg/l elemental phosphorus.
Sewerage	A complete system of piping, pumps, basins, tanks, unit processes, and appurtenances for the collection, transporting, treating, and discharging of wastewater. Term is declining in use, generally being replaced by sewer system or wastewater facilities.
Submain	A sewer that receives flow from one or more lateral sewers.
Suspended Solids (SS)	The suspended undiluted material transported in wastewater. The quantity of suspended material removed during treatment varies with the type and degree of treatment and has an important bearing on the size of many mechanical and process units. Also referred to as "Total Suspended Solids (TSS).
Trunk	A sewer that receives flow from one or more sewer mains.
Volatile Suspended Solids	The organic portion of the total suspended solids which will oxidize and be driven off as a gas at 600°C. VSS typically represents 75 to 85 percent of the TSS for digested and undigested sludge.
Washington Administrative Code (WAC)	Document which consists of regulations adopted by the State to carry out the RCW.
Wastewater	Water-carried wastes from residences, businesses, institutions, and industrial establishments, together with such ground and storm waters as may be present.
Wastewater Treatment Plant (WWTP)	A water pollution control facility engineered and constructed to remove pollutants from wastewater. Also referred to as a sewage treatment plant.
Wet Weather Flow	Wastewater flow during or following periods of moderate to heavy rainfall; in the Puget Sound area, this typically occurs during the months November through April. Infiltration and inflow may increase the wet weather flow to a rate many times greater than the dry weather flow, and unless provided for in sewerage design, can produce hydraulic overloads resulting in wastewater overflows to streets or water courses.

Wet Well	The compartment in a pump station where wastewater flow is collected and from which the pumps intake wastewater to be discharged into a force main.

CHAPTER 1

INTRODUCTION

1.1 OVERVIEW

The following report compiles and summarizes the planning and engineering studies undertaken by PACE Engineers, Inc. in the development of this Comprehensive Sewer System Plan prepared for Valley View Sewer District. This plan has been developed in accordance with all rules and regulations applicable to comprehensive sewer system planning in the State of Washington, and its development has been authorized by the District's Board of Commissioners.

This Plan updates and supersedes the 2015 Comprehensive Sewer Plan. It has been prepared in accordance with the requirements of the State Department of Ecology and the applicable requirements of the jurisdictions within which Valley View Sewer District operates. The following Sections are Included herein: Identification and description of the sanitary sewer service area; Description of the existing sanitary sewer system; adapted minimum design criteria; Identification of system deficiencies; Recommendations for system improvements; and a Capital Facilities Plan that includes a schedule and financial plan. The result of these considerations is an overall plan for developing and upgrading the sanitary sewer system to accommodate the existing and projected population and land use within the service area. This program addresses both maintaining high quality service to areas currently served by the District and extensions of service to areas and properties that are currently not receiving sanitary sewer service.

1.2 LOCATION

As shown on Figure 1-1, Valley View Sewer District is located south of the City of Seattle, in King County, Washington. The District generally extends from the City of Seattle limits at South Director Street and South Cambridge Street on the north to South 176th and 182nd Streets on the south, and from Interstate Highway 5 and State Route 599 on the east to 1st Avenue South and State Route 509 on the west. The District serves portions of the cities of Burien, SeaTac, Seattle, Tukwila, and unincorporated King County. The District's current Boundary is shown on Figure 2-1. Additional information regarding boundaries and service area characteristics is included in Chapter 2.

This page is intentionally left blank.

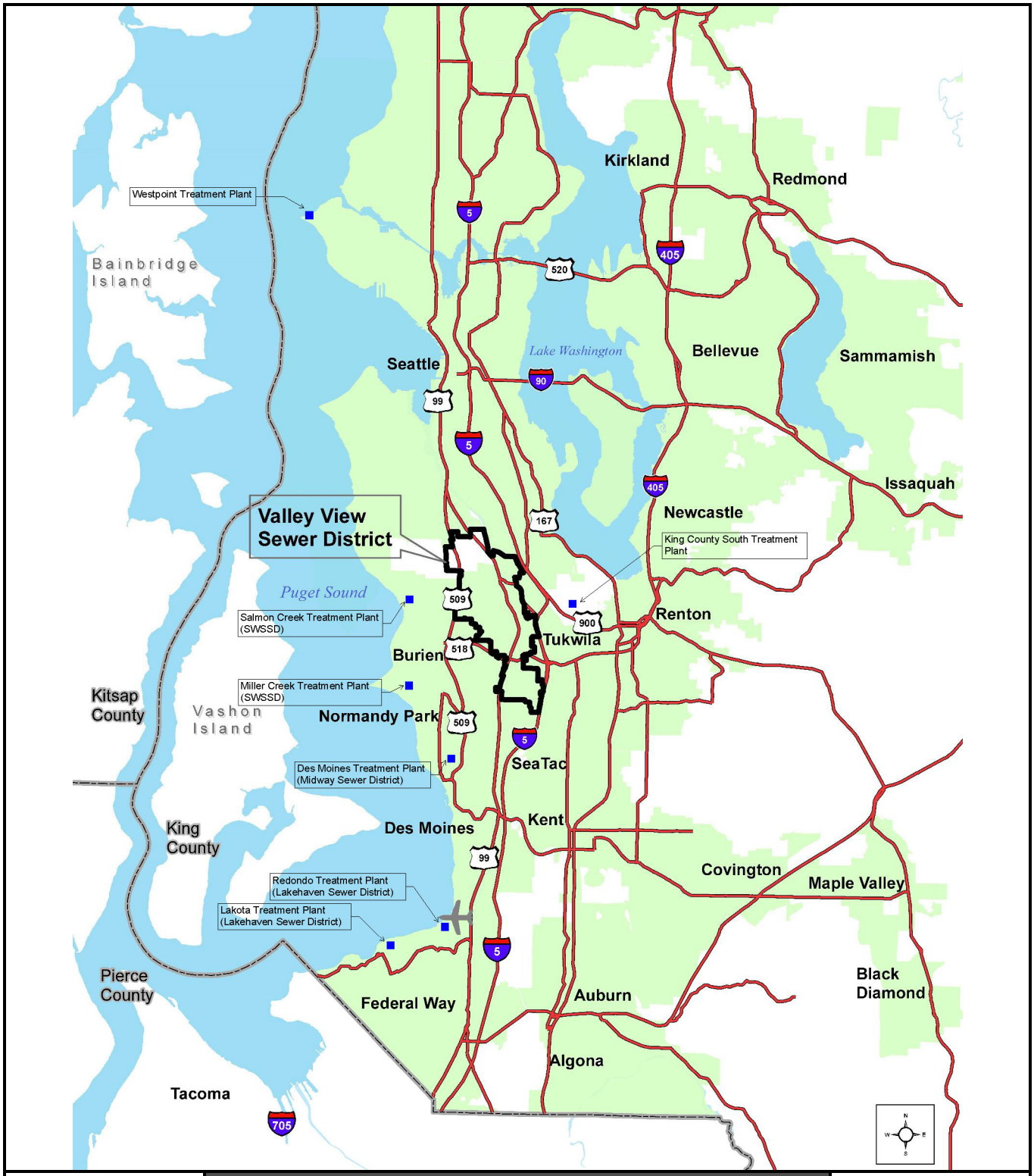


Figure 1-1	*Location Map*	20045
		03.2021

This page is intentionally left blank.

1.3 HISTORY OF THE DISTRICT

The Valley View Sewer District, previously known as Val Vue Sewer District, was established in 1946 and was one of the first sewer Districts in King County. Initially, the District provided sanitary sewer service to 0.37 square miles and served the Cascade Homes Addition and businesses along Pacific Highway South (International Blvd.). Effluent was treated, chlorinated and discharged into the Duwamish River at a primary treatment plant located just east of Pacific Highway South (near South 135th Street). This plant remained in service until 1958, when flows from the area increased and construction of a new primary treatment plant was required. The second plant was located near 42nd Avenue South and South 129th Street and discharged to the Duwamish River. It remained in service until 1966, when construction of freeways in the area necessitated abandoning the facility and contracting with the Municipality of Metropolitan Seattle (now King County Wastewater Treatment Division or KCWWTD) for wastewater treatment and disposal. In 1972, Valley View entered into a contract with Des Moines Sewer District (now Midway Sewer District) for the treatment and disposal of wastewater flows from major motels along Highway 99, in the southern most portion of the District. Valley View Sewer District changed its name from Val Vue Sewer District in 2007.

In 1995, Rainier Vista Sewer District merged into Valley View Sewer District to form one consolidated sanitary sewer district. The Rainier Vista portion of the current Valley View service area generally includes the northwest and western areas of the District. Figure 2-1 shows the current service area boundaries of Valley View and Rainier Vista prior to the merger and indicates neighboring sewer service providers.

Rainier Vista Sewer District was formed in 1945 to provide sanitary sewer service to the Beverly, Beverly Heights, Lerina, and McKinley areas of unincorporated King County. Subsequent to formation of the District, a large area was annexed in 1946 and a comprehensive plan was adopted by the District in 1947.

No action was taken on construction of a sewer system until 1956, when another comprehensive plan was adopted. Financing for the proposed system was accomplished by a combination of revenue bonds and through the formation of Utility Local Improvement District (ULID) No. 1. The original collection system and treatment plant were constructed in 1958 and 1959. Subsequently, ULID Nos. 2 through 14 were formed to construct the core infrastructure of the original Rainier Vista sewer system.

Rainier Vista continued to expand through ULIDs and developer extensions. In 1976, Rainier Vista's original treatment plant was closed, and the District contracted with KCWWTD for treatment and disposal of wastewater flows from the majority of the District. To maximize opportunities for gravity flow (without pump stations) and to control cost, an agreement was reached with Southwest Suburban Sewer District for treatment and disposal of wastewater flows from the western portion of the District.

1.4 AUTHORITY AND MANAGEMENT OF THE DISTRICT

Authority and procedures for sewer district functions are provided by the State of Washington in RCW Title 57. The District is governed by an elected three-member Board of Commissioners. Public meetings are held on the first and third Tuesday of every month at the District's office, which is located at the following address:

Valley View Sewer District
3460 S. 148th Street, Suite 100
P.O. Box 69550
Seattle, Washington 98188
Phone: (206) 242-3236

Day to day operation of the District is the responsibility of the District Manager, who oversees all office and field operations. To augment the expertise of the Board of Commissioners and staff, the District employs the services of consulting engineers as well as legal counsel and certified public accountants.

1.5 GOALS AND OBJECTIVES

The primary objective of Valley View Sewer District is to provide high quality, efficient, and low cost sanitary sewer service to its existing and future customers while minimizing Impacts to the environment. Implicit to achieving this objective are the following considerations:

- Development and adoption of a Comprehensive Sanitary Sewer System Plan to be used as a guideline for future planning and construction of facilities to address the specific system requirements of the service area.
- Development of environmental policies which will provide guidelines for preservation of water quality and other features of the environment, as set forth in state and federal regulations.
- Compliance with the objectives and criteria set forth in the comprehensive plans and other requirements of the State Department of Ecology, KCWWTD, and the cities of Burien, SeaTac, Seattle and Tukwila.
- Through research and study of Infiltration and Inflow (I & I) data, reduce the amount of I & I within the system.
- Provision of a well planned wastewater collection system, which is environmentally sound and adequately protects the public health and welfare in addition to ground water and surface water resources.
- Work with King County and other wastewater treatment providers and water purveyors, as appropriate, to implement regional water reuse goals.
- Maximize the availability of wastewater treatment options by routing flows to the most efficient wastewater treatment provider.
- Provide gravity flow wherever possible to minimize pumping costs. Future projects and system expansions should be based on cost benefit analyses of wastewater treatment alternatives.
- Prior to upgrading pump stations, force mains or sewer mains in the vicinity of pump stations, fully evaluate opportunities to eliminate existing pump stations.
- Reduce system vulnerability through system improvements and technology.
- Operation of the sanitary sewer system in a manner which is consistent with accepted procedures and practices and which maximizes the useful life of system components.

- Work to ensure consistent service is provided to all areas of the District and that potential overflows are minimized.
- Maintaining a financial level sufficient to retire all bonded indebtedness as it comes due, maintain adequate cash reserves, and provide service at the lowest reasonable cost.

1.6 RELATED PLANNING STUDIES

Planning and engineering studies completed by the District, or other agencies, that have been considered during development of this document are listed below. Related plans and policies of other jurisdictions which have been considered in this planning process are identified later in this section.

- Valley View Sewer District, Hazard Mitigation Plan, 2019, PACE Engineers, Inc.
- Valley View Sewer District, Comprehensive Sewer System Plan, 2015, PACE Engineers, Inc.
- Valley View Sewer District Interim Capital Facilities Plan, 2006, PACE Engineers, Inc.
- Valley View Sewer District Sewer Comprehensive Plan, 2000, Penhallegon Associates Consulting Engineers, Inc.
- Valley View Sewer District General Facility Charge/System Facility Charge Study, 2004, Penhallegon Associates Consulting Engineers, Inc.
- King County Regional Infiltration/Inflow Control Program, 2002, Earth Tech Team.
- I & I Study on Manhole Testing, RH2 Engineers, Inc.
- Valley View Sewer District, Comprehensive Sewer Plan, 1993, Horton Dennis and Associates, Inc.
- Rainier Vista Sewer District Comprehensive Sewer System Plan, 1990, Hammond, Collier, Wade-Livingstone Associates, Inc.

1.7 RULES AND REGULATIONS

Valley View Sewer District operates under a variety of rules and regulations, which are summarized in the following paragraphs. Detailed discussions regarding specific regulations affecting this document are contained in the relevant sections of this Plan, as appropriate.

1.7.1 Federal Requirements

Valley View Sewer District is required to operate within the regulations and requirements of the federal government, including the Endangered Species Act (ESA). Section 4 (d) of the Endangered Species Act (ESA) directs the National Marine Fisheries Service to issue regulations to conserve species listed as threatened. The 4 (d) rules apply to ocean and inland areas, and to any entity subject to U.S. jurisdiction. Locally, these rules protect Puget Sound Chinook Salmon, which were listed as threatened in 2000 and the Coastal-Puget Sound population of Bull Trout, which were listed as threatened in 1999.

Section 9 of the ESA prohibits the taking/harm of listed species and the 4 (d) rule identifies some activities that have a high risk of “take” associated with them, such as:

urban development in riparian areas and areas susceptible to surface erosion; destruction/alteration of habitats (in-stream and riparian); violation of discharge permits; and application of pesticides affecting water quality. Since the District does not own or operate a Wastewater Treatment Plant, many of the ESA requirements will be implemented by those agencies that the District relies on for treatment and disposal of its wastewater flows (KCWWTD, Southwest Suburban Sewer District and Midway Sewer District).

Other federal regulations which may have an impact on District operations are those associated with specific permits for individual projects. These specific regulations will be identified and addressed on a project-by-project basis.

Capacity Management Operations and Maintenance (CMOM) is an best practice program for sewer collection operators from the United States Environmental Protection Agency (EPA). CMOM programs are both comprehensive and holistic and helps lower the risk of National Pollutant Discharge Elimination System permit violations and prevent Sanitary Sewer Overflows (SSOs). Although CMOM itself is an EPA program, not a regulation, it is an excellent tool and currently, the District Valley View Sewer District operates in a manner to avoid all SSOs and has prepared strategies and documentation in accordance with the program.

Valley View contracts with KCWWTD, Southwest Suburban Sewer District, and Midway Sewer District to ensure all wastewater produced within its service area is conveyed to regional Wastewater Treatment Plants (WWTPs). Wastewater generated in the District is treated at these plants to meet the water quality standards established under the Federal Water Pollution Control Act (also referred to as the Clean Water Act) and under the terms of each Plant's National Pollutant Discharge Elimination System (NPDES) permits. The District's formal agreements with these wastewater treatment facilities ensure that it remains in compliance with the Clean Water Act and regional water quality management plans. Interlocal agreements are included in the Appendix F.

The District does not own and operate its own sewage treatment facility; however, it is important to discuss the adequacy of capacity of treatment as required by WAC 173-240-050(3)(h), which states, "A statement regarding provisions of treatment and discussion of adequacy of the treatment." The District's agreements, provided in Appendix F, do not discuss capacity in terms of quantities of flow however in the agreement it does state the following for the area that is directed to King County treatment, "The District shall deliver to Metro all of the sewage and industrial waste collected by the District…and Metro shall accept the sewage and industrial waste delivered for treatment and disposal." An agreement was formed with Midway to serve a portion of the District's area because the sewage can flow by means of gravity and no pumping is necessary, reducing costs.

1.7.2 State of Washington Requirements

Valley View Sewer District operates under the general rules and regulations put forth by Title 57 of the Revised Code of Washington. Additional requirements for various aspects of sewer district operation consistent with protection of the health and safety of the general public and the environment are found throughout the laws of the State of Washington and are adhered to by the District.

Approval of this Comprehensive Sanitary Sewer System Plan is under the jurisdiction of the State Department of Ecology (DOE). This Plan has therefore been prepared, and the District operates in accordance with, the requirements set forth in DOE's "Criteria for Sewage Works Design", which incorporates the policies, guidelines and practices of the State Department of Ecology and identifies the minimum engineering criteria for design, construction and operation of a public sanitary sewer system.

The Growth Management Act (GMA) has a direct impact on utility system planning as it requires that a complete inventory of existing facilities and a comprehensive effort toward determining the capability of existing systems to accommodate future growth. Although Counties and Cities are responsible for a majority of the growth management planning requirements, the District's Planning documents are a crucial element in their ability to comply with the Act.

State Environmental Policy Act (SEPA) review is generally required for all District projects other than regular renewal and replacement projects involving pipe sizes of 8-inches or less in diameter. SEPA requirements and exemptions are detailed in WAC Chapter 197-11 and adopted District environmental policies are in place to ensure that environmental concerns associated with construction are adequately addressed. Initiation of the SEPA process can be at the District's direction or as required for various permits and approvals.

The State Department of Ecology administers a variety of regulatory requirements that have a direct impact on operation of a public sanitary sewer collection system, including the following:

- Surface water quality regulations as put forth in WAC 173-201A
- Contract document review as authorized by WAC 173-240
- Shoreline management in accordance with WAC 173-27

1.7.3 King County Requirements

A portion of Valley View Sewer District's service area is within unincorporated King County and the District operates within the regulations and requirements established by the King County Code. Specifically, Chapter 13.24 of the King County Code has been utilized in the development of this document. All work within King County road right-of-way will be carried out in accordance with the most current edition of the King County Road Standards and the District's current franchise.

The District also operates in accordance with the requirements of the KCWWTD, which is responsible for the treatment and disposal of the majority of wastewater flows from the District. The District operates under the terms and conditions of its contract with KCWWTD. Similarly, the District maintains contracts with Midway Sewer District and Southwest Suburban Sewer District for wastewater treatment and disposal, and adheres to the terms and conditions of those contracts.

1.7.4 City Requirements

Valley View Sewer District is within the corporate limits of the cities of Tukwila, SeaTac, Seattle, and Burien and, therefore, adheres to the policies, right of way requirements and

regulations of those entities as appropriate to specific areas of the District. The Comprehensive Plans of these jurisdictions have been utilized in the development of this document and a copy of the final Plan is provided to each jurisdiction to ensure consistency between the District's Plan and those of the agencies having land use jurisdiction.

CHAPTER 2

DESCRIPTION OF THE SERVICE AREA

2.1 DISTRICT BOUNDARIES

The existing corporate boundary and current service area of Valley View Sewer District are shown on Figure 2-1. As a general rule, the District anticipates corporate annexation of all areas to which it provides sewer service. The District endeavors to eventually establish consistency between its corporate boundary and service area. As indicated on Figure 2-1, the District provides service within the cities of SeaTac, Tukwila, Seattle, Burien, and in unincorporated King County. The District's boundary generally extends from the Seattle city limits at South Cambridge and South Director Streets on the north; to South 176th and South 182nd Streets on the south; from 1st Avenue South and State Route 509 on the west; and to State Route 599 and Interstate Highway 5 on the east.

2.2 FUTURE SERVICE AREA

The anticipated future service area of the District is slightly larger than the District's corporate boundary. The future service area boundary has been determined to be the logical area which could be served by Valley View based on topography and the distance to existing system facilities.

2.3 INTERLOCAL AGREEMENTS

Valley View Sewer District maintains interlocal agreements with several adjacent agencies, as well as with King County Wastewater Treatment Division (KCWWTD), as summarized in Table 2-1. Copies of interlocal agreements are maintained at the District's office and can be made available for review to any party interested.

TABLE 2-1: SUMMARY OF INTERLOCAL AGREEMENTS

Agreement With	Date	Nature of Agreement
King County Wastewater Treatment Division	3/1/73	Rainier Vista - Sewage Disposal Agreement
King County Wastewater Treatment Division	3/19/87	Rainier Vista - Extension of Sewage Disposal Agreement
SW Suburban Sewer District	11/15/05	Service Boundary Agreement
King County Wastewater Treatment Division	8/1/66	Sewage Disposal Agreement
Port of Seattle	7/15/68	Sewage Disposal Agreement

Agreement With	Date	Nature of Agreement
Midway Sewer District & King County Wastewater Treatment Division	2/7/06	Sewer Service Area Agreement
City of Tukwila	5/22/75	Sewage Disposal Agreement
City of SeaTac	2/11/97	Agreement for Video Inspection Work
Port of Seattle		Developers Extension Agreement for AKART
City of Tukwila	04/16/2018	Sewer Service Agreement for the Loop Area
City of Tukwila	06/12/2017	Agreement to jointly construct along 42nd Ave South
Alderwood Water and Wastewater District	04/23/2018	Intergovernmental cooperative purchasing agreement
Note: All Interlocal Agreements are on file and available for review at the District Office		

2.4 SERVICE AREA CONFLICTS

There are no known service area conflicts between the District and neighboring purveyors. As mentioned previously, the District operates within the limits of the cities of Tukwila, Seattle, SeaTac and Burien. Service within these jurisdictions is expected to continue into the future. There are areas along the Districts eastern boundary, just west of Interstate 5, which could be served by either Valley View or the City of Tukwila. Because these areas are within the City of Tukwila and are currently unsewered, the City would have first right of refusal for extending facilities to serve the areas. It may be more practical, however, for Valley View to serve these potential connections. The City of Tukwila and Valley View Sewer District have had discussions in the past to determine the most logical service provider for these areas and when service is desired, and reasonable to construct, further discussions will occur.

2.4.1 Unsewered Areas

Areas of Valley View Sewer District are currently unsewered for various reasons. Some areas are simply undeveloped and could potentially be sewered, while others are not serviceable due to physical limitations of the land. It is not always economically practical to construct all facilities with the capability to provide full service under saturation conditions, especially when those conditions may take a long time or may never materialize. As development scenarios occur, sufficient capacity must be provided to accommodate expected development over the ensuing planning period.

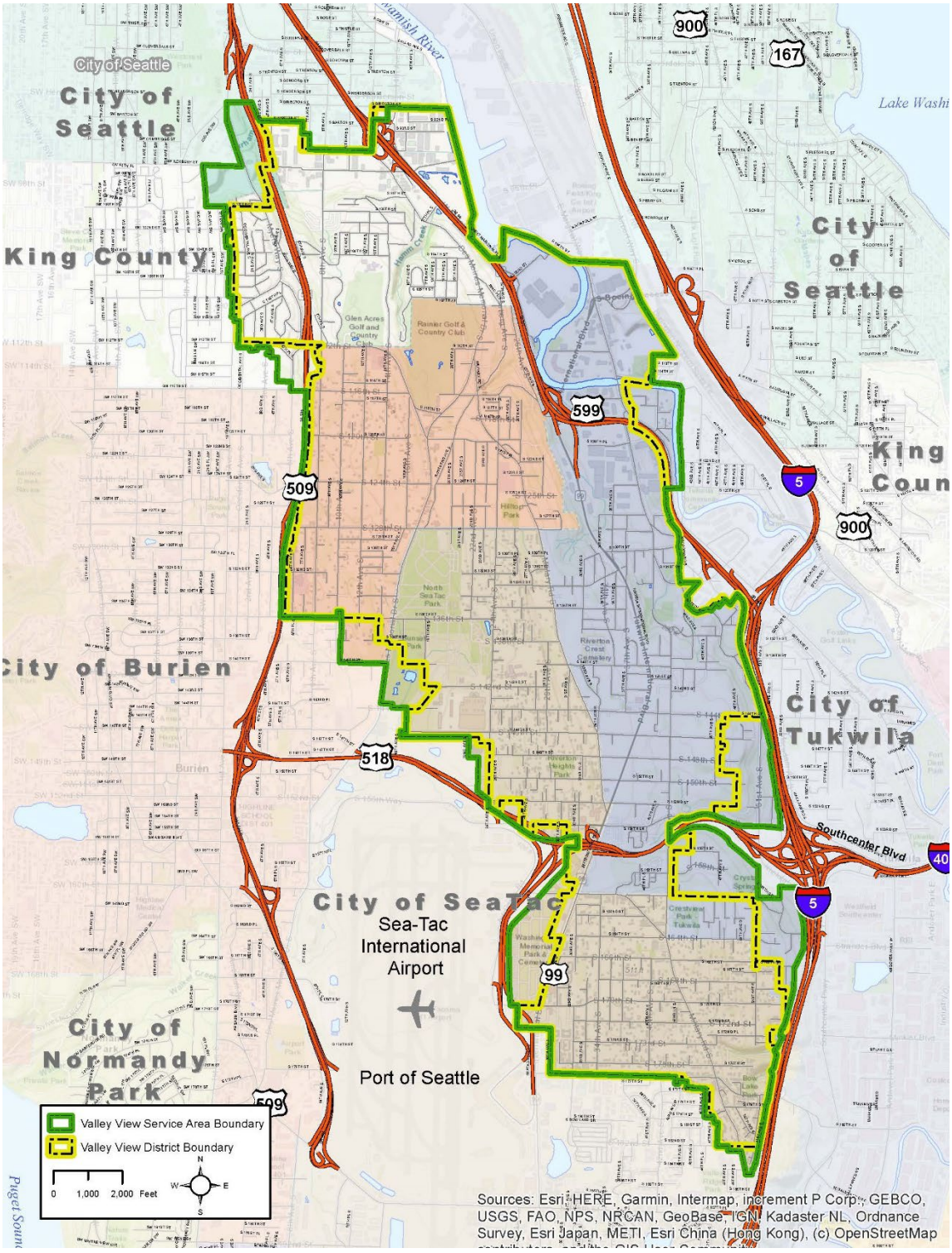


Figure 2-1	*Boundary Map*	20045
		March 2021

This page is intentionally left blank.

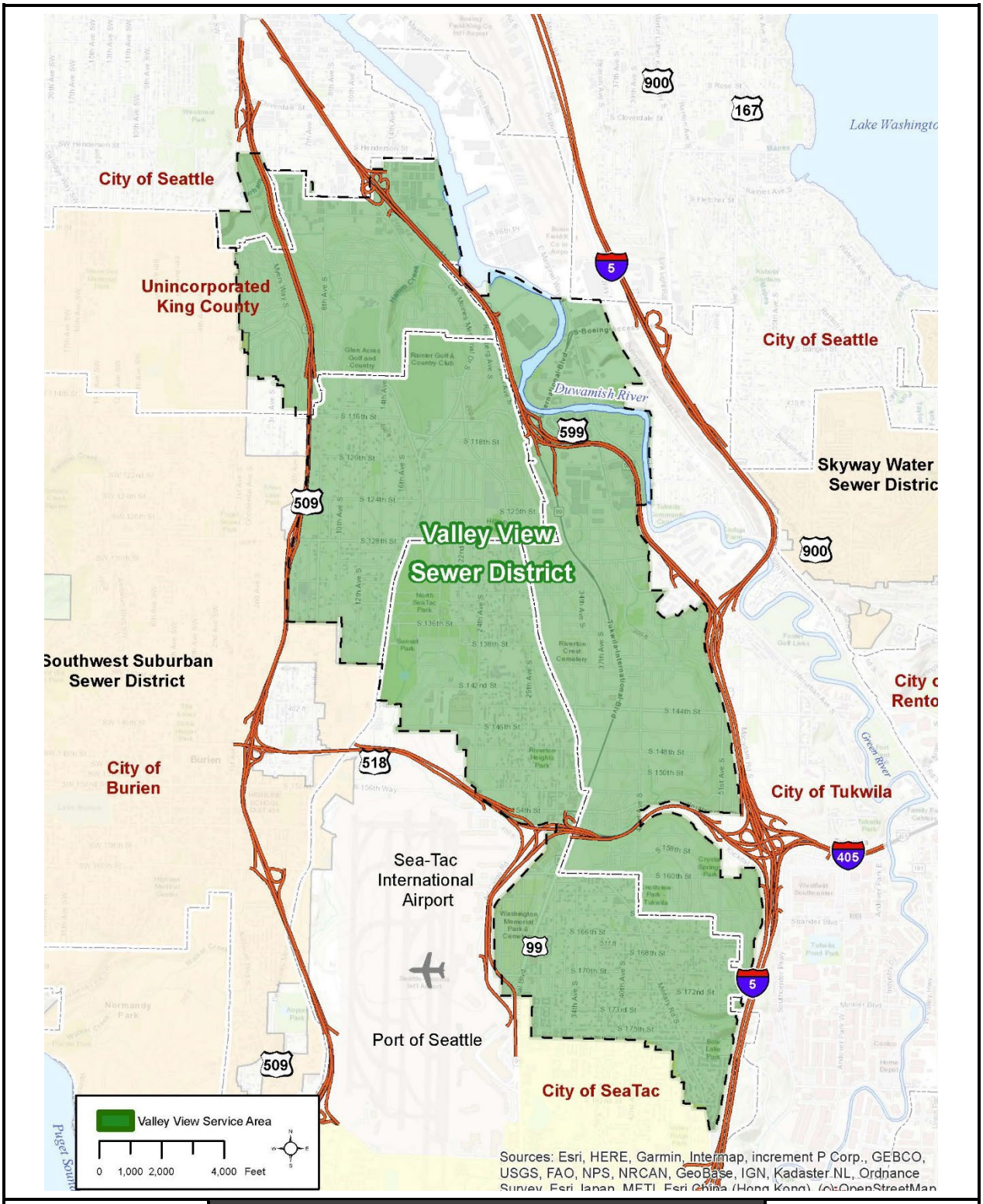


Figure 2-2	*Service Area Map*	20045
		March 2021

This page is intentionally left blank.

2.5 PHYSICAL CHARACTERISTICS

2.5.1 Topography

Topography is a critical consideration for sewer utilities because the natural contours of the ground contributes (or inhibits) the ability of sewage to flow by gravity. Topography of the Valley View Sewer District service area is typical of that found in the Puget lowland and elevations range from over 500 feet in the southern portion of the District, to near sea level in the vicinity of the Duwamish River. The most predominant natural physical feature in the study area is the Duwamish River. The Duwamish River has been diked but not straightened and still exhibits the serpentine characteristics of a mature stream. The river valley typifies the last stage of development of an old valley: wide, flat bottom, broad meander belt and generally gentle slopes.

2.5.2 Drainage Basins

A natural drainage basin is an area that drains the surface runoff and river/stream discharge of a contiguous area. The natural drainage basin includes both the streams and rivers that convey water as well as the land surfaces from which water drains into those channels. The drainage basin acts like a funnel - collecting all the water within the area covered by the basin and channeling it into a waterway. Each drainage basin is separated topographically from adjacent basins. The direction and velocity of surface runoff and river/stream flow is directly related to the topography of the drainage basin.

The primary and sub-basins referred to in this plan are “man-made” drainage basins. The natural topography does play a role in the design of the man-made drainage basin in regards to the infrastructure. But the system does not have to flow in the same direction as the natural drainage basin flow. Pipe depth and pump stations enable the flow into the sewer infrastructure to go against the natural flow direction of the basin. The District has been divided into 11 primary drainage basins and 29 drainage sub-basins for the purpose of defining service for each area of the District. Drainage basins have been identified using topographic information as well as system specific characteristics, and are shown on Figure 4-1. Geographic descriptions, existing system information and recommended improvements for each drainage basin are presented in subsequent chapters of this Plan.

2.5.3 Geology and Soils

Soil conditions of the Valley View Sewer District are dominated by Quaternary deposits primarily composed of Vashon Drift in the uplands, and post glacial alluvial deposits in the Duwamish River bottom. Ten different soils series are found within the area, and these soils have either been formed directly from glacial deposits or from alluvial or lacustrine action.

Soil types occurring within the Valley View area are indicated in Table 2-2. In general, the soils in the study area are suited for urban development in the uplands and for agricultural uses in the lowlands. As indicated in Table 2-2, none of the soils present are considered suitable for septic drainfields.

TABLE 2-2: SOIL TYPES

Symbol	Soil Series	Potential for failure of Septic Drainfields.
AgB, AgD, AgC	Alderwood	Severe: Slow Substream permeability
Be	Beausite	Severe: Bedrock at a depth of 20 to 40"
InC	Indianola	Slight and Moderate: Moderate if slope is more than 8%; Possible pollution hazard
KpD	Kitsap	Severe: Very slow permeability
Pu	Puget	Severe: Slow permeability; Seasonal high water table
Py	Puyallup	Severe: Flood hazard
Rh	Riverwash	Severe: Flood hazard
Sk	Seattle	Severe: Seasonal high water table
Su	Sultan	Severe: Seasonal high water table; Flood hazard
Wo	Woodinville	Severe: Seasonal high water table; flood hazard
Source: King County Soil Survey		

2.5.4 Climate

The climate of the area is characteristic of the Seattle metropolitan area, which is strongly influenced by maritime masses originating over the Pacific Ocean and can generally be described as having mild, wet winters and warm, dry summers. Temperatures typically range from 34 to 49 degrees Fahrenheit in the winter months and 51 to 75 degrees Fahrenheit during the summer months. Rainfall in the area averages 35-40 inches annually. Climate effects sanitary sewer operations in the potential to increase inflow and infiltration during the wet season through precipitation. Climate effects sanitary sewer construction through the scheduling of projects as well as the construction techniques implemented during various times of the year.

2.5.5 Hydrology

The primary hydrologic feature in the study area is the Duwamish River, which flows through the northeastern portion of the District. WAC 173-201 designates the Duwamish as water quality Class B (good), which generally means that water quality shall meet or exceed requirements for most uses. Because of the close proximity to development and on-site sewage disposal systems, water quality is of concern. Other small tributaries within the District include Hamms Creek and several unnamed streams, which flow into the Duwamish.

2.5.6 Sensitive Areas

Sensitive areas such as streams, wetlands, steep slopes, floodplains and areas of erosion hazard do preside within the District's service boundaries. Specific information pertaining to sensitive areas is maintained by and can be obtained from King County or

the appropriate city within which the District operates. Sensitive areas are important considerations for projecting future development, assessing the site locations of projects, and utilizing specialized construction techniques as appropriate for project safety and environmental protection.

This page is intentionally left blank.

CHAPTER 3

DEMOGRAPHICS AND SYSTEM FLOWS

3.1 GENERAL

This Chapter of the Plan details the land use, zoning, and population characteristics of the District's service area. Population, employment and land use data is sourced from the Puget Sound Regional Council (PSRC), as well as the jurisdictions within which the District operates. The chapter's aim is to provide realistic growth projections based on demographic trend forecasts and anticipated development within the District's service area. These projections provide the basis for evaluating the exiting system's capabilities to meet current and projected future demand.

3.2 ZONING AND LAND USE

Figure 3-1 provides a generalized summary of zoning and land use within the District's boundaries. The District operates within the cities of SeaTac, Tukwila, Seattle, and Burien, and within unincorporated King County. As such, the zoning classifications have been generalized in Figure 3-1 in order to achieve consistency and provide a common basis for further analysis. Figure 3-1 is not intended to be used as a site-specific zoning map; such information should be obtained directly from the appropriate jurisdictional agencies.

As indicated in Figure 3-1, land use within the District is predominantly single family residential, with multi-family and commercial uses concentrated along major thoroughfares. Industrial uses are located primarily in the northeastern of the District, along East Marginal Way and adjacent to the Duwamish River, while mixed aviation and industrial uses are also present in the portion of District located in the northeast of SeaTac City limits and north of Sea-Tac International Airport.

Table 3-1 below provides the approximate percentages of total District land area occupied by each of the 6 zoning classifications shown in Figure 3-1. For comparison purposes, the table provides both 2020 land area percentages (as shown in Figure 3-1) and the 2010 land area distribution figures put forward in the District's previous Plan (2015). The District's service area saw an 8% increase in the percentage of land dedicated to single family residential between 2010 and 2020, while the proportion of multi-family residential was maintained. Conversely, the percentage of industrially dedicated land was reduced by 14%, with the addition of separate 'Aviation' and 'Park' land-use categories in the 2020 figures.

TABLE 3-1: LAND AREA COMPARISON

Zoning Classification	2000 Percentage of Land Area	2010 Percentage of Land Area	2020 Percentage of Land Area
Single Family	70%	53%	61%
Multi-Family	7%	9%	9%
Industrial	15%	29%	15%
Commercial	8%	9%	8%
Park	-	-	5%
Aviation	-	-	2%

This page is intentionally left blank.

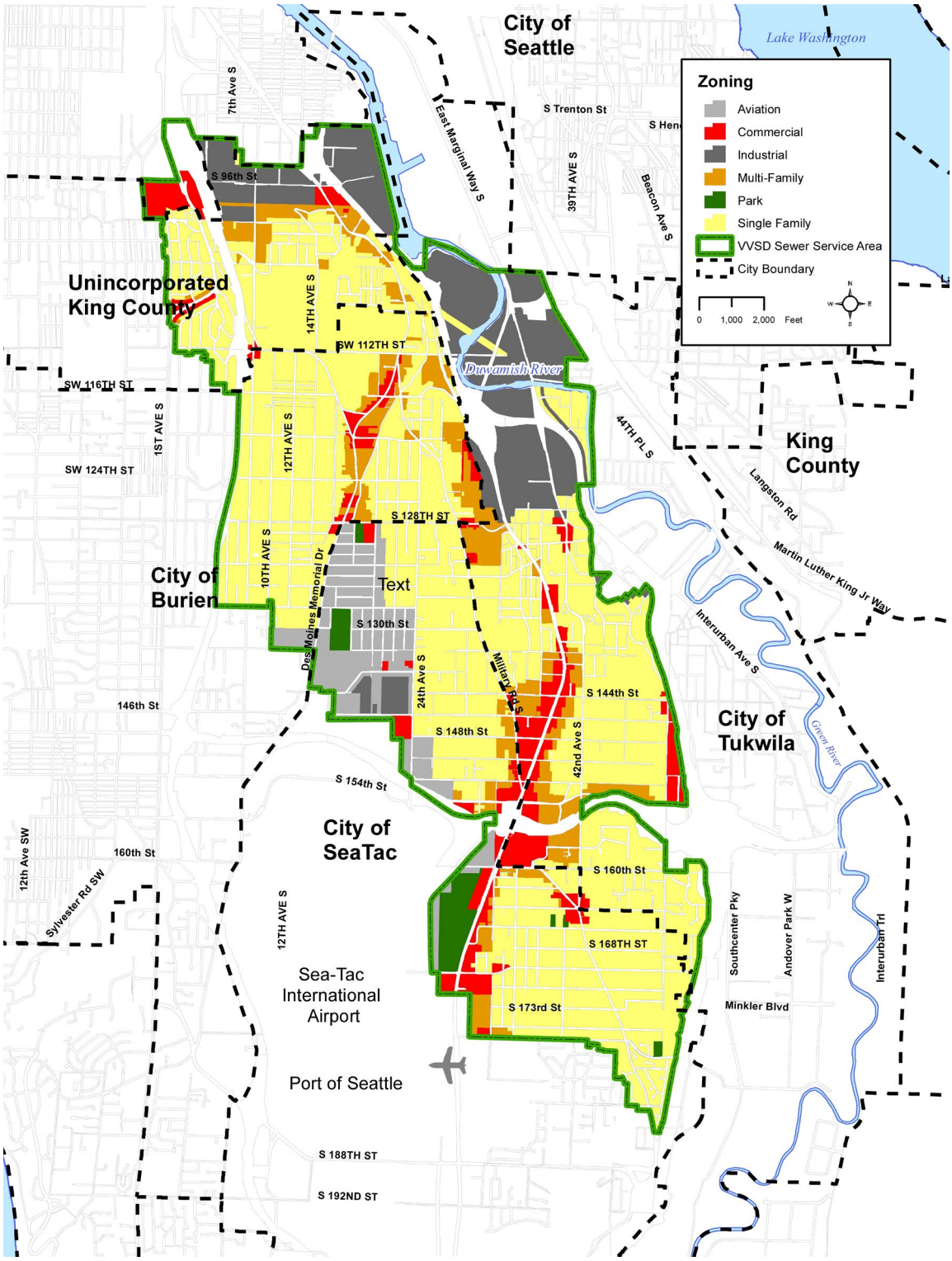


Figure 3-1	***Zoning Map***	20045

This page is intentionally left blank.

3.3 PROJECTED DEVELOPMENT

Anticipated development within the District's service area is limited to infill development and associated projects, with redevelopment anticipated in the future. The District's previous comprehensive plan (2015) proposed a strong likelihood of the continued trend towards reduction in single-family residential uses and increases in multi-family and commercial uses, as had occurred between 2000 and 2010 (Table 3-1). This trend remains present in an extended 20 year scope (2000 -2020) and, while trend fluctuations can be seen in the recent 10 year term, directional trend forecasts remain consistent with those of the previous Plan.

Continued expansion of activity around SeaTac International Airport is believed to have impacted current development and has contributed to the increased shift from single-family to multi-family and commercial land uses that are necessary to support additional airport activity.

3.4 POPULATION AND EMPLOYMENT

Population and employment projections for the District's service area were calculated in 5 year increments, from 2020 to 3030, and one 10 year increment, from 2030 to 2040. Spatial distribution of population and employment change is contextualized through division of the area into sub-basins. The figures used are based on interpolation of population and employment data provided by the Puget Sound Regional Council (PSRC's) Land Use Vision Version 2 (LUV.2) dataset, last updated in 2018. This dataset allocates values at the parcel level, rather than utilizing census tracts or forecast area zones (FAZ) as PSRC has in the past. This nature of its value allocation methodology makes the 2018 dataset preferable to population and employment input data, as it doesn't require a secondary sub-allocation of values based on the percentages of census tract within each basin. The result is more reliable and accurate model calculations and future projections.

All population and employment projections are consistent with King County's recent (2020) Comprehensive Plan Update, which has completed its public review process and contains estimated housing targets and employment targets for each city and unincorporated urban areas within King County through the year 2031. Population and employment within the District is expected to increase over the immediate and long-range planning periods. The most significant increases are expected in the multi-family and commercial (including industrial) customer classifications. This shift is expected to take the form of mixed-use infill development and single-family redevelopment, particularly around the two Sound Transit operated light rail (Link) stations. One Link station is located at the intersection of International Boulevard (Pacific Highway South) and Southcenter Boulevard in Tukwila, and the other is located just at Sea-Tac International Airport, just west of the City of SeaTac's city center. As expansion of the Link rail system continues northward, the mobility offered to residents living in proximity to these two stations is expected to increase, as will the accessibility of commercial activities located nearby.

3.4.1 Unsewered Areas

Portions of Valley View Sewer District are currently unsewered for a variety of reasons. Some areas are not fully built out, while others are developed and can be provided service once the necessary infrastructure is in place. These factors are considered when projecting population and employment growth within Valley Views' service area. This is a very important consideration when planning for the ability of the system to meet future growth needs of the community.

3.5 FLOW PROJECTIONS

Using the population and employment forecasts presented in Table 3-2, flow projections have been developed for the District's service area by primary drainage and sub-basins. Projected base flows are indicated in Table 3-3.

The District's service area, as defined in Chapter 2 of this document, includes areas which could potentially be served by either the District or by another sewerage provider, such as those areas in the eastern portion of the District which could possibly be served by the City of Tukwila. Although the projected flows are not substantial, it is important to note that service by the District is dependent on the timing of development and Tukwila's degree of interest in extending service to these currently unsewered properties.

Average daily flows have been determined using the following criteria:

Residential flows:	75 gallons/capita/day
Industrial flows:	75 gallons/employee/day
Commercial flows:	35 gallons/employee/day

Peak flows have been determined by applying a peaking factor of 2.5 to average daily flows and do not include infiltration and inflow (I & I). These flows are presented in Table 3-4.

In addition to the projected flows calculated based on population, employment, and zoning, Valley View also has three industrial waste users within its service area. These users are:

Name	Permit Number
Kaiser Permanente Washington	11667-02
King County Metro Transit South Base	4238-04
King County Metro Transit South Base Interim Base	306864
King County Metro Transit South Base Facilities Maintenance	266-06
Port of Seattle, Sea-Tac International Airport, BW	7963-01
Port of Seattle, Sea-Tac International Airport, IWS-IWTP	7810-05
City of Seattle Joint Training Facility	10849-04
South Park Industrial Properties LLC	4086-04

The District was an active and voluntary participant in King County's Regional Infiltration and Inflow (I&I) Control pilot Program to test new methods of controlling I & I. This program included flow monitoring by the District through drainage basins during the winter seasons of 2000 – 2002. Based on the flow and rainfall data collected for the ten largest rainfall events in the fall and winter of 2001 and 2002, the average calculated 30-minute peak, total I & I for the District was 3,789 gallons per acre per day (gpad).

The I&I control method implemented by Valley View was manhole rehabilitation, which consisted of rehabilitating manholes through chemical grouting or epoxy injection and adjusting frames and covers, however, no measurable I & I reduction was observed due to these measures.

The District also conducted their own I & I study in 1999 which indicates that currently I & I ranges from approximately 1,100 gpad in some basins to nearly 13,200 gpad in sub-basin Val007. Table 3-5 presents the I & I used in the modeling process, and also shows the added potential flow I & I adds to the peak flows from Table 3-4. The variance between the I & I values obtained from Valley View's study and the King County I & I Study may be due to the difference in drainage basins. The drainage basins referenced in this plan are modified King County drainage basins. The drainage basins used in the 1999 Valley View study vary from the King County basins as well as the monitoring locations. Future facility planning is based on achieving an overall I & I rate of

1,100 gpad and Valley View has adopted an aggressive program for I & I reduction and prevention.

Despite the fact that the most recent Inflow and Infiltration (I&I) study dates back to 1999, the District's commitment to monitoring its sewer Lift Stations remains unwavering. Annually, the dedicated staff diligently assesses these stations and meticulously records a comprehensive range of rainfall events, spanning daily and monthly periods, to discern any discernible spikes linked to precipitation. This meticulous data collection regimen is further reinforced by the District's proactive site visits, which are conducted 2 to 3 times per week, solidifying their dedication to maintaining a vigilant oversight.

The District asserts that the continuous inspection of sewer Lift Stations and the meticulous documentation of rain volume collectively validate their rationale for not conducting additional I&I studies since 1999. This comprehensive data-driven approach serves as a testament to the District's commitment to efficiency and evidence-based decision-making.

By harnessing the valuable insights gathered through this systematic evaluation of rainfall events and the resulting impact on sewer infrastructure, the District substantiates its perspective that these regular assessments adequately address any potential I&I concerns. This approach not only highlights the District's prudent resource management but also reflects its dedication to adopting a pragmatic strategy that efficiently safeguards its sewer system and optimally serves the community it supports.

3.6 PRETREATMENT DEVICES

The District does not require pretreatment devices as part of their standard details and specifications. The District does encourage homeowners and businesses to avoid pouring F.O.G. down the drain or into the garbage disposal. The District has included a section on their website with steps to prevent F.O.G. backup.

TABLE 3-2: POPULATION AND EMPLOYMENT BY DRAINAGE BASIN

			2020		2025		2030		2040	
Primary Drainage Basin	Sub-basin	Acres	Population	Employment	Population	Employment	Population	Employment	Population	Employment
Beverly Park	Val004	233.07	1,727	129	1,731	145	1,727	148	1,744	139
Duwamish	Val005A	323.10	117	2,655	115	2,984	113	3,292	86	4,248
Duwamish	Val005B	107.64	302	826	344	880	361	913	436	945
Glen Acres	Val003	109.79	1,180	289	1,185	283	1,181	277	1,178	243
Glen Acres	Val023	181.47	1,299	138	1,306	140	1,358	149	1,402	139
Glen Acres	ValXXX	174.72	1,201	76	1,253	88	1,313	98	1,377	128
Glen Acres	ValYYY	69.67	508	11	523	14	539	18	542	16
Macadam	Val013	237.89	1,213	1,194	1,345	1,181	1,406	1,183	1,596	1,327
McMicken	Val017	217.21	1,661	61	1,966	73	2,294	84	2,626	116
McMicken	Val019	109.18	663	92	773	103	993	119	1,159	160
McMicken	Val020	152.03	1,013	58	1,112	71	1,108	96	1,262	119
McMicken	Val021	122.94	1,069	31	1,248	32	1,440	42	1,672	75
Midway	Val016	193.43	3,961	485	4,152	590	5,421	745	5,818	1,222
Rainier Vista	Val007	330.26	2,421	162	2,418	151	2,526	144	2,600	135
Rainier Vista	Val008	83.92	712	55	767	71	798	82	852	97
Rainier Vista	Val010	178.79	1,668	103	1,854	118	1,945	121	2,153	136
Rainier Vista	Val011	170.88	1,651	476	1,656	483	1,651	479	1,693	503
Rainier Vista	Val012	225.98	1,497	64	1,698	84	1,986	97	2,361	149
Riverton	Val009	165.99	1,175	743	1,168	800	1,224	836	1,258	1,203
Riverton	Val014	206.83	1,763	182	1,948	178	2,212	196	2,595	241
Riverton	Val015	88.13	2,215	720	2,273	756	2,251	750	2,374	743
Riverton	Val068	369.82	2,658	2,870	3,305	2,933	3,421	2,969	2,854	3,221
South Park	Duwamish West	130.80	16	1,392	18	1,398	18	1,449	18	1,624
South Park	Val006	215.95	718	2,037	739	2,035	796	2,048	820	2,307
SW Suburban	SWSSD South	571.07	2,193	524	2,200	626	2,202	730	2,244	1,008
SW Suburban	SWSSD West	82.85	598	17	623	14	629	13	656	16

			2020		2025		2030		2040	
Primary Drainage Basin	Sub-basin	Acres	Population	Employment	Population	Employment	Population	Employment	Population	Employment
Three Tree	Tukwila	41.92	127	5	132	6	129	6	144	8
Three Tree	Val001	433.88	3,243	1,577	3,535	1,511	3,896	1,713	4,113	1,947
Three Tree	Val002	217.97	2,061	977	2,183	990	2,206	997	2,223	1,145
Three Tree	Val018	114.64	993	131	1,182	128	1,428	181	1,585	157
Three Tree	Val022	209.64	3,061	1,380	3,190	1,533	4,367	1,859	2,749	2,435
	TOTAL	6,071	44,684	19,460	47,942	20,399	52,939	21,834	54,190	25,952

TABLE 3-3: BASE FLOWS BY DRAINAGE BASIN (GPM)

			2020			2025			2030			2040		
Primary Drainage Basin	Sub-basin	Acres	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL
Beverly Park	Val004	233.07	85	3	89	90	4	94	90	4	94	91	3	94
Duwamish	Val005A	323.10	6	65	71	6	73	79	6	80	86	4	103	108
Duwamish	Val005B	107.64	16	20	36	18	21	39	19	22	41	23	23	46
Glen Acres	Val003	109.79	61	7	68	62	7	69	62	7	68	61	6	67
Glen Acres	Val023	181.47	64	3	68	68	3	71	71	4	74	73	3	76
Glen Acres	ValXXX	174.72	25	2	27	29	2	32	34	2	37	54	3	57
Glen Acres	ValYYY	69.67	19	0	19	20	0	21	22	0	23	28	0	29
Macadam	Val013	237.89	63	29	92	70	29	99	73	29	102	83	32	115
McMicken	Val017	217.21	87	1	88	102	2	104	119	2	122	137	3	140
McMicken	Val019	109.18	33	2	35	40	3	43	52	3	55	60	4	64
McMicken	Val020	152.03	53	1	54	58	2	60	58	2	60	66	3	69
McMicken	Val021	122.94	56	1	56	65	1	66	75	1	76	87	2	89
Midway	Val016	193.43	206	12	218	216	14	231	282	18	300	492	30	521
Rainier Vista	Val007	330.26	126	4	130	126	4	130	132	4	135	135	3	139
Rainier Vista	Val008	83.92	37	1	38	40	2	42	42	2	44	44	2	47
Rainier Vista	Val010	178.79	83	2	85	97	3	99	101	3	104	112	3	115
Rainier Vista	Val011	170.88	86	12	98	86	12	98	86	12	98	88	12	100
Rainier Vista	Val012	225.98	78	2	80	88	2	90	103	2	106	123	4	127

			2020			2025			2030			2040		
Primary Drainage Basin	Sub-basin	Acres	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL
Riverton	Val009	165.99	58	17	75	61	19	80	64	20	84	66	29	95
Riverton	Val014	206.83	83	4	87	96	4	101	115	5	120	135	6	141
Riverton	Val015	88.13	115	18	133	118	18	137	117	18	135	124	18	142
Riverton	Val068	369.82	138	70	208	172	71	243	178	72	250	188	78	267
South Park	Duwamish West	130.80	1	34	35	1	34	35	1	35	36	1	39	40
South Park	Val006	215.95	37	50	87	38	49	88	41	50	91	43	56	99
SW Suburban	SWSSD South	571.07	80	13	93	86	15	101	92	18	109	117	25	141
SW Suburban	SWSSD West	82.85	2	0	2	3	0	3	5	0	5	21	0	21
Three Tree	Tukwila	41.92	0	0	0	0	0	0	1	0	1	5	0	5
Three Tree	Val001	433.88	118	38	157	138	37	175	162	42	204	214	47	262
Three Tree	Val002	217.97	86	24	110	97	24	121	103	24	128	116	28	144
Three Tree	Val018	114.64	52	3	55	62	3	65	74	4	79	83	4	86
Three Tree	Val022	209.64	159	34	193	166	37	203	274	45	320	240	59	299
	TOTAL	6,071	2,113	471	2,584	2,322	495	2,817	2,655	530	3,186	3,113	631	3,744

TABLE 3-4: PEAK FLOWS WITHOUT INFILTRATION AND INFLOW (I&I) BY DRAINAGE BASIN (GPM)

			2020			2025			2030			2040		
Primary Drainage Basin	Sub-basin	Acres	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL
Beverly Park	Val004	233.07	214	8	221	225	9	234	225	9	234	227	8	236
Duwamish	Val005A	323.10	15	161	177	15	181	196	15	200	215	11	258	269
Duwamish	Val005B	107.64	39	50	90	45	53	98	47	55	102	57	57	114
Glen Acres	Val003	109.79	154	18	171	154	17	171	154	17	171	153	15	168
Glen Acres	Val023	181.47	161	8	169	170	9	179	177	9	186	183	8	191
Glen Acres	ValXXX	174.72	63	5	67	73	5	79	85	6	91	134	8	142
Glen Acres	ValYYY	69.67	46	0	47	51	1	52	56	1	57	71	1	72
Macadam	Val013	237.89	158	73	230	175	72	247	183	72	255	208	81	288
McMicken	Val017	217.21	216	4	220	256	4	260	299	5	304	342	7	349
McMicken	Val019	109.18	82	5	87	101	6	107	129	7	137	151	10	161

			2020			2025			2030			2040		
Primary Drainage Basin	Sub-basin	Acres	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL	Resi-dential	Comm./ Ind.	TOTAL
McMicken	Val020	152.03	132	4	135	145	4	149	144	6	150	164	7	172
McMicken	Val021	122.94	139	2	141	163	2	164	188	3	190	218	5	222
Midway	Val016	193.43	516	29	545	541	36	576	706	45	751	1,229	74	1,303
Rainier Vista	Val007	330.26	315	10	325	315	9	324	329	9	338	339	8	347
Rainier Vista	Val008	83.92	93	3	96	100	4	104	104	5	109	111	6	117
Rainier Vista	Val010	178.79	206	6	212	241	7	249	253	7	261	280	8	289
Rainier Vista	Val011	170.88	215	29	244	216	29	245	215	29	244	220	31	251
Rainier Vista	Val012	225.98	195	4	199	221	5	226	259	6	264	307	9	316
Riverton	Val009	165.99	145	43	188	152	49	201	159	51	210	164	73	237
Riverton	Val014	206.83	207	11	218	241	11	252	288	12	300	338	15	353
Riverton	Val015	88.13	288	44	332	296	46	342	293	46	339	309	45	354
Riverton	Val068	369.82	346	174	520	430	178	171	445	180	183	471	196	667
South Park	Duwamish West	130.80	2	85	87	2	85	309	2	88	339	2	99	101
South Park	Val006	215.95	93	124	217	96	124	150	104	124	168	107	140	247
SW Suburban	SWSSD South	571.07	200	32	232	215	38	329	229	44	388	292	61	353
SW Suburban	SWSSD West	82.85	4	0	4	8	0	8	12	0	12	51	1	52
Three Tree	Tukwila	41.92	0	0	0	1	0	45	2	0	57	11	0	12
Three Tree	Val001	433.88	296	96	391	345	92	499	406	104	587	536	118	654
Three Tree	Val002	217.97	215	59	274	242	60	277	259	61	351	289	70	359
Three Tree	Val018	114.64	129	8	137	154	8	171	186	11	189	206	10	216
Three Tree	Val022	209.64	399	84	482	415	93	509	686	113	799	600	148	748
	TOTAL	5,283	1,178	6,461	5,804	1,238	6,923	6,639	1,326	7,980	7,783	1,576	9,359	5,283

TABLE 3-5: PEAK FLOWS WITH I & I (GPM)

			2020		2025		2030		2040	
Primary Drainage Basin	Sub-basin	Acres	I & I (gal/acre/day)	Total Flow w/ I & I	I & I (gal/acre/day)	Total Flow w/ I & I	I & I (gal/acre/day)	Total Flow w/ I & I	I & I (gal/acre/day)	Total Flow w/ I & I
Beverly Park	Val004	233.07	1,100	400	1,100	412	1,100	412	1,100	414
Duwamish	Val005A	323.10	1,100	423	1,100	443	1,100	462	1,100	516

			2020		2025		2030		2040	
Primary Drainage Basin	Sub-basin	Acres	I & I (gal/acre/day)	Total Flow w/ I & I	I & I (gal/acre/day)	Total Flow w/ I & I	I & I (gal/acre/day)	Total Flow w/ I & I	I & I (gal/acre/day)	Total Flow w/ I & I
Duwamish	Val005B	107.64	6,900	605	6,900	614	6,900	618	6,900	630
Glen Acres	Val003	109.79	1,100	255	1,100	255	1,100	254	1,100	252
Glen Acres	Val023	181.47	1,100	308	1,100	317	1,100	324	1,100	330
Glen Acres	ValXXX	174.72	13,200	1,669	13,200	1,680	13,200	1,693	13,200	1,744
Glen Acres	ValYYY	69.67	1,100	100	1,100	105	1,100	110	1,100	125
Macadam	Val013	237.89	7,000	1,387	7,000	1,403	7,000	1,411	7,000	1,445
McMicken	Val017	217.21	1,100	386	1,100	426	1,100	470	1,100	515
McMicken	Val019	109.18	1,100	171	1,100	190	1,100	220	1,100	244
McMicken	Val020	152.03	1,100	252	1,100	265	1,100	266	1,100	288
McMicken	Val021	122.94	1,100	235	1,100	258	1,100	284	1,100	316
Midway	Val016	193.43	1,100	693	1,100	724	1,100	899	1,100	1,451
Rainier Vista	Val007	330.26	1,100	577	1,100	576	1,100	590	1,100	599
Rainier Vista	Val008	83.92	8,600	597	8,600	605	8,600	610	8,600	618
Rainier Vista	Val010	178.79	8,600	1,280	8,600	1,316	8,600	1,328	8,600	1,356
Rainier Vista	Val011	170.88	2,900	588	2,900	589	2,900	588	2,900	595
Rainier Vista	Val012	225.98	8,600	1,548	8,600	1,576	8,600	1,614	8,600	1,666
Riverton	Val009	165.99	1,900	407	1,900	420	1,900	429	1,900	456
Riverton	Val014	206.83	1,100	376	1,100	410	1,100	458	1,100	511
Riverton	Val015	88.13	1,100	399	1,100	409	1,100	406	1,100	422
Riverton	Val068	369.82	2,500	1,163	2,500	813	2,500	825	2,500	1,309
South Park	Duwamish West	130.80	2,500	314	2,500	536	2,500	566	2,500	328
South Park	Val006	215.95	5,800	1,087	5,800	1,020	5,800	1,038	5,800	1,117
SW Suburban	SWSSD South	571.07	2,500	1,223	2,500	1,320	2,500	1,380	2,500	1,345
SW Suburban	SWSSD West	82.85	1,100	67	1,100	71	1,100	76	1,100	115
Three Tree	Tukwila	41.92	1,100	32	1,100	77	1,100	90	1,100	44
Three Tree	Val001	433.88	1,100	723	1,300	891	1,300	978	1,300	1,046
Three Tree	Val002	217.97	2,000	577	2,000	580	2,000	654	2,000	662
Three Tree	Val018	114.64	2,000	296	2,000	330	2,000	348	2,000	375
Three Tree	Val022	209.64	2,000	774	2,000	800	2,000	1,090	2,000	1,039
	TOTAL	6,071		18,912		19,435		20,492		21,870

CHAPTER 4

EXISTING SYSTEM DATA

4.1 GENERAL

Valley View Sewer District serves approximately 8,600 connections, with a population of approximately 44,684 people and 19,460 employees within the District in 2020. These connections are served through a network of collector and interceptor lines ranging in size from 2 to 24 inches in diameter. There are approximately 134 miles of sanitary sewer lines and an estimated 39 miles of side sewers in the Valley View system and pipe materials include PVC (55%), concrete (15%), clay (16%), ductile iron (5%), HDPE (4%) and AC (3%). There are 11 primary drainage basins within Valley View Sewer District. These drainage basins have been determined based on topography as well as the actual facilities that serve each area. An additional 31 drainage sub-basins occur within the primary basins. Valley View currently maintains 16 pump stations and 1 dosing station to compensate for topography in the area and pump flows where gravity service cannot be provided.

The District does not own or maintain wastewater treatment facilities and instead relies on King County Wastewater Treatment Division (KCWWTD), Southwest Suburban Sewer District and Midway Sewer District for treatment and disposal of wastewater generated by the District's customers.

Detailed information regarding the primary features of the Valley View system is put forth in this Chapter and on the Comprehensive Plan Map included at the back of this document. Subsequent portions of the Plan identify the minimum design criteria used to evaluate the existing system, details of the system analysis and recommended system improvements.

4.2 DRAINAGE BASINS

The following provides a description of the primary drainage basins and sub-basins identified for Valley View Sewer District. Figure 4-1 provides an overview of the drainage basins within the District and is included on the Comprehensive Plan Map at the back of the document.

Drainage basins have been identified based on topography, direction of flow within the existing system, and the facilities to which the Valley View system discharges. Sanitary sewer drainage basins differ somewhat from the surface drainage basins identified by cities and King County for storm drainage purposes as described in Chapter 2. Sanitary sewer systems can provide greater flexibility due to the depth of the piping systems, and can encompass a larger area than surface water drainage basins. No attempt has been made to correlate the sanitary drainage basins of Valley View Sewer District with the surface water drainage basins of other jurisdictions.

The Valley View basins are primarily the same as the previous Sewer Plan Update in 2015. Minor changes to the sub basin boundaries in Val002, Val022, and Val018 are due to the sewer project on 152nd Ave that directs most of the Val022 basin to the Val002 basin through the new sewer main on 152nd rather than directing the flow to the north. And a shift of sub basin boundaries due to the failure of Peter Western Bridge.

A description of the primary basins and sub-basins within the Valley View area are presented below. Information regarding pumping facilities and connections to other systems for treatment/discharge is presented later in this Chapter.

4.2.1 McMicken Basin

The McMicken basin is located in the southeastern portion of the District. The area is generally bounded on the north by South 160th Street, on the west by 39th and 43rd Avenues South, on the east by the District's eastern boundary at Interstate Highway 5, and on the south by the District's southern boundary at South 182nd and 184th Streets. The McMicken basin includes the following King County sub-basins: VAL017, VAL019, VAL020 and VAL021.

Sub-basin VAL020, is in the northern portion of the McMicken basin and is served entirely by gravity flow to the north and east and discharges into the King County Wastewater Treatment Division system at two separate connections. Connections to the King County Wastewater Treatment Division system are located near the intersections of 51st Avenue South and South 160th Street, and State Route 518 and Interstate Highway 5.

Sub-basins VAL017 and VAL021 generally flow by gravity to Pump Station 2 (McMicken) where it is pumped through an 8-inch force main to sub-basin VAL020.

Sub-basin VAL019 is isolated by 2 steep ravines from the remainder of the basin. A dosing station and double siphon are located at approximately South 176th Street, adjacent to the Interstate 5 right-of-way, to facilitate flow across the ravines to Pump Station 2 (McMicken). A FEMA grant has been pursued to remove the dosing station and double siphon and connect into the Tukwila sewer system. The first attempt to obtain a grant was unsuccessful but pursuits in the future will be investigated.

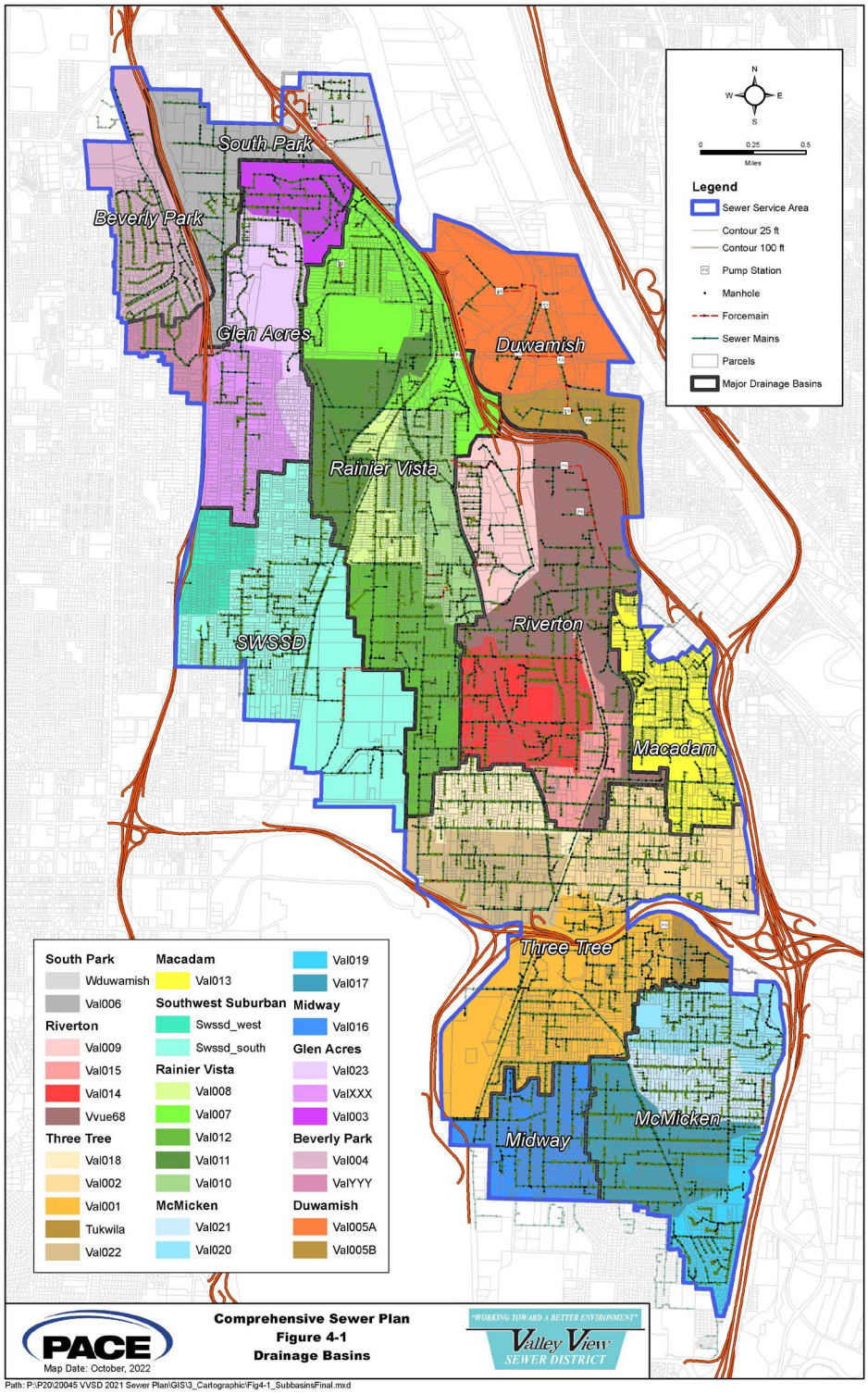


Figure 4-1	***Drainage Basins***	20045

This page is intentionally left blank.

4.2.2 Midway Basin

The Midway drainage basin is located in the southwestern portion of the District and is included in drainage sub-basin VAL016. The Midway basin is designated as such because wastewater flows generated in this area are directed to Midway Sewer District for treatment and disposal. The Midway basin currently flows by gravity to Midway Sewer District, and includes areas, which were previously part of the Three Tree basin. There are two connections to Midway Sewer District: one located at 172nd Street and Pacific Highway South; and, one located at approximately 2900 South 176th Street.

In order to maintain the possibility to increase the area draining to Midway Sewer District consistent with the basin boundary shown, the District has constructed an additional connection to the Midway system. This connection is located just east of Pacific Highway South and on South 170th Street. It is currently in place, but not in use. The basin boundary has been changed to reflect this connection. The VAL016 sub-basin area includes a small area to the north of the basin that actually drains to the Three Tree Basin.

4.2.3 Three Tree Basin

Valley View's Three Tree basin is located in the south central portion of the District. Sub-basins Tukwila, VAL001, VAL002, VAL018 and VAL022 are included in the Three Tree basin and flow by gravity to two connections to King County Wastewater Treatment Division located northwest of the intersection of State Route 518 and Interstate Highway 5. This basin, as represented herein, have been modified to reflect the construction of the sewer main within 152nd Ave South which diverts flow from VAL022 to VAL002 through 152nd Ave South.

Located in the Northeast area of the basin is a pump station that is owned and maintained by the District, however it is located on private property. The pump station services 4 of the properties in that area, whose residents opted to connect to public sewer.

The Tukwila Loop project was a considerable large sewer project that was funded through Ecology grants to provide sewer to an unsewered area within this Basin. The area is just south of SR 518 and west of Interstate 5.

Some areas within the Three Tree basin are still currently unsewered, one being north of the intersection of State Route 518 on the west side of Interstate 5. This unsewered areas is outside of the District's legal boundary and within the City of Tukwila. This area is, however, included in the District's service area because they could logically be served by an extension of the District's system. The District would only serve this unsewered areas if it is determined to be the best alternative and extension of service is agreed to by Tukwila. The District has tried to enter discussions about these unsewered areas with the City of Tukwila but there has been lack of response in order to move forward. The District is willing to provide service to these properties but with no response from the city, the property owners can be annexed by carrying a petition. Otherwise, these properties will continue to be unsewered unless response from the City occurs.

Specific improvements required for extension of service to unsewered areas and other system improvements within the Three Tree basin are discussed in further detail in Chapter 7 of this document. FOR the undeveloped areas in the eastern portion of this

basin, flow can go either way but will depend on the timing and location of the development.

4.2.4 Macadam Basin

The Macadam basin serves the eastern portion of the District and includes sub-basin VAL013. This basin is generally bounded on the north by South 130th Street; on the east by the District boundary and I-5; on the south by South 148th Street. The westerly boundary is generally along 45th Avenue South in the southerly portion and 40th and 42nd Avenue South in the northerly portion of the basin.

Flows from this basin are directed to the north and east through a series of 6 and 8-inch gravity lines. In 1995, the District abandoned the Macadam Road Pump (or Tukwila) Station, which was previously required for discharge into KCWWTD's Interurban Interceptor located at 13300 Interurban Avenue South. Abandoning the pump station was possible because King County Wastewater Treatment Division upgraded the Interceptor at a greater depth. This allows for gravity flow directly to the King County Wastewater Treatment Division system.

Service to unsewered areas in the Macadam basin will require the construction of several small extension projects to accommodate future development. Gravity service could be provided to this area; however, since the area is outside of the District's legal boundary and within the City of Tukwila, the District would provide service to the unsewered area only through an agreement with Tukwila. Similar to the properties within the Three Tree basin, the District has entered discussions with the City but has yet to hear a response. The District is willing to provide service to these properties but with no response from the city, the property owners can be annexed by carrying a petition. Otherwise, these properties will continue to be unsewered unless a response from the City occurs.

4.2.5 Riverton Basin

The Riverton basin is located in the central area of the District and includes sub-basins VAL009, VAL014, VAL015, and VAL068 and includes the original Valley View District. This basin is generally bounded on the north by State Route 599; on the east by 40th and 42nd Avenue South; on the south by South 148th Street; and on the west by Military Road South and 26th Avenue S. Service to this area is provided by a combination of gravity flow and pumping stations as further described below by individual drainage sub-basins.

The mains in this area are older and need to be assessed to understand the conditions of the pipes. Also, a large multi-family residential development is planned within this basin added to the flows of these older pipes.

Flows from the entire Riverton basin are directed through sub-basin VAL68. Facilities within sub-basin VAL68 all flow by gravity or pump station and include a network of 6 and 8-inch collector sewers and a 12 and 15-inch interceptor located on South 130th Street. This interceptor discharges to King County Wastewater Treatment Division through the District's primary connection to the regional system located at 42nd Avenue South and South 130th Street. This connection is referred to as the "Valley View" connection.

Sub-basin VAL009 is located in the northwest corner of the Riverton basin and serves an area, which was part of the Rainier Vista sewer system prior to merging into Valley View. It originally gravity fed to PS#17 and was then pumped west into the Rainier Vista Basin. However, pump station #17 has since been abandoned and VAL009 flows by gravity east to sub-basin VAL068. The sub-basin boundaries shown on the maps included in this document represent the realigned basins, which resulted from completion of the elimination of Pump Station # 17.

Sub-basin VAL68 includes the northeastern portion of the Riverton basin. Two pump stations, Pump Station Nos. 6 (Inco) and 7 (Metro) serve the area and direct flows southeasterly to South 130th and the Valley View connection. Pump Station No. 7 is located in the northern portion of the basin and takes flow from the area previously served by the recently abandoned Pump Station No. 17. Pump Station No. 7 also handles a small portion of the Metro South Flow and most of the flow from Metro South goes to Sta. No 6. Flows from this station are pumped south along East Marginal Way South and discharged into the force main from PS# 6 which continues south to S 130th. A 12-inch diameter gravity line carries flows along East Marginal Way South to Pump Station No. 6, which provides service to the remainder of the basin. Flows from Pump Station No. 6 are pumped through an 8-inch diameter force main located in East Marginal Way South and discharged to the gravity sewer in South 130th Street.

Sub-basins VAL014 and VAL015 are served by a network of 6 through 12-inch gravity lines which flow by gravity to sub-basin VAL68 and the previously discussed Valley View connection to King County Wastewater Treatment Division.

4.2.6 Duwamish Basin

The Duwamish basin is located in the northeastern most area of the District and generally includes the industrial areas along East Marginal Way South, West Marginal Way South and Pacific Highway South, as well as the area north of State Route 599 and south of the Duwamish River. The basin is bounded by State Route 599 on the south and west, and by the District boundary on the north and east. The Duwamish basin includes sub-basins VAL005A and VAL005B.

Drainage within the Duwamish basin is influenced by the Duwamish River, which bisects the basin into sub-basin VAL005A to the north and VAL005B to the south as well as the essentially flat topography of the area. Pump stations are required to accommodate service within this basin and flows are pumped to the District's connections to King County Wastewater Treatment Division located near the intersections of East Marginal Way South and the Boeing Access Road, and at South 112th Street and the Seattle Transmission Line right-of-way.

Flows from the western portion of the basin, which is west of the Duwamish River and east of West Marginal Way South, are transported across the Duwamish River through a new Ductile Iron force main under the river and is discharged directly to the King County transmission main and does not connect to the Pacific Highway Pump Station anymore. The Pump Station No. 11 is new and has a name change from Boeing to Oxbow and was shifted to the South to accommodate a new Amazon development. Pump Stations 8 (East Marginal), 9 (Pacific Highway), and 10 (Towing) serve that portion of the basin which is east of the Duwamish River.

The southern portion of the Duwamish basin is the sub-basin VAL005B and is the area located south of the Duwamish River and north of SR 599. The area east of East Marginal Way S. is an established residential area that has been recently sewered. The flows in this residential area gravity flow to Pump Station 17 (Duwamish) and are pumped to Pump Station 12 (Seagate). Service to the area west of East Marginal Way flows by gravity to Pump Station 12 which transports flows north across the river through a pipe hung on a bridge to the main portion of the basin.

4.2.7 South Park Basin

The South Park drainage basin is located in the northwestern portion of the District and includes the VAL 006 and Duwamish West sub-basins. The basin generally extends from SR 509 on the west to the Duwamish River on the east, and from the northern district boundary to a point along 8th avenue South in the western portion of the District extending to approximately South 112th St

Flows generated from sub-basin VAL006 customers are directed to the northeast, through Pump Station No. 14 (96th Street) to a connection with KCWWTD adjacent to the pump station.

The Duwamish West sub-basin includes the area along the westerly banks of the Duwamish River in the northern portion of the District. Wastewater from the basin flows southeasterly and is discharged to the King County Wastewater Treatment Division's system through the District's Pump Station No. 15 (Delta Marine) which is located near the intersection of South 96th Street and West Marginal Way. Pump Station No. 18 (Union Hall) is located in the northwestern corner of the West Duwamish basin and discharges through a force main to Pump Station No. 15. Three additional privately owned pump stations (Duwamish Manor, PSF and Yacht Club stations) serve the West Duwamish basin and are shown on the Plan Map included at the back of this document.

4.2.8 Beverly Park Basin

The Beverly Park basin contains drainage sub-basin VAL004. Flows from the area, which is in the northwestern portion of the District, are directed to the northwest and a connection to KCWWTD at 1st Avenue South and Meyers Way South. Pump Station No. 13 (Aqua Way) is located within sub-basin VAL004 and provides service to a small area of the basin, which is just west of State Route 509.

4.2.9 Glen Acres Basin

The Glen Acres basin contains sub-basin VAL003, VAL023, and VAL XXX and are sewered by a network of 8-inch collector sewers flowing to a 12-inch trunk line along South 99th Street and ultimately connecting to KCWWTD. The southern portion of sub-basin VAL023 is currently unsewered. Service to this area, which is generally south of South 112th Street, will be accomplished by construction of gravity lines flowing north into the existing Glen Acres basin's system.

The Glen Acres drainage basin extends from the District's western boundary and 8th Avenue S. on the west to 14th and 16th Avenues South on the east; and from South 99th Street on the north to South 124th Street on the south. The Glen Acres basin operates entirely by gravity and flows to the north, then east. Discharge to the King County

Wastewater Treatment Division system is through a manhole connection located near the intersection of 17th Place South and Pacific Highway South SR 99 in the northeastern portion of the basin.

Further discussion of future improvements in this basin is included in Chapter 7, however, the mains within this basin are generally on the older side and further investigation of improvements will be required.

4.2.10 Rainier Vista Basin

The Rainier Vista drainage basin is a large basin, which runs from north to south through the central portion of the District. Sub-basins VAL 007, VAL008, VAL010, VAL011, and VAL012 are all within the Rainier Vista basin. The basin is served by gravity to the north through a network of 6 and 8-inch collector sewers. Trunk lines along 20th Avenue South, Roseburg Avenue South, and 24th Avenue South range in size from 10 to 21-inches in diameter and carry flows north to a connection with the King County Wastewater Treatment Division system near the intersection of Des Moines Way South and 17th Place South. Pump Station 5 (Hilltop) serves an isolated area of low topography within the Rainier Vista basin. Two major sewer extensions (Hilltop and Military Road South) occurred since the last plan within basin Val010 and the new sewers are reflected on the maps.

On February 9, 2017 it was reported of severe erosion below the Peter Western bridge which is in the Val010 subbasin. It was revealed that two columns had been completely undermined and a third column was partially supported. The bridge was declared structurally deficient, and the City of Burien began to construct a replacement bridge. The District routed the sewer main that went across the bridge to the north into Val007 which change the sub basin boundaries by shifting a portion of the Val010 subbasin to the Val007 subbasin.

4.2.11 Southwest Suburban Basin

The Southwest Suburban basin is located in the southwestern portion of the District and generally extends from 14th ,18th and 23rd Avenues South in the east to the District boundary at State Route 509 on the west and from South 120th Street on the north to the District boundary on the south at about S. 146th Street. This basin is named such because flows from the area are directed to Southwest Suburban Sewer District for treatment and disposal in accordance with an interlocal agreement between the two agencies.

The Southwest Suburban basin includes drainage from sub-basins Southwest Suburban Sewer District (SWSSD) West and SWSSD South (formerly sub-basins 24 and 25; there are no corresponding King County sub-basins). The majority of the area in this basin is currently unsewered, although as discussed in Chapter 7, conceptual plans for sewering the entire basin are being developed. Sub-basin SWSSD-West includes the northwestern portion of the Southwest Suburban basin is currently all unsewered. Once service is provided in this area, the effluent will flow westerly by gravity to a boring (South 129th Street and State Route 509 crossing) under State Route 509 south of South 128th Street and a connection to the Southwest Suburban Sewer District's 4th Avenue Interceptor on the west side of State Route 509. Five properties have been connected so far to the boring, with other residents engaged in discussions with the District about potentially

connecting.Sub-basin SWSSD-South flows to the south and is currently connected to the Southwest Suburban Sewer District through three separate connections. The locations of the three SWSSD connections are at 8th Avenue South and South 136th Street, 16th Avenue South and South 144th Street and S. 138th Street and 10th Avenue S.

The City of Burien is planning to improve 8th Ave from 128th to 136th and the District may participate in improving the sewer in this area.

4.3 PUMP STATIONS

Valley View Sewer District currently owns and operates 16 separate pump stations to compensate for the rolling topography of the area. Detailed information on the existing pump station is contained in Table 4-1. Analysis and recommendations concerning future pump station improvements is discussed in Chapter 7.

The District also owns the pump station located on the David Doll property along with four other E-One pumps in the loop project area.

4.4 WASTEWATER TREATMENT AND DISPOSAL

Valley View Sewer District does not own or operate a wastewater treatment facility and relies on the treatment and disposal facilities of other agencies. More than 90% of flows generated in the District are discharged into the King County Wastewater Treatment Division system for treatment and disposal. The remainder of flow from the District is discharged into either the Southwest Suburban Sewer District system or the Midway Sewer District system for treatment and disposal. The District maintains interlocal agreements with King County Wastewater Treatment Division, Southwest Suburban Sewer District, and Midway Sewer District to accomplish this and copies of these agreements are summarized in Chapter 2 and available at the District office for review. A summary of the District's connections to these other agencies is presented in Table 4-2.

TABLE 4-1: PUMP STATION CHARACTERISTICS

Sta.	Name/Address	Year	Manufacturer	Capacity (per Pump Design)	Estimated Retention Time (hr)	Elect.	Emergency Power	Primary & Secondary Basins/City
2	McMicken 17036 53rd Ave. S.	1996	Triangle Pump ABS Submersible	900 gpm 2 @ 33.5 HP	0.25 to 0.50	480V 3 Phase	Full Time Fixed Unit	McMicken/VAL021 & VAL017 Tukwila @SeaTac
3	24th Avenue 2400 S. 152nd St.	1981	Cornell/Ideal Duplex Wet Well Mounted	250 gpm 2 @ 15 HP	8 to 10	480V 3 Phase	Emergency Plug	Three Tree/VAL022 Tukwila & SeaTac
5	Hill Top 10432 17th Ave. S.	1996	Hydromatic Submersible Duplex	120 gpm 2 @ 5 HP	1 to 2	240V 1 Phase	Emergency Plug	Glen Acres/VAL007 King County & SeaTac
6	Inco 3702 S. 124th St.	1993	Meyers 4VHX150M4-43 Submersible Duplex	300 gpm 2 @ 15 HP	1	480V 3 Phase	Full Time Portable Unit	Riverton/VAL068 Tukwila
7	Metro 11911 E. Marginal Way	1999	Dakota Pump Duplex Wet Well Mounted	450 gpm 2 @ 33.5 HP	1	480V 3 phase	Full Time Fixed Unit	Riverton/VAL068 Tukwila
8	E. Marginal Way 11200 E. Marginal Way	1989	Cascade/Cornell Ideal Wet Well Mounted	200 gpm 2 @ 3 HP	1 to 2	240V 3 Phase	Full Time Fixed Unit	Duwamish/VAL005 Tukwila
9	Pacific Highway 11059 Tukwila Int. Blvd.	1988	Cascade Ideal Duplex ABS Submersible	520 gpm 2 @ 8 HP	0.5 to 1	240V 3 Phase	Fixed Unit Generator	Rainier Vista/VAL007 King County & SeaTac
10	Towing 10712 E. Marginal Way	1980	Cornell/Ideal Duplex Vacuum Lift	200 gpm 2 @ 3 HP	3 to 4	240V 3 Phase	Fixed Unit Generator	Duwamish/VAL005 Tukwila
11	Oxbow 10500 E. Marginal Way S	2021	Flygt Submersible Wet Well Mounted	425 gpm 2 @ 10 HP	0.5 to 1	480 3 Phase	Fixed Unit Generator	Duwamish/VAL005 Tukwila
12	Seagate 11600 E. Marginal Way	1990	Cascade Ideal Duplex ABS Submersible	200 gpm 2 @ 10 HP	1 to 2	240V 3 Phase	Full Time Potable Unit	Duwamish/VAL005B Tukwila
13	Aqua Way 10202 4th Ave. S.	1982	Duplex Submersible	200 gpm 2 @ 5 HP	2 to 3	480V 3 Phase	Full Time Fixed Unit	Beverly Park/VAL004 Seattle
14	96th Street 96th St. @ Des Moines Way	1996	Triangle Pump ABS Submersible	880 gpm 2 @ 9 HP	0.5	480V 3 Phase	Emergency Plug	Beverly Park/VAL006 King County
15	Delta Marine 1600 S. 96th Street	Rehab 2000	Duplex Submersible	200 gpm 2 @ 5 HP	2 to 3	240V 3 Phase	Full Time Fixed Unit	Duwamish-West King County
16	Union Hall S. 96th St. & 15th Ave. S.	Rehab 2000	Duplex Submersible	150 gpm 2 @ 3 HP	4 to 5	240V 3 Phase	Full Time Fixed Unit	Duwamish-West King County
17	Duwamish 3819 S. 117th St.	2002	Duplex Submersible	150 gpm 2 @ 5 HP	10 to 12	240V 3 Phase	Full Time Fixed Unit	Duwamish/VAL005B Tukwila
18	Freeway 11032 26th Ave. S.	1989	Aurora Pump Company	175 gpm 2 @ 10 HP	1.5 to 2	480V3 Phase	Full Time Fixed Unit	Rainier Vista/VAL007 King County

Table 4-2: Connections to Other Systems

Connection With	Approximate Location	Valley View		Into Pipe Size	Type
		Pipe Size	Drainage Basin		
KCWWTD	1st Avenue S. & Meyers Way	10-inch	Beverly Park	12-inch	Gravity
KCWWTD	S. 96th Street & Des Moines Way S.	8-inch FM	Beverly Park	36-inch	Pump Sta. 14
KCWWTD	S. 96th Street & W. Marginal Way	4-inch FM	W. Duwamish	30-inch	Pump Sta. 15
KCWWTD	East Marginal Way and S Boeing St.	6-inch FM	Duwamish	42-inch	Oxbow Pump Sta
KCWWTD	17th Pl. S. & W. Marginal Way	12-inch	Glen Acres	24-inch	Gravity
KCWWTD	W. of 17th Pl. S. & Des Moines Way S.	21-inch	Rainier Vista	24-inch	Gravity
KCWWTD	W. of Pacific Hwy. S. & E. Marginal Way	8-inch FM	Duwamish	42-inch	Pump Sta. 10
KCWWTD	S. 128th Street & 42nd Avenue S.	15-inch	Riverton	15-inch	Gravity
KCWWTD	Interurban Avenue S. & Gateway Dr.	12-inch	Macadam	12-inch	Gravity
KCWWTD	52nd Avenue S. & + Approx. S. 152nd Street	12-inch	Three Tree	24-inch	Gravity
KCWWTD	Renton Three Tree Rd. & 52nd Avenue S.	21-inch	Three Tree	24-inch	Gravity
KCWWTD	S. 160th Street & 51st Avenue S.	8-inch	McMicken	12-inch	Gravity
KCWWTD	N. of S. 160th Street @ Interstate 5	12-inch	McMicken	10-inch	Gravity
Midway	S. 176th Street & 38th Avenue S.	8-inch	Midway	8-inch	Gravity
Midway	S. 176th Street & 29th Avenue S.	8-inch	Midway	8-inch	Gravity
Midway	S. 171st Street & Pacific Hwy S.	8-inch	Midway	8-inch	Gravity
SWSSD	S. 144th Street & 16th Avenue S.	12-inch	SW Suburban	21-inch	Gravity
SWSSD	8th Avenue S. & S. 136th Street	8-inch	SW Suburban	8-inch	Gravity
SWSSD	7th Avenue S. & S. 136th Street	8-inch	SW Suburban	8-inch	Gravity
SWSSD	S. 129th Street W. of State Route 509	10-inch	SW Suburban	10-inch	Gravity (1998)

CHAPTER 5

MINIMUM DESIGN CRITERIA

5.1 INTRODUCTION

In order to evaluate the District's existing system and plan for adequate future improvements to the system, it is necessary to define minimum design criteria. Minimum design criteria identified includes; typical domestic wastewater quantities generated by various customer classes and land uses; existing and future capacity requirements for various components of the system; and projected infiltration and inflow rates and peaking factors to be used in the design of facilities.

5.2 MINIMUM DESIGN REQUIREMENTS

The State Department of Ecology's (DOE) "Criteria for Sewage Works Design" (commonly referred to as the Orange Book) was revised on a comprehensive scale in December 1998, in cooperation with the State Department of Health (DOH) and the U.S. Environmental Protection Service (USEPA), and sets forth the standards, guidelines and minimum design requirements for sanitary sewer systems operating within the State of Washington. The Document was revised/updated in 2006, 2007, and 2008, and most recently in 2019. A full list of revision specifications can be found within the up-to-date document (Orange Book), available on the Ecology website.

This Ecology manual, together with the District's documents that dictate the minimum requirements and the District's are as follows:

Rules and Regulations Governing Valley View Sewer District's Sewage Collection Facilities

Valley View Standard Sewer Details

Valley View Standard Specifications

Valley View Developer Extension Manual

These documents are provided in the Appendices and establish the design criteria and construction standards to be used in evaluation and design. In addition, the District is required to comply with the requirements and regulations of the jurisdictions within which it operates. Valley View Sewer District is within the corporate limits of the cities of Seattle, Tukwila, SeaTac, Burien and unincorporated King County, and as such, conducts its operations consistent with the requirements, policies and procedures of those agencies.

5.3 DESIGN PERIOD

In planning sewage facilities, it is necessary to evaluate both present conditions and future service needs and to design a system compatible with variable demands over a given length of time, or design period. A 20-year design period is used in evaluating the system and developing a plan for future system improvements.

5.4 REFERENCE DATUM

The datum used for planning of facilities in this study and for District design work is based on the horizontal datum NAD83 and the vertical datum NAVD88.

5.5 SYSTEM DESIGN

All sanitary sewer systems shall be designed in accordance with accepted engineering practices and by a professional engineer approved by the District and registered in the State of Washington. All pipelines will be designed and constructed in accordance with the latest "Criteria for Sewage Works Design" as published by the State Department of Ecology, the District's sewer extension policies, and the requirements put forth in this Comprehensive Sewer System Plan. All main sewer lines will be constructed under the District's jurisdiction and will be owned and maintained by the District.

Sewer system facilities must be designed with sufficient capacity to carry peak flows from the tributary area at ultimate development, unless other criteria has been established and/or approved by the District. Sewer systems shall be designed and constructed to achieve total containment of sanitary wastes and maximize exclusion of Infiltration and Inflow.

5.5.1 Combined Sewers

No combined sanitary and storm sewers are allowed within the District.

5.5.2 Overflows

No overflows or new overflow structures will be permitted.

5.5.3 Collection Sewers

All new mains are to be a minimum of 8-inches in diameter. Where specifically approved by the District, 6-inch lateral sewers may be installed but must be equipped with clean outs at the end of the main.

Collection sewers and pump stations should be designed for ultimate development of the tributary areas based on the design factors outlined in Tables 5-1 and 5-2, and allowable infiltration and inflow rates.

Gravity sewers are to be used wherever possible. Pump stations will be allowed only after thorough investigation has shown that no other cost effective alternatives exist and require specific District review and approval.

5.5.4 Trunk and Interceptor Sewers

Trunk and interceptor sewers shall be designed with sufficient capacity to carry peak flows at ultimate development conditions based on the criteria established in Tables 5-1 and 5-2. This flow represents the sum of several loadings calculated separately for each section of sewer or tributary area. The loadings consist of peak wastewater flows, groundwater infiltration, surface water inflow, and any other quantities which are unique to the individual pipeline.

5.5.5 Flow Rates

Flow in a sanitary sewer system is comprised of domestic, commercial and industrial wastes, groundwater infiltration and surface water inflow. All portions of the sanitary sewer system must be capable of carrying the peak volumes from these sources. Table 5-1 identifies the typical flows associated with various land use types.

TABLE 5-1: ESTIMATED SEWER FLOWS BY LAND USE TYPE

Land Use	Population Equivalents	Building Area/ Land Area Factor	Average Daily Flow
Single Family	persons/unit	Per Zoning	75 gal/capita/day
Multi-Family	persons/unit	Per Zoning	75 gal/capita/day
Retail/Commercial		0.3 SF/GSF	0.15 gal/SF
Office Space		0.45 SF/GSF	0.08 gal/SF
Light Industrial		0.4 SF/GSF	0.015 gal/SF
Heavy Industrial		0.4 SF/GSF	0.5 gal/SF
Manufacturing/Processing			Case by case

1. Average flow rates indicated do not include infiltration and inflow. Infiltration and inflow should be calculated at 1,100 gallons per acre per day.
2. The average amount of developed land on a given lot is estimated by multiplying the gross square footage (GSF) of the lot by the factor indicated per square foot (SF).
3. Manufacturing/processing uses should consider water reuse alternatives.
4. For long range flow projections, flows from non-residential uses can be calculated on a per employee basis, as detailed in Chapter 4.

TABLE 5-2: PEAKING FACTORS (used to convert average daily flows to peak daily flows)

Type of Facility	DOE Standard	K.C. Wastewater Treatment Division Standard	District Standard
Lateral and Local Sewers	4.0	—	4.0
Trunks and Interceptors	2.5	—	2.5
Heavy Industrial	—	2.0	2.0
Light Industrial	—	3.0	3.0
Commercial	—	—	3.0
Pump Stations	—	—	2.0

Peaking Factors indicate the multiplier to be used to determine peak flows.
Peaking factors do not apply to infiltration and inflow

5.5.6 Infiltration and Inflow

Infiltration is groundwater, which enters sewer systems through pipe joints, porous pipes or openings in the system. Inflow is surface water, which enters the sewer system through manholes or illegal connections such as footing drains, roof drains or area drains. Inflow and Infiltration (I/I) are significant elements in any sanitary sewer system analysis and are particularly critical in wet weather climates such as the Pacific Northwest. I/I can cause overloading or surcharging of the sewer system and compromise system capacity resulting in unnecessary treatment costs and in extreme cases, environmental damages. Limiting infiltration and inflow is a primary goal of Valley View Sewer District due to these issues.

Infiltration and inflow, or I/I, is expressed in units of gallons per acre per day (gpad). Although new sewers are constructed of materials and methods to eliminate I/I, some allowances must be made for the future deterioration of facilities and potential illegal connections to the system. Typical values to compensate for infiltration/inflow in system evaluation and design are 600 gpad for infiltration and 500 gpad for inflow. These typical values must be adjusted accordingly to suit site conditions. For example, older facilities are determined on a case-by-case basis and can be as high as 1,200 gpad for infiltration and 2,500 gpad for inflow. Valley View Sewer District recognizes the need to address Inflow and Infiltration within the system.

The District has historically participated in the King County I/I study/program and also conducted analyses to determine I/I flow rates throughout the District by drainage basins. The District's data and King County data for I/I monitoring at various locations throughout the District show that basin-wide I/I rates range from approximately 1,100 gpad to greater than 2,500 gpad. Sub-basins may go beyond 2,500 gpad as noted in Section 3.5.

Although it was assumed that I/I should be maintained at 1,100 gallons per day per acre in the systems analysis, the results from the various analyses indicate that some locations may require more attention then others. The District will continue to develop other programs or projects in attempt to reduce I/I impacts.

In 2007, an initiative was undertaken within the District, involving the rehabilitation of approximately 80 Manholes in the McMicken basin. This undertaking was tracked using the McMicken Pump Station logs, providing a comprehensive record of the project's performance. The endeavor proved successful over an extended period, delivering positive outcomes. However, recent winters have brought about a set of challenges for our field team stationed at that site. Despite the incorporation of new connections, it seems that this expansion alone may not be the root cause of the capacity issues. If the resurgence of Inflow and Infiltration (I&I) is the underlying issue, a plausible explanation could be the behavior of cementitious grout, which exhibits expansion and shrinkage as the seasons shift from wet to dry. It's worth noting that historical knowledge suggests that certain older grout products remained effective for around ten water table cycles,

offering intriguing insight into the potential factors influencing the present challenges faced by the District.

In efforts to combat the persistent challenge of I&I, the District has proactively adopted a strategy involving the installation of Pipe Patch 2' Cured-In-Place Pipe (CIPP) Liners. These specialized liners are strategically placed on joints exhibiting severe Inflow and Infiltration issues. Importantly, these problematic mainline faults are identified through the careful examination of Closed-Circuit Television (CCTV) footage, showcasing the District's commitment to employing cutting-edge methods for problem identification and resolution.

In 2010, the District secured a loan from the Public Works Trust Fund (PWTF). This financial support facilitated the rehabilitation of approximately 200 stubs extending from the mainlines to property boundaries. The primary goal of this initiative was to mitigate the I&I issue. In preparation for this undertaking, the District conducted multiple TV surveys of the mains, revealing that the mainlines were not the source of the I&I. Contrary to this, the flow monitoring data consistently indicated the presence of I&I. To accurately pinpoint the source, the District conducted smoke testing within the basin, leading to the revelation that Inflow and Infiltration originated from privately owned side sewers. This revelation was pivotal in guiding the District's decision to replace over 200 stubs, effectively addressing the identified points of I&I ingress. It's important to acknowledge that while these efforts have yielded promising results, the availability of dependable post-project flow monitoring data remains uncertain, emphasizing the ongoing need for comprehensive and accurate assessment.

5.5.7 Pipe Materials

Plastic (PVC) pipe may be used for gravity sewer lines where soil foundation conditions permit and for slopes less than fifteen percent and depths less than 22 feet, unless otherwise approved by the District. A PVC pipe shall meet extra strength minimum requirements of ASTM D 3034 SDR 35 or ASTM F 789. Joints for PVC pipe shall conform to ASTM D3212 using restrained gasket conforming to ASTM F 477. Provisions shall be made for construction and expansion of each joint with a rubber ring. The bell shall consist of an integral wall section with a slid cross section rubber ring. Size and dimensions shall be as shown on the drawings. Standard pipe length shall be 12.5' and 20'.

The ductile cast iron pipe shall be Class 50 or 52 per ANSI A 21.51 or AWWA C 151. The pipe inside shall be lined with Protecto 401TM in accordance with specifications provided by Protecto 401 Ceramic Epoxy Company. The Pipe shall NOT have cement mortar lining. Coat exterior of pipe intended for below grade installation with an asphaltic material approximately one (1) mil thick. Cement lined ductile iron pipe is required for all other areas and for force mains. Ductile iron pipe placed in peat soils or potentially corrosive areas shall be polyethylene encased.

All rigid pipes must pass standard crushing, flexural and fill tests to insure the installation will be watertight and able to withstand projected earth loads.

High Density Polyethylene (HDPE) pipe with thermally fused joints is to be used for all pipe bursting and directional drilling sanitary sewer installations.

5.5.8 Sewer Locations

In general, trunk and interceptor sewers are to be located in existing street rights-of-way or proposed street areas. Where required to utilize natural drainage course and topography, specific pipes may be located within easements.

5.5.9 Depth

Minimum depth of cover for a sewer line in street right-of-way is six feet. Minimum depth of cover for sewer lines installed in easements is three feet. Shallower depths may be used if pipe crush strength analyses are provided; although in no case shall the depth of cover be less than 30-inches. Forcemain shall have a minimum cover of 4 feet except as approved by the District.

5.5.10 Separation

Wherever possible, a minimum horizontal separation of ten feet, measured edge to edge, is required between gravity sanitary sewers and any existing potable water line. Sewer lines crossing water lines are to be laid below the water lines to provide a separation of at least 18 inches between the invert of the water line and the crown of the sewer pipe. Where the required separation of lines can not be achieved, sewer lines are to be constructed as specified in the DOE Criteria for Sewage Works Design.

5.5.11 Roughness Coefficient

An "n" value of 0.013 shall be used in Manning's formula for the design of sewer facilities.

5.5.12 Slope

All sewers shall be designed and constructed to give mean velocities at design flow of not less than 2.0 feet per second (fps). The required minimum slope of pipes are indicated in Table 5-3, although slopes greater than that are sometimes required to allow for higher velocities which will reduce maintenance requirements.

In side sewers, flows at less than super-critical depth are to be avoided because the associated shallow water depths often leave solids in the pipe. Over sizing sewers with respect to capacity in order to allow the use of flatter slopes should be avoided as this may result in operational capacities below sedimentation velocity (2 fps).

Sanitary sewers are to be laid with uniform slope between manholes. Sewers with slopes greater than 15% are to be anchored securely with concrete anchors or retaining gaskets. Sewers with slopes in excess of 40% or with change in velocity greater than 5 fps at any structure shall be equipped with an approved energy dissipater. Any such devices shall be reviewed by the District on a case-by-case basis.

TABLE 5-3: MINIMUM REQUIRED PIPE SLOPES

Pipe Size	Min. Slope/ 100 Feet	Pipe Size	Min. Slope/ 100 Feet
4-inch	2.00%*	16-inch	0.14%
6-inch	1.00%*	18-inch	0.12%
8-inch	0.50%**	21-inch	0.10%
10-inch	0.28%	24-inch	0.08%
12-inch	0.22%	27-inch	0.07%
14-inch	0.17%	30-inch	0.06%
15-inch	0.15%	36-inch	0.05%

* 4 and 6-inch pipe allowed for side sewers only
** District Standard

5.5.13 Alignment

Gravity sewers shall be designed with straight alignment between manholes.

5.5.14 Downsizing

Downsizing of sewer lines, or the installation of a smaller diameter line downstream of a larger diameter line, will not be allowed, except where grade and velocity warrant and downsizing is specifically approved by the District.

5.5.15 Grinder Pump Stations

The District's intention is to provide public sewers within the District's service area so that no homeowner has to connect to public sewer via a grinder pump station. However, when no public sewer is within the vicinity for the homeowner to connect to, the homeowner may be approved by the District to connect via a grinder pump station.

Should a homeowner within the District boundary connect to the sewer system through a grinder pump station, the District must approve the type and manufacturer of the pump. Currently, the District has approved the Environmental One pump and the District will maintain spare parts for these pump systems.

The homeowner shall grant an easement to the District for operation and maintenance access. The costs associated with operation and maintenance of the grinder pumps will be covered by the homeowner.

5.6 MANHOLES

Manholes are to be installed at the end of each line, at all changes in grade, size, or alignment, at all intersections and at distances not greater than 400 feet. (Unless approved by District).

The minimum diameter of manholes is 48 inches. The minimum clear opening in manholes shall be 23 inches. For incoming pipes that are larger than 24 inches in diameter the manhole

diameter shall be 54 inches or greater. Larger size manholes may be required to accommodate special requirements.

Drop connections are discouraged in the District and shall be kept to an absolute minimum. If allowed by the District, it should be provided for a sewer entering a manhole at an elevation of 24 inches or more above the manhole invert. Where the difference in elevation between the incoming sewer and the manhole invert is less than 24 inches, the invert should be channeled to prevent deposit of solids.

FRAMES AND COVERS

Manhole frames and covers shall be dense gray cast iron conforming to the Districts Standard Details.

Covers shall have a non-skid type surface and shall have the word "SEWER" in large raised letters. Covers shall be provided with one pick hole one inch in diameter. Seating surfaces of frames and covers shall be machined finished or ground so as to assure interchangeability and non-rocking it in any position. Cover shall be bolt down type with 3 bolts. Frames and covers shall be ductile iron and all covers shall be the locking type.

5.7 PUMP STATIONS

Design and construction of sewage pump stations and force mains is to be accomplished in accordance with the following minimum design criteria:

5.7.1 Location and Flood Protection

Sewage pump stations will be located as far as practical from present or proposed built-up residential areas, and all weather road access shall be provided to all pump stations. New pump stations and rehabilitations to existing pump stations are to be submersible type. Noise control, odor control, and station architectural design must be considered in the locating and design of sewage pump stations. Sites for pump stations must be of sufficient size to accommodate expansion of facilities to meet projected build-out conditions.

Operational components must be located at elevations above established 100-year flood/wave action or shall be adequately protected against such action. All pump stations must be designed to remain fully operational during 100-year flood conditions.

5.7.2 Pumping Rate and Number of Units

At least two pumps must be provided at each pump station and each must be capable of handling the anticipated maximum flow. Where three or more pumps are provided, they shall be designed to fit actual flow conditions and must be of such capacity to handle anticipated maximum flow with the largest pump out of service.

5.7.3 Pump Cycle Ratios

A pump cycle ratio represents the percentage of time during which a pump can be expected to run. Recommended pump replacement sizes are based on cycle ratios of 70% for theoretical peak day flows as generated for the design period conditions. Pump station peaking factors of 2.5 are used to arrive at peak flows from average day figures. Conversely, average day flows represent approximately 40% of peak design flows, so that pumps sized according to recommendations operate approximately 30% of the time. These cycle ratios were selected to provide a margin of safety against pump overheating and subsequent wet well flooding which might happen if mechanical problems were to occur at or near peak flow conditions. In addition, lower cycle ratios imply less running time and, therefore, longer pump life. Pump cycle ratios must be appropriate to provide a margin of safety against pump overheating and subsequent wet well flooding.

5.7.4 Pumps

Pumps shall be capable of passing spheres of at least 3 inches in diameter. Pump suction and discharge openings shall be at least 4 inches in diameter.

Pumps shall be placed so that under normal operating conditions they will operate under a positive suction head (unless otherwise approved).

5.7.5 Controls

Air operated pneumatic controls, float switches or ultrasonic controls will be used for all sewage pump stations. Provisions should be made to automatically alternate pumps in use. Pump stations with motors and/or controls below-grade should be equipped with a secure external disconnect switch. Controls must be designed and approved by the District prior to installation.

5.7.6 Site Water

Pump stations shall provide site water service with a required backflow prevention device.

5.7.7 Bypass/Storage

On-site or portable power units should be incorporated into station design. Small stations may require a plug-in device for a portable generator unit; however, large stations will require permanent standby power. Where portable generators are used, storage must be provided to permit time for the generator to be delivered and installed.

5.7.8 Alarm System

The District has a computer controlled, monitored alarm system for each District owned and operated pump station. The system checks each station's status hourly, 24-hours a day, for the following conditions: Intrusion; Power failure; Wet dry well; High wet well; Low wet well; Smoke; Operator in trouble; and/or, Line failure. Testing of the circuitry is required for verification prior to operation.

Test circuits should be provided to enable the alarm system to be tested and verified as in good working order.

CHAPTER 6

SYSTEM ANALYSIS AND RECOMMENDATIONS

6.1 GENERAL

This section of the Plan discusses existing system analysis and provides recommendations for future system improvements, extensions and operational improvements. It is based on the population and flow projections, existing system data and minimum design criteria presented in previous sections and includes system analysis information described in this section. Included are discussions and recommendations pertaining to: resolving existing limitations in the system, meeting projected system requirements in terms of capacity, improving system operation by rerouting flows, reconfiguring drainage basins and eliminating pump stations and extending service to currently unserved areas. A summary of recommended improvements, their estimated costs, proposed schedule and financing is included in Chapter 7 and Chapter 9.

6.2 SYSTEM ANALYSIS

This section describes the analysis of the collection system's ability to meet the needs of the existing and projected customers of the District's ultimate sewer service area. The analysis was performed using various tools; including a spreadsheet analysis accomplished using Microsoft Excel™ and a computer model that was constructed to simulate how the sewer system operates under various flow and growth projections. The computer software used in modeling the system is InfoSWMM® by Innovyze of Monrovia, California.

InfoSWMM® is an ArcGIS-centric hydraulic, hydrologic, and water quality simulation model for urban drainage and sewer networks. It provides analysis for the planning and management of sanitary sewer networks. The model utilizes various interfaces with GIS and utilizes the Innovyze tool GIS Gateway to exchange relevant system database files from the District's GIS to be used by the InfoSWMM® model data and user interface. The information exchanged from the District's GIS includes conveyance system facility data and layers for parcels, streets, and drainage basin boundaries. The model utilizes all of these layers to determine flows in various portions of the system and identifies potential problem areas under a given set of development conditions. Detailed descriptions of the data developed for the model is included in the following subsections.

6.2.1 Data Input

In developing the InfoSWMM model's Conveyance System layer (pipes and manholes), existing system mapping developed for the District's GIS was utilized. GIS data was brought into the InfoSWMM® model inclusive of all District trunk line mains, side street pipelines, and their connected manholes. All associated pipe material, diameter, and lengths along with manhole rim and invert elevations were incorporated into the

InfoSWMM® modeling program. PACE evaluated the existing system and determined for ease of modeling to eliminate all cleanouts as these are not considered to contribute a significant amount of wastewater flow. Updated pump station data was also used to modify the Conveyance System layer of the model. This information was provided by the District and is summarized in Table 4-1. The final component of the system analysis is the infiltration and inflow rates established for various areas of the District. These rates were estimated based on District and King County flow measurements and modeling and entered into the model as described in Section 6.2.2.2 below and in Section 3.5.

6.2.2 Development of System Flows

Municipal wastewater consists of base wastewater flow, groundwater infiltration and surface water inflow. These types of flow are included in both the InfoSWMM® and spreadsheet modeling processes. A more detailed discussion of these flows and how they were considered in the analyses is presented below.

6.2.2.1 Wastewater Flows

Population data from the Puget Sound Regional Council (PSRC) was used to develop modeling scenarios for the twenty-year planning horizon starting with year 2020 and increasing in five-year increments until 2040. The data received from PSRC contained estimates for both residential and commercial populations within the District's boundaries. These estimates were allocated per parcel within the District's sewered service area. All residential and commercial populations associated with parcels outside of the District's sewered service area were excluded from the model. Existing flow conditions as well as projected flow conditions based on the District's population growth were analyzed. A peaking factor of 2.5 was applied to residential and commercial base flows to determine peak wastewater flow.

Flow contributions per capita were used for residential and office/commercial populations.

6.2.2.2 Infiltration and Inflow

Infiltration occurs as a result of groundwater unintentionally entering the wastewater system through joints and cracks in pipes and manholes. The volume of infiltration is mainly influenced by age and condition of the system and by the amount of rainfall. Infiltration is also affected by system proximity to larger bodies of water and by tidal influences near low lying seashores.

Inflow is the water that unintentionally enters the sanitary system directly. Inflow might occur due to overflowing storm drain systems or might result from illegal connections to the sanitary sewer system (typically from area, roof or footing drains).

Typical values to compensate for I & I in system evaluation and design are 600 gpad for infiltration and 500 gpad for inflow. These typical values must be adjusted accordingly to suit local conditions. For example, older facilities are

determined on a case-by-case basis and can be as high as 1,100 gpad for infiltration and 2,500 gpad for inflow.

Specific data regarding actual I & I rates were calculated prior to this Plan update are available from both the District's flow monitoring efforts as well as monitoring performed by King County in the past. In order to accurately estimate I & I flow within the sub-basins, a number of sub-basin characteristics are considered. These factors included pipeline age and materials, land use, concentrations of on-site disposal systems, open space, lakes and surface water, significant portions of sub-basins situated adjacent to the Puget Sound, and pump stations which have exhibited higher levels of I & I flows. Based on this information, average I & I was adjusted for each sub-basin and considered in the analyses. I & I ranged from 1,100 gallons per acre per day (in accordance with The District's contract with King County) to a small area of the Rainier Vista Basin where I & I rates are thought to be in excess of 13,200 gallons per acre per day (gpad). The weighted average of I & I in the District at the present time is estimated at just over 2,500 gallons per acre per day. For reference, it is noted that if the District were able to reduce I & I in the aforementioned area where it currently exceeds 13,000 gpad, the District-wide average could be reduced to less than 2,000 gpad.

For modeling purposes in InfoSWMM, the I & I rates were allocated per sewered parcel by multiplying the associated basin's I & I by the parcel's total area to obtain gallons per day. This I & I was then added to the peak residential and peak commercial flows to determine the total peak wastewater flow per parcel.

6.2.2.3 Pattern of Usage

Diurnal curves for various types of connections represent typical flow patterns within the service area. The diurnal curves reflect the relative use of unit flow of water throughout the day and assist in analysis of facilities under peak flow conditions. The various diurnal curves used to reflect usage patterns for different populations in the analysis are presented in Figures 6-1.

The residential curve in Figure 6-1 shows peak usage in the early morning hours. A smaller peak starts to develop in the late afternoon/early evening. The unit diurnal curve used to represent office/retail/industrial consists of several peaks. Water usage increases in the morning as people arrive at work and a peak occurs during lunchtime. Water usage then declines and rises again as the workday ends and reaches the highest peak during the day. The hospital diurnal curve was estimated to fall somewhere between the residential and the office/retail/industrial curve. Water usage in the hospital at night remains fairly consistent compared to the other two curves. It is assumed that an additional small peak occurs around midnight as shift change occurs.

In the InfoSWMM model, the peak flow scenario was the only scenario modeled for residential and commercial populations. The output from the

model presents sewer flows at the peak condition (which based on the diurnal curves is in the morning hours between 8am and 10am). The InfoSWMM model output can be considered a snapshot in time for peak flows throughout the system. The InfoSWMM model can be fine tuned and calibrated, if deemed necessary, to show sewer pipe capacities and flows for different times of the day. However, when selecting areas to be considered for capital improvements the most important factor is available pipe capacity during peak events. Thus the peak flow scenarios as modeled by InfoSWMM are considered sufficient to identify areas where it is necessary to, firstly, resolve existing limitations in the system and, secondly, meet projected system requirements in terms of residential and commercial population growth.

The diurnal curves show unit flows. The peak is 100 percent of the unit flow. These curves are used to distribute the daily flows throughout the day. The peak flows contributed to the system occur based on the peak in the curve. As described above, the InfoSWMM model calculates the peak sewer flows based on residential and commercial population peak flows plus I & I contributions to sewer flow. These flows can then used to determine the peak hour, the peak day and the average day flows.

It is important to note that while there has been flow monitoring in the past, there has not been recent monitoring done to confirm peak flows that are shown within the hydraulic model.

Figure 6-1

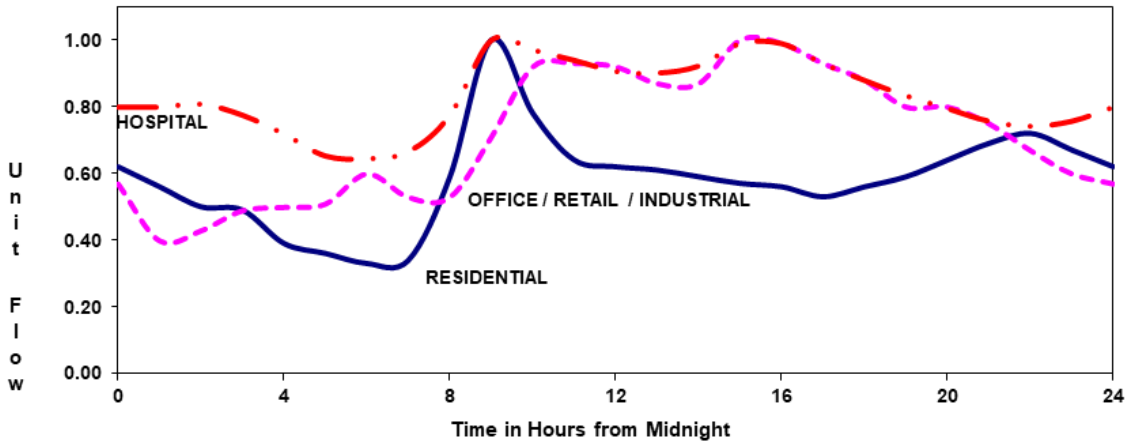


Figure 6- 1: Diurnal Curve - Residential Usage

6.3 DRAINAGE BASIN ANALYSIS

The estimated I & I per basin serves as the starting point for the system analyses and determination of recommended improvements to the existing system and I & I rates were presented in detail in Chapter 5 of this Plan. This data combined with review of historical repair records and viewing of video inspection tapes of specific pipe runs provided a realistic view of existing facilities and opportunities for system improvements and/or extensions to provide service to parcels that are currently undeveloped or rely on on-site septic tanks for wastewater treatment and disposal. Detailed system improvements recommendations are presented in Chapter 7.

A primary goal of the system analysis was to identify unsewered areas that could be directed to the least expensive treatment provider without creating exorbitant pumping costs. Although no significant changes in the previously aligned basins between King County WWTFD served areas and those areas that flow to other jurisdictions for treatment, it is recommended that the District continue to review opportunities for directing flows westerly to SWSSD on a case by case basis.

The InfoSWMM model was run for the entire twenty-year planning horizon in five year increments (ie. 2020, 2025, 2030, 2035, and 2040). The results produced by the model represent a one day snapshot for peak wastewater flows for all pipes and manholes in the District's system. Pipe capacity was the main component analyzed when evaluating potential system improvements. The model results provide pipe capacity (d/D) as the percentage of the used capacity over the total available capacity, where d represents the actual wastewater flow depth through the pipe and D is the maximum available depth. If d/D exceeded 75%, then the pipe is considered under capacity and it is recommended to evaluate system improvement options to provide the additional required capacity.

This Page Is Intentionally Left Blank.

CHAPTER 7

CAPITAL IMPROVEMENTS PLAN

7.1 GENERAL

This section of the Comprehensive Plan details the results of analysis of the existing sanitary sewer system and provides a detailed Capital Improvements Plan (CIP) for implementation by the District.

As discussed in Chapter 6, analysis of the system has been accomplished by drainage basin and includes evaluation of all existing facilities (interceptors, collectors and pump stations) in each basin with regard to the current and projected flows. Alternatives for correction of deficiencies in the existing system and improvements required to serve the existing and forecasted customers of the District were developed and considered prior to finalization and adoption of the CIP.

Through continued upgrades and a stringent preventive maintenance program, Valley View Sewer District has developed a sound sanitary sewer collection system with few known deficiencies, aside from typical system replacement requirements that are inherent to any utility system. Although it is District policy to provide sanitary sewer service to all new development within its service area, it is difficult to predict the timing of new development. In the Valley View area, it is also difficult to predict the type and magnitude of future developments that may be associated with the on-going expansion of the Airport and the construction of a Sound Transit train station in the heart of the District's commercial area. Nevertheless, this plan puts forth a conceptual plan for sewering all areas of the District, but recognizes that the exact sizing and location of facilities will be determined at the time the service extensions are requested.

Different alternatives for sending flow from expanded sections are considered, specifically sending customers to Southwest Suburban Sewer District (SWSSD) and Midway Sewer District. If they were to switch to Midway, they would need to pay an Impact Charge. Along with this, Midway would need to service 200 residences in a short amount of time. Their system would possibly need upgrades in order to effectively service this amount of people. Possible connecting to SWSSD in order to save rate payers money in comparison to King County treatment, however that might not be feasible if gravity flow is not possible.

7.2 RECOMMENDED IMPROVEMENTS

The Capital Improvements identified in Table 7-2 at the end of this Chapter include three distinct types of improvements: System extensions associated with providing sewer service to the entire sewer service area; renewal and replacements that are required to maintain the District's investment in the system and replace aging pipelines prior to their failure; and finally, the improvements noted by system analyses and District staff that are required to correct specific deficiencies in the system. System extensions and renewal and replacement projects are

identified on the Comprehensive Plan Map at the back of this document according to the Project ID number assigned in the table.

As noted earlier in this Plan, there are three separate treatment providers that the District maintains contracts with for the treatment and disposal of wastewater generated by the customers of the District. When considering extension of service to unsewered areas of the District, a primary goal was to identify ways to direct flow to the least expensive treatment provider(s) without creating exorbitant pumping costs. Although there are no significant changes in the previously aligned basins between King County WWTD served areas and those areas that flow to other jurisdictions for treatment, it is recommended that the District continue to review opportunities for directing flows to westerly to SWSSD or southerly to Midway on a case by case basis.

Regular renewal and replacement projects have primarily been identified by review of pumping and I & I flow monitoring records provided by the District. Although Valley View has remained at the forefront of reducing I & I despite the fact that it maintains one of the oldest sewer systems in the region, continued flow monitoring by the District remains a key element for identifying future improvement projects. These projects begin by analysis of flows by sub-basin. The District moves flow meters and conducts manual and video inspections upstream until those pipes contributing the most I & I can be pinpointed. Video inspections assist both in the identification of which pipes require replacement or rehabilitation and in determining the best construction technology for the project. This process has allowed Valley View to extend the useful life of the system while maintain reasonable rates by limiting replacements to those facilities that require it most.

Other CIP projects are for severe problem areas that become evident as the system ages. Using a combination of system modeling, video inspection records and District staff knowledge and maintenance records, the entire system was reviewed for problem areas requiring specific and/or immediate repair. This type of project has been included in detail whenever possible so that adequate funds can be budgeted. It is noted, however, that specific pipe deficiencies will continue to become apparent to the District as facilities age and deteriorate. For this reason, an annual allowance is set aside for emergency pipeline repair, restoration or replacement of pipes that have not yet been identified as deficient. For the purposes of obtaining funding – these future improvements are included in the CIP and given an annual cost of $300,000 per year.

Aside from emergency pipe repair or spot repairs, restoration, and replacement, annual allowances for pipe rehabilitation or reline have also been set aside to rehabilitate pipes that are made from clay, asbestos cement (AC), concrete, and cast iron. Pipes made from these materials are likely to have been installed in the mid-20th century and are at risk for deficiencies and failure due to degradation from corrosion, cracking, and problems due to age. There is currently approximately 250,000 linear feet of this pipe within the District and to rehab or reline all this pipe within the next 25 years, $1,000,000 a year is being allocated to this program and is included in the CIP.

Typically side sewer construction is not included in the CIP project's budget. However, when funding sources are able to allocate money to the construction of side sewers, the side sewers construction is added. The CIP table indicates which projects with side sewers.

7.3 COST ESTIMATES

Cost estimates have been developed for each project outlined in the Capital Improvements Plan. Cost estimates are based on past experience with similar projects, engineering judgment, anticipated time of year for construction, localized conditions affecting construction, competitive bidding conditions, and other factors. Because of these intangible factors, the exact cost of construction can vary significantly and cannot be accurately predicted until actual bids are received.

Due to the general nature of the projects recommended herein and the lack of detail on any particular project, it is important to realize that the actual design of the project and possible changes to the project scope could significantly alter the cost of the projects shown. Prior to initiation of the projects, project specifics should be detailed and cost estimates updated to reflect current conditions.

The cost estimates presented in Table 7-1 are based on 2022 prices and reflect total project costs. Total project costs included construction costs, contingency factors, and overhead costs such as engineering, administration, legal fees, taxes, etc. Overhead costs are estimated at 45% of the construction cost and are broken down in Table 7-1.

Operation and maintenance costs, the costs of land acquisition and easements, and permit costs, although potentially significant, have not been included in overhead costs or in project cost estimates. These costs should be considered in the initial design phase of any improvements.

Revenue sources for financing District operations and capital expenses include rates, Utility Local Improvement Districts (ULIDs), bonds, grants and loans. Each of these specific revenue sources are discussed in further detail in the following paragraphs.

Table 7-1: Cost Estimates – Overhead

Element of Project	% of Construction Cost
Engineering, Planning and Surveying	12.0%
Inspection	8.0%
Sales Tax	8.6%
District Administration	2.0%
Legal Fees	4.4%
Contingency	10.0%
TOTAL	45.0%

7.4 PROJECT SCHEDULES

The Capital Facilities Plan outlined in Table 7-2 has been developed for a planning period from 2023 to 2052, but includes projects anticipated over the next thirty years. The anticipated construction date for each facility is outlined in Table 7-2. Valley View Sewer District develops an annual budget for construction projects. Through this process, the projects outlined in the CIP, along with any additional improvements which have been identified are scheduled for completion. In doing so, the District remains flexible in implementation of the CIP to account for the actual conditions and requirements of the District and dictate the timing of projects.

Unfortunately, it is difficult to predict the timing of development and when service to currently unsewered areas of the District will be requested. The District relies on developer extensions and ULIDs as the impetus for this type of project. The CIP therefore does not indicate a specific time schedule for many of the required projects. Instead, these projects are annotated with ARBD, or "as required by development." It is the District's policy that all extensions to the system are paid for by the property owners requesting service.

Additional information on the types of financing available to the District is put forth in the Implementation Chapter (Chapter 9) of this document.

TABLE 7-2
VALLEY VIEW SEWER DISTRICT
CAPITAL IMPROVEMENTS PROGRAM

No.	From	Along	To	Size	Length (ft)	Cost per Foot	Cost	Schedule	Funding
SEWER REHABILITATION AND REPLACEMENT PROJECTS									
R-1	**Freeway Pump Station Rehabilitation**							2023	RATES/PWTF
	Upgrade to Submersible at Station						$1,000,000		
	TOTAL						**$1,000,000**		
R-2	**24th Ave. S. Pump Station Rehabilitation**							2023	RATES/PWTF
	Upgrade to Submersible at Station						$1,000,000		
	TOTAL						**$1,000,000**		
R-3	**East Marginal Way Pump Station Rehabilitation**							2024	RATES/PWTF
	Upgrade to Submersible at Station						$1,000,000		
	TOTAL						**$1,000,000**		
R-4	**MH Redesign and Replacement at International Blvd and 32nd Ave S**							2024	RATES/PWTF
	D19-7	32ND AVE. S.	E19-2	12	40	$ 1,250	$50,000		
	TOTAL						**$50,000**		
R-5	**McMicken Pump Station Cast Iron Force Main Replacement**							2025	RATES/PWTF
	Pump Station	53rd Ave. S.	G20-13	8	1,400	$ 1,150	$1,610,000		
	TOTAL						**$1,610,000**		
R-6	**Inco Cast Iron Force Main Replacement**							2025	RATES/PWTF
	Pump Station	East Marginal Way	E11-36	8	2,290	$ 1,150	$2,633,500		
	TOTAL						**$2,633,500**		
R-7	**Generator Replacement Project**							2026	RATES/PWTF
	Miscellaneous Projects			6		$ 150,000	$900,000		
							$900,000		
R-8	**42nd Ave S**							2026	RATES/PWTF
	F12-4	42nd Ave S	F12-5	12	333	$ 1,250	$416,250		
	TOTAL						**$416,250**		
R-9	**S 150th ST and 42nd Ave S**							2027	RATES/PWTF
	E16-50	Along 42nd ave S	E16-51	12	483	$ 1,250	$603,750		
	E16-51	Along 42nd ave S	E16-53	12	450	$ 1,250	$562,500		
	TOTAL						**$1,166,250**		
R-10	**S 160th ST and Intl Blv**							2027	RATES/PWTF
	E19-11	Along S 160th ST	E18-6	10	74	$ 1,200	$88,800		
	E18-6	Along S 160th ST	E18-5	18	169	$ 1,500	$253,500		
	E18-5	Along Intl Blv	E19-1	15	224	$ 1,325	$296,800		
	E19-1	Along Intl Blv	E19-2	15	278	$ 1,325	$368,350		
	TOTAL						**$1,007,450**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM									
R-11	**Washington Memorial Park and Cemetery**							2028	RATES/PWTF
	D20-3	Along Intl Blv	D20-4	12	592	$ 1,250	$740,000		
	D20-4	Along Intl Blv	D20-5	12	509	$ 1,250	$636,250		
	D20-5	Along Intl Blv	D20-6	12	22	$ 1,250	$27,500		
	D20-6	Along Intl Blv	D20-7	12	364	$ 1,250	$455,000		
	D20-7	Along Intl Blv	D21-1	12	585	$ 1,250	$731,250		
	D21-1	Along Intl Blv	D21-2	12	380	$ 1,250	$475,000		
	D21-2	Along Intl Blv	D21-3	12	285	$ 1,250	$356,250		
	D21-3	Along Intl Blv	D21-4	12	129	$ 1,250	$161,250		
	D21-4	Along S 170th ST	D21-5	12	264	$ 1,250	$330,000		
	D21-5	Along S 170th ST	D21-13	12	438	$ 1,250	$547,500		
	D21-13	Easement	D21-14	12	474	$ 1,250	$592,500		
	D21-14	Easement	D22-10	12	503	$ 1,250	$628,750		
	D22-10	Easement	D22-11	12	104	$ 1,250	$130,000		
	D21-2	Along Intl Blv	D21-30	12	105	$ 1,250	$131,250		
	D21-30	Along Intl Blv	D21-31	12	378	$ 1,250	$472,500		
	D21-31	Along Intl Blv	D21-32	12	58	$ 1,250	$72,500		
	TOTAL						**$6,487,500**		
R-12	**Tukwila International Blvd**							2028	RATES/PWTF
	E14-34	Along Tukwila Intl Blvd	E14-35	10	130	$ 1,200	$156,000		
	E14-35	Along Tukwila Intl Blvd	E14-36	10	211	$ 1,200	$253,200		
	TOTAL						**$409,200**		
R-13	**Windsor Heights Apartments**							2029	RATES/PWTF
	D22-17	Easement	D22-14	10	32	$ 1,200	$38,400		
	D22-14	Easement	D22-15	10	34	$ 1,200	$40,800		
	TOTAL						**$79,200**		
R-14	**32nd Ave S and S 175th ST**							2029	RATES/PWTF
	E22-1	Along 32nd ST	D22-19	10	586	$ 1,200	$703,200		
	TOTAL						**$703,200**		
R-15	**20th AVE S and S 124th ST**							2030	RATES/PWTF
	C9-26	Along 20th AVE S	C9-25	12	333	$ 1,250	$416,250		
	TOTAL						**$416,250**		
R-16	**20th Ave and S 128th ST**							2030	RATES/PWTF
	F11-11	Along S 133rd ST	F11-10	15	172	$ 1,325	$227,900		
	F11-10	Along S 133rd ST	F11-9	15	318	$ 1,325	$421,350		
	F11-9	Along S 133rd ST	F12-14	15	360	$ 1,325	$477,000		
	F12-14	Along S 133rd ST	F12-13	15	201	$ 1,325	$266,325		
	TOTAL						**$1,392,575**		
R-17	**N Seatac Park**							2031	RATES/PWTF
	C11-12	West of 22nd Ave S	C11-9	18	472	$ 1,500	$708,000		
	C11-13	West of 22nd Ave S	C11-12	18	486	$ 1,500	$729,000		
	C11-21	West of 22nd Ave S	C11-13	10	596	$ 1,200	$715,200		
	TOTAL						**$2,152,200**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM									
R-18	**22nd AVE S and S 134th ST**							2031	RATES/PWTF
	C12-20	Along 22nd Ave S	C12-12	12	265	$ 1,250	$331,250		
	C12-12	Along S 134th ST	C12-11	12	328	$ 1,250	$410,000		
	C12-11	N Seatac Park	C12-4	12	322	$ 1,250	$402,500		
	C12-12	Along S 134th ST	C12-13	10	300	$ 1,200	$360,000		
	C12-16	Along 22nd Ave S	C12-15	10	230	$ 1,200	$276,000		
	C12-15	Along 22nd Ave S	C12-12	10	249	$ 1,200	$298,800		
	TOTAL						**$1,337,300**		
R-19	**S 133rd St and 24th Ave S**							2032	RATES/PWTF
	D12-4	Along S 133rd ST	D12-3	12	292	$ 1,250	$365,000		
	TOTAL						**$365,000**		
R-20	**S 136th ST**							2032	RATES/PWTF
	C13-18	Easement	C13-9	10	84	$ 1,200	$100,800		
	C13-9	Along S 136th ST	C13-12	12	242	$ 1,250	$302,500		
	C12-23	Across 136th ST	C13-9	12	35	$ 1,250	$43,750		
	TOTAL						**$447,050**		
R-21	**East of Bow Lake Park**							2033	RATES/PWTF
	DS G23-7	Easement	G22-8	10	320	$ 1,200	$384,000		
	G22-8	Easement	G22-7	10	186	$ 1,200	$223,200		
	G22-6	Easement	G22-4	10	535	$ 1,200	$642,000		
	TOTAL						**$1,249,200**		
R-22	**S 99th PL and S 100th ST**							2033	RATES/PWTF
	B3-19	Easement along S 99th PL	B3-20	12	325	$ 1,250	$406,250		
	B3-18	North of S 100th ST	B3-19	12	241	$ 1,250	$301,250		
	B4-13	Easement South of 100th ST	B3-18	12	472	$ 1,250	$590,000		
	B4-13	Easement South of 100th ST	B4-14	12	458	$ 1,250	$572,500		
	TOTAL						**$1,870,000**		
R-23	**2011 Towing Pump Station Rehabilitation**							2034	RATES/PWTF
	Upgrade to Submersible at Station						$1,000,000		
	TOTAL						**$1,000,000**		
R-24	**S. 142nd St. East of 24th Ave S. Rehab**							2034	RATES/PWTF
	ST D14-42	Easement	D14-7	8	100	$ 1,150	$115,000		
	D14-7	Easement	D14-5	8	317	$ 1,150	$364,550		
	D14-5	S. 142ND ST.	D14-4	10	80	$ 1,200	$96,000		
	D14-8	24th Ave S	D14-3	10	331	$ 1,200	$397,200		
	D14-3	S. 142ND ST.	D14-4	10	370	$ 1,200	$444,000		
	D14-4	Easement	D14-2	10	950	$ 1,200	$1,140,000		
	D14-2	Easement	D14-1	10	184	$ 1,200	$220,800		
	D14-1	Easement	D13-16	10	368	$ 1,200	$441,600		
	D13-16	24th Ave S	C13-15	10	181	$ 1,200	$217,200		
	C13-15	24th Ave S	C13-17	10	261	$ 1,200	$313,200		
	C13-17	24th Ave S	D13-7	10	12	$ 1,200	$14,400		
	D13-7	24th Ave S	D13-2	10	351	$ 1,200	$421,200		
	TOTAL						**$4,185,150**		
R-25	**136th and Des Moines Improvements**							2035	RATES/PWTF
	C13-7	South on 18th Ave S.	C13-8	18	300	$ 1,500	$153,000		
	TOTAL						**$153,000**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM									
R-26	**24th Ave S. and 22nd Pl. S. Improvements**							2035	RATES/PWTF
	STUB C5-39	22ND PL S.	C5-37	8	150	$ 1,150	$172,500		
	C6-6	ESMT BHD 10847 24TH AVE S	C6-4	10	328	$ 1,200	$393,600		
	C6-4	ESMT BHD 10847 24TH AVE S	C6-3	10	231	$ 1,200	$277,200		
	CO C6-12	ESMT BHD 2204 S 111TH PL	C6-11	10	157	$ 1,200	$188,400		
	C6-11	ESMT BHD 2204 S 111TH PL	C6-10	10	323	$ 1,200	$387,600		
	TOTAL						**$1,031,700**		
R-27	**Glen Acres DR S**							2036	RATES/PWTF
	B5-3	Along S 105th ST	B5-4	12	103	$ 1,250	$128,750		
	B5-5	Along Glen Acres DR S	B5-3	12	214	$ 1,250	$267,500		
	B5-6	Along Glen Acres DR S	B5-5	12	381	$ 1,250	$476,250		
	B5-8	Along Glen Acres DR S	B5-6	12	298	$ 1,250	$372,500		
	B5-10	Along Glen Acres DR S	B5-8	12	297	$ 1,250	$371,250		
	B5-11	Along Glen Acres DR S	B5-10	12	204	$ 1,250	$255,000		
	B5-12	Along Glen Acres DR S	B5-11	12	307	$ 1,250	$383,750		
	B6-1	Along Glen Acres DR S	B5-12	12	398	$ 1,250	$497,500		
	TOTAL						**$2,752,500**		
R-28	**N 27th Ave S**							2036	RATES/PWTF
	D5-5	Easement	D5-4	12	388	$ 1,250	$485,000		
	D5-4	Easement	D5-3	12	442	$ 1,250	$552,500		
	D5-3	Easement	D5-2	12	453	$ 1,250	$566,250		
	D5-2	Easement	D5-1	12	482	$ 1,250	$602,500		
	D5-1	Easement	D5-8	10	94	$ 1,200	$112,800		
	D5-9	Easement	D5-8	10	232	$ 1,200	$278,400		
	D5-9	Easement	D5-10	10	305	$ 1,200	$366,000		
	D5-6	Easement	D5-2	12	586	$ 1,250	$732,500		
	D5-7	Easement	D5-6	12	589	$ 1,250	$736,250		
	D5-7	Easement	D6-30	8	244	$ 1,150	$280,600		
	D6-18	Easement	D5-7	10	467	$ 1,200	$560,400		
	TOTAL						**$5,273,200**		
R-29	**E Marginal Way S and S 124th ST**							2037	RATES/PWTF
	E9-6	Along E Marginal Way S	E10-15	15	354	$ 1,325	$469,050		
	E9-7	Along S 124th ST	E10-15	10	549	$ 1,200	$658,800		
	E10-15	Along S 124th ST	E10-16	15	486	$ 1,325	$643,950		
	E10-14	Along E Marginal Way S	E10-15	10	556	$ 1,200	$667,200		
	E11-57	Along E Marginal Way S	E10-14	10	1,492	$ 1,200	$1,790,400		
	E11-58	Along E Marginal Way S	E11-57	10	468	$ 1,200	$561,600		
	E11-36	Along E Marginal Way S	E11-58	10	280	$ 1,200	$336,000		
	E11-36	Along E Marginal Way S	CO E11-37	8	319	$ 1,150	$366,850		
	CO E11-37	Along S 130th ST	E11-38	8	61	$ 1,150	$70,150		
	TOTAL						**$5,564,000**		
R-30	**S 133rd ST & Macadam RD S**							2038	RATES/PWTF
	F12-1	S 133rd ST	F12-9	12	141	$ 1,250	$176,250		
	F12-9	S 133rd ST	F12-10	12	453	$ 1,250	$566,250		
	TOTAL						**$742,500**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM									
R-31	**S 133rd ST**							2039	RATES/PWTF
	F11-10	Along S 133rd ST	F11-11	15	172	$ 1,325	$227,900		
	F11-9	Along S 133rd ST	F11-10	15	318	$ 1,325	$421,350		
	F12-14	Along S 133rd ST	F11-9	15	360	$ 1,325	$477,000		
	F12-13	Along S 133rd ST	F12-14	15	201	$ 1,325	$266,325		
	TOTAL						**$1,392,575**		
R-32	**S 120th ST and E Marginal Way S**							2039	RATES/PWTF
	D9-44	Along S 120th ST	E9-1	10	399	$ 1,200	$478,800		
	E8-28	Easement	E9-1	10	269	$ 1,200	$322,800		
	E9-1	Along S 120th ST	E9-2	10	695	$ 1,200	$834,000		
	E9-2	Along S 120th ST	E9-3	10	436	$ 1,200	$523,200		
	E9-3	Along E Marginal Way S	E9-9	10	1,181	$ 1,200	$1,417,200		
	E9-9	Along E Marginal Way S	E9-4	10	511	$ 1,200	$613,200		
	TOTAL						**$4,189,200**		
R-33	**S. 102nd and 12th Ave S. Area Improvements**							2040	RATES/PWTF
	B4-29	West on S. 102nd St	B4-28	12	141	$ 1,250	$176,250		
	B4-28	West on S. 102nd St	B4-27	12	118	$ 1,250	$147,500		
	B4-27	West on S. 102nd St	B4-24	12	145	$ 1,250	$181,250		
	B4-24	West on S. 102nd St	B4-23	12	135	$ 1,250	$168,750		
	B4-23	West on S. 102nd St	B4-22	12	281	$ 1,250	$351,250		
	B4-22	West on S. 102nd St	B4-21	12	279	$ 1,250	$348,750		
	TOTAL						**$1,373,750**		
R-34	**47th Ave S. Sewer Main Replacement (from S. 173rd St. to S. 172nd Pl.)**							2041	RATES/PWTF
	F22-18	47th Ave S.	F22-23	12	280	$ 1,250	$350,000		
	TOTAL						**$350,000**		
R-35	**S. 116th St. & 20th Ave. S. Improvements**							2042	RATES/PWTF
	C8-1	Easement	B8-3	10	37	$ 1,200	$44,400		
	B8-3	16th Ave S	B8-2	10	311	$ 1,200	$373,200		
	B8-2	16th Ave S	B8-1	10	400	$ 1,200	$480,000		
	B8-1	Easement	CO C8-65	10	69	$ 1,200	$82,800		
	CO C8-65	Easement	C8-28	10	157	$ 1,200	$188,400		
	C8-28	Easement	C8-27	10	400	$ 1,200	$480,000		
	C8-27	Easement	C8-26	10	335	$ 1,200	$402,000		
	C8-26	Easement	C8-25	10	363	$ 1,200	$435,600		
	C8-25	20th AVE S	C7-4	10	212	$ 1,200	$254,400		
	C7-4	21st AVE S	C7-3	10	186	$ 1,200	$223,200		
	C7-3	22nd AVE S	C7-2	10	400	$ 1,200	$480,000		
	C7-2	23rd AVE S	ST C7-42	10	178	$ 1,200	$213,600		
	TOTAL						**$3,657,600**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM									
R-36	**16th Ave S. and 15th Ave. S. Improvements**							2042	RATES/PWTF
	B4-46	16TH AVE S & 15TH AVE S	C4-10	10	370	$ 1,200	$444,000		
	TOTAL						**$444,000**		
R-37	**99th Street Critical Interceptor Improvements**							2045	RATES/PWTF
	B4-13	North on 9th Ave S, then East	B3-18	15	319	$ 1,325	$422,675		
	B3-18	North on 9th Ave S, then East	B3-19	15	163	$ 1,325	$215,975		
	B3-19	North on 9th Ave S, then East	B3-20	15	220	$ 1,325	$291,500		
	B3-21	East on S. 99th Street	B3-22	18	460	$ 1,500	$690,000		
	C3-3	Along W. Marginal Way	C3-4	18	330	$ 1,500	$495,000		
	TOTAL						**$2,115,150**		
R-38	**ACE Seatac Hardware**							2046	RATES/PWTF
	E18-7	Easement	E18-46	18	113	$ 1,500	$169,500		
	TOTAL						**$169,500**		
R-39	**15th PL S and S 92nd ST**							2046	RATES/PWTF
	B1-2	Easement E of 14th Ave S	B1-1	12	521	$ 1,250	$651,250		
	B1-3	Easement	B1-2	12	235	$ 1,250	$293,750		
	B1-4	Easement W of 15th PL S	B1-3	12	132	$ 1,250	$165,000		
	B1-5	Easement W of 15th PL S	B1-4	10	130	$ 1,200	$156,000		
	B1-6	Along 15th PL S	B1-5	10	246	$ 1,200	$295,200		
	C1-1	Along 15th PL S	B1-6	10	387	$ 1,200	$464,400		
	C1-2	Along 15th PL S	C1-1	10	385	$ 1,200	$462,000		
	C1-3	Along S 92nd St	B1-5	10	305	$ 1,200	$366,000		
	C2-1	South of S 92nd St	C1-3	10	267	$ 1,200	$320,400		
	C1-4	Along S 92nd St	C1-3	10	324	$ 1,200	$388,800		
	C2-2	South of S 92nd St	C1-4	10	270	$ 1,200	$324,000		
	C2-3	South of S 92nd St	C1-6	10	263	$ 1,200	$315,600		
	C1-5	North of S 92nd St	C1-6	10	385	$ 1,200	$462,000		
	C1-7	Along S 92nd St	C1-6	10	501	$ 1,200	$601,200		
	TOTAL						**$5,265,600**		
R-40	**S 96th ST**							2047	RATES/PWTF
	C2-16	Along S 96th ST	B2-6	10	268	$ 1,200	$321,600		
	C2-14	Along S 96th ST	C2-16	10	422	$ 1,200	$506,400		
	C2-13	Along S 96th ST	C2-14	10	379	$ 1,200	$454,800		
	C2-12	Along S 96th ST	C2-13	10	387	$ 1,200	$464,400		
	C2-11	Along S 96th ST	C2-12	10	160	$ 1,200	$192,000		
	C2-15	Along S 96th ST	C2-11	10	265	$ 1,200	$318,000		
	TOTAL						**$2,257,200**		
R-41	**Myers Way**							2047	RATES/PWTF
	A2-21	Along Myers Way	A2-17	12	213	$ 1,250	$266,250		
	TOTAL						**$266,250**		
R-42	**East of Des Moines Memorial Drive**							2048	RATES/PWTF
	B3-33	Across Des Moines Memorial DR	B3-34	15	50	$ 1,325	$66,250		
	B3-34	Easement East of Des Moines Memorial DR	C3-1	15	632	$ 1,325	$837,400		
	TOTAL						**$903,650**		
R-43	**North of 17th PL S**							2048	RATES/PWTF
	C3-3	Easement	c3-4	15	457	$ 1,325	$605,525		
	TOTAL						**$605,525**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM									
R-44	**South of 17th PL S**							2048	RATES/PWTF
	C4-22	Easement	C4-21	24	139	$ 1,750	$243,250		
	TOTAL						**$243,250**		
R-45	**East of S 103rd ST**							2049	RATES/PWTF
	C4-26	Easement	C4-25	24	316	$ 1,750	$553,000		
	TOTAL						**$553,000**		
R-46	**North of 22nd PL S**							2049	RATES/PWTF
	C5-30	Easement	C4-27	24	396	$ 1,750	$693,000		
	C5-31	Easement	C5-30	24	564	$ 1,750	$987,000		
	C5-32	Easement	C5-31	24	441	$ 1,750	$771,750		
	C5-32	Easement	B4-14	24	549	$ 1,750	$960,750		
	TOTAL						**$3,412,500**		
R-47	**E Marginal Way and S 112th ST**							2050	RATES/PWTF
	E6-8	Easement	E6-6	8	136	$ 1,150	$156,400		
	TOTAL						**$156,400**		
R-48	**Rosenberg Ave S and 26th Ave S**							2050	RATES/PWTF
	C6-3	Along Rosenberg Ave S	C6-2	18	333	$ 1,500	$499,500		
	D6-1	Along Rosenberg Ave S	C6-3	18	217	$ 1,500	$325,500		
	D6-2	Along Rosenberg Ave S	D6-1	18	593	$ 1,500	$889,500		
	D6-3	Along Rosenberg Ave S	D6-2	18	495	$ 1,500	$742,500		
	D6-4	Along Rosenberg Ave S	D6-3	18	286	$ 1,500	$429,000		
	D7-1	Along Rosenberg Ave S	D6-4	18	237	$ 1,500	$355,500		
	D7-29	Along Rosenberg Ave S	D7-1	15	337	$ 1,325	$446,525		
	D6-4	Easement	D6-6	10	213	$ 1,200	$255,600		
	D6-6	Easement	D6-7	10	353	$ 1,200	$423,600		
	D6-7	Across 26th Ave S	D6-10	10	184	$ 1,200	$220,800		
	D6-10	Easement	Freeway Wet Well	10	63	$ 1,200	$75,600		
	TOTAL						**$4,663,625**		
R-49	**Roseberg Ave S**							2051	RATES/PWTF
	C7-24	Along Roseberg Ave S	C7-28	12	226	$ 1,250	$282,500		
	TOTAL						**$282,500**		
R-50	**Roseberg Ave S and S 116th ST**							2051	RATES/PWTF
	C7-21	Along Roseberg Ave S	C7-22	12	465	$ 1,250	$581,250		
	C8-42	Along Military RD S	C7-21	12	262	$ 1,250	$327,500		
	C8-36	Across Military RD S	C8-42	12	79	$ 1,250	$98,750		
	C8-47	Along S 116th ST	C8-42	10	179	$ 1,200	$214,800		
	TOTAL						**$1,222,300**		
R-51	**E Marginal Way S across the Duwamish River**							**2052**	RATES/PWTF
	E7-4	Along E Marginal Way S	E7-3	8	1,026	$ 1,150	$1,179,900		
	E7-7	Along S 116th ST	E8-1	8	485	$ 1,150	$557,750		
	E8-5	Along 38th Ave S	E7-7	8	167	$ 1,150	$192,050		
	E8-5	Along 38th Ave S	E8-6	8	260	$ 1,150	$299,000		
	E8-6	Along S 117th ST	E8-9	8	208	$ 1,150	$239,200		
	E8-10	Along S 117th ST	E8-9	8	389	$ 1,150	$447,350		
	E8-11	Along S 117th ST	E8-10	8	46	$ 1,150	$52,900		
	E8-12	Along S 117th ST	E8-11	8	435	$ 1,150	$500,250		
	TOTAL						**$3,468,400**		
SUBTOTAL - REHABILITATION / REPLACEMENT PROJECTS:							**$85,950,575**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM										
SEWER EXTENSION PROJECTS (New Construction)										
N-1	**S 112th St (W of SR 509)**									ULID/DE
	Occidental	S 112th St	4th Ave S	8	220	$	1,150	$253,000		
	S 110th St	Occidental	S 112th St	8	650	$	1,150	$747,500		
	5th Ave S	S 111th St	6th Ave S	8	500	$	1,150	$575,000		
	N of 111 th St	6th Ave S	4th Ave S	8	900	$	1,150	$1,035,000		
	TOTAL							**$2,610,500**		
N-2	**8th Ave S Trunk**									ULID/DE
	810' N of 110th St	8th Ave S	366' N of 110th	8	444	$	1,150	$510,600		
	Gracey Ext	Easerment	8th Ave S	8	215	$	1,150	$247,250		
	900' N of 112th St	8th Ave S	140' N of 112th St	8	760	$	1,150	$874,000		
	TOTAL							**$1,631,850**		
N-3	**Riverton Crest (Military Rd & S 140th St)**									ULID/DE
	200' N of S. 144th St.	31st Ave. S.	CO D14-41	8	820	$	1,150	$943,000		
	D14-40	W side of Military Rd	850' South	8	850	$	1,150	$977,500		
	S 140th St	E side of Military Rd	790' South	8	790	$	1,150	$908,500		
	S 140th St.	33rd Ave S	34th Ave S	8	885	$	1,150	$1,017,750		
	TOTAL							**$3,846,750**		
N-4	**NW McMicken (Military & 164th, 162nd & 42nd)**									ULID/DE
	32nd Ave S	S 164th St.	160' W of 34th Ave. S.	8	500	$	1,150	$575,000		
	S 164th St	34th Ave S	300' S of S 164th	8	300	$	1,150	$345,000		
	Btwn S 162nd & S 164th	Easement	300' W of Military	8	800	$	1,150	$920,000		
	TOTAL							**$1,840,000**		
N-5	**51st Ave S @ S 182nd St Sewers**									ULID/DE
	S 182nd St	51st Ave S	145' S 182nd St	8	145	$	1,150	$166,750		
	51st Ave S	Easement W Side of I-5	470' S 182nd St	8	476	$	1,150	$547,400		
	Esmt W Side I-5	Esmt&S 183rd Pl	W end 183rd Pl	8	250	$	1,150	$287,500		
	Esmt W Side I-5	Easement	190' West I-5	8	150	$	1,150	$172,500		
	TOTAL							**$1,174,150**		
N-6	**S 112th St to S120th St Sewers**									ULID/DE
	S116th	8th Ave S	S 128th St	8	3,900	$	1,150	$4,485,000		
	600' N. of S. 120th	10th Ave S	600'S of S 124th St	8	1,200	$	1,150	$1,380,000		
	10th Ave S	S 115th St	W of 12th Ave S	8	540	$	1,150	$621,000		
	S 112th St	12th Ave S	250' S of S 120th St	8	2,850	$	1,150	$3,277,500		
	150' E of 12th Ave S	S 116th St	12th Ave S	8	150	$	1,150	$172,500		
	150' E of 12th Ave S	S 117th St	12th Ave S	8	150	$	1,150	$172,500		
	ST B8-13	11th Ave S	250' S ST B8-13	8	250	$	1,150	$287,500		
	ST B8-13	Esmts	East	8	160	$	1,150	$184,000		
	160' E ST B8-13	Esmts	250' South	8	250	$	1,150	$287,500		
	B7-27	S116th St	140' E B7-27	8	140	$	1,150	$161,000		
	SR 509	S 120th St	250' E of 12th Ave S	8	1,600	$	1,150	$1,840,000		
	SR 509	S 124th St	300' E of 10th Ave S	8	1,200	$	1,150	$1,380,000		
	TOTAL							**$14,248,500**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM										
N-7	**14th Ave S at S 116th St Sewers**									ULID/DE
	Glendale Way	14th Ave S	100' N of S 120th	8	2,500	$	1,150	$2,875,000		
	14th Ave S	S 115th St	500' W	8	500	$	1,150	$575,000		
	14th Ave S	S 116th St	400' W	8	400	$	1,150	$460,000		
	14th Ave S	S 117th St	400' W	8	400	$	1,150	$460,000		
	TOTAL							**$4,370,000**		
N-8	**S 120th St to S 128th St Sewers**									ULID/DE
	302' E 12th AVE S	S 120th ST	14th Ave S	8	315	$	1,150	$362,250		
	S 120th ST	14th AVE S	S 124th ST	8	1,291	$	1,150	$1,484,650		
	233' S S 120th ST	12th Ave S	250' N S 124th ST	8	823	$	1,150	$946,450		
	321 ' W 12th AVE S	S 124th St	257' E 14th Ave S	8	1,261	$	1,150	$1,450,150		
	293' S S 124th ST	Easement W 12th AVE S	12th AVE S	8	222	$	1,150	$255,300		
	127' S S 124th ST	12th Ave S	B11-1	8	1,163	$	1,150	$1,337,450		
	B10-15	14th Ave S	B11-3	8	691	$	1,150	$794,650		
	327' S S 120th ST	Easement	14th AVE S	8	324	$	1,150	$372,600		
	12th AVE S	Easement E 12th Ave S	252' N S 124th ST	8	307	$	1,150	$353,050		
	327' S S 120th ST	Easement W of 14th AVE S	264' N S 124th ST	8	728	$	1,150	$837,200		
	246' N S 124th ST	Easement E 12th Ave S	S 124th ST	8	246	$	1,150	$282,900		
	12th AVE S	Easement E 12th AVE S	206' S S 124th ST	8	170	$	1,150	$195,500		
	178' S S S 124th ST	Easement E 12th AVE S	236' S S 124th ST	8	46	$	1,150	$52,900		
	145' E 12th AVE S	Easement E 12th AVE S	224' W 14th AVE S	8	226	$	1,150	$259,900		
	246' S S 124th ST	Easement E 12th AVE S	330' S S 124th ST	8	92	$	1,150	$105,800		
	S 124th ST	Easement W 14th AVE S	234' S S 124th ST	8	234	$	1,150	$269,100		
	137' W 14th AVE S	Easement S S 124th ST	203' W 14th AVE S	8	102	$	1,150	$117,300		
	247' S S 124th ST	Easement W 14th AVE S	132' W B10-15	8	402	$	1,150	$462,300		
	B10-15	Easement W 14th AVE S	132' W B10-15	8	132	$	1,150	$151,800		
	93' E 14th AVE S	Easement S S 124th ST	149' E 14th AVE S	8	60	$	1,150	$69,000		
	215' S S 124th ST	Easement E 14th AVE S	160' W CO B10-2	8	296	$	1,150	$340,400		
	302' W CO B10-2	Easement W 16th AVE S	302' W B10-3	8	388	$	1,150	$446,200		
	302' W B10-3	Easement W 16th AVE S	96' W B10-11	8	222	$	1,150	$255,300		
	TOTAL							**$11,202,150**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM										
N-9	**Cedarhurst Sewer Extension**									ULID/DE
	S132nd	8th Ave S	S 128th St	8	1,200	$	1,150	$1,380,000		
	SR 509	S 128th St	12th Ave S (200' W)	8	1,700	$	1,150	$1,955,000		
	B12-27	S 134th St	220' W B12-27	6	220	$	1,100	$242,000		
	6th Ave S	S 136th St	MH A12-5	8	315	$	1,150	$362,250		
	S 136th St	6th Ave S	S 128th St	8	2,450	$	1,150	$2,817,500		
	S 132nd St	7th Ave S	S 128th St	8	1,200	$	1,150	$1,380,000		
	S 132nd St	8th Ave S	S 128th St	8	1,200	$	1,150	$1,380,000		
	150' N S 132nd St	Easement	8th Ave S	8	1,000	$	1,150	$1,150,000		
	S 128th St	10th Ave S	550' N of S 128th St	8	550	$	1,150	$632,500		
	TOTAL							**$11,299,250**		
N-10	**12th Ave S & S 138th St Sewers**									ULID/DE
	SWSSD 12th Pl MH	12th Pl & S 140th	500'W of 12th Pl S.	8	600	$	1,150	$690,000		
	WAD B11-31	12th Ave S	250S of S 132nd	8	580	$	1,150	$667,000		
	250'E B13-10	Easements	650'E B13-10	8	400	$	1,150	$460,000		
	Easements	Prop ULID#50 Esmts		8	1,000	$	1,150	$1,150,000		
	B13-3	Easements	150'W B13-3	8	150	$	1,150	$172,500		
	12th Pl S.	140th St.	300'E 12th	8	300	$	1,150	$345,000		
	TOTAL							**$3,484,500**		
N-11	**S 127th St & Military Road Sewers**									ULID/DE
	80' E of MH D10-21	S 127th Street(Prop ULID#42)	380'E 0f MH D10-21	8	300	$	1,150	$345,000		
	S128th ST	Easements(Prop ULID#42)	S 127th St	8	390	$	1,150	$448,500		
	TOTAL							**$793,500**		
N-12	**S. 154th St & 30th Ave. S.**									ULID/DE
	MH D17-16		750'W Mh D17-16	8	750	$	1,150	$862,500		
	S 154th St.	30th Ave S	N of 518 R/W	8	300	$	1,150	$345,000		
	S 154th St.	Easement	250' W S154th St	8	250	$	1,150	$287,500		
	TOTAL							**$1,495,000**		
N-13	**5th Ave South**									ULID/DE
	4th Pl S	5th Ave S	S 116th St.	8	950	$	1,150	$1,092,500		
	TOTAL							**$1,092,500**		
							SUBTOTAL - SEWER EXTENSION PROJECTS:	**$59,088,650**		

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

VALLEY VIEW SEWER DISTRICT CAPITAL IMPROVEMENTS PROGRAM									
OTHER PROJECT EXPENSES									
	SCADA							2027	Rates
	SCADA Upgrade			LS	1		$ 150,000		
	SCADA							2023-2029	Rates
	SCADA Annual Upgrades			LS	6	$ 30,000	$ 180,000		
								2023-2029	Rates
	New Vehicles				4	$ 50,000	$ 200,000		
	Software & Misc Items					$ 40,000			
						SUBTOTAL - OTHER PROJECT EXPENSES:	**$ 530,000**		
ANNUAL EXPENSES									
	System Mapping								Rates
	GIS Mapping						$ 35,000		
	Emergency Repairs/Spot Repairs/Replace or Rehabilitation								Rates
	Sewer System Rehabilitation			LS	3	$ 100,000	$300,000		
	Pump Station Rehabilitation/Generators								Rates
	Pump Station Rehabilitation			LS	1	$ 50,000	$50,000		
	Aging Pipe Rehabilitation or Reline								Rates
	Rehab aging pipe (Clay, AC, Conc, and CI pipe)						$1,000,000		
	Infiltration & Inflow - Annual Expenses								Rates
	Manhole Grouting			Each	60	$ 350	$21,000		
	Stub Repair			Each	10	$ 8,000	$80,000		
	Flow Monitoring			LS	1	$ 2,250	$2,250		
	Locking Manhole Lids throughout District (1600 Manholes @ $500/each)						$25,000		
	System Extensions Annual Expense								Rates
	District Financed Extensions			LS	1		$500,000		
						SUBTOTAL FOR ANNUAL EXPENSES	**$ 2,013,250**		
						SUBTOTAL FOR REHABILITATION / REPLACEMENT PROJECTS:	**$85,950,575**		
						SUBTOTAL FOR SEWER EXTENSION PROJECTS:	**$59,088,650**		
						SUBTOTAL FOR OTHER PROJECT EXPENSES:	**$ 530,000**		
	TOTAL CAPITAL IMPROVEMENTS PROJECTS						**$145,569,225**		
						ANNUAL EXPENSES:	**$ 2,013,250**	(per year)	

Notes: Costs are in 2022 dollars and include Engineering, Construction, Construction Management, Administration and Sales Tax.

Legend

CIP Projects

- Sewer Extensions
- Repair and Replacement

Old Pipe Rehab or Repair

- 1950s Clay Pipe
- 1950-1980s Asbestos Cement Pipe
- 1940-1960s Cast Iron Pipe
- 1950-1960s Concrete Pipe

- City Boundaries
- Valley View Service Boundary
- Interstate Highway
- State Route
- Manhole
- Pump Station
- Force Mains

Seattle-Tacoma International Airport

Southwest Suburban Sewer District

Midway Sewer District

Duwamish River Flow Direction

Lake Washington

Comprehensive Sewer Plan
Capital Improvement Plan Map

0 750 1,500 3,000

Feet

Map Date: April 2023

"WORKING TOWARD A BETTER ENVIRONMENT"

Valley View SEWER DISTRICT

PACE

Path: P:\KIR\P20\20045 VVSD 2021 Sewer Plan\GIS\3_Cartographic\2022 Comp Plan Map 36x48 CIP Map (Jan 6 2023).mxd

CHAPTER 8

OPERATIONS AND MAINTENANCE

8.1 GENERAL

This Chapter overviews the routine and emergency procedures that Valley View Sewer District employs for operation and maintenance of its sewer system. Specific recommendations for continued operation of the sewer utility are in accordance with State regulations and the requirements of the jurisdictions within which Valley View operates.

A prerequisite to the delivery of efficient and reliable service to all customers of the District is a competent staff organized such that the responsibility for day-to-day and emergency operations is clearly defined and executed. The following is a summary of Valley View Sewer District's organization.

The Valley View Sewer District operates as a vital sewer system serving its community, notable for its unique configuration. Unlike many other sewer systems, Valley View Sewer District does not possess its own dedicated treatment plant. Instead, it relies on established collaborative relationships with nearby treatment facilities, ensuring effective waste management and treatment processes.

Due to the specific nature of the District's operations, discussions regarding reclaimed water opportunities are notably absent from its current plan. Reclaimed water, which is treated wastewater that can be repurposed for non-potable uses like irrigation or industrial processes, isn't a central component of the District's agenda. This approach aligns with the District's concentrated focus on its core functions and reflects its commitment to fulfilling its primary role of efficient and responsible waste management. Therefore, reclaimed water is not discussed within this sewer plan.

8.2 SYSTEM RESPONSIBILITY AND AUTHORITY

8.2.1 Board of Commissioners

Overall responsibility for the District's operations lies with the elected officials. Valley View Sewer District currently has a three member Board of Commissioners that are responsible for operation, management, regulatory compliance and financial aspects of the District.

The Board of Commissioners holds regular public meetings, which are open to all customers of the District and other interested parties. Meetings are held twice monthly at the District's office.

8.2.2 District Manager and Assistant Manager

The District Manager has the overall responsibility for the management of the sanitary sewer system and all District personnel. In the event that the District Manager is not present, the Assistant Manager has full authority to act on his/her behalf.

8.2.3 Field Superintendent

The Field Superintendent reports to the District Assistant Manager and is responsible for all field operations and personnel, including routine maintenance of the system and equipment, and field emergency repair. The Field Superintendent is state certified.

8.2.4 Outside Consultants

Valley View Sewer District retains the services of outside consultants for its engineering, planning, surveying and legal requirements. In accordance with state law, engineering consultants are selected based on statements of qualifications periodically requested from specialists in sanitary sewer system engineering.

8.2.5 Other Assistance

Other assistance is required from time to time for specific District projects, maintenance and construction. The District maintains a roster of qualified contractors for small works projects and contracts with other service providers as required by District needs and in accordance with Washington State Law.

8.3 RECORD MAINTENANCE

Operation of a sewer utility requires consideration of long term records management in a format which is useful to the variety of staff members and outside consultants which use them. Valley View Sewer District maintains the following records on an ongoing basis:

- Customer Account Information: Detailed records of each sewer account are maintained through the District's computerized billing system.
- Interlocal Agreements: Copies of the District's agreements with King County- Metro, as well as monthly reports required for documentation of wastewater treatment and disposal charges are kept on file at the District Office.
- GIS Mapping: Valley View Sewer District has constructed and maintains an extensive mapping system in GIS format. Mapping is coordinated with King County Base Mapping and takes advantage of a variety of data linked to a comprehensive network of data, exhibits and records.
- Grid Mapping: The District maintains a comprehensive set of grid maps detailing existing facilities. These maps are derived from the GIS mapping and printed as a scale of 1-inch=100 feet. They are updated using as-built information as system improvements and extensions are completed.
- Comprehensive Plan Map: The Sewer Comprehensive Map, and other maps included in this document are maintained in a computerized GIS format and detail the general

location of existing and proposed facilities, as well as physical features, land use, and boundary information for the District

- Maintenance Reports: Detailed records of periodic maintenance schedules and system attributes are kept on a computerized maintenance management system. Additionally, flow monitoring is accomplished year round by the District. A signal flow meter is used to collect data, which is subsequently downloaded, into the maintenance program.

8.4 PREVENTIVE MAINTENANCE

8.4.1 General Preventive Maintenance

The District utilizes the Five Star Maintenance Management System (DMBS) software for scheduling of preventive maintenance work, and the storage, retrieval and manipulation of information, activities, and records. Generally, preventive maintenance on the District's system includes the following elements:

- All possible hazards are thoroughly and systematically identified.
- Potential failures are detected while still in their developing stages.
- Maintenance activities are prioritized and scheduled.
- Scheduled maintenance of pump stations is completed once weekly, or as needed, and operational checks are performed twice weekly.
- System cleaning and field and video inspection of the system, including lines and manholes, is scheduled and accomplished.
- District staff attends workshops and seminars in order to learn up-to-date techniques and materials.

8.4.2 Water Conservation

The District does not provide water to its customers, therefore they do not have control over the water flows and do not have their own water conservation program. The District has similar boundaries with King County Water District 125 and coordinate with them on any conservation measures when necessary. For commercial properties within the District, low flow fixtures are encouraged whenever possible.

8.5 EMERGENCY PROCEDURES

8.5.1 District Personnel

Valley View Sewer District maintains a sanitary sewer emergency response crew on 24-hour call. The District's regular telephone number (206 242 3236) is monitored 24 hours a day to allow the public to notify emergency crews at any time. This is accomplished by a voice messaging and cell phones to take after-hours calls.

The District's on-call crew is available to answer any emergency that may occur within the system and has immediate response responsibility. This includes but is not limited to,

response to lift station alarms, sewer back-ups and forcemain blockages, minor repair work and emergency response procedures required to sustain service. In the event of a major emergency, on-call staff is responsible for notifying other staff members as appropriate to conditions. Figure 8-1 (at the back of this Chapter) outlines emergency contacts and procedures.

8.5.2 Communications

The District maintains a base radio station to keep in contact with field crews. In addition, certain staff members carry portable phones and pagers for communication with the District Office or answering service.

8.5.3 Supplies and Spare Parts

The District maintains an inventory of spare parts that are required for routine maintenance and/or emergency repairs. A list of suppliers for after hours and emergency repairs is maintained for response to major emergency conditions.

8.5.4 Outside Assistance

Valley View maintains relationships with the cities within which it operates for coordination during emergency events. In addition, the District is a participant in the Washington State Association of Water and Sewer District's Mutual Aid Agreement, which provides a mechanism for participants to share resources and staff in the event of an emergency. A copy of that agreement is on file at the District office.

In addition to the relationships that the District has with other jurisdictions for emergency response there are other outside service providers which may be instrumental in emergency response. A summary of emergency contacts, and agencies, which the District may be required to notify, is provided in Table 8-1.

8.6 SYSTEM VULNERABILITY

The Valley View Sewer District sewer system consists of individual drainage basins, which convey wastewater to one of three agencies responsible for treatment and disposal. These three agencies are King County Wastewater Treatment Division (KCWWTD) which receives most flows from the area, Southwest Suburban Sewer District which is just west of Valley View, and Midway Sewer District which is south of Valley View.

The vulnerability of various components of the overall sewer system has been evaluated to identify areas which may be affected in the event of a natural or manmade disaster. System vulnerability includes loss of service, damage to property, and/or health risks which may be associated with failure of the individual components of the sanitary sewer system. A summary of the system vulnerability analysis is presented in the following paragraphs.

8.6.1 Treatment and Disposal

Valley View maintains agreements with KCWWTD, Southwest Suburban Sewer District and Midway Sewer District for the treatment and disposal of wastewater flows generated within the District. These agencies have full responsibility for adequate treatment and disposal of wastewater in accordance with the rules and regulations governing such operations. Any interruption in the treatment services provided by these agencies would likely result in discharge of untreated wastewater to the Puget Sound.

8.6.2 Sewer Mains, Trunks, and Regional Interceptors

Any pipeline is subject to clogging and, under certain circumstances, can break. Clogging of sewer lines can create backups in manholes and in severe cases, can progress back to customer properties. Pipe breaks due to settlement, deterioration of pipe material or other causes can pollute the groundwater and result in excessive infiltration and inflow.

8.6.3 Pump Stations

The District operates pump stations to serve low elevations within the system. Several of the pump stations have overflows which would operate in the event of a mechanical failure or extended power failure. These overflows could create an environmental and health hazard. Failure of a lift station could also cause significant backups.

All of the District's pump stations are equipped with alarm systems which, by telemeter, relay information regarding alarm conditions. Pump station alarms are monitored in the District's maintenance shop during normal working hours. After hours the alarms are relayed by an auto-dialer to the on-call staff member.

8.6.4 Electrical Power

Power to the northern portion of the District is provided by Seattle City Light and to the southern portion of the District by Puget Sound Energy. Both electrical utilities have an extensive power distribution grid in the Valley View area and electrical power can be provided by many different directions. Loss of power would shut down pumps and control operations, potentially resulting in pump station overflows and collector line backups. Historically, the District has not experienced regular or extended power outages and maintains backup generators for power failure events. Thirteen of the 17 stations have on-site back-up power generators. Two of the remaining four do not require back-up power supply because they equipped with either by-pass lines or overflows to other existing sewer lines. An additional portable, stand-by generator is stored at the District's maintenance shop and is available at all times for response to the remaining two stations. The District office and maintenance building are also equipped with and emergency generators.

8.6.5 Fats, Oils and Grease (FOG)

Fats, oils, and grease (FOG) pose a serious danger to sewer systems. When improperly disposed of down sink drains or toilets, FOG can accumulate and solidify inside the sewer

pipes, leading to blockages and clogs. This restricts the flow of wastewater, causing sewage backups in homes, businesses, and public areas. Such backups result in unpleasant odors, property damage, and potential health hazards. Sewer overflows caused by FOG blockages can also lead to environmental pollution, harming aquatic life and ecosystems.

Homeowners and businesses need to be aware that they may be held liable for all cleanup costs related to sewer backups. To prevent these issues, customers can follow the District's website's recommended steps: Pour cooled fats, oils, and grease into a covered, disposable container and dispose of it in the garbage (COOL IT, CAN IT, & TRASH IT). Additionally, they should use paper towels to soak up remaining FOG and dispose of it with food and yard waste. Before washing dishes, it's crucial to scrape food scraps, fats, oils, and grease into compost or trash. Using garbage disposals should be minimized, and sink strainers can be used to catch any remaining food waste while washing dishes. Regular sink drain maintenance can also help by using baking soda and white vinegar (excluding cases where commercial products were recently used to remove blockages). By following these guidelines, individuals can actively protect the sewer system from FOG-related problems and avoid potential liabilities and cleanup expenses.

8.6.6 Wellhead Protection Areas

Wellhead protection areas and unsewered areas are interconnected concepts related to safeguarding drinking water sources. A wellhead protection area is a designated zone around a groundwater well or a surface water intake where activities are regulated to prevent contamination of the drinking water supply. On the other hand, unsewered areas refer to regions lacking a centralized sewage system, relying instead on individual septic systems or other decentralized methods for wastewater disposal. The relationship between the two lies in the potential risk to drinking water sources in unsewered areas, as improper wastewater management can lead to groundwater contamination and compromise the integrity of the wellhead protection area. Therefore, implementing proper wastewater treatment and disposal measures is crucial to ensure the protection of the water supply and the health of the surrounding community.

After analyzing the locations of wellhead protection areas in comparison to existing unsewered areas in the District, it is confirmed that the two areas do not intersect. This means that the unsewered areas do not pose a risk to water wells or surface waters.

8.6.7 Odor Control

Rate payers often communicate with the District when issues arise, and the District acts promptly in problem solving. Odor complaints, while infrequent, are treated with equal seriousness. The District has observed that such complaints are generally transient and often linked to specific tenant-related factors. Whenever these issues do arise, the District's resourcefulness comes into play as it employs deodorizers within wet wells to mitigate any unpleasant odors. Moreover, the strategic design and operation of flows and lift stations contribute significantly to managing the potential for odors. These

systems boast sufficient cycling, effectively minimizing the likelihood of odor-related complaints.

In essence, the District's proactive and collaborative approach to addressing challenges, along with its diligent use of effective odor-control methods, has resulted in a notably low occurrence of both corrosion and odor issues. This accomplishment reflects the District's commitment to maintaining a high standard of service and its continuous efforts to ensure the well-being and satisfaction of its community.

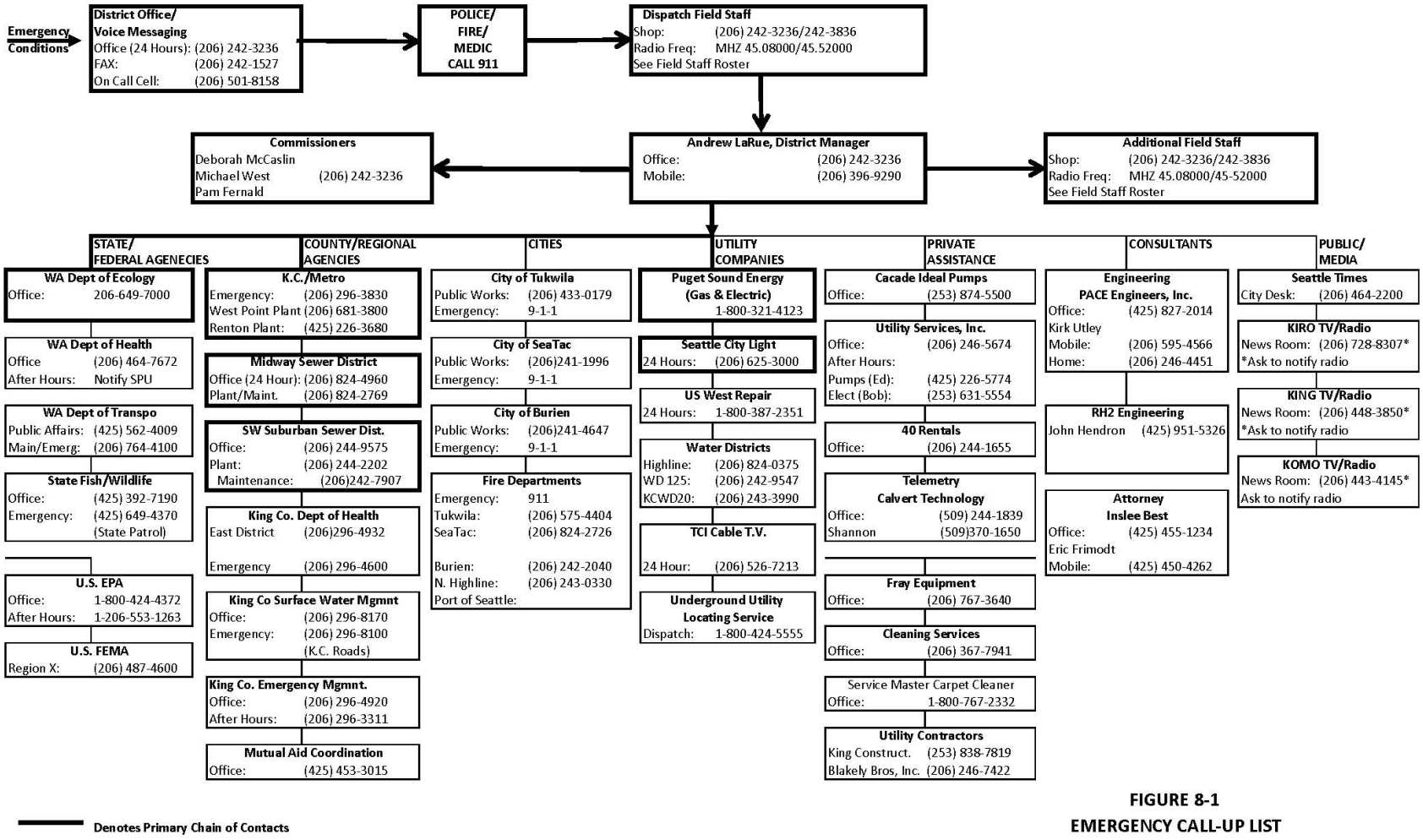


FIGURE 8-1
EMERGENCY CALL-UP LIST

Figure 8-1	*Emergency Call-Up List*	20045

CHAPTER 9

FINANCING

9.1 GENERAL

This Chapter of the Plan considers the financing option associated with construction of the improvements recommended in Section 7 of this document and outlines specific recommendations for continued operation of the sewer utility in accordance with State regulations and the requirements of the jurisdictions within which Valley View operates. Operation of a sewer utility requires consideration of a variety of expenses, which can be classified as follows:

9.2 FINANCIAL CONSIDERATIONS

- Capital Improvements Plan Projects;
- Repair and Replacement Projects;
- Administration, Operation and Maintenance Expenses;
- Debt Service Requirements; and,
- Wastewater Treatment and Disposal Costs.

9.3 FUNDING SOURCES

Revenue sources for financing District operations and capital expenses include rates, Utility Local Improvement Districts (ULIDs), Bonds, Grants and Loans. Each of these specific revenue sources are discussed in further detail in the following paragraphs.

9.3.1 Rates

Revenue from rate and charges is obtained from monthly sewer charges, permit fees, facility charges and connection charges. A summary of the District's current and projected rates and charges is presented in Table 9-1. Monthly sewer use rates were last updated in 2021. Note that the District maintains a rate schedule that accommodates the various rates paid to the three separate treatment providers to the District (King County-Metro, Midway and Southwest Suburban Sewer District). Facility and connection charges were reviewed and updated in the past and the District plans to update these charges using the projects outlined in the Capital Improvements Plan (Chapter 7). Copies of the District's rate and facility charge studies are available for review at the District office.

Table 9-1: 2022 Rates, Fees, and Charges

Customer Classification	Monthly Rates	
Residential and Condominiums Metro-King County Area Midway Area SWSSD	 $66.00 $47.73 $49.22	
Apartments and Mobile Home Parks Metro-King County Area Midway Area SWSSD	 $56.15 $47.73 $49.22	
Detached Accessory Dwelling Units Metro-King County Area Midway Area SWSSD	 $66.00 $47.73 $49.22	
Residential Plus Attached Accessory Dwelling Units Metro-King County Area Midway Area SWSSD	 $122.15 $95.46 $49.22	
Commercial/Travel Trailer Parks Metro-King County Area Midway Area SWSSD	First 750 CF $66.00 $47.73 $49.22	Each Additional 100 CF $8.80 $6.36 $6.56
Coin operated laundries are granted a 3% evaporation exemption. Delinquent Accounts are subject to 10% penalty and 12% annual interest.		
Type of Permit	**Fee**	
Single Family Residential	$100.00 Includes two inspections	
Accessory Dwelling Unit	$50.00 Includes one inspection	
Private Pump Systems	$150.00 Includes two inspections	
Commercial Structures	$0.05/square foot of ground area $100.00 minimum Includes two inspections	
Right-of-Way Permit City of Burien City of SeaTac King County City of Tukwila	 $450.00 $350.00 $475.00 $700.00	
Repair Permit	$15.00 Includes one inspection	
Capping Permit	$70.00	

Additional Inspections	$50.00
Connection Charges	**Fee**
General Facilities Charge Residential or Res. Equiv. Multi Family (per living unit) Accessory Dwelling Unit	 $4,033.00 $3,226.00 $3,226.00
System Facilities Charge Residential or Res. Equiv. Multi Family (per living unit)	 $162.00/Front Foot ($8,100.00 minimum) $8,100.00/unit
Notes: Connection Charges are one time charges due at the time of connection. Connection charges for non-residential uses are determined by estimating monthly flows/Residential Equivalents.	
SWSSD Connection Charge	**Fee**
Single Family Residence	$3,826.00
Multiple Dwelling: 2 or more units Commercial based on ERU	 $2,410.00/unit $3,826.00 minimum
Note: SWSSD connection charges reflect the costs of other jurisdictions. This one time fee is due at time of connection.	
King County Monthly Capacity Charge (For buildings connected on or after February 1, 1990)	$10.50
Single Family Residence: Net square footage (SF) less that 1,500 Net SF 1,500-2,999 Net SF 3,000 or greater	$70.39 x Residential Customer Equivalent 0.81 RCE 1.0 RCE 1.16 RCE
Multiple Dwelling: 2 – 4 units 5 or more units Commercial based on ERU	(# of units x RCE) x $70.39 0.81 RCE 0.63 RCE 0.59 RCE
Note: Treatment charges reflect the costs of other jurisdictions.	

9.3.2 Utility Local Improvement District Financing

Utility Local Improvement District (ULID) financing is a means by which improvements can be financed by those property owners directly benefiting from those improvements. This method of financing can be initiated either by property owners or by District resolution. If initiated by petition by property owners, the measure must have the support of at least 51% of property owners within the benefiting area. ULID financing is generally used for construction of local facilities and initial financing is typically by bond sales. The costs associated with the improvements are usually divided and assessed against properties, although revenue from rates can also be used to repay the bonds.

9.3.3 Bond Financing

Bond financing can be achieved by sale of either general obligation or revenue bonds. General obligation bonds must have the support of the majority of voters in the District. These bonds are paid for by assessments against properties within the District. Revenue Bonds, however, do not require voter approval and may be financed by whatever funds are available to the District for the payment of debt service. This might include revenues from water sales, general fees, latecomer charges or other funds.

9.3.4 Grant Financing

Grant financing for sanitary sewer projects has become increasingly scarce for utility systems in recent years. Grants from the Centennial Clean Water Fund, however, are still available. This program is administered by the State of Washington and is primarily for the planning, design and construction of facilities which will assist in the protection of the State's waters. Although this type of funding has been used for the construction of sanitary sewer facilities in areas adjacent to surface waters, declaration of a public health hazard is typically required for funding.

Other grant funding includes the King County Community Development Block Grant program, which in 2010 awarded the District with a grant to extend sewers south of S. 120th St along 10th Ave South in a low income neighborhood of the District currently unserved by the sewer system.

9.3.5 Loan Financing

As of late, the District has used Ecology's Clean Water State Revolving Fund program to obtain loans for their projects. The CWSRF program provides low-interest and forgivable principal loan funding for wastewater construction projects. This program was the primary funding source for the Military Road South, Hilltop and Loop projects that began in 2015.

Another source of loan financing for public utility systems in Washington is the Public Works Board, which is administered by the State of Washington Department of Commerce. The Public Works Board program is a low interest loan program which provides twenty year financing for certain public works projects with interest rates ranging from 0.5% to 1.5% depending on the level of local match funding. Generally, eligible projects are limited to public utility rehabilitation and replacement projects. The funds are distributed annually on a competitive application basis. The amount of funds vary depending on the legislature and the funds may be awarded to a qualifying jurisdiction per biennium. Valley View Sewer District has benefited from this type of financing for several projects in their past and it is recommended that the District evaluate the appropriateness of this type of financing for upcoming projects during its annual budgeting and CIP review process.

9.4 FINANCING CAPITAL IMPROVEMENTS

Capital improvements can be further defined into: (1) General facilities which are facilities such as sewer interceptors, pump stations, force mains, standby power or pumping units and other appurtenances which are required for the overall system to function properly; (2) Local facilities such as distribution mains and appurtenances which benefit a smaller area; and, (3) Individual service lines which benefit only the single property that they serve. Methods for financing each of these types of improvements are described below.

9.4.1 General Facilities

In new and expanding areas, where sewer service is not currently available, General Facilities are typically financed by one of the following methods:

- Passing a general obligation bond which is insured by the voters;
- Forming a ULID and assessing the benefiting properties equally;
- Requiring the initial developer to pay for the improvements with a pay-back arrangement as the area develops (latecomers charges);
- District funding improvements and assessing a charge to each property within the benefited area as development occurs. This charge must cover all costs incurred, including interest on money and an allowance at a rate that will amortize the investment; and/or,
- District obtaining grants or low interest loans.

In older, established areas such as the Valley View area, financing general facility improvements or replacement of major system improvements presents a unique challenge. Existing customers of the system have typically paid their fair share of general facility charges through monthly rates and connection charges and the amount of new development, and associated developer financing is typically limited. In these instances, general facilities can be constructed and paid for by the grants, bonds or other funds available to the District and rates established to cover and pay back such financing. Additionally, general facility charges are established so that the required replacements are included in the amount that new customers to the system pay for connection. Valley View recently completed a General Facility Charge study which takes into account all system improvements which have been completed in the last ten years or are proposed in the next ten years.

9.4.2 Local Facilities

Local facilities such as sewer collection lines and appurtenances benefit a smaller area than general facilities do. The costs for these improvements can be directly attributable to the property owners benefited and are typically financed by the following methods:

- Formation of a ULID (Utility Local Improvement District)
- Developer Extension Agreements;
- Payback Latecomer Agreements; and/or,

- Grants and outside assistance to reduce local costs and/or District participation.
- Funding local facilities improvement from rates is not recommended because it would result in all customers paying for improvements which benefit only a small area.

9.4.3 Individual Service Lines

Individual service lines are typically financed by the customer receiving service from such facilities.

9.5 FINANCING RECOMMENDED IMPROVEMENTS

The Capital Improvements Plan put forth in Chapter 7 of this Plan indicates that more than $85 million is required to accomplish all the recommended improvements associated with renewals and replacements to the system. Since this amount of money is clearly not available form rates and charges, alternative methods of financing must be used. Potential financing options for each project are identified in the CIP. Wherever possible, the District utilizes developer contributions for construction of required extensions and ULIDs for extending service to unsewered areas. In addition to continuing this method of financing extension improvements, it is recommended that the District continue to apply for State Public Works Board funding for appropriate projects as identified in the CFP.

9.6 OTHER CONSIDERATIONS

As discussed in Chapter 2 of this Plan, portions of the District are within the limits of the cities of Seattle, Tukwila, SeaTac, and Burien. In accordance with the laws of the State of Washington, cities which already operate sanitary sewer systems (Tukwila) could assume responsibility for the sewer facilities and service to that portion of the system which is within their limits. For cities which do not currently have sanitary sewer system facilities, establishment of a utility in accordance with state laws would be required prior to takeover. Although no formal discussion regarding takeover of Valley View has taken place, all parties agree that coordination between jurisdictions is required to protect the interest of the residents of the area. It is recommended that Valley View continue its coordination efforts with these jurisdictions in order to insure uniform design and permitting procedures. In addition, it is recommended that the District negotiate franchise agreements with the cities having jurisdiction. These franchise agreements should detail the terms and conditions of operating sanitary sewer facilities within city and county rights-of-way.

Appendix A
SEPA Checklist

THIS PAGE IS INTENTIONALLY LEFT BLANK.

VALLEY VIEW SEWER DISTRICT
DETERMINATION OF NON-SIGNIFICANCE

NOTICE OF ACTION

Notice is given under SEPA RCW 43.21C.080, that ***Valley View Sewer District*** took the action described in (2) below on ***March 15, 2023.***

1. Any action to set aside, enjoin, review, or otherwise challenge such action on the grounds of non-compliance with the provisions of Chapter 43.21C RCW (State Environmental Policy Act) shall be commenced by appeal to ***Board of Commissioners of Valley View Sewer District on or before 10pm, May 2, 2023.***

2. Description of Agency Action: ***Determination of Non-Significance for Project action with respect to Valley View Sewer District's General Sewer Plan Update.***

3. Description of Proposal: ***Update the Valley View Sewer District General Sewer Plan.***

4. Location of Proposal: ***Valley View Sewer District is generally located in south King County, east of Puget Sound and west of Interstate 5.***

5. Type of environmental review under SEPA: ***Project Action, Project SEPA Checklist dated December 15, 2022 and DNS signed March 17, 2023.***

6. Documents may be examined during regular business hours at: ***Valley View Sewer District, 3460 South 148th Street, Suite 100, Burien, WA 98168*****. Public comments will be accepted at the District Commissioners Board meeting to be held at the Valley View District office on Monday May 2, 2023 at 5:30pm.**

7. Name of agency giving notice: ***Valley View Sewer District.***

8. This notice is filed by: ***Andrew LaRue, General Manager, Valley View Sewer District.***

_____ DATE 03/17/2023

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist:

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

***Instructions for applicants*:** [help]

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for Lead Agencies:

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals: [help]

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

Valley View Sewer District
Environmental Checklist

A. background [help]

1. Name of proposed project, if applicable: [help]

Valley View Sewer District Comprehensive Sewer Plan Update

2. Name of applicant: [help] *Valley View Sewer District*

3. Address and phone number of applicant and contact person: [help]

Andrew LaRue, General Manager
Valley View Sewer District
3460 South 148th Street, Suite 100
Tukwila, WA 98168
(206) 242-3236

Paul Weller, Senior Project Manager
PACE Engineers, Inc.
11255 Kirkland Way, Suite 300
Kirkland, WA 98033
(425) 827-2014

4. Date checklist prepared: [help] *December 15, 2022*

5. Agency requesting checklist: [help] *Valley View Sewer District*

6. Proposed timing or schedule (including phasing, if applicable): [help]

An updated Capital Improvement Plan is included in Chapter 7 of the Plan and better defines the priority and detail of extending sewers to unsewered areas of the District. The District is submitting applications to the Washington Department of Ecology (Ecology) for the State Revolving Fund (SRF) and Centennial Grant fund for projects included in this Plan update. Specific timing of improvements will depend on the availability of funding, the schedule of development, and sewer system requirements. Completion of the Comprehensive Sewer Plan including all applicable approvals is expected in 2023.

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. [help]

Refer to Chapter 7 of the updated Comprehensive Sewer Plan for detailed information regarding the future improvements for Valley View's sewer system. The Plan does not include land use changes and only considers the sewer system improvements required to meet existing and projected population of the service area outlined in the Plan. Additional activity related to the individual projects identified in the Plan is anticipated in accordance with the Capital Improvements Plan implementation.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. [help]

Additional environmental documents may be required for implementation of specific projects recommended in the Plan. Completion of environmental documentation will be accomplished in accordance with the threshold determination and other requirements of the State Environmental Policy Act.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. [help]

None are applicable to this proposal.

STATE OF WASHINGTON -- KING COUNTY

--ss.

415260 No.

VALLEY VIEW SEWER DISTRICT

Affidavit of Publication

The undersigned, on oath states that he is an authorized representative of The Daily Journal of Commerce, a daily newspaper, which newspaper is a legal newspaper of general circulation and it is now and has been for more than six months prior to the date of publication hereinafter referred to, published in the English language continuously as a daily newspaper in Seattle, King County, Washington, and it is now and during all of said time was printed in an office maintained at the aforesaid place of publication of this newspaper. The Daily Journal of Commerce was on the 12th day of June, 1941, approved as a legal newspaper by the Superior Court of King County.

The notice in the exact form annexed, was published in regular issues of The Daily Journal of Commerce, which was regularly distributed to its subscribers during the below stated period. The annexed notice, a

PN:DNS NOTICE OF ACTION

was published on

03/24/23 03/31/23

The amount of the fee charged for the foregoing publication is the sum of $292.80.

JENNIFER A BARNES 96738 NOTARY PUBLIC COMM. EXPIRES 10-24-23 STATE OF WASHINGTON

Subscribed and sworn to before me on

03/31/2023

Notary public for the State of Washington,
residing in Seattle

Affidavit of Publication

State of Washington, King County

VALLEY VIEW SEWER DISTRICT
DETERMINATION OF NON-SIGNIFICANCE
NOTICE OF ACTION

Notice is given under SEPA RCW 43.21C.080, that ***Valley View Sewer District*** took the action described in (2) below on **March 15, 2023.**

1. Any action to set aside, enjoin, review, or otherwise challenge such action on the grounds of non-compliance with the provisions of Chapter 43.21C RCW (State Environmental Policy Act) shall be commenced by appeal to **Board of Commissioners of Valley View Sewer District on or before 10pm, May 2, 2023.**

2. Description of Agency Action: **Determination of Non-Significance for Project action with respect to Valley View Sewer District's General Sewer Plan Update.**

3. Description of Proposal: **Update the Valley View Sewer District General Sewer Plan.**

4. Location of Proposal: **Valley View Sewer District is generally located in south King County, east of Puget Sound and west of Interstate 5**.

5. Type of environmental review under SEPA: **Project Action, Project SEPA Checklist dated December 15, 2022 and DNS signed March 17, 2023.**

6. Documents may be examined during regular business hours at: **Valley View Sewer District, 3460 South 148th Street, Suite 100, Burien, WA 98168. Public comments will be accepted at the District Commissioners Board meeting to be held at the Valley View District office on Monday May 2, 2023 at 5:30pm.**

7. Name of agency giving notice: **Valley View Sewer District**.

8. This notice is filed by: **Andrew LaRue, General Manager, Valley View Sewer District.**

/s/ DATE 03/16/2023

Dates of publication in the Seattle Daily Journal of Commerce, March 24 and 31, 2023.

3/31(415260)

10. List any government approvals or permits that will be needed for your proposal, if known. [help]

Approvals from the State of Washington Department of Ecology and King County are required. Opportunity for review, comment, and approval have also be given to the cities of Seattle, SeaTac, Tukwila, and Burien in accordance with State and County regulations governing comprehensive utility planning. **(Tribes too?)**

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.) [help]

This proposal contemplates the adoption of the updated Valley View Sewer District Comprehensive Sewer Plan. The Plan addresses future sewer system needs within the District's sewer service area boundary as described in Chapter 7 of the Plan. The Plan recommends a Capital Facilities Plan in accordance with the design criteria.

This Environmental Checklist addresses the Comprehensive Sewer Plan from a conceptual standpoint only. It does not attempt to address the environmental concerns associated with individual projects identified in the Plan. Environmental determination, if required, will be made for each project individually as it is designed. In that respect, this SEPA checklist is considered the first step in a phased review of individual projects as provided for in WAC 197-11-060(5).

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [help]

As indicated on Figure 1-1 (Location Map) and Figure 1-2 (Vicinity Map), Valley View Sewer District is generally located in south King County. The District generally lies east of Puget Sound and west of Interstate 5. All or part of the following Sections are included in the District's sewer service area:

Section	Township	Range
5	23 N	4 E
17	23 N	4 E
8	23 N	4 E
4	23 N	4 E
9	23 N	4 E
16	23 N	4 E
21	23 N	4 E
28	23 N	4 E
3	23 N	4 E
35	23 N	4 E

Section	Township	Range
32	24 N	4 E
33	24 N	4 E
10	23 N	4 E
15	23 N	4 E
22	23 N	4 E
27	23 N	4 E
34	23 N	4 E
26	23 N	4 E
23	23 N	4 E

B. ENVIRONMENTAL ELEMENTS [help]

1. Earth

a. General description of the site [help]
(circle one): Flat, **ROLLING**, **HILLY**, **STEEP SLOPES**, mountainous,
other _____

b. What is the steepest slope on the site (approximate percent slope)? [help]
Does not apply to this proposal. Steep slopes will be addressed at the project level.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [help]
Not Applicable. Soil types will be addressed when specific project proposals are submitted for approval.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [help]
Not Applicable. Geologic hazards will be addressed when specific project proposals are submitted for approval.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [help]
Not Applicable. Filling and grading quanties and types will be addressed when specific project proposals are submitted for approval.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [help]
Not Applicable. Erosion hazards will be addressed when specific project proposals are submitted for approval.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [help]
Not Applicable. Construction is not proposed.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [help]
Not Applicable.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [help]
Not Applicable.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [help]
Not Applicable.

c. Proposed measures to reduce or control emissions or other impacts to air, if any: [help]
Not Applicable.

3. **Water**

a. Surface Water: [help]

1) **Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.** [help]

The primary hydrologic feature in the District's service area is the Duwamish River, which flows through the northeastern portion of the District. Other small tributaries within the District include Hamms Creek and several unnamed streams which flow into the Duwamish.

2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [help]

Not Applicable. This proposal is for the adoption of a Sewer System Plan document only.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [help]

Does not apply to this proposal.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [help]

No.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [help]

The Duwamish River contains a 100-year floodplain, per FEMA's Preliminary 100-year floodplain map.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [help]

No.

b. Ground Water:

1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [help]

Does not apply to this proposal. Groundwater will not be withdrawn as a result of this proposal.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [help]

No waste materials would be dischared into the ground as a result of this proposal.

c. Water runoff (including stormwater):

1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [help]

Does not apply to this proposal.

2) Could waste materials enter ground or surface waters? If so, generally describe. [help]

No.

3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

No.

d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Does not apply to this proposal. There would be no impacts on surface, ground, or runoff water or drainage patterns.

4. **Plants** [help]

a. Check the types of vegetation found on the site: [help]

_X__deciduous tree: alder, maple, aspen, other
_X__evergreen tree: fir, cedar, pine, other
_X__shrubs
_X__grass
____pasture
____crop or grain
____ Orchards, vineyards or other permanent crops.
_X__ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other
____water plants: water lily, eelgrass, milfoil, other
_X__other types of vegetation: *typical urban, domestic landscaping.*

b. What kind and amount of vegetation will be removed or altered? [help]

None as a result of this Sewer Plan update.

c. List threatened and endangered species known to be on or near the site. [help]

None known.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [help]

Does not apply to this proposal. Landscaping needs would be addressed at the project level.

e. List all noxious weeds and invasive species known to be on or near the site.

None known

5. **Animals**

a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include: [help]

birds: hawk, heron, eagle, **SONGBIRDS**, other:
mammals: deer, bear, elk, beaver, other: *urban mammals (squirrels, rats, etc.)*
fish: bass, salmon, trout, herring, shellfish, other _____

b. List any threatened and endangered species known to be on or near the site. [help]

None known

c. Is the site part of a migration route? If so, explain. [help]

The Pacific Flyway traverses most of the Pacific Northwest.

d. Proposed measures to preserve or enhance wildlife, if any: [help]

Not Applicable. There would be no impact to wildlife as result of this proposal.

e. List any invasive animal species known to be on or near the site.

None known

6. **Energy and natural resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [help]

Does not apply to this Sewer Plan Update.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe. [help]

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any: [help]

None. The proposed projects in the Capital Improvements chapter of the plan would be gravity flow systems.

7. **Environmental health**

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [help]

There are no environmental health hazards associated with this proposal.

1) Describe any known or possible contamination at the site from present or past uses.

Does not apply to this proposal. Possible contamination will be addressed at the project level.

2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

Does not apply to this proposal. Possible hazards will be addressed at the project level.

3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

No chemicals will be stored, used, or produced as a result of this proposal.

4) Describe special emergency services that might be required.

None.

5) Proposed measures to reduce or control environmental health hazards, if any:

Does not apply to this proposal.

b. **Noise**

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [help]

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indi-cate what hours noise would come from the site. [help]

None.

3) Proposed measures to reduce or control noise impacts, if any: [help]

Does not apply.

8. **Land and shoreline use**

a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [help]

Land use within the District is predominantly single-family, with some anticipated multifamily development, and minimal commercial and industrial use outside of Sea-Tac Airport operations. The proposal will not effect current

land uses on nearby or adjacent properties.

b. Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [help]

Does not apply to this proposal. No farmland would be converted as a result of this proposal.

1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No.

c. Describe any structures on the site. [help]

Structures within the District consist of single-family, multi-family, commercial, and industrial structures.

d. Will any structures be demolished? If so, what? [help]

No.

e. What is the current zoning classification of the site? [help]

Zoning within the District includes various residential, commercial, and industrial designations.

f. What is the current comprehensive plan designation of the site? [help]

The comprehensive plan designation within the District includes various residential, commercial, and industrial designations.

g. If applicable, what is the current shoreline master program designation of the site? [help]

Does not apply.

h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [help]

Critical areas such as streams, wetlands, steep slopes, and floodplains exist within the service area and will be addressed at the project level.

i. Approximately how many people would reside or work in the completed project? [help]

None.

j. Approximately how many people would the completed project displace? [help]

None.

k. Proposed measures to avoid or reduce displacement impacts, if any: [help]

Does not apply.

L. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [help]

The Plan is prepared in compliance with jurisdictional land use codes.

m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

Does not apply to this proposal.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, mid-dle, or low-income housing. [help]

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [help]

None.

c. Proposed measures to reduce or control housing impacts, if any: [help]

Does not apply. Impacts to housing would be addressed at the project level.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [help]

Does not apply. Structures are not proposed.

b. What views in the immediate vicinity would be altered or obstructed? [help]

Does not apply.

c. Proposed measures to reduce or control aesthetic impacts, if any: [help]

Does not apply.

11. Light and glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [help]

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views? [help]

No.

c. What existing off-site sources of light or glare may affect your proposal? [help]

None.

d. Proposed measures to reduce or control light and glare impacts, if any: [help]

Does not apply.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity? [help]

There are various recreational opportunities within the District in the form of parks and riverfront.

b. Would the proposed project displace any existing recreational uses? If so, describe. [help]

No.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [help]

Does not apply.

13. Historic and cultural preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [help]

There are several residential neighborhoods with houses that are over 45 years old. Properties listed in national, state, or local preservation registers would be addressed at the project level.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [help]

None known. Professional studies will be conducted at the time of project development if deemed necessary.

c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [help]

Does not apply to this proposal. Cultural and historic resources will be addressed at the project level.

d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Does not apply.

14. Transportation

a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [help]

Major access points include Interstate 5, SR 99, SR 518, SR 509, SR 599 and Military Road (see Figure 2-2).

b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [help]

Metro bus service is available throughout the service area.

c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [help]

None.

d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [help]

No.

e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [help]

Does not apply to this proposal. A portion of the District's southwest boundary abuts the Sea-Tac International Airport.

f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [help]

None.

g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No.

h. Proposed measures to reduce or control transportation impacts, if any: [help]

Does not apply. There would be no impacts on transportation as a result of this proposal.

15. **Public services**

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [help]

Does not apply.

b. Proposed measures to reduce or control direct impacts on public services, if any. [help]

Does not apply. The Plan update would not impact public services.

16. Utilities

a. Circle utilities currently available at the site: [help]
ELECTRICITY, NATURAL GAS, WATER, REFUSE SERVICE, TELEPHONE, SANITARY SEWER, SEPTIC SYSTEM, other _____

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [help]

There is no construction associated with this proposal.

C. Signature [HELP]

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Paul Weller

Name of signee Paul Weller

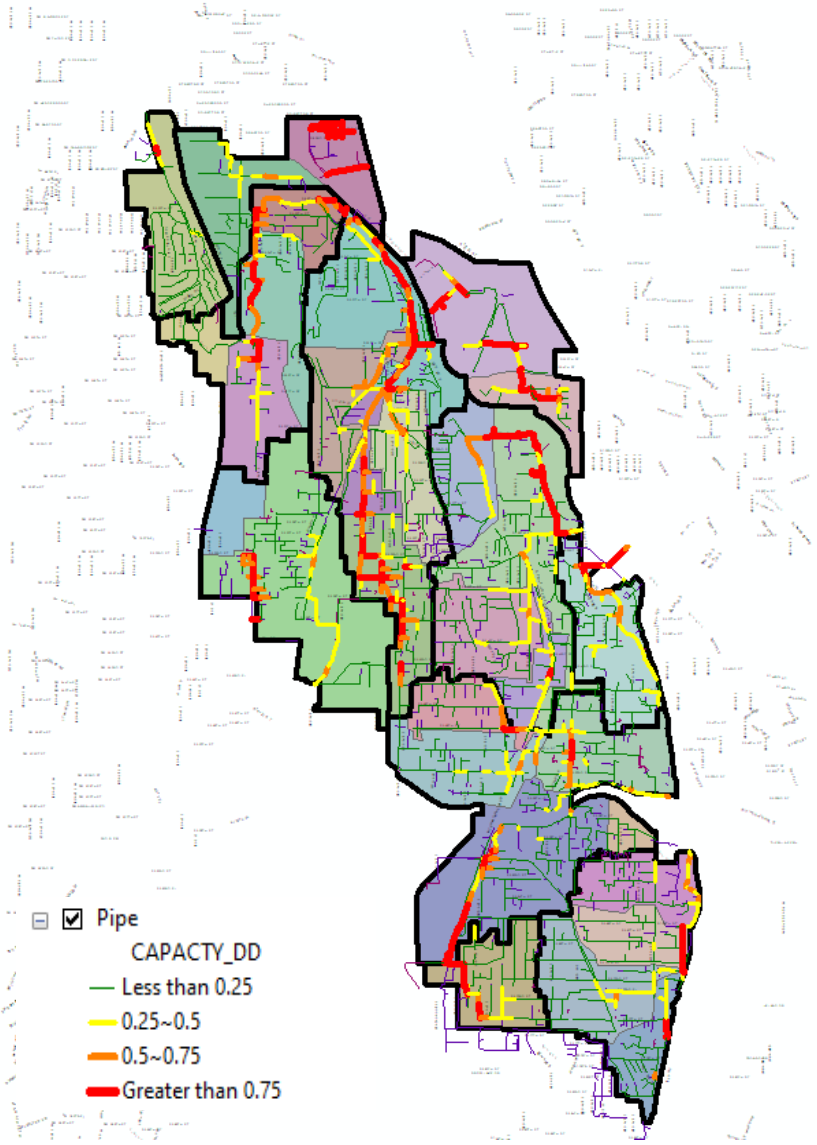
Position and Agency/Organization Senior Project Manager, PACE Engineers, Inc.

Date Submitted: December 15, 2022

Appendix B
Model Results

THIS PAGE IS INTENTIONALLY LEFT BLANK.

Peak 2040 InfoSWMM Model Analysis Results

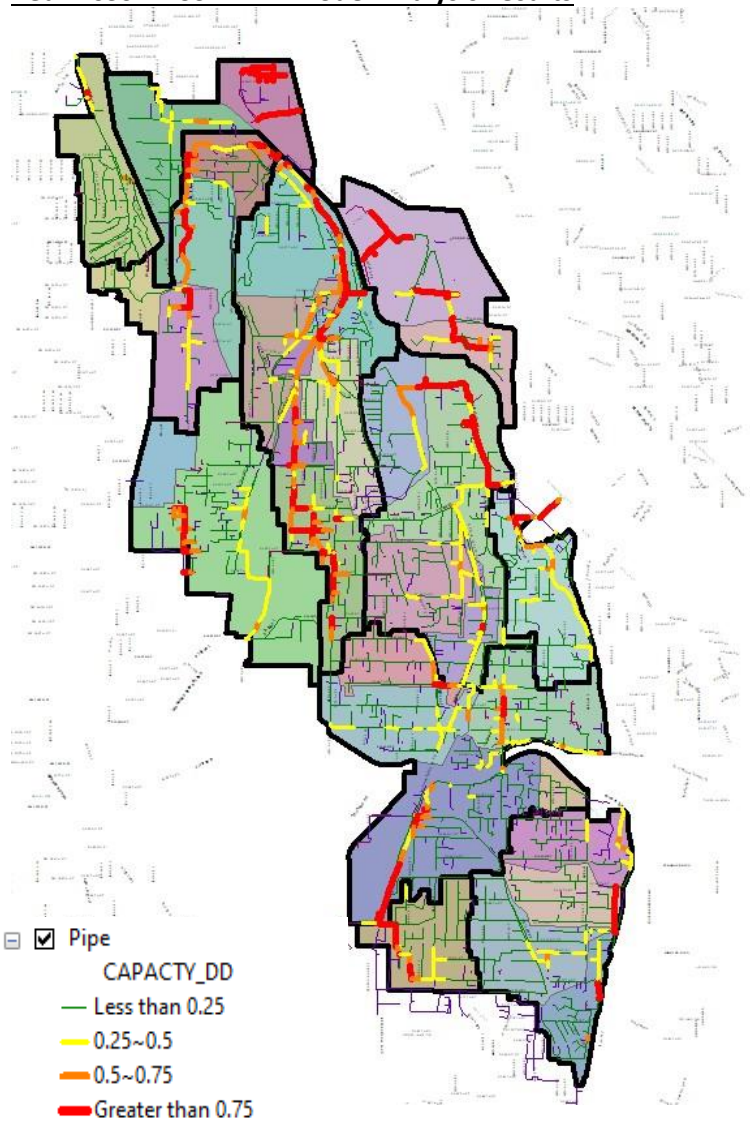


Table

Pipe

FLOW_CLASS	DEPTH	HGL	VELOCITY	VOLUME	FROUDE_NUM	CAPACTY_DD
0	0.049	335.558	1.095	10.168	1.052	0.031
0	0.151	352.061	0.216	141.327	0.116	0.176
0	0.304	350.126	2.436	26.535	0.886	0.458
0	0.321	349.982	2.323	23.515	0.818	0.483
0	0.048	352.051	0.949	27.333	0.923	0.033
0	0.27	352.184	1.33	498.441	0.519	0.392
0	0.158	361.971	2.336	79.943	1.233	0.181
0	0.145	363.79	2.466	119.669	1.36	0.161
0	0.179	365.048	1.777	113.952	0.877	0.216
0	0.061	384.49	1.6	39.086	1.381	0.046
0	0.167	366.076	1.89	85.036	0.967	0.196
0	0.172	366.487	1.711	47.421	0.863	0.204
0	0.168	367.189	1.647	65.859	0.839	0.199
0	0.094	380.709	0.31	80.629	0.214	0.086
0	0.076	386.637	1.271	51.717	0.983	0.064
0	0.055	395.973	1.314	14.766	1.197	0.04
0	0.035	397.076	0.836	10.338	0.959	0.02
0	0.027	402.021	0.873	7.609	1.143	0.014
0	0.121	371.603	2.275	24.313	1.382	0.124
0	0.086	381.201	1.31	64.604	0.947	0.076
0	0.11	373.138	2.588	55.363	1.648	0.11
0	0.023	388.223	1.607	10.582	2.284	0.011
0	0.143	373.72	1.411	79.446	0.785	0.159
0	0.091	399.202	0.266	82.92	0.187	0.083
0	0.136	375.202	1.195	120.267	0.683	0.148
0	0.075	381.038	0.679	40.822	0.527	0.063
0	0.095	376.717	1.181	45.542	0.816	0.088
0	0.058	397.038	1.618	34.603	1.436	0.043
0	0.113	363.681	1.284	76.455	0.809	0.112
0	0.034	399.031	0.958	7.761	1.101	0.02
0	0.033	399.965	0.832	8.367	0.977	0.019
0	0.129	361.124	0.362	129.171	0.212	0.14
0	0.166	362.644	0.766	42.642	0.393	0.195
0	0.181	362.229	1.871	143.625	0.916	0.227
0	0.179	361.333	2.033	220.693	1.001	0.223
0	0.227	353.225	1.61	260.381	0.695	0.31
1	0.825	18.595	0.004	311.906	0	1
0	0.181	315.82	2.944	36.066	1.441	0.223
0	0.103	320.336	3.082	42.821	2.033	0.1
0	0.326	325.773	2.781	420.639	0.994	0.363
0	0.286	324.789	3.325	405.634	1.281	0.303
0	0.053	355.218	0.357	38.167	0.332	0.037
0	0.165	330.206	1.389	105.068	0.71	0.247
0	0.089	330.631	0.118	31.621	0.084	0.079
0	0.138	330.91	1.531	54.298	0.863	0.192
<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>
0	0.477	17.455	1.491	2501.745	0.393	0.773
0	0.066	337.559	1.473	1.767	1.22	0.052

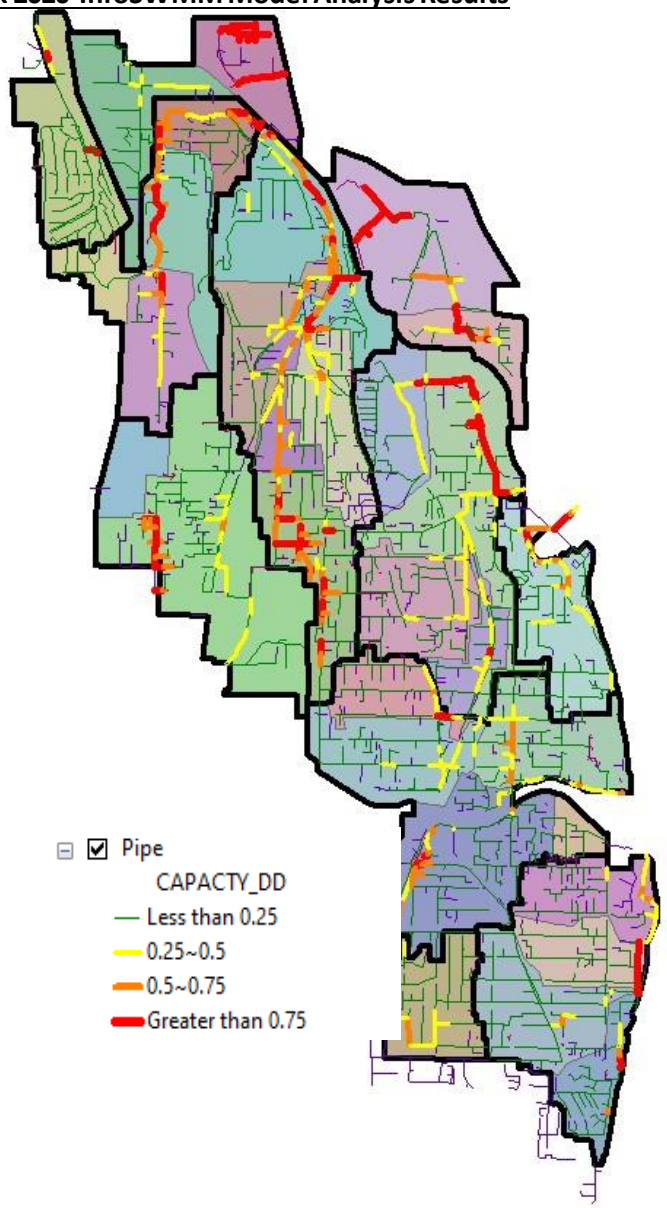
Peak 2030 InfoSWMM Model Analysis Results



Pipe

FLOW	FLOW_CLASS	DEPTH	HGL	VELOCITY	VOLUME	FROUDE_NUM	CAPACTY_DD
5.912	0	0.049	335.558	1.095	10.168	1.052	0.031
5.678	0	0.151	352.061	0.215	141.745	0.116	0.176
165.444	0	0.303	350.124	2.429	26.343	0.886	0.454
170.736	0	0.319	349.981	2.321	23.312	0.82	0.479
4.76	0	0.048	352.051	0.949	27.341	0.923	0.033
76.019	0	0.268	352.181	1.31	492.556	0.514	0.387
64.158	0	0.155	361.969	2.312	78.337	1.23	0.177
60.016	0	0.143	363.786	2.439	116.758	1.358	0.157
57.974	0	0.176	365.045	1.759	111.042	0.876	0.21
10.426	0	0.058	384.487	1.552	36.623	1.371	0.043
55.96	0	0.164	366.073	1.869	82.823	0.966	0.191
52.812	0	0.169	366.484	1.695	46.22	0.863	0.199
49.349	0	0.165	367.186	1.628	64.208	0.837	0.194
4.195	0	0.093	380.709	0.317	78.694	0.221	0.084
11.66	0	0.073	386.635	1.25	49.28	0.983	0.061
6.998	0	0.053	395.971	1.218	13.977	1.135	0.037
2.334	0	0.033	397.074	0.816	9.534	0.961	0.019
1.846	0	0.026	402.021	0.928	7.138	1.242	0.013
42.697	0	0.119	371.601	2.255	23.695	1.383	0.121
14.353	0	0.084	381.199	1.257	61.922	0.923	0.073
42.264	0	0.108	373.136	2.562	54.009	1.647	0.107
2.664	0	0.023	388.223	1.607	10.582	2.284	0.011
33.118	0	0.14	373.717	1.394	77.065	0.784	0.155
3.772	0	0.09	399.203	0.301	81.016	0.214	0.082
26.196	0	0.133	375.2	1.183	116.911	0.683	0.144
6.187	0	0.073	381.037	0.659	39.619	0.517	0.061
15.833	0	0.093	376.717	1.194	44.667	0.83	0.086
11.052	0	0.058	397.039	1.67	34.682	1.479	0.043
21.372	0	0.11	363.678	1.263	73.695	0.806	0.108
3.346	0	0.036	399.032	1.031	8.166	1.165	0.021
2.792	0	0.035	399.968	0.88	9.203	1.001	0.021
7.594	0	0.127	361.124	0.368	126.86	0.217	0.138
22.239	0	0.165	362.642	0.737	42.182	0.38	0.193
63.273	0	0.181	362.228	1.865	143.481	0.913	0.226
68.311	0	0.179	361.334	2.038	220.889	1.003	0.224
74.842	0	0.227	353.225	1.61	260.386	0.695	0.31
-0.997	1	0.825	18.596	0.004	311.906	0	1
100.035	0	0.179	315.82	2.961	35.513	1.457	0.22
46.837	0	0.103	320.336	3.07	42.515	2.03	0.099
242.907	0	0.323	325.768	2.771	415.368	0.995	0.358
242.907	0	0.283	324.787	3.309	401.233	1.281	0.3
1.826	0	0.052	355.217	0.325	36.778	0.306	0.036
36.534	0	0.163	330.204	1.362	103.561	0.7	0.243
1.458	0	0.087	330.631	0.12	30.925	0.086	0.077
31.468	0	0.136	330.908	1.523	53.096	0.866	0.188
<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>	<Null>
165.049	0	0.471	17.319	1.407	2466.274	0.375	0.764
11.688	0	0.066	337.558	1.464	1.739	1.219	0.051

Peak 2020 InfoSWMM Model Analysis Results



Pipe

HGL	VELOCITY	VOLUME	FROUDE_NUM	CAPACTY_DD
335.553	1	8.76	1.012	0.027
352.061	0.219	139.123	0.119	0.173
350.12	2.431	25.661	0.898	0.443
349.973	2.311	22.257	0.835	0.457
352.026	0.662	8.612	0.957	0.01
352.179	1.306	484.72	0.516	0.381
361.969	2.326	77.492	1.243	0.175
363.787	2.445	116.911	1.36	0.157
365.045	1.757	111.261	0.875	0.211
384.487	1.552	36.199	1.377	0.042
366.073	1.87	82.886	0.966	0.191
366.484	1.696	46.258	0.863	0.199
367.187	1.628	64.263	0.838	0.194
380.709	0.308	78.618	0.215	0.084
386.636	1.266	51.124	0.983	0.063
395.972	1.265	14.519	1.161	0.039
397.08	0.942	11.041	1.057	0.022
402.02	0.828	7.227	1.106	0.013
371.602	2.262	23.73	1.386	0.121
381.199	1.255	60.335	0.93	0.071
373.136	2.565	54.183	1.647	0.108
388.223	1.607	10.582	2.284	0.011
373.718	1.404	78.356	0.785	0.157
399.205	0.371	83.053	0.26	0.084
375.198	1.138	116.819	0.658	0.144
381.039	0.73	39.164	0.574	0.061
376.715	1.164	43.202	0.819	0.083
397.038	1.642	33.284	1.477	0.041
363.676	1.248	71.694	0.805	0.105
399.032	1.027	7.884	1.173	0.02
399.967	0.864	8.93	0.993	0.02
361.121	0.326	124.126	0.195	0.134
362.64	0.733	40.863	0.382	0.186
362.223	1.839	138.745	0.912	0.219
361.331	2.007	213.896	1	0.217
353.22	1.59	252.478	0.695	0.301
18.588	0.006	311.906	0	1
315.793	2.151	27.725	1.171	0.169
320.265	0.47	18.165	0.433	0.039
325.746	2.712	389.556	1.002	0.335
324.779	3.26	373.318	1.301	0.279
355.217	0.346	34.317	0.332	0.034
330.201	1.357	99.66	0.708	0.234
330.631	0.123	30.09	0.089	0.076
330.905	1.497	51.409	0.862	0.182
<Null>	<Null>	<Null>	<Null>	<Null>
17.119	1.26	2330.136	0.358	0.703
337.553	1.32	1.591	1.132	0.047

Appendix C
Pump Run Times

THIS PAGE IS INTENTIONALLY LEFT BLANK.

VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

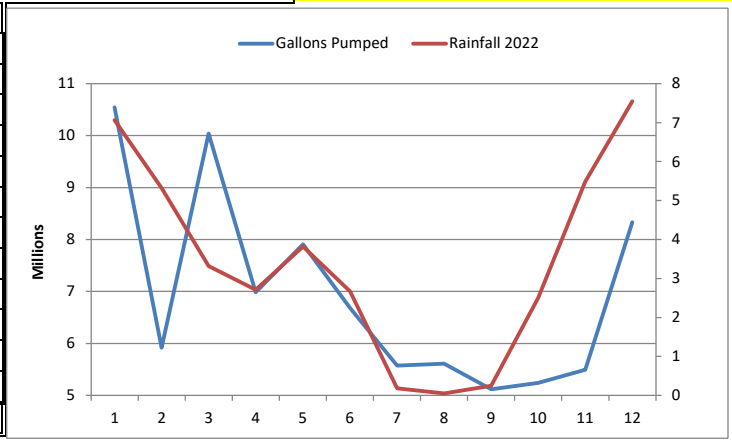
STATION # 2 McMICKEN STATION

		PUMP ONE	GAL/MIN	646	PUMP TWO	GAL/MIN	597
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		5384.8	5526.4	141.6	4705.7	4846.8	141.1
		Gals. Pumped	5,488,416		Gals. Pumped	5,054,202	
FEBRUARY		5526.4	5608.4	82	4846.8	4923.3	76.5
		Gals. Pumped	3,178,320		Gals. Pumped	2,740,230	
MARCH		5608.4	5749.3	140.9	4923.3	5051.1	127.8
		Gals. Pumped	5,461,284		Gals. Pumped	4,577,796	
APRIL		5749.3	5843.2	93.9	5051.1	5144.5	93.4
		Gals. Pumped	3,639,564		Gals. Pumped	3,345,588	
MAY		5843.2	5953.5	110.3	5144.5	5245.9	101.4
		Gals. Pumped	4,275,228		Gals. Pumped	3,632,148	
JUNE		5953.5	6046	92.5	5245.9	5332.3	86.4
		Gals. Pumped	3,585,300		Gals. Pumped	3,094,848	
JULY		6046	6098.6	52.6	5332.3	5431	98.7
		Gals. Pumped	2,038,776		Gals. Pumped	3,535,434	
AUGUST		6098.6	6165.4	66.8	5431	5515.4	84.4
		Gals. Pumped	2,589,168		Gals. Pumped	3,023,208	
SEPTEMBER		6165.4	6225.5	60.1	5515.4	5593.2	77.8
		Gals. Pumped	2,329,476		Gals. Pumped	2,786,796	
OCTOBER		6225.5	6287.8	62.3	5593.2	5672.1	78.9
		Gals. Pumped	2,414,748		Gals. Pumped	2,826,198	
NOVEMBER		6287.8	6352.3	64.5	5672.1	5755.7	83.6
		Gals. Pumped	2,500,020		Gals. Pumped	2,994,552	
DECEMBER		6352.3	6443.8	91.5	5755.7	5889.3	133.6
		Gals. Pumped	3,546,540		Gals. Pumped	4,785,552	
TOTAL			41,046,840	1059		42,396,552	1183.6

TOTAL GALLONS PUMPED / YEAR 83,443,392 GALLONS

646 Pump #1 replaced w/ Metro Pump

MONTHS	PUMP 1+2	Rainfall
JANUARY	10,542,618	7.06
FEBRUARY	5,918,550	5.32
MARCH	10,039,080	3.32
APRIL	6,985,152	2.71
MAY	7,907,376	3.82
JUNE	6,680,148	2.67
JULY	5,574,210	0.18
AUGUST	5,612,376	0.05
SEPTEMBER	5,116,272	0.25
OCTOBER	5,240,946	2.51
NOVEMBER	5,494,572	5.49
DECEMBER	8,332,092	7.55
TOTALS	83,443,392	40.93



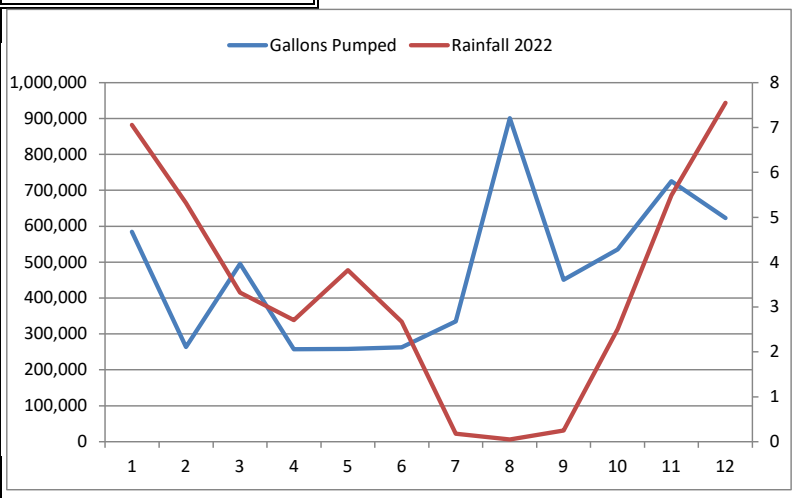
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 3 24th Ave Station

		PUMP ONE	GAL/MIN	174	PUMP TWO	GAL/MIN	194
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		4897.6	4925.2	27.6	5082.6	5108.1	25.5
		Gals. Pumped	288,144		Gals. Pumped	296,820	
FEBRUARY		4925.2	4937.3	12.1	5108.1	5119.9	11.8
		Gals. Pumped	126,324		Gals. Pumped	137,352	
MARCH		4937.3	4963.1	25.8	5119.9	5139.3	19.4
		Gals. Pumped	269,352		Gals. Pumped	225,816	
APRIL		4963.1	4974.6	11.5	5139.3	5151.1	11.8
		Gals. Pumped	120,060		Gals. Pumped	137,352	
MAY		4974.6	4986.4	11.8	5151.1	5162.7	11.6
		Gals. Pumped	123,192		Gals. Pumped	135,024	
JUNE		4986.4	4998.3	11.9	5162.7	5174.6	11.9
		Gals. Pumped	124,236		Gals. Pumped	138,516	
JULY		4998.3	5009.8	11.5	5174.6	5193.1	18.5
		Gals. Pumped	120,060		Gals. Pumped	215,340	
AUGUST		5009.8	5023.6	13.8	5193.1	5258.1	65
		Gals. Pumped	144,072		Gals. Pumped	756,600	
SEPTEMBER		5023.6	5034.7	11.1	5258.1	5286.9	28.8
		Gals. Pumped	115,884		Gals. Pumped	335,232	
OCTOBER		5034.7	5047.1	12.4	5286.9	5321.8	34.9
		Gals. Pumped	129,456		Gals. Pumped	406,236	
NOVEMBER		5047.1	5060.4	13.3	5321.8	5372.2	50.4
		Gals. Pumped	138,852		Gals. Pumped	586,656	
DECEMBER		5060.4	5074.8	14.4	5372.2	5412.8	40.6
		Gals. Pumped	150,336		Gals. Pumped	472,584	
TOTAL			1,849,968	177.2		3,843,528	330.2

TOTAL GALLONS PUMPED / YEAR	5,693,496 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	584,964	7.06
FEBRUARY	263,676	5.32
MARCH	495,168	3.32
APRIL	257,412	2.71
MAY	258,216	3.82
JUNE	262,752	2.67
JULY	335,400	0.18
AUGUST	900,672	0.05
SEPTEMBER	451,116	0.25
OCTOBER	535,692	2.51
NOVEMBER	725,508	5.49
DECEMBER	622,920	7.55
TOTALS	5,693,496	40.93



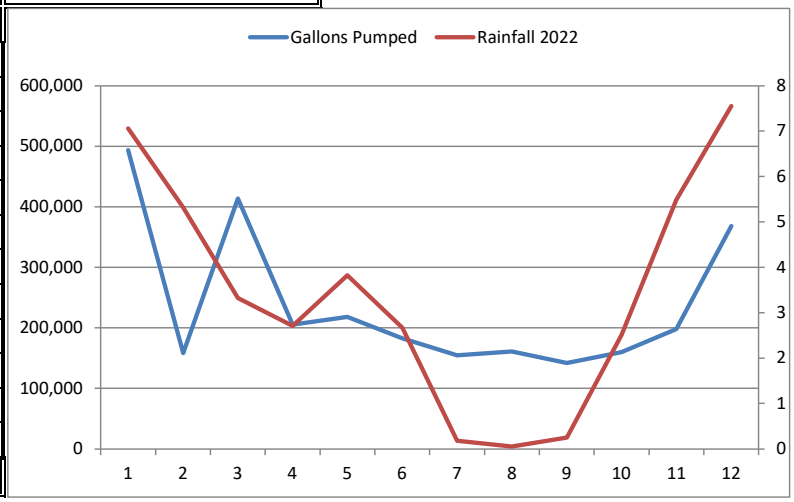
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 5 HILLTOP STATION

		PUMP ONE	GAL/MIN	67	PUMP TWO	GAL/MIN	66
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		7250.6	7318.5	67.9	6680.8	6736.5	55.7
		Gals. Pumped	272,958		Gals. Pumped	220,572	
FEBRUARY		7318.5	7342.8	24.3	6736.5	6751.8	15.3
		Gals. Pumped	97,686		Gals. Pumped	60,588	
MARCH		7342.8	7406	63.2	6751.8	6792.1	40.3
		Gals. Pumped	254,064		Gals. Pumped	159,588	
APRIL		7406	7432.2	26.2	6792.1	6817.4	25.3
		Gals. Pumped	105,324		Gals. Pumped	100,188	
MAY		7432.2	7460.4	28.2	6817.4	6843.8	26.4
		Gals. Pumped	113,364		Gals. Pumped	104,544	
JUNE		7460.4	7483.1	22.7	6843.8	6866.8	23
		Gals. Pumped	91,254		Gals. Pumped	91,080	
JULY		7483.1	7503.1	20	6866.8	6885.5	18.7
		Gals. Pumped	80,400		Gals. Pumped	74,052	
AUGUST		7503.1	7523.8	20.7	6885.5	6905.1	19.6
		Gals. Pumped	83,214		Gals. Pumped	77,616	
SEPTEMBER		7523.8	7542.5	18.7	6905.1	6921.9	16.8
		Gals. Pumped	75,174		Gals. Pumped	66,528	
OCTOBER		7542.5	7562.7	20.2	6921.9	6941.8	19.9
		Gals. Pumped	81,204		Gals. Pumped	78,804	
NOVEMBER		7562.7	7588.2	25.5	6941.8	6965.9	24.1
		Gals. Pumped	102,510		Gals. Pumped	95,436	
DECEMBER		7588.2	7635.1	46.9	6965.9	7011.2	45.3
		Gals. Pumped	188,538		Gals. Pumped	179,388	
TOTAL			1,545,690	384.5		1,308,384	330.4

TOTAL GALLONS PUMPED / YEAR	2,854,074 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	493,530	7.06
FEBRUARY	158,274	5.32
MARCH	413,652	3.32
APRIL	205,512	2.71
MAY	217,908	3.82
JUNE	182,334	2.67
JULY	154,452	0.18
AUGUST	160,830	0.05
SEPTEMBER	141,702	0.25
OCTOBER	160,008	2.51
NOVEMBER	197,946	5.49
DECEMBER	367,926	7.55
TOTALS	2,854,074	40.93



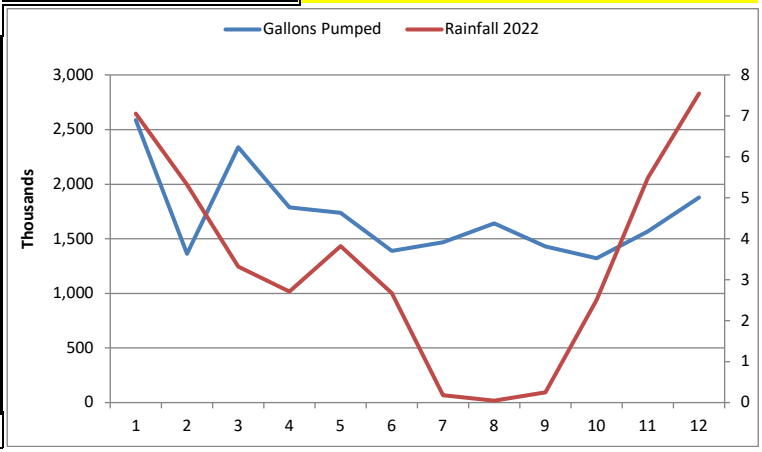
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 6 INCO STATION

		PUMP ONE	GAL/MIN	394	PUMP TWO	GAL/MIN	426
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		19623.5	19707.2	83.7	18519.4	18543.2	23.8
		Gals. Pumped	1,978,668		Gals. Pumped	608,328	
FEBRUARY		19707.2	19764.8	57.6	18543.2	18543.2	0
		Gals. Pumped	1,361,664		Gals. Pumped	0	
MARCH		19764.8	19825.3	60.5	18543.2	18578.8	35.6
		Gals. Pumped	1,430,220		Gals. Pumped	909,936	
APRIL		19825.3	19864.2	38.9	18578.8	18612.8	34
		Gals. Pumped	919,596		Gals. Pumped	869,040	
MAY		19864.2	19902.3	38.1	18612.8	18645.5	32.7
		Gals. Pumped	900,684		Gals. Pumped	835,812	
JUNE		19902.3	19933.1	30.8	18645.5	18671.3	25.8
		Gals. Pumped	728,112		Gals. Pumped	659,448	
JULY		19933.1	19965.3	32.2	18671.3	18698.9	27.6
		Gals. Pumped	761,208		Gals. Pumped	705,456	
AUGUST		19965.3	20001	35.7	18698.9	18730.1	31.2
		Gals. Pumped	843,948		Gals. Pumped	797,472	
SEPTEMBER		20001	20032	31	18730.1	18757.4	27.3
		Gals. Pumped	732,840		Gals. Pumped	697,788	
OCTOBER		20032	20061.1	29.1	18757.4	18782.2	24.8
		Gals. Pumped	687,924		Gals. Pumped	633,888	
NOVEMBER		20061.1	20095.7	34.6	18782.2	18811.5	29.3
		Gals. Pumped	817,944		Gals. Pumped	748,908	
DECEMBER		20095.7	20136.9	41.2	18811.5	18846.9	35.4
		Gals. Pumped	973,968		Gals. Pumped	904,824	
TOTAL			12,136,776	513.4		8,370,900	327.5

TOTAL GALLONS PUMPED / YEAR	20,507,676 GALLONS	426	#2 Old Metro Pump

MONTHS	PUMP 1+2	Rainfall
JANUARY	2,586,996	7.06
FEBRUARY	1,361,664	5.32
MARCH	2,340,156	3.32
APRIL	1,788,636	2.71
MAY	1,736,496	3.82
JUNE	1,387,560	2.67
JULY	1,466,664	0.18
AUGUST	1,641,420	0.05
SEPTEMBER	1,430,628	0.25
OCTOBER	1,321,812	2.51
NOVEMBER	1,566,852	5.49
DECEMBER	1,878,792	7.55
TOTALS	20,507,676	40.93



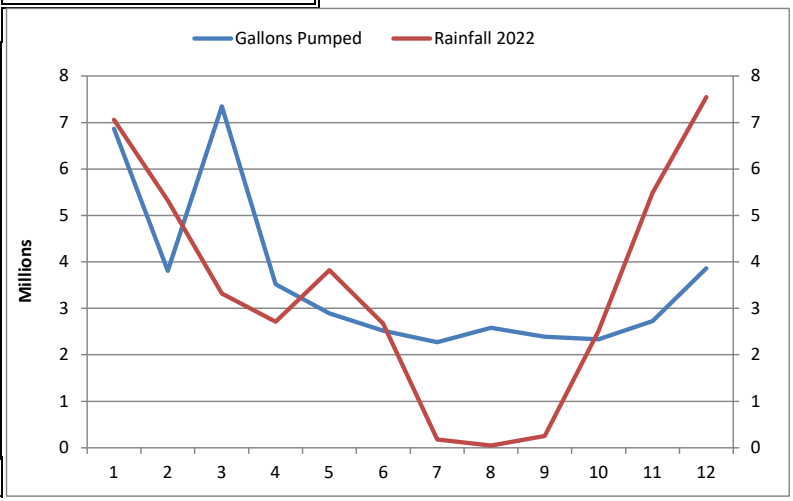
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 7 METRO STATION

		PUMP ONE	GAL/MIN	363	PUMP TWO	GAL/MIN	304
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		1162.7	1317.6	154.9	92853.8	93045.1	191.3
		Gals. Pumped	3,373,722		Gals. Pumped	3,489,312	
FEBRUARY		1317.6	1416.4	98.8	93045.1	93135.8	90.7
		Gals. Pumped	2,151,864		Gals. Pumped	1,654,368	
MARCH		1416.4	1592.2	175.8	93135.8	93328.6	192.8
		Gals. Pumped	3,828,924		Gals. Pumped	3,516,672	
APRIL		1592.2	1665.1	72.9	93328.6	93434.4	105.8
		Gals. Pumped	1,587,762		Gals. Pumped	1,929,792	
MAY		1665.1	1737.4	72.3	93434.4	93506.7	72.3
		Gals. Pumped	1,574,694		Gals. Pumped	1,318,752	
JUNE		1737.4	1802.2	64.8	93506.7	93567.4	60.7
		Gals. Pumped	1,411,344		Gals. Pumped	1,107,168	
JULY		1802.2	1860.3	58.1	93567.4	93622.7	55.3
		Gals. Pumped	1,265,418		Gals. Pumped	1,008,672	
AUGUST		1860.3	1923.2	62.9	93622.7	93689	66.3
		Gals. Pumped	1,369,962		Gals. Pumped	1,209,312	
SEPTEMBER		1923.2	1978.8	55.6	93689	93753.7	64.7
		Gals. Pumped	1,210,968		Gals. Pumped	1,180,128	
OCTOBER		1978.8	2038	59.2	93753.7	93810.9	57.2
		Gals. Pumped	1,289,376		Gals. Pumped	1,043,328	
NOVEMBER		2038	2109.1	71.1	93810.9	93875.4	64.5
		Gals. Pumped	1,548,558		Gals. Pumped	1,176,480	
DECEMBER		2109.1	2216.4	107.3	93875.4	93958.9	83.5
		Gals. Pumped	2,336,994		Gals. Pumped	1,523,040	
TOTAL			22,949,586	1053.7		20,157,024	1105.1

TOTAL GALLONS PUMPED / YEAR	43,106,610 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	6,863,034	7.06
FEBRUARY	3,806,232	5.32
MARCH	7,345,596	3.32
APRIL	3,517,554	2.71
MAY	2,893,446	3.82
JUNE	2,518,512	2.67
JULY	2,274,090	0.18
AUGUST	2,579,274	0.05
SEPTEMBER	2,391,096	0.25
OCTOBER	2,332,704	2.51
NOVEMBER	2,725,038	5.49
DECEMBER	3,860,034	7.55
TOTALS	43,106,610	40.93



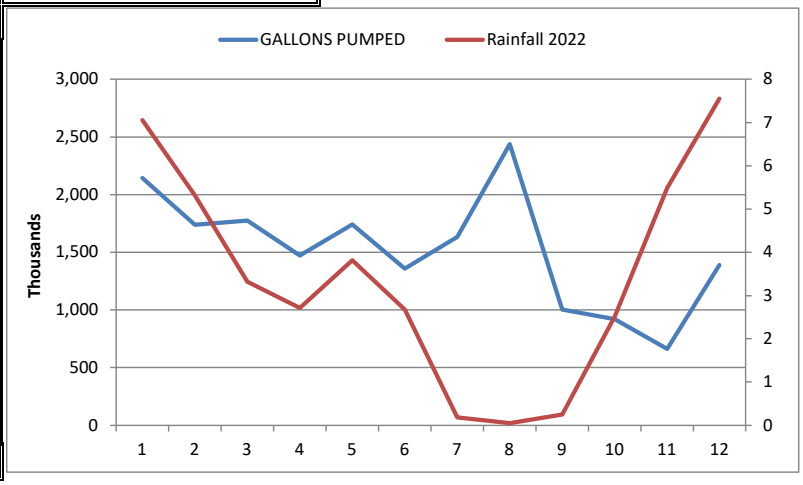
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 8 EAST MARGINAL WAY STATION

		PUMP ONE	GAL/MIN	301	PUMP TWO	GAL/MIN	310
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		7680	7740	60	7843.4	7900.5	57.1
		Gals. Pumped	1,083,600		Gals. Pumped	1,062,060	
FEBRUARY		7740	7788.6	48.6	7900.5	7946.8	46.3
		Gals. Pumped	877,716		Gals. Pumped	861,180	
MARCH		7788.6	7835.7	47.1	7946.8	7996.6	49.8
		Gals. Pumped	850,626		Gals. Pumped	926,280	
APRIL		7835.7	7875.1	39.4	7996.6	8037.5	40.9
		Gals. Pumped	711,564		Gals. Pumped	760,740	
MAY		7875.1	7920.5	45.4	8037.5	8087.1	49.6
		Gals. Pumped	819,924		Gals. Pumped	922,560	
JUNE		7920.5	7960.5	40	8087.1	8121.3	34.2
		Gals. Pumped	722,400		Gals. Pumped	636,120	
JULY		7960.5	8006.3	45.8	8121.3	8164.7	43.4
		Gals. Pumped	827,148		Gals. Pumped	807,240	
AUGUST		8006.3	8074.4	68.1	8164.7	8229.6	64.9
		Gals. Pumped	1,229,886		Gals. Pumped	1,207,140	
SEPTEMBER	p1 taken out for rep	8074.4	8074.4	0	8229.6	8283.5	53.9
		Gals. Pumped	0		Gals. Pumped	1,002,540	
OCTOBER	P2/P1 new HR mete	0	0	0	0	49.4	49.4
		Gals. Pumped	0		Gals. Pumped	918,840	
NOVEMBER		0	0	0	49.4	85	35.6
		Gals. Pumped	0		Gals. Pumped	662,160	
DECEMBER		0	0	0	85	159.7	74.7
		Gals. Pumped	0		Gals. Pumped	1,389,420	
TOTAL			7,122,864	394.4		11,156,280	599.8

TOTAL GALLONS PUMPED / YEAR	18,279,144 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	2,145,660	7.06
FEBRUARY	1,738,896	5.32
MARCH	1,776,906	3.32
APRIL	1,472,304	2.71
MAY	1,742,484	3.82
JUNE	1,358,520	2.67
JULY	1,634,388	0.18
AUGUST	2,437,026	0.05
SEPTEMBER	1,002,540	0.25
OCTOBER	918,840	2.51
NOVEMBER	662,160	5.49
DECEMBER	1,389,420	7.55
TOTALS	18,279,144	40.93



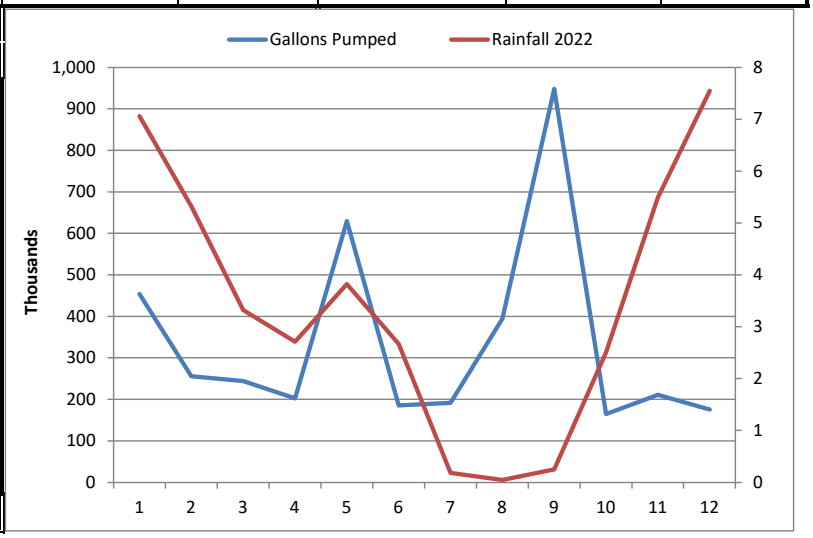
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 9 PAC HWY STATION

		PUMP ONE	GAL/MIN	249	PUMP TWO	GAL/MIN	236
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		15883.3	15893.4	10.1	16643.4	16664.8	21.4
		Gals. Pumped	150,894		Gals. Pumped	303,024	
FEBRUARY		15893.4	15901.6	8.2	16664.8	16674.2	9.4
		Gals. Pumped	122,508		Gals. Pumped	133,104	
MARCH		15901.6	15911.7	10.1	16674.2	16680.8	6.6
		Gals. Pumped	150,894		Gals. Pumped	93,456	
APRIL		15911.7	15913.8	2.1	16680.8	16692.9	12.1
		Gals. Pumped	31,374		Gals. Pumped	171,336	
MAY		15913.8	15947.1	33.3	16692.9	16702.2	9.3
		Gals. Pumped	497,502		Gals. Pumped	131,688	
JUNE		15947.1	15947.2	0.1	16702.2	16715.2	13
		Gals. Pumped	1,494		Gals. Pumped	184,080	
JULY		15947.2	15951.2	4	16715.2	16724.5	9.3
		Gals. Pumped	59,760		Gals. Pumped	131,688	
AUGUST		15951.2	15952.4	1.2	16724.5	16751.1	26.6
		Gals. Pumped	17,928		Gals. Pumped	376,656	
SEPTEMBER		15952.4	16005.6	53.2	16751.1	16761.9	10.8
		Gals. Pumped	794,808		Gals. Pumped	152,928	
OCTOBER		16005.6	16011.5	5.9	16761.9	16767.3	5.4
		Gals. Pumped	88,146		Gals. Pumped	76,464	
NOVEMBER		16011.5	16018.8	7.3	16767.3	16774.5	7.2
		Gals. Pumped	109,062		Gals. Pumped	101,952	
DECEMBER		16018.8	16023.9	5.1	16774.5	16781.5	7
		Gals. Pumped	76,194		Gals. Pumped	99,120	
TOTAL			2,100,564	140.6		1,955,496	138.1

TOTAL GALLONS PUMPED / YEAR

MONTHS	PUMP 1+2	Rainfall
JANUARY	453,918	7.06
FEBRUARY	255,612	5.32
MARCH	244,350	3.32
APRIL	202,710	2.71
MAY	629,190	3.82
JUNE	185,574	2.67
JULY	191,448	0.18
AUGUST	394,584	0.05
SEPTEMBER	947,736	0.25
OCTOBER	164,610	2.51
NOVEMBER	211,014	5.49
DECEMBER	175,314	7.55
TOTALS	4,056,060	40.93



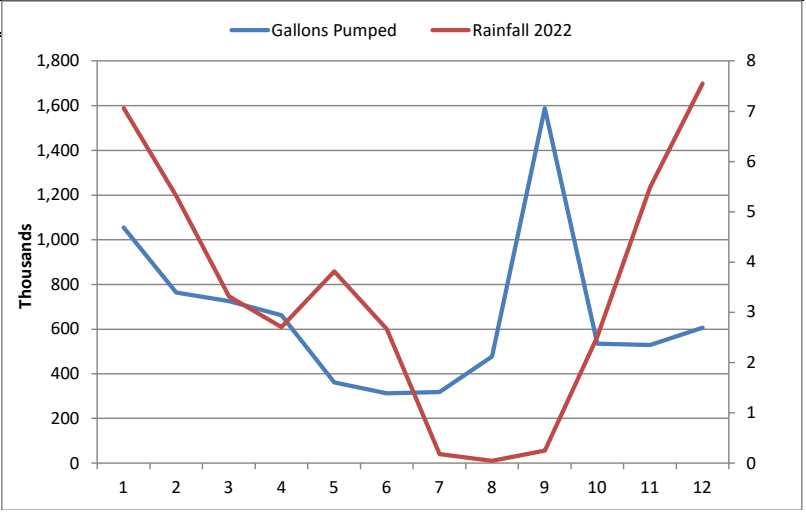
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 10 TOWING STATION

		PUMP ONE	GAL/MIN	337	PUMP TWO	GAL/MIN	361
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		779.9	809.9	30	559	579.7	20.7
		Gals. Pumped	606,600		Gals. Pumped	448,362	
FEBRUARY		809.9	841.3	31.4	579.7	585.7	6
		Gals. Pumped	634,908		Gals. Pumped	129,960	
MARCH		841.3	869.6	28.3	585.7	592.8	7.1
		Gals. Pumped	572,226		Gals. Pumped	153,786	
APRIL		869.6	893.4	23.8	592.8	601.2	8.4
		Gals. Pumped	481,236		Gals. Pumped	181,944	
MAY		893.4	903.3	9.9	601.2	608.6	7.4
		Gals. Pumped	200,178		Gals. Pumped	160,284	
JUNE		903.3	912	8.7	608.6	614.9	6.3
		Gals. Pumped	175,914		Gals. Pumped	136,458	
JULY		912	920.4	8.4	614.9	621.7	6.8
		Gals. Pumped	169,848		Gals. Pumped	147,288	
AUGUST		920.4	932	11.6	621.7	632.9	11.2
		Gals. Pumped	234,552		Gals. Pumped	242,592	
SEPTEMBER		932	998	66	632.9	644.6	11.7
		Gals. Pumped	1,334,520		Gals. Pumped	253,422	
OCTOBER		998	1015.1	17.1	644.6	653.3	8.7
		Gals. Pumped	345,762		Gals. Pumped	188,442	
NOVEMBER		1015.1	1032.9	17.8	653.3	661.1	7.8
		Gals. Pumped	359,916		Gals. Pumped	168,948	
DECEMBER		1032.9	1054	21.1	661.1	669.4	8.3
		Gals. Pumped	426,642		Gals. Pumped	179,778	
TOTAL			5,542,302	274.1		2,391,264	110.4

TOTAL GALLONS PUMPED / YEAR

MONTHS	PUMP 1+2	Rainfall
JANUARY	1,054,962	7.06
FEBRUARY	764,868	5.32
MARCH	726,012	3.32
APRIL	663,180	2.71
MAY	360,462	3.82
JUNE	312,372	2.67
JULY	317,136	0.18
AUGUST	477,144	0.05
SEPTEMBER	1,587,942	0.25
OCTOBER	534,204	2.51
NOVEMBER	528,864	5.49
DECEMBER	606,420	7.55
TOTALS	7,933,566	40.93



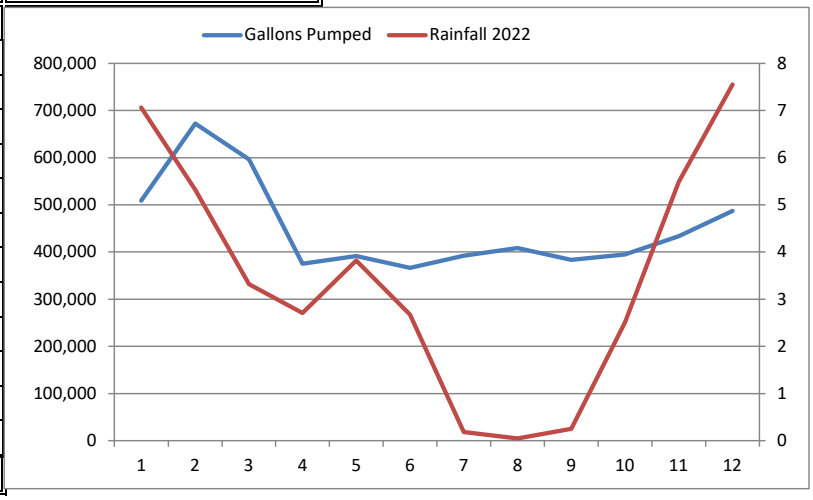
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 11 OXBOW STATION

		PUMP ONE	GAL/MIN	474	PUMP TWO	GAL/MIN	459
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		82.5	90.8	8.3	81.6	91.5	9.9
		Gals. Pumped	236,052		Gals. Pumped	272,646	
FEBRUARY		90.8	103.4	12.6	91.5	102.9	11.4
		Gals. Pumped	358,344		Gals. Pumped	313,956	
MARCH		103.4	114	10.6	102.9	113.6	10.7
		Gals. Pumped	301,464		Gals. Pumped	294,678	
APRIL		114	120.7	6.7	113.6	120.3	6.7
		Gals. Pumped	190,548		Gals. Pumped	184,518	
MAY		120.7	127.6	6.9	120.3	127.4	7.1
		Gals. Pumped	196,236		Gals. Pumped	195,534	
JUNE		127.6	134.1	6.5	127.4	134	6.6
		Gals. Pumped	184,860		Gals. Pumped	181,764	
JULY		134.1	141.2	7.1	134	140.9	6.9
		Gals. Pumped	201,924		Gals. Pumped	190,026	
AUGUST		141.2	148.4	7.2	140.9	148.3	7.4
		Gals. Pumped	204,768		Gals. Pumped	203,796	
SEPTEMBER		148.4	155.2	6.8	148.3	155.2	6.9
		Gals. Pumped	193,392		Gals. Pumped	190,026	
OCTOBER		155.2	162.2	7	155.2	162.3	7.1
		Gals. Pumped	199,080		Gals. Pumped	195,534	
NOVEMBER		162.2	169.9	7.7	162.3	170.1	7.8
		Gals. Pumped	218,988		Gals. Pumped	214,812	
DECEMBER		169.9	178.4	8.5	170.1	179	8.9
		Gals. Pumped	241,740		Gals. Pumped	245,106	
TOTAL			2,727,396	95.9		2,682,396	97.4

TOTAL GALLONS PUMPED / YEAR	5,409,792 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	508,698	7.06
FEBRUARY	672,300	5.32
MARCH	596,142	3.32
APRIL	375,066	2.71
MAY	391,770	3.82
JUNE	366,624	2.67
JULY	391,950	0.18
AUGUST	408,564	0.05
SEPTEMBER	383,418	0.25
OCTOBER	394,614	2.51
NOVEMBER	433,800	5.49
DECEMBER	486,846	7.55
TOTALS	5,409,792	40.93



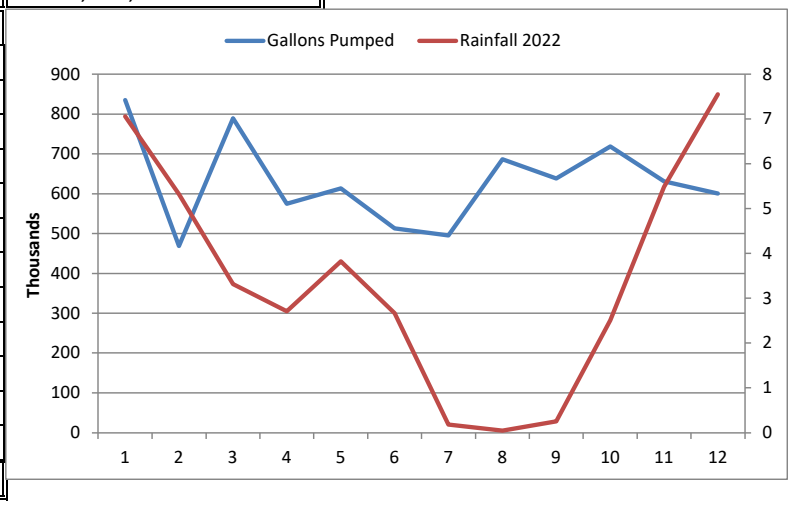
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 12 SEAGATE STATION

		PUMP ONE	GAL/MIN	126	PUMP TWO	GAL/MIN	131
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		8273.4	8324.6	51.2	8108.7	8165.7	57
		Gals. Pumped	387,072		Gals. Pumped	448,020	
FEBRUARY		8324.6	8354.4	29.8	8165.7	8196.7	31
		Gals. Pumped	225,288		Gals. Pumped	243,660	
MARCH		8354.4	8404.5	50.1	8196.7	8248.9	52.2
		Gals. Pumped	378,756		Gals. Pumped	410,292	
APRIL		8404.5	8438.1	33.6	8248.9	8289.7	40.8
		Gals. Pumped	254,016		Gals. Pumped	320,688	
MAY		8438.1	8476.7	38.6	8289.7	8330.6	40.9
		Gals. Pumped	291,816		Gals. Pumped	321,474	
JUNE		8476.7	8507.8	31.1	8330.6	8365.9	35.3
		Gals. Pumped	235,116		Gals. Pumped	277,458	
JULY		8507.8	8539.9	32.1	8365.9	8398	32.1
		Gals. Pumped	242,676		Gals. Pumped	252,306	
AUGUST		8539.9	8581	41.1	8398	8445.8	47.8
		Gals. Pumped	310,716		Gals. Pumped	375,708	
SEPTEMBER		8581	8620.3	39.3	8445.8	8489.2	43.4
		Gals. Pumped	297,108		Gals. Pumped	341,124	
OCTOBER		8620.3	8667.5	47.2	8489.2	8535.2	46
		Gals. Pumped	356,832		Gals. Pumped	361,560	
NOVEMBER		8667.5	8703.6	36.1	8535.2	8580.8	45.6
		Gals. Pumped	272,916		Gals. Pumped	358,416	
DECEMBER		8703.6	8738.7	35.1	8580.8	8623.4	42.6
		Gals. Pumped	265,356		Gals. Pumped	334,836	
TOTAL			3,517,668	465.3		4,045,542	514.7

TOTAL GALLONS PUMPED / YEAR	7,563,210 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	835,092	7.06
FEBRUARY	468,948	5.32
MARCH	789,048	3.32
APRIL	574,704	2.71
MAY	613,290	3.82
JUNE	512,574	2.67
JULY	494,982	0.18
AUGUST	686,424	0.05
SEPTEMBER	638,232	0.25
OCTOBER	718,392	2.51
NOVEMBER	631,332	5.49
DECEMBER	600,192	7.55
TOTALS	7,563,210	40.93



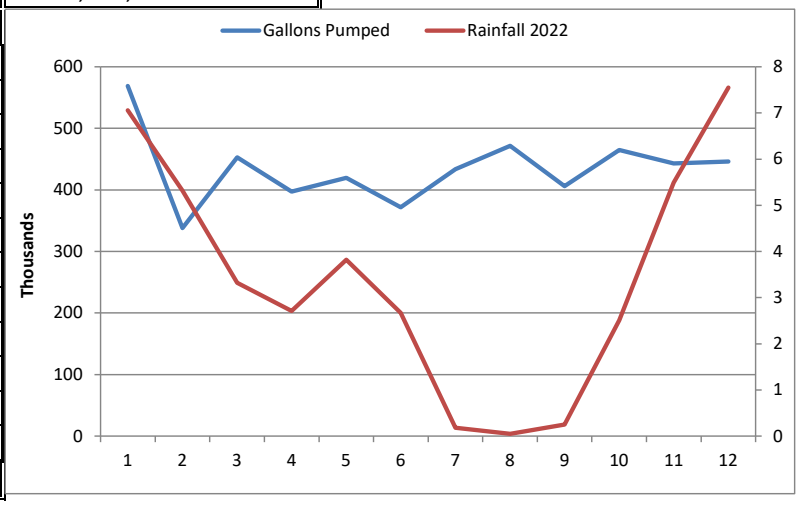
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 13 AQUA WAY STATION

		PUMP ONE	GAL/MIN	174	PUMP TWO	GAL/MIN	180
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		1531.6	1562	30.4	1147.7	1171	23.3
		Gals. Pumped	317,376		Gals. Pumped	251,640	
FEBRUARY		1562	1580.1	18.1	1171	1184.8	13.8
		Gals. Pumped	188,964		Gals. Pumped	149,040	
MARCH		1580.1	1606.8	26.7	1184.8	1200.9	16.1
		Gals. Pumped	278,748		Gals. Pumped	173,880	
APRIL		1606.8	1628	21.2	1200.9	1217.2	16.3
		Gals. Pumped	221,328		Gals. Pumped	176,040	
MAY		1628	1650.4	22.4	1217.2	1234.4	17.2
		Gals. Pumped	233,856		Gals. Pumped	185,760	
JUNE		1650.4	1670.5	20.1	1234.4	1249.4	15
		Gals. Pumped	209,844		Gals. Pumped	162,000	
JULY		1670.5	1693.5	23	1249.4	1267.3	17.9
		Gals. Pumped	240,120		Gals. Pumped	193,320	
AUGUST		1693.5	1718.5	25	1267.3	1286.8	19.5
		Gals. Pumped	261,000		Gals. Pumped	210,600	
SEPTEMBER		1718.5	1741.9	23.4	1286.8	1301.8	15
		Gals. Pumped	244,296		Gals. Pumped	162,000	
OCTOBER		1741.9	1767.8	25.9	1301.8	1319.8	18
		Gals. Pumped	270,396		Gals. Pumped	194,400	
NOVEMBER		1767.8	1791.1	23.3	1319.8	1338.3	18.5
		Gals. Pumped	243,252		Gals. Pumped	199,800	
DECEMBER		1791.1	1814.2	23.1	1338.3	1357.3	19
		Gals. Pumped	241,164		Gals. Pumped	205,200	
TOTAL			2,950,344	282.6		2,263,680	209.6

TOTAL GALLONS PUMPED / YEAR 5,214,024 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	569,016	7.06
FEBRUARY	338,004	5.32
MARCH	452,628	3.32
APRIL	397,368	2.71
MAY	419,616	3.82
JUNE	371,844	2.67
JULY	433,440	0.18
AUGUST	471,600	0.05
SEPTEMBER	406,296	0.25
OCTOBER	464,796	2.51
NOVEMBER	443,052	5.49
DECEMBER	446,364	7.55
TOTALS	5,214,024	40.93



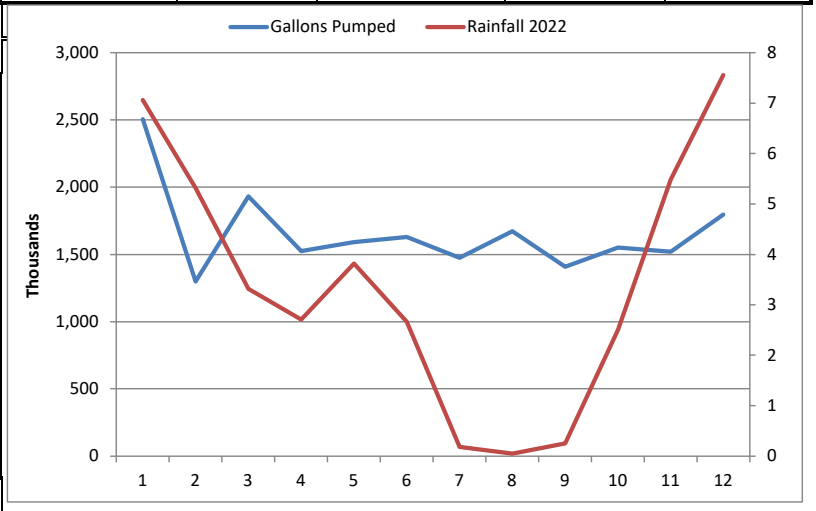
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 14 96TH ST STATION

		PUMP ONE	GAL/MIN	717	PUMP TWO	GAL/MIN	770
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		7610.6	7638.2	27.6	7505.3	7533.8	28.5
		Gals. Pumped	1,187,352		Gals. Pumped	1,316,700	
FEBRUARY		7638.2	7652.3	14.1	7533.8	7548.8	15
		Gals. Pumped	606,582		Gals. Pumped	693,000	
MARCH		7652.3	7673.5	21.2	7548.8	7570.9	22.1
		Gals. Pumped	912,024		Gals. Pumped	1,021,020	
APRIL		7673.5	7690.3	16.8	7570.9	7588.3	17.4
		Gals. Pumped	722,736		Gals. Pumped	803,880	
MAY		7690.3	7708.6	18.3	7588.3	7605.7	17.4
		Gals. Pumped	787,266		Gals. Pumped	803,880	
JUNE		7708.6	7727.6	19	7605.7	7623.3	17.6
		Gals. Pumped	817,380		Gals. Pumped	813,120	
JULY		7727.6	7744.4	16.8	7623.3	7639.6	16.3
		Gals. Pumped	722,736		Gals. Pumped	753,060	
AUGUST		7744.4	7763.3	18.9	7639.6	7658.2	18.6
		Gals. Pumped	813,078		Gals. Pumped	859,320	
SEPTEMBER		7763.3	7779.2	15.9	7658.2	7673.9	15.7
		Gals. Pumped	684,018		Gals. Pumped	725,340	
OCTOBER		7779.2	7796.8	17.6	7673.9	7691.1	17.2
		Gals. Pumped	757,152		Gals. Pumped	794,640	
NOVEMBER		7796.8	7810.9	14.1	7691.1	7710.9	19.8
		Gals. Pumped	606,582		Gals. Pumped	914,760	
DECEMBER		7810.9	7827	16.1	7710.9	7734.8	23.9
		Gals. Pumped	692,622		Gals. Pumped	1,104,180	
TOTAL			9,309,528	216.4		10,602,900	229.5

TOTAL GALLONS PUMPED / YEAR

MONTHS	PUMP 1+2	Rainfall
JANUARY	2,504,052	7.06
FEBRUARY	1,299,582	5.32
MARCH	1,933,044	3.32
APRIL	1,526,616	2.71
MAY	1,591,146	3.82
JUNE	1,630,500	2.67
JULY	1,475,796	0.18
AUGUST	1,672,398	0.05
SEPTEMBER	1,409,358	0.25
OCTOBER	1,551,792	2.51
NOVEMBER	1,521,342	5.49
DECEMBER	1,796,802	7.55
TOTALS	19,912,428	40.93



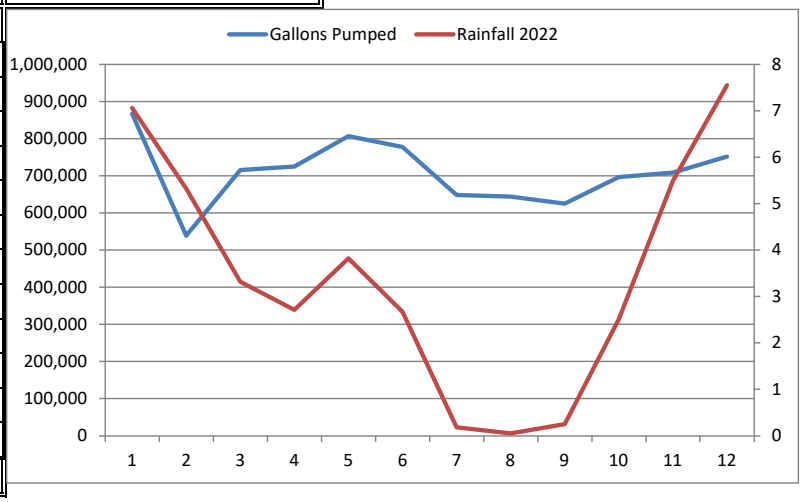
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 15 DELTA MARINE STATION

		PUMP ONE	GAL/MIN	208	PUMP TWO	GAL/MIN	244
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		693.5	729.1	35.6	734.7	763.6	28.9
		Gals. Pumped	444,288		Gals. Pumped	423,096	
FEBRUARY	hr meter malfunc	729.1	750.7	21.6	763.6	1187.2	18.4
	put average runti	Gals. Pumped	269,568		Gals. Pumped	269,376	
MARCH		750.7	779.4	28.7	0	0	24.4
		Gals. Pumped	358,176		Gals. Pumped	357,216	
APRIL		779.4	808.5	29.1	0	0	24.7
		Gals. Pumped	363,168		Gals. Pumped	361,608	
MAY	new hr meter inst	808.5	840.9	32.4	0	3.5	27.5
		Gals. Pumped	404,352		Gals. Pumped	402,600	
JUNE		840.9	872	31.1	3.5	30.1	26.6
		Gals. Pumped	388,128		Gals. Pumped	389,424	
JULY		872	896	24	30.1	53.9	23.8
		Gals. Pumped	299,520		Gals. Pumped	348,432	
AUGUST		896	921.9	25.9	53.9	75.8	21.9
		Gals. Pumped	323,232		Gals. Pumped	320,616	
SEPTEMBER		921.9	947	25.1	75.8	97.1	21.3
		Gals. Pumped	313,248		Gals. Pumped	311,832	
OCTOBER	p2 taken out for r	947	992	45	97.1	106.3	9.2
		Gals. Pumped	561,600		Gals. Pumped	134,688	
NOVEMBER		992	1048.8	56.8	106.3	106.3	0
		Gals. Pumped	708,864		Gals. Pumped	0	
DECEMBER		1048.8	1109	60.2	106.3	106.3	0
		Gals. Pumped	751,296		Gals. Pumped	0	
TOTAL			5,185,440	415.5		3,318,888	226.7

TOTAL GALLONS PUMPED / YEAR	8,504,328 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	867,384	7.06
FEBRUARY	538,944	5.32
MARCH	715,392	3.32
APRIL	724,776	2.71
MAY	806,952	3.82
JUNE	777,552	2.67
JULY	647,952	0.18
AUGUST	643,848	0.05
SEPTEMBER	625,080	0.25
OCTOBER	696,288	2.51
NOVEMBER	708,864	5.49
DECEMBER	751,296	7.55
TOTALS	8,504,328	40.93



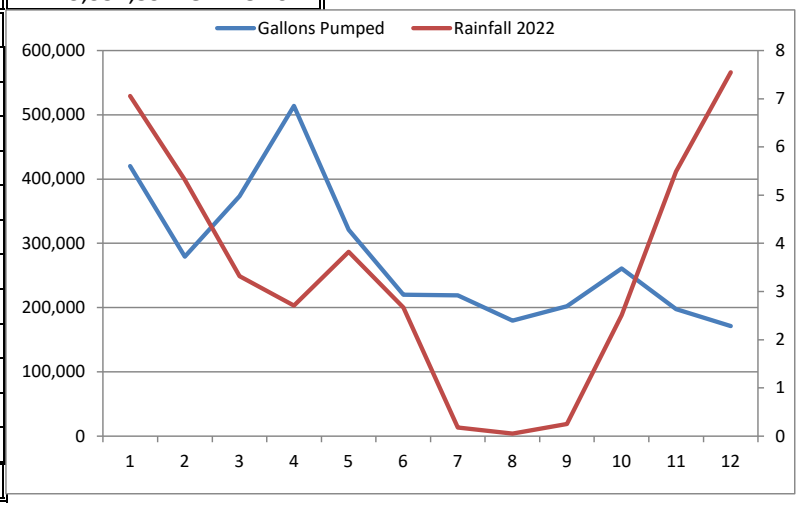
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 16 UNION HALL STATION

		PUMP ONE	GAL/MIN	135	PUMP TWO	GAL/MIN	129
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		963.9	987.6	23.7	930.8	960.3	29.5
		Gals. Pumped	191,970		Gals. Pumped	228,330	
FEBRUARY		987.6	1003.9	16.3	960.3	979.3	19
		Gals. Pumped	132,030		Gals. Pumped	147,060	
MARCH		1003.9	1027.7	20.7	979.3	1005.9	26.6
		Gals. Pumped	167,670		Gals. Pumped	205,884	
APRIL		1027.7	1068.5	40.8	1005.9	1029.6	23.7
		Gals. Pumped	330,480		Gals. Pumped	183,438	
MAY		1068.5	1080.9	12.4	1029.6	1058.1	28.5
		Gals. Pumped	100,440		Gals. Pumped	220,590	
JUNE		1080.9	1080.9	0	1058.1	1086.5	28.4
		Gals. Pumped	0		Gals. Pumped	219,816	
JULY		1080.9	1080.9	0	1086.5	1114.8	28.3
		Gals. Pumped	0		Gals. Pumped	219,042	
AUGUST		1080.9	1080.9	0	1114.8	1138	23.2
		Gals. Pumped	0		Gals. Pumped	179,568	
SEPTEMBER		1080.9	1080.9	0	1138	1164.1	26.1
		Gals. Pumped	0		Gals. Pumped	202,014	
OCTOBER		1080.9	1080.9	0	1164.1	1197.8	33.7
		Gals. Pumped	0		Gals. Pumped	260,838	
NOVEMBER		1080.9	1080.9	0	1197.8	1223.3	25.5
		Gals. Pumped	0		Gals. Pumped	197,370	
DECEMBER		1080.9	1080.9	0	1223.3	1245.4	22.1
		Gals. Pumped	0		Gals. Pumped	171,054	
TOTAL			922,590	113.9		2,435,004	314.6

TOTAL GALLONS PUMPED / YEAR 3,357,594 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	420,300	7.06
FEBRUARY	279,090	5.32
MARCH	373,554	3.32
APRIL	513,918	2.71
MAY	321,030	3.82
JUNE	219,816	2.67
JULY	219,042	0.18
AUGUST	179,568	0.05
SEPTEMBER	202,014	0.25
OCTOBER	260,838	2.51
NOVEMBER	197,370	5.49
DECEMBER	171,054	7.55
TOTALS	3,357,594	40.93



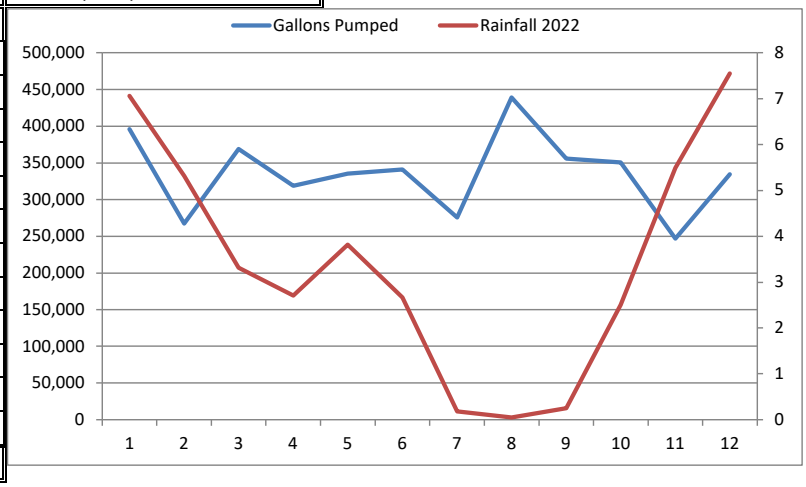
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 17 DUWAMISH STATION

		PUMP ONE	GAL/MIN	136	PUMP TWO	GAL/MIN	138
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		2703.2	2722.5	19.3	3169.6	3198.4	28.8
		Gals. Pumped	157,488		Gals. Pumped	238,464	
FEBRUARY		2722.5	2735	12.5	3198.4	3218.4	20
		Gals. Pumped	102,000		Gals. Pumped	165,600	
MARCH		2735	2752	17	3218.4	3246.2	27.8
		Gals. Pumped	138,720		Gals. Pumped	230,184	
APRIL		2752	2766.5	14.5	3246.2	3270.4	24.2
		Gals. Pumped	118,320		Gals. Pumped	200,376	
MAY		2766.5	2781.2	14.7	3270.4	3296.4	26
		Gals. Pumped	119,952		Gals. Pumped	215,280	
JUNE		2781.2	2796.8	15.6	3296.4	3322.2	25.8
		Gals. Pumped	127,296		Gals. Pumped	213,624	
JULY		2796.8	2811.2	14.4	3322.2	3341.3	19.1
		Gals. Pumped	117,504		Gals. Pumped	158,148	
AUGUST		2811.2	2830.3	19.1	3341.3	3375.5	34.2
		Gals. Pumped	155,856		Gals. Pumped	283,176	
SEPTEMBER		2830.3	2846.7	16.4	3375.5	3402.3	26.8
		Gals. Pumped	133,824		Gals. Pumped	221,904	
OCTOBER		2846.7	2862.3	15.6	3402.3	3429.3	27
		Gals. Pumped	127,296		Gals. Pumped	223,560	
NOVEMBER		2862.3	2874.8	12.5	3429.3	3446.8	17.5
		Gals. Pumped	102,000		Gals. Pumped	144,900	
DECEMBER		2874.8	2889	14.2	3446.8	3473.2	26.4
		Gals. Pumped	115,872		Gals. Pumped	218,592	
TOTAL			1,516,128	185.8		2,513,808	303.6

TOTAL GALLONS PUMPED / YEAR	4,029,936 GALLONS

MONTHS	PUMP 1+2	Rainfall
JANUARY	395,952	7.06
FEBRUARY	267,600	5.32
MARCH	368,904	3.32
APRIL	318,696	2.71
MAY	335,232	3.82
JUNE	340,920	2.67
JULY	275,652	0.18
AUGUST	439,032	0.05
SEPTEMBER	355,728	0.25
OCTOBER	350,856	2.51
NOVEMBER	246,900	5.49
DECEMBER	334,464	7.55
TOTALS	4,029,936	40.93



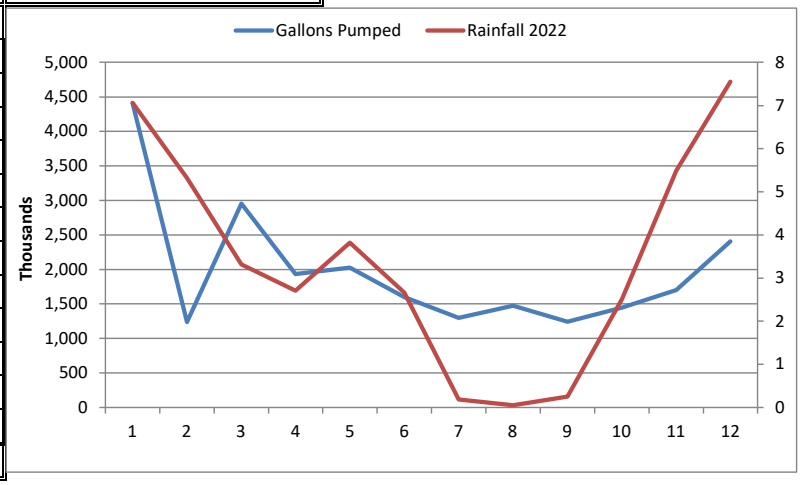
VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022

STATION # 18 FREEWAY STATION

		PUMP ONE	GAL/MIN	158	PUMP TWO	GAL/MIN	172
MONTH		START TIME	STOP TIME	TOTAL TIME	START TIME	STOP TIME	TOTAL TIME
JANUARY		25490.2	25705.1	214.9	33692.8	33922.6	229.8
		Gals. Pumped	2,037,252		Gals. Pumped	2,371,536	
FEBRUARY		25705.1	25764.4	59.3	33922.6	33988	65.4
		Gals. Pumped	562,164		Gals. Pumped	674,928	
MARCH		25764.4	25843.6	79.2	33988	34201.5	213.5
		Gals. Pumped	750,816		Gals. Pumped	2,203,320	
APRIL		25843.6	25935.6	92	34201.5	34304.5	103
		Gals. Pumped	872,160		Gals. Pumped	1,062,960	
MAY		25935.6	26034.7	99.1	34304.5	34410.2	105.7
		Gals. Pumped	939,468		Gals. Pumped	1,090,824	
JUNE		26034.7	26107.4	72.7	34410.2	34498.4	88.2
		Gals. Pumped	689,196		Gals. Pumped	910,224	
JULY		26107.4	26169	61.6	34498.4	34567.2	68.8
		Gals. Pumped	583,968		Gals. Pumped	710,016	
AUGUST		26169	26237.9	68.9	34567.2	34646.4	79.2
		Gals. Pumped	653,172		Gals. Pumped	817,344	
SEPTEMBER		26237.9	26296.1	58.2	34646.4	34713.1	66.7
		Gals. Pumped	551,736		Gals. Pumped	688,344	
OCTOBER		26296.1	26364	67.9	34713.1	34790.5	77.4
		Gals. Pumped	643,692		Gals. Pumped	798,768	
NOVEMBER		26364	26459.4	95.4	34790.5	34867.9	77.4
		Gals. Pumped	904,392		Gals. Pumped	798,768	
DECEMBER		26459.4	26479.4	20	34867.9	35083	215.1
		Gals. Pumped	189,600		Gals. Pumped	2,219,832	
TOTAL			9,377,616	989.2		14,346,864	1390.2

TOTAL GALLONS PUMPED / YEAR	23,724,480 GALLONS

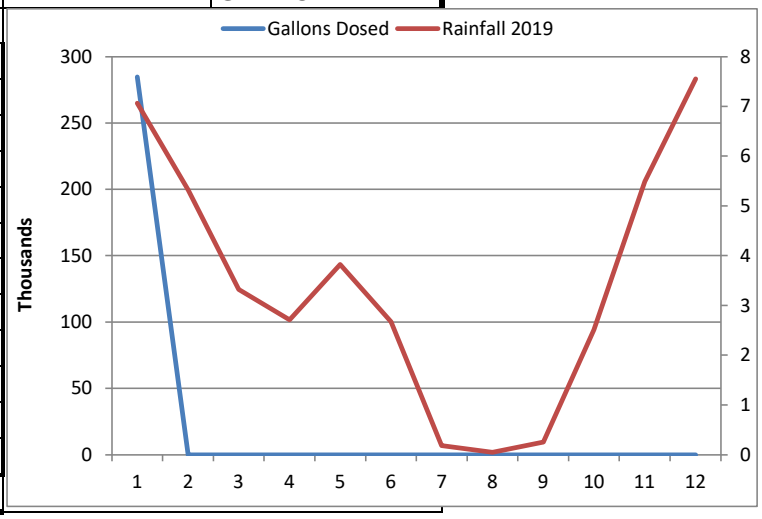
MONTHS	PUMP 1+2	Rainfall
JANUARY	4,408,788	7.06
FEBRUARY	1,237,092	5.32
MARCH	2,954,136	3.32
APRIL	1,935,120	2.71
MAY	2,030,292	3.82
JUNE	1,599,420	2.67
JULY	1,293,984	0.18
AUGUST	1,470,516	0.05
SEPTEMBER	1,240,080	0.25
OCTOBER	1,442,460	2.51
NOVEMBER	1,703,160	5.49
DECEMBER	2,409,432	7.55
TOTALS	23,724,480	40.93



VALLEY VIEW SEWER DISTRICT
PUMP TIMER REPORT
YEAR 2022
Station # 19 DOSING STATION

		CYCLE CO	GALS/DOSED	
MONTH				TOTAL COUNT
JANUARY		433		216.5
			Gals. Dosed	284,698
FEBRUARY	cycle counter	0		0
	broken		Gals. Dosed	0
MARCH		0		0
			Gals. Dosed	0
APRIL		0		0
			Gals. Dosed	0
MAY		0		0
			Gals. Dosed	0
JUNE		0		0
			Gals. Dosed	0
JULY		0		0
			Gals. Dosed	0
AUGUST		0		0
			Gals. Dosed	0
SEPTEMBER		0		0
			Gals. Dosed	0
OCTOBER		0		0
			Gals. Dosed	0
NOVEMBER		0		0
			Gals. Dosed	0
DECEMBER		0		0
			Gals. Dosed	0
TOTAL				284,698

TOTAL GALLONS DOSED / YEAR				GALLONS
MONTHS	Gallons	Rainfall		
JANUARY	284,698	7.06		
FEBRUARY	0	5.32		
MARCH	0	3.32		
APRIL	0	2.71		
MAY	0	3.82		
JUNE	0	2.67		
JULY	0	0.18		
AUGUST	0	0.05		
SEPTEMBER	0	0.25		
OCTOBER	0	2.51		
NOVEMBER	0	5.49		
DECEMBER	0	7.55		
TOTALS	284,698	40.93		

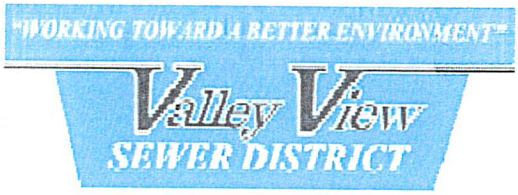


Appendix D
Financial Statements

THIS PAGE IS INTENTIONALLY LEFT BLANK.

CPAs | CONSULTANTS | WEALTH ADVISORS

CLAconnect.com



FINANCIAL STATEMENTS AND SUPPLEMENTARY INFORMATION

YEARS ENDED DECEMBER 31, 2020 AND 2019

VALLEY VIEW SEWER DISTRICT
TABLE OF CONTENTS
YEARS ENDED DECEMBER 31, 2020 AND 2019

CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT ACCOUNTANTS' REVIEW REPORT

Board of Commissioners
Valley View Sewer District
Seattle, Washington

We have reviewed the accompanying financial statements of Valley View Sewer District (the District), which comprise the statements of net position as of December 31, 2020 and 2019, and the related statements of revenues, expenses, and changes in fund net position, and cash flows for the years then ended, and the related notes to the financial statements. A review includes primarily applying analytical procedures to management's financial data and making inquiries of District management. A review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the financial statements as a whole. Accordingly, we do not express such an opinion.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement whether due to fraud or error.

Accountants' Responsibility

Our responsibility is to conduct the review engagements in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the American Institute of Certified Public Accountants. Those standards require us to perform procedures to obtain limited assurance as a basis for reporting whether we are aware of any material modifications that should be made to the financial statements for them to be in accordance with accounting principles generally accepted in the United States of America. We believe that the results of our procedures provide a reasonable basis for our conclusion.

Accountants' Conclusion

Based on our reviews, we are not aware of any material modifications that should be made to the accompanying financial statements in order for them to be in accordance with accounting principles generally accepted in the United States of America.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and the required supplementary information listed in the table of contents be presented to supplement the basic financial statements. Such information, although not a required part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting and for placing the basic financial statements in an appropriate operational, economic, or historical context. Such information is the responsibility of management. We have not audited, reviewed, or compiled the management's discussion and analysis and, accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on it. We have reviewed the schedules of proportionate share of the net pension liability and employer contributions. Such information is the responsibility of management and was derived from, and relates directly to, the underlying accounting and other records used to prepare the financial statements. We are not aware of any material modifications that should be made to the schedules of proportionate share of the net pension liability and employer contributions. We have not audited the schedules of proportionate share of the net pension liability and employer contributions and do not express an opinion on such information.

Additional Supplementary Information

The accompanying additional supplementary information listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from, and relates directly to, the underlying accounting and other records used to prepare the financial statements. The supplementary information has been subjected to the review procedures applied in our reviews of the basic financial statements. We are not aware of any material modifications that should be made to the supplementary information. We have not audited the supplementary information and do not express an opinion on such information.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Bellevue, Washington
October 12, 2022

VALLEY VIEW SEWER DISTRICT
MANAGEMENT'S DISCUSSION AND ANALYSIS
DECEMBER 31, 2020 AND 2019
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

INTRODUCTION

Valley View Sewer District (the District) was organized in 1946 to provide sewer services to customers residing within the District boundaries. Our mission is to provide our ratepayers with excellent customer service by offering safe, reliable, and efficient sewer service and to provide our employees a working environment that protects their health and safety and encourages professional development. The District is dedicated to working toward a better environment.

MANAGEMENT'S DISCUSSION AND ANALYSIS

This section of management's discussion and analysis presents our review of the District's financial position as of December 31, 2020 and 2019 and our financial performance for the years then ended. Please read these comments in conjunction with the District's financial statements, which follow this section.

OVERVIEW OF THE FINANCIAL STATEMENTS

The financial statements include statements of net position, statements of revenues, expenses, and changes in fund net position, statements of cash flows and notes to the financial statements.

The statements of net position present total assets and deferred outflows of resources and total liabilities and deferred inflows of resources with the difference between the two totals reported as net position. These statements provide information about the nature and amounts of investments in resources (assets), consumption of resources that are applicable to future periods (deferred outflows), obligations to District creditors (liabilities) and the acquisition of resources that are applicable to a future reporting period (deferred inflows). They provide a basis for evaluating the capital structure of the District and assessing its liquidity and financial flexibility. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial condition of the District is improving or deteriorating.

The statements of revenues, expenses, and changes in fund net position present the results of the District's business activities over the course of the year. This information can be used to determine whether the District has successfully recovered all its costs through its user fees and other charges, and to evaluate our profitability and credit worthiness.

The statements of cash flows report cash receipts, cash payments, and net changes in cash resulting from operating, financing, and investing activities over the course of the year. They present information regarding where cash came from and what it was used for.

The notes to the financial statements provide useful information regarding the District's significant accounting policies, explain significant account balances and activities, certain material risks, estimates, obligations, commitments, contingencies, and subsequent events, if any.

CONDENSED STATEMENTS OF NET POSITION AT DECEMBER 31

	2020	2019	2018
Capital Assets	$ 40,994,753	$ 41,637,729	$ 40,548,843
Other Assets	12,677,810	11,481,760	9,130,423
Total Assets	53,672,563	53,119,489	49,679,266
Deferred Outflows of Resources	159,471	140,614	143,382
Long-Term Liabilities	5,158,887	6,027,387	6,336,033
Other Liabilities	1,387,098	1,396,666	1,343,640
Total Liabilities	6,545,985	7,424,053	7,679,673
Deferred Inflows of Resources	171,539	308,928	275,766
Net Investment in Capital Assets	35,340,985	35,022,684	33,944,058
Restricted Net Position	575,438	750,902	822,359
Unrestricted Net Position	11,198,087	9,753,536	7,100,792
Total Net Position	$ 47,114,510	$ 45,527,122	$ 41,867,209

CONDENSED STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN FUND NET POSITION FOR THE YEAR ENDED DECEMBER 31

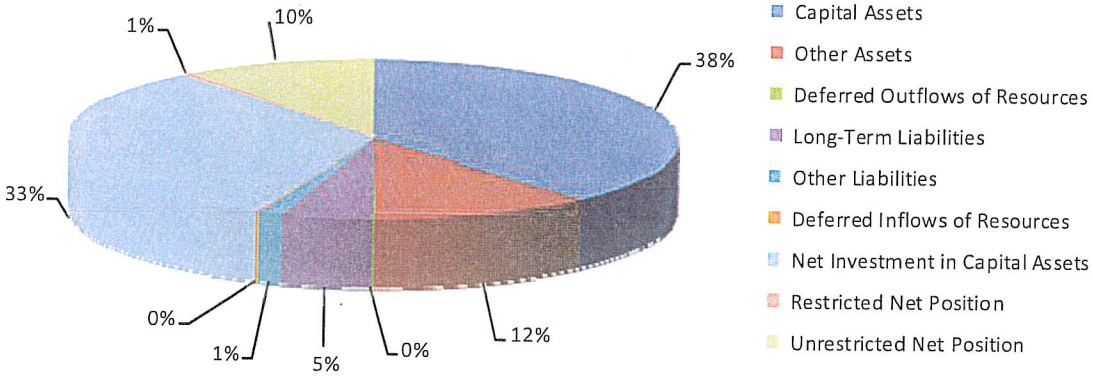
	2020	2019	2018
Sewer Service Charges	$ 13,226,125	$ 13,704,890	$ 12,922,239
Other Operating Revenue	230,763	839,989	537,447
Total Operating Revenues	13,456,888	14,544,879	13,459,686
Operating Costs	9,904,615	10,169,311	9,629,896
General and Administrative Expenses	2,217,461	2,035,465	1,716,955
Depreciation and Amortization	1,317,510	1,264,890	1,220,211
Total Operating Expenses	13,439,586	13,469,666	12,567,062
Operating Income	17,302	1,075,213	892,624
Nonoperating Revenue (Expense):			
Investment and Interest Income	176,744	279,945	194,783
Net Gain (Loss) on Disposal and Abandonment of Assets	-	-	500
Noncapital Grant	53,871	-	-
Private Property Improvements	6,957	(398,491)	(176,628)
Interest and Amortization on Long-Term Debt	(85,700)	(98,906)	(93,328)
Income Before Capital Contributions	169,174	857,761	817,951
Capital Contributions	1,418,214	2,802,152	5,120,906
Increase in Net Position	1,587,388	3,659,913	5,938,857
Net Position, January 1	45,527,122	41,867,209	35,928,352
Net Position, December 31	$ 47,114,510	$ 45,527,122	$ 41,867,209

FINANCIAL POSITION

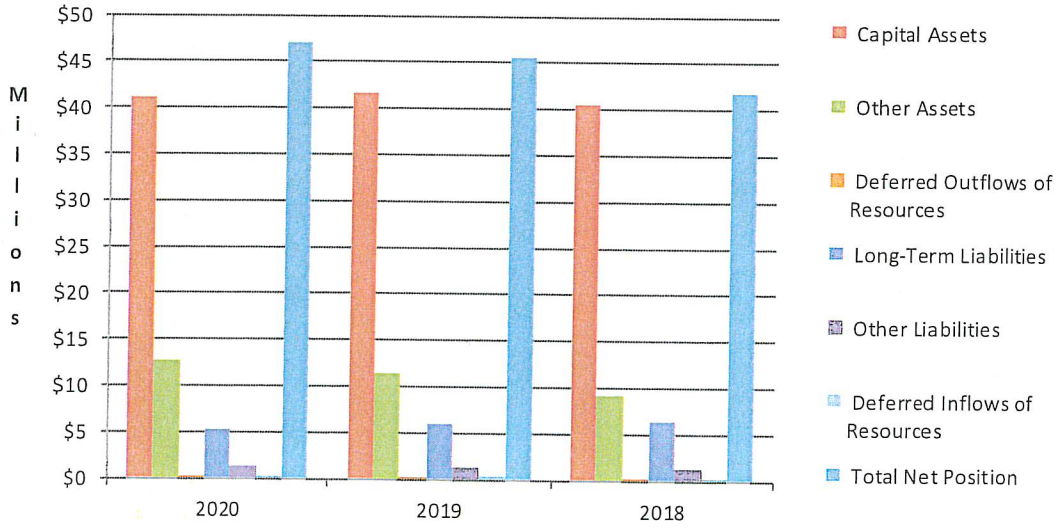
The District's overall financial position continues to be strong. The District is financed primarily by equity. Sufficient liquid assets are available to fund liabilities and construction. Capital assets decreased in 2020 due to depreciation in excess of construction activity and donated systems and increased 2019 due to growth in the customer base and construction activity to upgrade the system.

The following charts indicate the components of financial position.

2020 STATEMENT OF NET POSITION



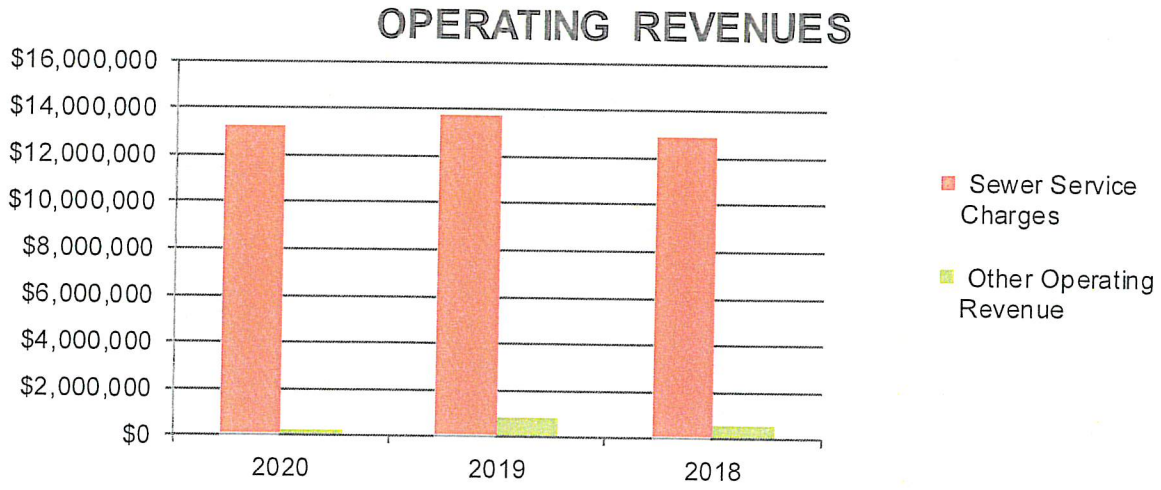
COMPARATIVE STATEMENT OF NET POSITION



RESULTS OF OPERATIONS

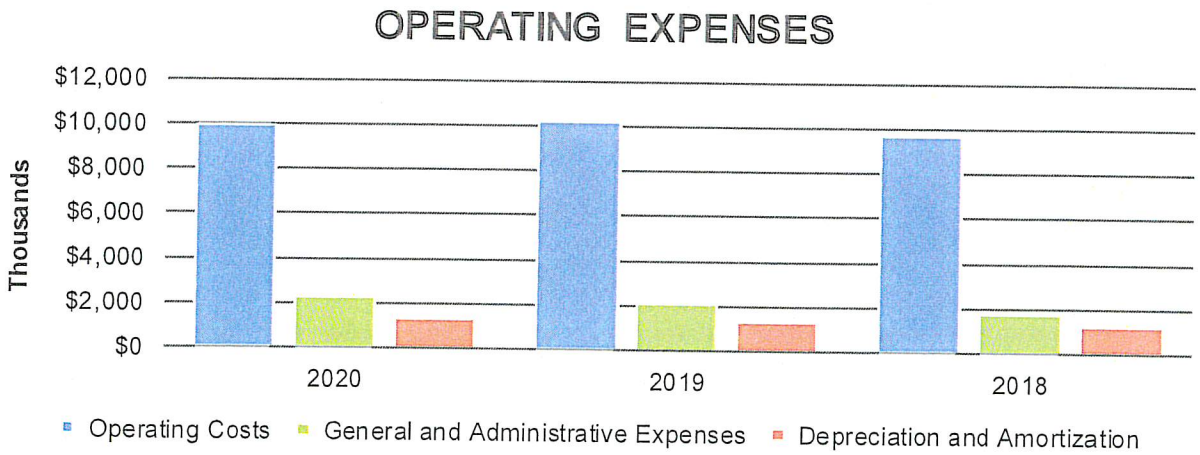
Operating revenues are received primarily from sewer service charges.

The following chart indicates operating revenue over the last three years:



Operating revenues decreased in 2020 due to decreases in consumption as a result of business closures and decreased activity at SeaTac airport as a result of Covid-19. Operating revenues increased in 2019 due to variances in consumption and rates increases. The variances in consumption were caused primarily by changes in the amount of rainfall and related storm water runoff during the winter months.

The following chart indicates operating expenses over the last three years:

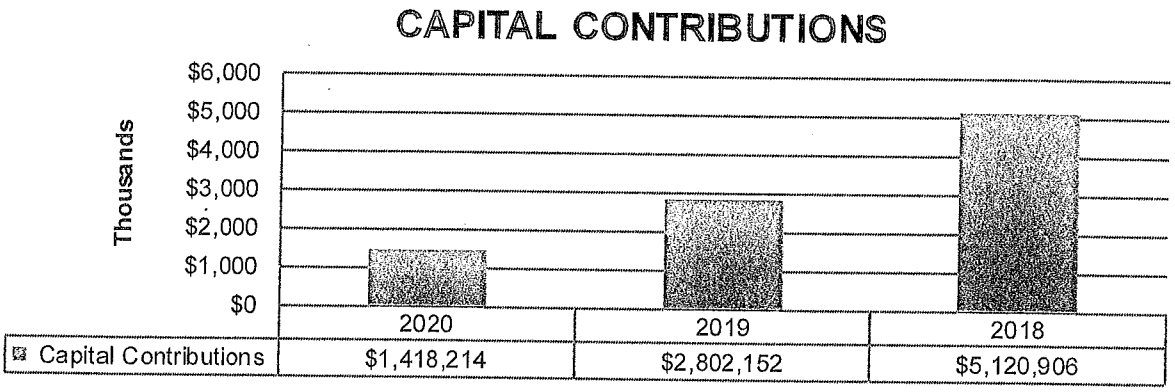


RESULTS OF OPERATIONS (CONTINUED)

The decrease in operating costs in 2020 was primarily due to less maintenance of the system being needed. The increase in operating costs in 2019 was primarily due to increases in treatment costs and additional maintenance activities. The increase in general and administrative expenses in 2020 was primarily due to increased engineering due to a line break. The increase in general and administrative expenses in 2019 was primarily due to increased personnel costs and increased maintenance activities. The District's philosophy generally is not to provide for all depreciation through rates based on the principle that connection charges and other fees also contribute to the cost of the sewer system. Operating results are augmented by earnings on investments and other nonoperating revenues and capital contributions.

The District collects capital contributions from new customers. These contributions consist of connection charges, grants, ULID assessments, and donated systems.

The following chart indicates capital contributions over the past three years.



The contributions are indicative of the growth of the District and include donated systems totaling $140,700, $99,200, and $-0- for the years ended December 31, 2020, 2019, and 2018, respectively, and grants (including forgiven loans) totaling $282,887, $1,532,485, and $3,619,162 for the years ended December 31, 2020, 2019, and 2018, respectively.

CAPITAL ASSETS AND LONG-TERM LIABILITIES

Capital assets decreased in 2020 due to depreciation in excess of construction activity and donated systems and increased 2019 due to growth in the customer base and construction activity to upgrade the system.

Significant capital asset additions during the years included the following:

2020		2019	
Duwamish Line Break	$ 147,985	The Loop	$ 1,615,180
Thorndyke Slide	262,460	40/42 Wastewater Bypass	400,763
40/42 Wastewater Bypass	51,663	S 127th St Sewer Extension	121,703
Donated Systems	140,700	Donated Systems	99,200

The decrease in long-term liabilities in 2020 and 2019 was mainly due to decreases in the net pension liability and principal payments on outstanding debt.

See Notes 4, 5, and 6 in the financial statements for detail activity in capital assets and long-term liabilities.

ADDITIONAL COMMENTS

The District is dependent on King County Wastewater Treatment Division (KCWTD/METRO) for the treatment of sewage collected by the District. The cost for this service charged to the District continues to increase. The District intends to adjust rates to compensate for increases in its direct treatment cost.

VALLEY VIEW SEWER DISTRICT
STATEMENTS OF NET POSITION
DECEMBER 31, 2020 AND 2019
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

ASSETS	2020	2019
CURRENT ASSETS		
Unrestricted:		
Cash and Cash Equivalents	$ 9,096,762	$ 6,851,931
Accounts Receivable - Users	783,691	719,076
Accounts Receivable - Other	120,130	111,994
Unbilled Utility Service Receivable	574,472	672,011
Interest Receivable	59,282	121,525
Prepaid Expenses	140,785	121,174
Contracts Receivable - Current Portion	300,703	193,797
Grant Receivable	262,460	971,338
Total Unrestricted	11,338,285	9,762,846
Restricted:		
Cash and Cash Equivalents	270,955	349,223
Interest Receivable	125	387
Assessments Receivable - Current Portion	112,243	100,859
Total Restricted	383,323	450,469
Total Current Assets	11,721,608	10,213,315
Noncurrent Assets:		
Unrestricted:		
Contracts Receivable, Less Current Portion	707,111	917,968
Preliminary Surveys and Investigations	56,976	50,044
Total Unrestricted	764,087	968,012
Restricted:		
Assessments Receivable, Less Current Portion	192,115	300,433
Capital Assets Not Being Depreciated:		
Land, Land Rights, and Other	628,310	628,310
Construction in Progress	430,333	455,149
Capital Assets Being Depreciated:		
Plant in Service	67,865,177	67,165,827
Less: Accumulated Depreciation	(27,929,067)	(26,611,557)
Net Capital Assets	40,994,753	41,637,729
Total Noncurrent Assets	41,950,955	42,906,174
Total Assets	53,672,563	53,119,489
DEFERRED OUTFLOWS OF RESOURCES		
Deferred Loss on Refunding of Debt	577	1,885
Deferred Outflows Related to Pensions	158,894	138,729
Total Deferred Outflows of Resources	159,471	140,614
Total Assets and Deferred Outflows or Resources	$ 53,832,034	$ 53,260,103

See accompanying Notes to Financial Statements.

VALLEY VIEW SEWER DISTRICT
STATEMENTS OF NET POSITION (CONTINUED)
DECEMBER 31, 2020 AND 2019
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

	2020	2019
LIABILITIES		
CURRENT LIABILITIES		
Payable from Unrestricted Assets:		
Accounts Payable	$ 230,779	$ 203,871
Side Sewer Deposits Payable	-	6,957
Compensated Absences	147,600	135,300
Retainage Payable	7,346	30,238
Accrued Interest	28,925	35,764
Long-Term Debt - Current Maturities	972,448	984,536
Total Current Liabilities	1,387,098	1,396,666
NONCURRENT LIABILITIES		
Long-Term Debt, Net of Current Maturities	4,673,821	5,494,445
Compensated Absences	10,365	36,648
Net Pension Liability	474,701	496,294
Total Noncurrent Liabilities	5,158,887	6,027,387
Total Liabilities	6,545,985	7,424,053
DEFERRED INFLOWS OF RESOURCES		
Deferred Inflows Related to Pensions	171,539	308,928
Total Liabilities and Deferred Inflows of Resources	6,717,524	7,732,981
NET POSITION		
Net Investment in Capital Assets	35,340,985	35,022,684
Restricted for Debt Service	571,843	746,130
Restricted for Impaired Investments	3,595	4,772
Unrestricted	11,198,087	9,753,536
Total Net Position	47,114,510	45,527,122
Total Liabilities and Deferred Inflows of Resources and Net Position	$ 53,832,034	$ 53,260,103

See accompanying Notes to Financial Statements.

VALLEY VIEW SEWER DISTRICT
STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN FUND NET POSITION
YEARS ENDED DECEMBER 31, 2020 AND 2019
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

	2020	2019
OPERATING REVENUES		
Service Charges:		
Commercial	$ 7,784,647	$ 8,294,840
Residential	5,441,478	5,410,050
Total Service Charges	13,226,125	13,704,890
Late Charges	39,386	137,394
Permit Fees	24,172	18,289
Rental of Flush Truck	820	420
Miscellaneous	166,385	683,886
Total Operating Revenues	13,456,888	14,544,879
OPERATING EXPENSES		
Collection and Transmission	9,594,790	9,856,423
Pumping	309,825	312,888
General and Administrative	2,217,461	2,035,465
Depreciation and Amortization	1,317,510	1,264,890
Total Operating Expenses	13,439,586	13,469,666
OPERATING INCOME	17,302	1,075,213
NONOPERATING REVENUE (EXPENSE)		
Investment Income	155,733	170,306
Interest on Assessments	14,974	21,064
Interest on Contracts	6,037	88,532
Other Interest	-	43
Noncapital Grant	53,871	-
Private Property Improvements	6,957	(398,491)
Interest and Amortization on Long-Term Debt	(85,700)	(98,906)
Total Nonoperating Revenue (Expense)	151,872	(217,452)
INCOME BEFORE CAPITAL CONTRIBUTIONS	169,174	857,761
Capital Contributions	1,418,214	2,802,152
CHANGE IN NET POSITION	1,587,388	3,659,913
Net Position - Beginning of Year	45,527,122	41,867,209
NET POSITION - END OF YEAR	$ 47,114,510	$ 45,527,122

See accompanying Notes to Financial Statements.

VALLEY VIEW SEWER DISTRICT
STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2020 AND 2019
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

	2020	2019
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash Received from Customers	$ 13,481,676	$ 14,442,744
Cash Paid to Vendors	(10,090,345)	(10,389,600)
Cash Paid to and for Employees and Commissioners	(2,110,583)	(2,025,948)
Cash Received (Paid) for Private Property Improvements	6,957	(398,491)
Issuance of Side Sewer Contracts Receivable	(65,917)	(145,447)
Collections on Side Sewer Contracts Receivable	85,812	69,729
Interest Received	10,381	14,633
Net Cash Provided by Operating Activities	1,317,981	1,567,620
CASH FLOWS FROM NONCAPITAL AND RELATED FINANCING ACTIVITIES		
Noncapital Grant Received	53,871	-
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Capital Contributions	1,798,045	3,139,022
Collections on ULID Assessments Receivable	96,934	107,778
Collections on Contracts Receivable	213,345	332,073
Interest Received on Contracts and Assessments	66,861	64,113
Expenditures for Plant in Service and Construction	(670,639)	(2,156,849)
Proceeds from Issuance of Long-Term Debt	142,884	2,484,828
Payment on Long-Term Debt	(975,596)	(1,525,179)
Interest Paid on Long-Term Debt	(91,231)	(83,032)
Net Cash Provided by Capital and Related Financing Activities	580,603	2,362,754
CASH FLOWS FROM INVESTING ACTIVITIES		
Collections on Contract with City of Tukwila	52,101	-
Interest Received on Investments	162,007	162,484
Net Cash Provided by Investing Activities	214,108	162,484
NET INCREASE IN CASH AND CASH EQUIVALENTS	2,166,563	4,092,858
Cash and Cash Equivalents - Beginning of Year	7,201,154	3,108,296
CASH AND CASH EQUIVALENTS - END OF YEAR	$ 9,367,717	$ 7,201,154
Cash and Cash Equivalents Balance is Comprised of the Following at December 31:		
Cash and Cash Equivalents - Unrestricted	$ 9,096,762	$ 6,851,931
Cash and Cash Equivalents - Restricted	270,955	349,223
Total	$ 9,367,717	$ 7,201,154

See accompanying Notes to Financial Statements.

VALLEY VIEW SEWER DISTRICT
STATEMENTS OF CASH FLOWS (CONTINUED)
YEARS ENDED DECEMBER 31, 2020 AND 2019
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

	2020	2019
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating Income	$ 17,302	$ 1,075,213
Adjustments to Reconcile Operating Income to Net Cash Provided by Operating Activities:		
Depreciation and Amortization	1,317,510	1,264,890
(Increase) Decrease in Assets and Deferred Outflows of Resources:		
Accounts Receivable	24,788	(102,135)
Prepaid Expenses	(19,611)	(2,890)
Side Sewer Contracts	26,852	(40,160)
Deferred Outflows Related to Pensions	(20,165)	384
Increase (Decrease) in Liabilities and Deferred Inflows of Resources:		
Accounts Payable	133,889	(7,909)
Side Sewer Deposits Payable	(6,957)	(35,558)
Compensated Absences	(13,983)	(59,631)
Net Pension Liability	(21,593)	(173,888)
Deferred Inflows Related to Pensions	(137,389)	33,162
Private Property Improvements	6,957	(398,491)
Other Income	10,381	14,633
Net Cash Provided by Operating Activities	$ 1,317,981	$ 1,567,620
SUPPLEMENTAL SCHEDULE OF SIGNIFICANT NONCASH FINANCING AND INVESTING ACTIVITIES		
Contract Assessments	$ 188,347	$ 212,513
Utility Plant Donations Received	$ 140,700	$ 99,200
Forgiven Loans	$ -	$ 1,049,500

See accompanying Notes to Financial Statements.

NOTE 1 DESCRIPTION OF BUSINESS, NATURE OF OPERATIONS, AND SIGNIFICANT ACCOUNTING POLICIES

Description of Business, Nature of Operations, and Reporting Entity

Valley View Sewer District (the District), a municipal corporation organized under the laws of the state of Washington, was created for the purpose of constructing, maintaining and operating a sewer system within its boundaries, which encompass a portion of the cities of SeaTac, Burien, and Tukwila, Washington, and surrounding unincorporated areas. The District is governed by an elected three-member board and has no component units.

Basis of Presentation and Accounting

These financial statements are prepared utilizing the economic resources measurement focus and full accrual basis of accounting. All activities of the District are accounted for within a single proprietary (enterprise) fund.

Newly Implemented Accounting Standards

The Districted implemented GASB 88 *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements* which improves the consistency in the information that is disclosed in the notes related to debt, including direct borrowings and direct placements. The implementation of this standard had no impact on the statement of net position or net income and had a minimal impact in the debt related footnotes.

Cash and Cash Equivalents

The District considers investments in the King County Investment Pool to be cash equivalents. These investments are stated at the fair value of the Pool's underlying assets.

Accounts Receivable

The District utilizes the allowance method of accounting for doubtful accounts. However, all accounts receivable are considered fully collectible since nonpayment of an account can result in a lien assessment filed against the property. Therefore, no allowance for doubtful accounts has been provided in the financial statements.

Capital Assets

Capital assets are stated at cost and include the capitalized portion of District employees' wages and related overhead costs. For sewer systems installed by developers or customers and conveyed to the District by bill of sale, the District records the cost of the system at acquisition value, which is estimated using the contributing party's cost. Major expenses for capital assets, including capital leases and major repairs that increase useful lives, are capitalized. Maintenance, repairs, and minor renewals are accounted for as expenses when incurred. When capital assets are retired or otherwise disposed of, the cost and accumulated depreciation are removed from the accounts and any resulting gain or loss is recognized in income for the period.

NOTE 1 DESCRIPTION OF BUSINESS, NATURE OF OPERATIONS, AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Capital Assets (Continued)

Depreciation on capital assets is computed using the straight-line method over the following estimated useful lives:

	Estimated Useful Lives
Sewer Mains and Extensions	50 Years
Sewer Structures and Intangibles	5 to 50 Years
Equipment	3 to 10 Years
Office Building	5 to 40 Years

Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of all state sponsored pension plans and additions to/deductions from those plans' fiduciary net position have been determined on the same basis as they are reported by the Washington State Department of Retirement Systems. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Deferred Outflows/Inflows of Resources

Deferred outflows of resources represent a consumption of net position that applies to future periods and will not be recognized as an outflow of resources (expense) until that time. Deferred outflows of resources consist of losses on refunding of debt, contributions to pension plans subsequent to the June 30 measurement date and the District's proportionate share of deferred outflows related to those plans. The deferred loss on refunding of debt results from a difference in the carrying value of refunded debt and its reacquisition price. Losses on refunding of debt are amortized by the interest method over the life of the refunded or refunding debt, whichever is shorter. Pension plan contributions subsequent to the measurement date are recognized as a reduction of the net pension liability in the following year. Deferred outflows of resources related to pensions for the net difference between projected and actual earnings on plan investments are amortized over a closed five-year period. The remaining deferred outflows of resources related to pensions are amortized over the average expected service lives of all employees provided with pensions through each plan.

Deferred inflows of resources represent an acquisition of net position that applies to future periods and will not be recognized as an inflow of resources (revenue) until that time. Deferred inflows of resources consist of the District's proportionate share of deferred inflows related to pension plans. Deferred inflows of resources related to pensions for the net difference between projected and actual earnings on plan investments are amortized over a closed five-year period. The remaining deferred inflows of resources related to pensions are amortized over the average expected service lives of all employees provided with pensions through each plan.

NOTE 1 DESCRIPTION OF BUSINESS, NATURE OF OPERATIONS, AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Compensated Absences

Employees earn vacation and sick leave based upon date of hire and years of service. Unused vacation and sick leave at retirement or normal termination is considered vested and payable to the employee at 100% of vacation (up to 576 hours) and 75% of accrued sick leave for retirement or 25% of accrued sick leave for normal termination. Vacation and the vested portion of sick leave, 50% based on historical turnover, which is earned but not used at December 31 each year is accrued as a liability of the District.

Long-Term Debt

Long-term debt is reported net of premiums and discounts. Premiums and discounts on long-term debt are amortized by the interest method over the period the related debt is outstanding.

Net Position

Net position is classified in the following three components:

Net Investment in Capital Assets – This component of net position consists of capital assets, net of accumulated depreciation, and capital-related deferred outflows of resources reduced by the outstanding balances of any capital-related borrowings and deferred inflows of resources. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds is not included in the calculation of net investment in capital assets. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.

Restricted – This component of net position consists of assets restricted by external creditors (such as through debt covenants), grantors, contributors or others reduced by related liabilities and deferred inflows of resources.

Unrestricted Net Position – This component of net position consists of all net position that does not meet the definition of "restricted" or "net investment in capital assets."

The District applies unrestricted and restricted resources to purposes for which both unrestricted and restricted net resources are available based on management's discretion.

Revenues and Expenses

Revenues and expenses are distinguished between operating and nonoperating items. Operating revenues result from providing services in connection with the District's sewer system. Operating expenses include the costs associated with providing the District's services, general and administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting these definitions are classified as nonoperating revenues and expenses.

NOTE 1 DESCRIPTION OF BUSINESS, NATURE OF OPERATIONS, AND SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Capital Contributions

Grants, ULID assessments, and contributions in aid of construction from property owners are recorded as capital contribution revenue.

Use of Estimates in Financial Statement Preparation

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

NOTE 2 DEPOSITS AND INVESTMENTS

Deposits

Cash on hand at December 31, 2020 and 2019 was $1,200 and $1,200, respectively. The Districts bank balances as of December 31, 2020 and 2019 were $88,218 and $48,700, respectively.

Custodial credit risk for deposits is the risk that, in event of a failure of a depository financial institution, the District would not be able to recover deposits or will not be able to recover collateral securities that are in possession of an outside party. The District deposits and certificates of deposit are covered by federal depository insurance (FDIC) or by collateral held in a multiple financial institution collateral pool administered by the Washington Public Deposit Protection Commission (PDPC).

Investments

In accordance with state law, the District's governing body has entered into a formal interlocal agreement with the District's ex officio treasurer, King County, to have all its funds not required for immediate expenditure to be invested in the King County Investment Pool (Pool). Investments in the Pool are stated at the fair value of the Pool's underlying assets. The stated value per share is $1. The King County Executive Finance Committee provides oversight of the Pool.

NOTE 2 DEPOSITS AND INVESTMENTS (CONTINUED)

Investments (Continued)

As of December 31, the District had the following investments:

Investment Type	Fair Value	Average Effective Duration
2020		
King County Investment Pool:		
Main Pool	$ 9,314,222	1.20 Years
Impaired Pool	3,595	
2019		
King County Investment Pool:		
Main Pool	$ 7,106,964	0.92 Years
Impaired Pool	4,772	

Impaired Investments

As of December 31, 2020 and 2019, all impaired commercial paper investments have completed enforcement events. The King County Impaired Investment Pool (Impaired Pool) held one commercial paper asset where the Impaired Pool accepted an exchange offer and is receiving the cash flows from the investment's underlying securities. As of December 31, 2019, the Impaired Pool also held the residual investments in one commercial paper asset that was part of completed enforcement events, where the Impaired Pool accepted the cash-out option. The District's share of the impaired investment pool principal was $5,752 and $7,090 at December 31, 2020 and 2019, respectively. The District's unrealized loss for these investments is $2,157 and $2,318 at December 31, 2020 and 2019, respectively.

Interest Rate Risk

As a means of limiting its exposure to rising interest rates, securities purchased in the Pool must have a final maturity, or weighted average life, no longer than five years. While the Pool's market value is calculated on a monthly basis, unrealized gains and losses are not distributed to participants. The Pool distributes earnings monthly using an amortized cost methodology.

Credit Risk

As of December 31, 2020 and 2019, the District's investment in the Pool was not rated by a nationally recognized statistical rating organization (NRSRO). In compliance with state statutes, Pool policies authorize investments in U.S. treasury securities, U.S. agency securities and mortgage-backed securities, corporate notes (rated at least "A" by one NRSROs), municipal securities (rated at least "A" by two NRSROs), commercial paper (rated at least the equivalent of "A-1" by one NRSROs), certificates of deposits issued by qualified public depositories, repurchase agreements, and the Local Government Investment Pool managed by the Washington State Treasurer's office.

NOTE 3 RESTRICTED ASSETS

In accordance with certain agreements, separate restricted accounts are required to be established. The assets held in these accounts are restricted for specific uses. Restricted assets are as follows:

	Cash and Cash Equivalents	Interest Receivable	Current Assessments Receivable	Long-Term Assessments Receivable
December 31, 2020				
Current Restricted Assets:				
Impaired Investment Pool	$ 3,595	$ -	$ -	$ -
Revenue Bond Reserve Account	117,084	-	-	-
Revenue Bond Fund Debt Service Account	150,276	125	112,243	192,115
Total	$ 270,955	$ 125	$ 112,243	$ 192,115
December 31, 2019				
Current Restricted Assets:				
Impaired Investment Pool	$ 4,772	$ -	$ -	$ -
Revenue Bond Reserve Account	153,224	-	-	-
Revenue Bond Fund Debt Service Account	191,227	387	100,859	300,433
Total	$ 349,223	$ 387	$ 100,859	$ 300,433

Terms of the revenue bond issues require the District to establish and maintain a reserve account. The reserve account is to provide security for bondholders. The amount to be reserved is the lesser of the maximum annual debt service, 125% of average annual debt service, or 10% of the proceeds of the bonds. As of December 31, 2020 and 2019, the required reserve is $117,084 and $153,224, respectively. As of December 31, 2020 and 2019, the reserve account was fully funded.

NOTE 4 CAPITAL ASSETS

Major classes of capital assets and capital asset activity were as follows for December 31, 2020:

	Balance - Beginning of Year	Increase	Decrease	Balance - End of Year
Capital Assets Not Being Depreciated:				
Land, Land Rights, and Other	$ 628,310	$ -	$ -	$ 628,310
Construction in Progress	455,149	531,356	(556,172)	430,333
Total	1,083,459	531,356	(556,172)	1,058,643
Capital Assets Being Depreciated:				
Sewer Mains and Extensions	57,582,618	694,934	-	58,277,552
Sewer Structures and Intangibles	3,614,754	-	-	3,614,754
Equipment	1,562,756	-	-	1,562,756
Office Building	4,405,699	4,416	-	4,410,115
Total	67,165,827	699,350	-	67,865,177
Accumulated Depreciation:				
Sewer Mains and Extensions	(20,946,150)	(1,136,377)	-	(22,082,527)
Sewer Structures and Intangibles	(2,561,318)	(52,248)	-	(2,613,566)
Equipment	(1,496,403)	(21,242)	-	(1,517,645)
Office Building	(1,607,686)	(107,643)	-	(1,715,329)
Total	(26,611,557)	(1,317,510)	-	(27,929,067)
Net Capital Assets	$ 41,637,729	$ (86,804)	$ (556,172)	$ 40,994,753

NOTE 4 CAPITAL ASSETS (CONTINUED)

Major classes of capital assets and capital asset activity were as follows for December 31, 2019:

	Balance - Beginning of Year	Increase	Decrease	Balance - End of Year
Capital Assets Not Being Depreciated:				
Land, Land Rights, and Other	$ 628,310	$ -	$ -	$ 628,310
Construction in Progress	4,821,929	2,230,759	(6,597,539)	455,149
Total	5,450,239	2,230,759	(6,597,539)	1,083,459
Capital Assets Being Depreciated:				
Sewer Mains and Extensions	50,874,729	6,707,889	-	57,582,618
Sewer Structures and Intangibles	3,614,754	-	-	3,614,754
Equipment	1,556,943	5,813	-	1,562,756
Office Building	4,398,844	6,855	-	4,405,699
Total	60,445,270	6,720,557	-	67,165,827
Accumulated Depreciation:				
Sewer Mains and Extensions	(19,883,845)	(1,062,305)	-	(20,946,150)
Sewer Structures and Intangibles	(2,503,509)	(57,809)	-	(2,561,318)
Equipment	(1,460,969)	(35,434)	-	(1,496,403)
Office Building	(1,498,343)	(109,343)	-	(1,607,686)
Total	(25,346,666)	(1,264,891)	-	(26,611,557)
Net Capital Assets	$ 40,548,843	$ 7,686,425	$ (6,597,539)	$ 41,637,729

NOTE 5 LONG-TERM DEBT PAYABLE

Long-term debt outstanding consisted of revenue bonds and direct borrowings and direct placements as follows at December 31:

Description	2020	2019
Revenue and Refunding Bonds:		
$1,835,000 issued September 18, 2008 for utility construction, due serially through the year 2023, with interest payable semi-annually at 4.30 annual percentage rate.	$ 455,000	$ 595,000
Total Revenue and Refunding Bonds	455,000	595,000
Direct Borrowings and Direct Placements:		
Revenue and Refunding Bond:		
$1,013,087 issued March 3, 2016 for refunding, due serially through the year 2022, with interest payable semi-annually at 1.89 annual percentage rate.	156,900	310,409

NOTE 5 LONG-TERM DEBT PAYABLE (CONTINUED)

Description	2020	2019
Public Works Trust Fund Loans: All issued for utility construction and secured by the revenue of the system.		
2001 $1,394,170 loan: Payable $73,581 annually through the year 2021, plus interest at 0.50 annual percentage rate.	$ 73,581	$ 147,162
2002 $1,908,250 loan: Payable $101,025 annually through the year 2022, plus interest at 0.50 annual percentage rate.	202,050	303,075
2003 $1,280,058 loan: Payable $68,755 annually through the year 2023, plus interest at 0.50 annual percentage rate.	206,264	275,019
2004 $88,230 loan: Payable $4,780 annually through the year 2023, plus interest at 0.50 annual percentage rate.	14,341	19,121
2004 $1,609,050 loan: Payable $85,185 annually through the year 2024, plus interest at 0.50 annual percentage rate.	340,740	425,925
2006 $3,320,632 loan: Payable $185,219 annually through the year 2026, plus interest at 0.50 annual percentage rate.	1,111,317	1,296,536
2012 $1,950,000 loan: Payable $100,685 annually through the year 2031, plus interest at 0.25 annual percentage rate.	1,107,540	1,208,225
2020 $638,000 Public Works Trust Fund Loan: $-0- drawn to December 31, 2020, payable annually through the year 2039, plus interest at 1.58 annual percentage rate.	-	-

NOTE 5 LONG-TERM DEBT PAYABLE (CONTINUED)

Description	2020	2019
Clean Water State Revolving Fund Loans: All issued for utility construction and secured by the revenue of the system.		
2017 $171,412 loan: Payable $5,285 semi-annually through the year 2038, plus interest at 2.0 annual percentage rate.	$ 158,996	$ 166,263
2017 $1,875,130 loan: Payable $56,616 semi-annually through the year 2039, plus interest at 2.0 annual percentage rate.	1,819,540	1,732,246
Total Direct Borrowings and Direct Placements	5,191,269	5,883,981
Total Long-Term Debt	5,646,269	6,478,981
Less: Current Maturities	972,448	984,536
Total	$ 4,673,821	$ 5,494,445

Long-term debt service requirements to maturity are as follows:

	Revenue and Refunding Bonds		Direct Placements and Direct Borrowings		
Year Ending December 31,	Principal	Interest	Principal	Interest	Total
2021	$ 150,000	$ 19,565	$ 822,448	$ 72,287	$ 1,064,300
2022	150,000	13,115	709,923	47,946	920,984
2023	155,000	6,665	533,364	42,253	737,282
2024	-	-	461,620	38,490	500,110
2025	-	-	378,262	35,059	413,321
2026-2030	-	-	1,179,159	134,458	1,313,617
2031-2035	-	-	642,741	77,207	719,948
2036-2039	-	-	463,752	20,886	484,638
Total	$ 455,000	$ 39,345	$ 5,191,269	$ 468,586	$ 6,154,200

NOTE 6 CHANGES IN LONG-TERM LIABILITIES

Changes in long-term liabilities were as follows:

	Balance - Beginning of Year	Additions	Reductions	Balance - End of Year	Amounts Due Within One Year
2020					
Public Works Trust Fund Loans	$ 3,675,063	$ -	$ (619,230)	$ 3,055,833	$ 619,231
Clean Water State Revolving Loans	1,898,509	142,884	(62,857)	1,978,536	123,607
Revenue Bonds	905,409	-	(293,509)	611,900	229,610
Compensated Absences	171,948	168,771	(182,754)	157,965	147,600
Net Pension Liability	496,294	-	(21,593)	474,701	-
Total	$ 7,147,223	$ 311,655	$ (1,179,943)	$ 6,278,935	$ 1,120,048
2019					
Public Works Trust Fund Loans	$ 4,294,295	$ -	$ (619,232)	$ 3,675,063	$ 619,231
Clean Water State Revolving Loans	468,329	2,484,829	(1,054,649)	1,898,509	71,796
Revenue Bonds	1,806,208	-	(900,799)	905,409	293,509
Compensated Absences	231,579	157,110	(216,741)	171,948	135,300
Net Pension Liability	670,182	-	(173,888)	496,294	-
Total	$ 7,470,593	$ 2,641,939	$ (2,965,309)	$ 7,147,223	$ 1,119,836

NOTE 8 PENSION PLAN

The following table represents the aggregate pension amounts for all plans as of and for the years ended December 31:

Aggregate Pension Amounts - All Plans

	2020	2019
Net Pension Liabilities	$ 474,701	$ 496,294
Deferred Outflows of Resources	158,894	138,729
Deferred Inflows of Resources	171,539	308,928
Pension Expense	1,967	31,482

State Sponsored Pension Plans

Substantially all of the District's full-time and qualifying part-time employees participate in one of the following statewide retirement systems administered by the Washington State Department of Retirement Systems, under cost-sharing, multiemployer public employee defined benefit and defined contribution retirement plans. The state Legislature establishes, and amends, laws pertaining to the creation and administration of all public retirement systems.

NOTE 8 PENSION PLAN (CONTINUED)

State Sponsored Pension Plans (Continued)

The Department of Retirement Systems (DRS), a department within the primary government of the state of Washington, issues a publicly available annual comprehensive financial report (ACFR) that includes financial statements and required supplementary information for each plan. The DRS ACFR may be obtained by writing to:

Department of Retirement Systems
Communications Unit
PO Box 48380
Olympia, WA 98540-8380

Or the DRS ACFR may be downloaded from the DRS website at www.drs.wa.gov.

Public Employees Retirement System (PERS)

PERS members include elected officials; state employees; employees of the Supreme, Appeals and Superior Courts; employees of the legislature; employees of district and municipal courts; employees of local governments, and higher education employees not participating in higher education retirement programs. PERS is comprised of three separate pension plans for membership purposes. PERS plans 1 and 2 are defined benefit plans, and PERS plan 3 is a defined benefit plan with a defined contribution component.

PERS Plan 1 – provides retirement, disability, and death benefits. Retirement benefits are determined as 2% of the member's average final compensation (AFC) times the member's years of service. The AFC is the average of the member's 24 highest consecutive service months. Members are eligible for retirement from active status at any age with at least 30 years of service, at age 55 with at least 25 years of service, or at age 60 with at least 5 years of service.

Members retiring from active status prior to the age of 65 may receive actuarially reduced benefits. Retirement benefits are actuarially reduced to reflect the choice of a survivor benefit. Other benefits include duty and nonduty disability payments, an optional cost-of-living adjustment (COLA), and a one-time duty-related death benefit, if found eligible by the Department of Labor and Industries. PERS 1 members were vested after the completion of five years of eligible service. The plan was closed to new entrants on September 30, 1977.

Contributions – The PERS Plan 1 member contribution rate is established by state statute at 6%. The employer contribution rate is developed by the Office of the State Actuary and includes an administrative expense component that is currently set at 0.18%. Each biennium, the state Pension Funding Council adopts Plan 1 employer contribution rates.

NOTE 8 PENSION PLAN (CONTINUED)

Public Employees Retirement System (PERS) (Continued)

Contributions (Continued)

The PERS Plan 1 required contribution rates (expressed as a percentage of covered payroll) were as follows:

PERS Plan 1 Actual Contribution Rates	Employer	Employee
2020		
January through August		
PERS Plan 1	7.92%	6.00%
PERS Plan 1 UAAL	4.76%	-
Administrative Fee	0.18%	-
Total	12.86%	6.00%
September through December		
PERS Plan 1	7.92%	6.00%
PERS Plan 1 UAAL	4.87%	-
Administrative Fee	0.18%	-
Total	12.97%	6.00%
2019		
January through June		
PERS Plan 1	7.52%	6.00%
PERS Plan 1 UAAL	5.13%	-
Administrative Fee	0.18%	-
Total	12.83%	6.00%
July through December		
PERS Plan 1	7.92%	6.00%
PERS Plan 1 UAAL	4.76%	-
Administrative Fee	0.18%	-
Total	12.86%	6.00%

The District's actual contributions to the plan were $68,309 and $67,085 for the years ended December 31, 2020 and 2019, respectively.

NOTE 8 PENSION PLAN (CONTINUED)

Public Employees Retirement System (PERS) (Continued)

PERS Plan 2/3 – provides retirement, disability, and death benefits. Retirement benefits are determined as 2% of the member's average final compensation (AFC) times the member's years of service for Plan 2 and 1% of AFC for Plan 3. The AFC is the average of the member's 60 highest-paid consecutive service months. There is no cap on years of service credit. Members are eligible for retirement with a full benefit at 65 with at least 5 years of service credit. Retirement before age 65 is considered an early retirement. PERS Plan 2/3 members who have at least 20 years of service credit and are 55 years of age or older, are eligible for early retirement with a benefit that is reduced by a factor that varies according to age for each year before age 65.

PERS Plan 2/3 members who have 30 or more years of service credit and are at least 55 years old can retire under one of two provisions:

- With a benefit that is reduced by 3% for each year before age 65; or
- With a benefit that has a smaller (or no) reduction (depending on age) that imposes stricter return-to-work rules.

PERS Plan 2/3 members hired on or after May 1, 2013 have the option to retire early by accepting a reduction of 5% for each year of retirement before age 65. This option is available only to those who are age 55 or older and have at least 30 years of service credit. PERS Plan 2/3 retirement benefits are also actuarially reduced to reflect the choice of a survivor benefit. Other PERS Plan 2/3 benefits include duty and nonduty disability payments, a cost-of-living allowance (based on the CPI), capped at 3% annually and a one-time duty related death benefit, if found eligible by the Department of Labor and Industries. PERS 2 members are vested after completing 5 years of eligible service. Plan 3 members are vested in the defined benefit portion of their plan after 10 years of service; or after 5 years of service if 12 months of that service are earned after age 44.

PERS Plan 3 – defined contribution benefits are totally dependent on employee contributions and investment earnings on those contributions. PERS Plan 3 members choose their contribution rate upon joining membership and have a chance to change rates upon changing employers. As established by statute, Plan 3 required defined contribution rates are set at a minimum of 5% and escalate to 15% with a choice of 6 options. Employers do not contribute to the defined contribution benefits. PERS Plan 3 members are immediately vested in the defined contribution portion of their plan.

Contributions – The PERS Plan 2/3 employer and employee contribution rates are developed by the Office of the State Actuary to fully fund Plan 2 and the defined benefit portion of Plan 3. The Plan 2/3 employer rates include a component to address the PERS Plan 1 unfunded actuarially accrued liability (UAAL) and an administrative expense that is currently set at 0.18%. Each biennium, the state Pension Funding Council adopts Plan 2 employer and employee contribution rates and Plan 3 contribution rates.

NOTE 8 PENSION PLAN (CONTINUED)

Public Employees Retirement System (PERS) (Continued)

The PERS Plan 2/3 required contribution rates (expressed as a percentage of covered payroll) were as follows:

PERS Plan 2/3 Actual Contribution Rates	Employer 2/3	Employee 2	Employee 3
2020			
January through August			
PERS Plan 2	7.92%	7.90%	Varies
PERS Plan 1 UAAL	4.76%	-	Varies
Administrative Fee	0.18%	-	Varies
Total	12.86%	7.90%	
September through December			
PERS Plan 2	7.92%	7.90%	Varies
PERS Plan 1 UAAL	4.87%	-	Varies
Administrative Fee	0.18%	-	Varies
Total	12.97%	7.90%	
2019			
January through June			
PERS Plan 2	7.52%	7.41%	Varies
PERS Plan 1 UAAL	5.13%	-	Varies
Administrative Fee	0.18%	-	Varies
Total	12.83%	7.41%	
July through December			
PERS Plan 2	7.92%	7.90%	Varies
PERS Plan 1 UAAL	4.76%	-	Varies
Administrative Fee	0.18%	-	Varies
Total	12.86%	7.90%	

The District's actual contributions to the plan were $112,805 and $104,741 for the years ended December 31, 2020 and 2019, respectively.

Actuarial Assumptions

The 2020 total pension liability (TPL) for each of the DRS plans was determined using the most recent actuarial valuation completed in 2020 with a valuation date of June 30, 2019. The actuarial assumptions used in the valuation were based on the results of the Office of the State Actuary's (OSA) *2013-2018 Experience Study* and the *2019 Economic Experience Study*.

The 2019 TPL for each of the DRS plans was determined using the actuarial valuation completed in 2019, with a valuation date of June 30, 2018. The actuarial assumptions used in the valuation were based on the results of the Office of the State Actuary's (OSA) *2007-2012 Experience Study* and the *2017 Economic experience Study*.

NOTE 8 PENSION PLAN (CONTINUED)

Actuarial Assumptions (Continued)

Additional 2020 assumptions for subsequent events and law changes are current as of the 2019 actuarial valuation report. Additional 2019 assumptions for subsequent events and law changes are current as of the 2018 actuarial valuation report. The TPL was calculated as of the valuation date and rolled forward to the measurement date of June 30, 2020 and June 30, 2019. 2020 Plan liabilities were rolled forward from June 30, 2019, to June 30, 2020, and 2019 Plan liabilities were rolled forward from June 30, 2018, to June 30, 2019, reflecting each plan's normal cost (using the entry-age cost method), assumed interest and actual benefit payments.

- **Inflation:** 2.75% total economic inflation; 3.50% salary inflation
- **Salary increases:** In addition to the base 3.50% salary inflation assumption, salaries are also expected to grow by promotions and longevity.
- **Investment rate of return:** 7.4%

2020 Mortality rates were developed using the Society of Actuaries' Pub. H-2020 mortality rates, which vary by member status, as the base table. The OSA applied age offsets for each system, as appropriate, to better tailor the mortality rates to the demographics of each plan. OSA applied the long-term MP-2017 generational improvement scale, also developed by the Society Actuaries, to project mortality rates for every year after the 2010 base table. Mortality rates are applied on a generational basis; meaning, each member is assumed to receive additional mortality improvements in each future year throughout his or her lifetime.

2019 Mortality rates were based on the RP-2000 report's Combined Healthy Table and Combined Disabled Table, published by the Society of Actuaries. The OSA applied offsets to the base table and recognized future improvements in mortality by projecting the mortality rates using 100% Scale BB. Mortality rates are applied on a generational basis; meaning, each member is assumed to receive additional mortality improvements in each future year throughout his or her lifetime.

There were changes in methods and assumptions between the 2020 and 2019 valuations.

- OSA updated its demographic assumptions based on the results of its latest demographic experience study. See OSA's 2013-2018 Demographic Experience Study at leg.wa.gov/osa.
- OSA updated the Early Retirement Factors and Joint-and-Survivor factors used in its model to match the ones implemented by DRS on October 1, 2020. These factors are used to value benefits for members who elect to retire early and for survivors of members that die prior to retirement.
- The valuation includes liabilities and assets for Plan 3 members purchasing Total Allocation Portfolio annuities when determining contribution rates and funded status.

NOTE 8 PENSION PLAN (CONTINUED)

Actuarial Assumptions (Continued)

- OSA changed its method of updating certain data items that change annually, including the public safety duty-related death lump sum and Washington state average wage. OSA set these values at 2018 and will project them into the future using assumptions until the next Demographic Experience Study in 2025. See leg.wa.gov/osa for more information on this method change.

There were changes in methods and assumptions between the 2019 and 2018 valuations.

- OSA updated modeling to reflect providing benefit payments to the date of the initial retirement eligibility for terminated vested members who delay application for retirement benefits.

- OSA updated COLA programming to reflect legislation signed during the 2018 legislative session that provides PERS Plan 1 annuitants who are not receiving a basic minimum, alternate minimum, or temporary disability benefit with a one-time permanent 1.5% increase to their monthly retirement benefit, not to exceed a maximum of $62.50 per month.

Discount Rate

The discount rate used to measure the total pension liability for all DRS plans was 7.4%.

To determine that rate, an asset sufficiency test was completed to test whether each pension plan's fiduciary net position was sufficient to make all projected future benefit payments for current plan members. Based on OSA's assumptions, the pension plans' fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return of 7.4% was used to determine the total liability.

Long-Term Expected Rate of Return

The long-term expected rate of return on the DRS pension plan investments of 7.4% was determined using a building-block-method. In selecting this assumption, the Office of the State Actuary (OSA) reviewed the historical experience data, considered the historical conditions that produced past annual investment returns, and considered capital market assumptions and simulated expected investment returns provided by the Washington State Investment Board (WSIB). The WSIB uses the capital market assumptions and their target asset allocation to simulate future investment returns over various time horizons.

Estimated Rates of Return by Asset Class

Best estimates of arithmetic real rates of return for each major asset class included in the pension plan's target asset allocation, are summarized in the table below. The inflation component used to create the table is 2.2% and represents the WSIB's most recent long-term estimate of broad economic inflation.

NOTE 8 PENSION PLAN (CONTINUED)

Estimated Rates of Return by Asset Class (Continued)

As of June 30, 2020 and 2019:

Asset Class	Target Allocation	Percent Long-Term Expected Real Rate of Return Arithmetic
Fixed Income	20 %	2.20 %
Tangible Assets	7	5.10
Real Estate	18	5.80
Global Equity	32	6.30
Private Equity	23	9.30
Total	100 %	

Sensitivity of Net Pension Liability (NPL)

The table below presents the District's proportionate share of the net pension liability calculated using the applicable discount rate, as well as what the District's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than applicable discount rate.

	1% Decrease (6.4%)	Current Discount Rate (7.4%)	1% Increase (8.4%)
2020			
PERS 1	$ 403,334	$ 322,009	$ 251,084
PERS 2/3	950,089	152,692	(503,965)

	1% Decrease (6.5%)	Current Discount Rate (7.5%)	1% Increase (8.5%)
2019			
PERS 1	$ 468,722	$ 374,284	$ 292,346
PERS 2/3	935,767	122,010	(545,732)

Pension Plan Fiduciary Net Position

Detailed information about the State's pension plans' fiduciary net position is available in the separately issued DRS financial report.

NOTE 8 PENSION PLAN (CONTINUED)

Pension Liabilities (Assets), Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At December 31, 2020 and 2019, the District reported a total pension liability (asset) for its proportionate share of the net pension liabilities as follows (measured as of June 30, 2020 and 2019):

	2020	2019
PERS 1	$ 322,009	$ 374,284
PERS 2/3	152,692	122,010
Total	$ 474,701	$ 496,294

The District's proportionate share of the collective net pension liabilities was as follows:

	Proportionate Share 6/30/19	Proportionate Share 6/30/20	Change in Proportion
PERS 1	0.009733%	0.009121%	-0.000612%
PERS 2/3	0.012561%	0.011939%	-0.000622%

	Proportionate Share 6/30/18	Proportionate Share 6/30/19	Change in Proportion
PERS 1	0.010050%	0.009733%	-0.000317%
PERS 2/3	0.012964%	0.012561%	-0.000403%

Employer contribution transmittals received and processed by the DRS for the fiscal year ended June 30 are used as the basis for determining each employer's proportionate share of the collective pension amounts reported by the DRS in the *Schedules of Employer and Non-employer Allocations.*

The 2020 and 2019 collective net pension liability (asset) was measured as of June 30, 2020 and 2019, respectively, and the actuarial valuation date on which the total pension liability (asset) is based was as of June 30, 2019 and 2018, respectively, with update procedures used to roll forward the total pension liability to the measurement date.

Pension Expense

For the years ended December 31, the District recognized pension expense as follows:

	2020	2019
PERS 1	$ (9,385)	$ 2,408
PERS 2/3	11,352	29,074
Total	$ 1,967	$ 31,482

NOTE 8 PENSION PLAN (CONTINUED)

Deferred Outflows of Resources and Deferred Inflows of Resources

At December 31, the District reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
2020		
PERS 1:		
Differences Between Expected and Actual Experience	$ -	$ -
Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	-	1,793
Changes of Assumptions	-	-
Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions	-	-
Contributions Subsequent to the Measurement Date	34,541	-
Total	$ 34,541	$ 1,793
PERS 2/3:		
Differences Between Expected and Actual Experience	$ 54,661	$ 19,136
Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	-	7,755
Changes of Assumptions	2,175	104,302
Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions	10,898	38,553
Contributions Subsequent to the Measurement Date	56,619	-
Total	$ 124,353	$ 169,746
Total All Plans	$ 158,894	$ 171,539

NOTE 8 PENSION PLAN (CONTINUED)

Deferred Outflows of Resources and Deferred Inflows of Resources (Continued)

2019	Deferred Outflows of Resources	Deferred Inflows of Resources
PERS 1:		
Differences Between Expected and Actual Experience	$ -	$ -
Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	-	25,005
Changes of Assumptions	-	-
Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions	-	-
Contributions Subsequent to the Measurement Date	32,334	-
Total	$ 32,334	$ 25,005
PERS 2/3:		
Differences Between Expected and Actual Experience	$ 34,956	$ 26,231
Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	-	177,597
Changes of Assumptions	3,124	51,191
Changes in Proportion and Differences Between Contributions and Proportionate Share of Contributions	14,515	28,904
Contributions Subsequent to the Measurement Date	53,800	-
Total	$ 106,395	$ 283,923
Total All Plans	$ 138,729	$ 308,928

NOTE 8 PENSION PLAN (CONTINUED)

Deferred Outflows of Resources and Deferred Inflows of Resources (Continued)

Deferred outflows of resources related to pensions resulting from the District's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the following year. Other amounts reported as deferred outflows and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ending December 31,	PERS 1	PERS 2/3
2021	$ (8,136)	$ (67,663)
2022	(256)	(19,450)
2023	2,482	(1,592)
2024	4,117	7,117
2025	-	(10,509)
Thereafter	-	(9,915)
Total	$ (1,793)	$ (102,012)

NOTE 9 DEFERRED COMPENSATION PLAN

The District offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. This plan is with Aetna Life Insurance and Annuity Company and the state of Washington. The plan, available to all eligible employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to the employees until termination, retirement, death, or unforeseeable emergency. The District made no contributions to the plan in 2020 or 2019.

NOTE 10 RISK MANAGEMENT

Valley View Sewer District is a member of Enduris. Chapter 48.62 RCW provides the exclusive source of local government entity authority to individually or jointly self-insure risks, jointly purchase insurance or reinsurance, and to contract for risk management, claims, and administrative services. The Pool was formed July 10, 1987 pursuant to the provisions of Chapter 48.62 RCW, Chapter 200-100 WAC, and Chapter 39.34 RCW when two counties and two cities in the state of Washington joined together by signing an interlocal governmental agreement to fund their self-insured losses and jointly purchase insurance and administrative services. As of August 31, 2020, there are 547 Enduris members representing a broad array of special purpose districts throughout the state. Enduris provides property and liability coverage as well as risk management services and other related administrative services.

NOTE 10 RISK MANAGEMENT (CONTINUED)

Members make an annual contribution to fund the Pool and share in the self-insured retention. The self-insured retention is:

- $1,000,000 self-insured retention on liability loss – The member is responsible for the first $1,000 of the amount of each claim, while Enduris is responsible for the remaining $999,000 on a liability loss.

- $250,000 self-insured retention on property loss – The member is responsible for the first $1,000 of the amount of each claim, while Enduris is responsible for the remaining $249,000 on a property loss. For property losses related to boiler and machinery Enduris is responsible for the first $4,000 of the claim.

Enduris acquires reinsurance from unrelated insurance companies on a "per occurrence" basis to cover all losses over the self-insured retentions as shown on the policy maximum limits. Liability coverage is for all lines of liability coverage including Public Official's Liability. The Property coverage is written on an "all risk", blanket basis using current Statement of Values. The Property coverage includes but is not limited to mobile equipment, boiler and machinery, electronic data processing equipment, business interruption, course of construction and additions, property in transit, fine arts, cyber and automobile physical damage to insured vehicles. Liability coverage limit is $20 million per occurrence and property coverage limit is $800 million per occurrence. Enduris offers crime coverage up to a limit of $1 million per occurrence.

Since Enduris is a cooperative program, there is joint liability among the participating members.

The contract requires members to remain in the Pool for a minimum of one year and must give notice 60 days before terminating participation. The Master Agreement (Intergovernmental Contract) is automatically renewed after the initial one (1) full fiscal year commitment. Even after termination, a member is still responsible for contribution to Enduris for any unresolved, unreported and in-process claims for the period they were a signatory to the Master Agreement.

Enduris is fully funded by its member participants. Claims are filed by members with the Pool and are administered in house.

The Pool is governed by a board of directors which is comprised of seven board members. The Pool's members elect the board and the positions are filled on a rotating basis. The board meets quarterly and is responsible for conducting the business affairs of Enduris.

In the past three years (2020, 2019, and 2018), there have been no claim settlements, per occurrence or in aggregate, that have exceeded the coverage provided by excess/reinsurance contracts.

NOTE 11 HEALTH AND WELFARE

The Valley View Sewer District is a member of the Association of Washington Cities Employee Benefit Trust Health Care Program (AWC Trust HCP). Chapter 48.62 RCW provides that two or more local government entities may, by Interlocal agreement under Chapter 39.34 RCW, form together or join a pool or organization for the joint purchasing of insurance, and/or joint self-insurance, to the same extent that they may individually purchase insurance, or self-insure.

An agreement to form a pooling arrangement was made pursuant to the provisions of Chapter 39.34 RCW, the Interlocal Cooperation Act. The AWC Trust HCP was formed on January 1, 2014 when participating cities, towns, and non-city entities of the AWC Employee Benefit Trust in the state of Washington joined together by signing an Interlocal Governmental Agreement to jointly self-insure certain health benefit plans and programs for participating employees, their covered dependents and other beneficiaries through a designated account within the Trust.

As of December 31, 2020, 262 cities/towns/non-city entities participate in the AWC Trust HCP.

In April 2020, the board of trustees adopted a large employer policy, requiring newly enrolling groups with 600 or more employees to submit medical claims experience data in order to receive a quote for medical coverage. Outside of this, the AWC Trust HCP pools claims without regard to individual member experience. The pool is actuarially rated each year with the assumption of projected claims run-out for all current members.

The AWC Trust HCP includes medical, dental and vision insurance through the following carriers: Kaiser Foundation Health Plan of Washington, Kaiser Foundation Health Plan of Washington Options, Inc., Regence BlueShield, Asuris Northwest Health, Delta Dental of Washington, and Vision Service Plan. Eligible members are cities and towns within the state of Washington. Non-City Entities (public agency, public corporation, intergovernmental agency, or political subdivision within the state of Washington) are eligible to apply for coverage into the AWC Trust HCP, submitting application to the board of trustees for review as required in the Trust Agreement.

Participating employers pay monthly premiums to the AWC Trust HCP. The AWC Trust HCP is responsible for payment of all covered claims. In 2020, the AWC Trust HCP purchased stop loss insurance for Regence/Asuris plans at an Individual Stop Loss (ISL) of $1.5 million through Commencement Bay Risk Management, and Kaiser ISL at $1 million with Companion Life through ASG Risk Management. The aggregate policy is for 200% of expected medical claims.

NOTE 11 HEALTH AND WELFARE (CONTINUED)

Participating employers' contract to remain in the AWC HCP for a minimum of three years. Participating employers with over 250 employees must provide written notice of termination of all coverage a minimum of 12 months in advance of the termination date, and participating employers with under 250 employees must provide written notice of termination of all coverage a minimum of six months in advance of termination date. When all coverage is being terminated, termination will only occur on December 31. Participating employers terminating a group or line of coverage must notify the HCP a minimum of 60 days prior to termination. A participating employer's termination will not obligate that member to past debts, or further contributions to the HCP. Similarly, the terminating member forfeits all rights and interest to the HCP Account.

The operations of the Health Care Program are managed by the board of trustees or its delegates. The board of trustees is comprised of four regionally elected officials from Trust member cities or towns, the Employee Benefit Advisory Committee Chair and Vice Chair, and two appointed individuals from the AWC Board of Directors, who are from trust member cities or towns. The trustees or its appointed delegates review and analyze Health Care Program related matters and make operational decisions regarding premium contributions, reserves, plan options, and benefits in compliance with Chapter 48.62 RCW. The board of trustees has decision authority consistent with the Trust Agreement, Health Care Program policies, Chapter 48.62 RCW and Chapter 200-110-WAC.

The accounting records of the Trust HCP are maintained in accordance with methods prescribed by the State Auditor's office under the authority of Chapter 43.09 RCW. The Trust HCP also follows applicable accounting standards established by the Governmental Accounting Standards Board (GASB). In 2018, the retiree medical plan subsidy was eliminated, and is noted as such in the report for the fiscal year ended December 31, 2018. Year-end financial reporting is done on an accrual basis and submitted to the Office of the State Auditor as required by Chapter 200-110 WAC. The audit report for the AWC Trust HCP is available from the Washington State Auditor's office.

In the past three years (2020, 2019, and 2018), there have been no claim settlements, per occurrence or in aggregate, that have exceeded the coverage provided by stop loss contracts.

NOTE 12 COMMITMENTS

Joint Administration Building

On August 14, 2005, the District entered into an agreement with Water District No. 125 of King County for the construction and operation of a joint administration building on property owned by Water District No. 125. The building was completed and occupied in 2007. The Districts are tenants in common, each having a 50% interest in the shared parcel and are operating under a condominium agreement. Details of the agreements are available in the District office.

NOTE 13 MAJOR SUPPLIER

Sewage collected by the District is treated by other entities. King County Wastewater Treatment Division (KCWTD/METRO) provides approximately 97% of the District's sewage treatment.

NOTE 14 COVID-19-PANDEMIC

In February 2020, the Governor of the state of Washington declared a state of emergency in response to the spread of a deadly new virus known as COVID-19. In the months following the declaration, precautionary measures to slow the spread of the virus were ordered. These measures included closing schools, cancelling public events, limiting public and private gatherings, and restricting business operations, travel and nonessential activities. The full extent of the financial impact on the District is unknown at this time.

REQUIRED SUPPLEMENTARY INFORMATION

VALLEY VIEW SEWER DISTRICT
SCHEDULES OF PROPORTIONATE SHARE OF THE NET PENSION LIABILITY
JUNE 30 (MEASUREMENT DATE)
LAST 10 FISCAL YEARS*
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

PERS 1

Year	Employer's Proportion of the Net Pension Liability (Asset)	Employer's Proportionate Share of the Net Pension Liability (Asset)	Employer's Covered Payroll	Net Pension Liability (Asset) as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2020	0.009121%	$ 322,009	$ 1,388,695	23.19%	68.64%
2019	0.009733%	374,284	1,365,199	27.42%	67.12%
2018	0.010050%	448,837	1,335,520	33.61%	63.22%
2017	0.010507%	498,571	1,325,011	37.63%	61.24%
2016	0.010066%	540,574	1,196,693	45.17%	57.03%
2015	0.009874%	516,479	1,137,451	45.41%	59.10%
2014	0.009227%	464,815	1,060,628	43.82%	61.19%
2013	0.915600%	535,003	1,026,904	52.10%	

Notes to Schedule:

* Information is presented only for those years for which information is available.

PERS 2/3

Year	Employer's Proportion of the Net Pension Liability (Asset)	Employer's Proportionate Share of the Net Pension Liability (Asset)	Employer's Covered Payroll	Net Pension Liability (Asset) as a Percentage of Covered Payroll	Plan Fiduciary Net Position as a Percentage of the Total Pension Liability
2020	0.011939%	$ 152,692	$ 1,388,695	11.00%	97.22%
2019	0.012561%	122,010	1,365,199	8.94%	97.77%
2018	0.012964%	221,345	1,335,520	16.57%	95.77%
2017	0.013515%	469,582	1,325,011	35.44%	90.97%
2016	0.012914%	650,233	1,196,693	54.34%	85.82%
2015	0.012755%	455,746	1,137,451	40.07%	89.20%
2014	0.001188%	240,134	1,060,628	22.64%	93.29%
2013	0.001219%	520,648	1,026,924	50.70%	

Notes to Schedule:

* Information is presented only for those years for which information is available.

VALLEY VIEW SEWER DISTRICT
SCHEDULES OF EMPLOYER PENSION CONTRIBUTIONS
DECEMBER 31 (EMPLOYER REPORTING DATE)
LAST 10 FISCAL YEARS*
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

PERS 1

Year	Statutorily Required Contribution	Contributions in Relation to the Statutorily Required Contribution	Contribution Deficiency (Excess)	Employer's Covered Payroll	Contributions as a Percent of Covered Payroll
2020	$ 68,309	$ (68,309)	$ -	$ 1,424,295	4.80%
2019	67,085	(67,085)	-	1,356,703	4.94%
2018	68,693	(68,693)	-	1,356,798	5.06%
2017	65,409	(65,409)	-	1,334,925	4.90%
2016	60,463	(60,463)	-	1,267,567	4.77%
2015	51,240	(51,240)	-	1,171,860	4.37%
2014	42,553	(42,553)	-	1,060,538	4.01%
2013	32,399	(32,399)	-	1,015,617	3.19%

Notes to Schedule:

* Information is presented only for those years for which information is available.

PERS 2/3

Year	Statutorily Required Contribution	Contributions in Relation to the Statutorily Required Contribution	Contribution Deficiency (Excess)	Employer's Covered Payroll	Contributions as a Percent of Covered Payroll
2020	$ 112,805	$ (112,805)	$ -	$ 1,424,295	7.92%
2019	104,741	(104,741)	-	1,356,703	7.72%
2018	101,757	(101,757)	-	1,356,798	7.50%
2017	91,564	(91,564)	-	1,334,925	6.86%
2016	78,969	(78,969)	-	1,267,567	6.23%
2015	65,792	(65,792)	-	1,171,860	5.61%
2014	52,676	(52,676)	-	1,060,538	4.97%
2013	49,003	(49,003)	-	1,015,617	4.82%

Notes to Schedule:

* Information is presented only for those years for which information is available.

SUPPLEMENTARY INFORMATION

VALLEY VIEW SEWER DISTRICT
SCHEDULES OF OPERATING EXPENSES
YEARS ENDED DECEMBER 31, 2020 AND 2019
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

	2020	2019
COLLECTION AND TRANSMISSION		
Treatment	$ 9,091,957	$ 9,092,232
Labor	333,538	388,916
Payroll Taxes	37,211	30,826
Employee Benefits	73,208	114,335
Outside Services - Maintenance	21,246	139,004
Supplies	32,305	84,874
Utility Underground Locate Center	2,654	3,335
Inspections	518	(1,546)
Permits	2,153	4,447
Total	$ 9,594,790	$ 9,856,423
PUMPING		
Labor	$ 181,242	$ 176,386
Payroll Taxes	20,220	13,980
Employee Benefits	39,781	51,855
Supplies	31,232	36,388
Power and Water	31,122	28,101
Alarm and Telephone	6,228	6,178
Total	$ 309,825	$ 312,888

VALLEY VIEW SEWER DISTRICT
SCHEDULES OF OPERATING EXPENSES (CONTINUED)
YEARS ENDED DECEMBER 31, 2020 AND 2019
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

	2020	2019
GENERAL AND ADMINISTRATIVE		
Labor	$ 910,077	$ 742,354
Commissioners Compensation	15,360	17,408
Payroll Taxes	103,247	64,354
Employee Benefits	203,125	224,426
Taxes and Benefits Capitalized	(2,096)	-
Consulting	90,718	80,333
Legal Services	30,839	36,430
Accounting	28,085	38,035
Outside Services - Engineering	335,220	200,285
Insurance	107,532	97,378
Injuries and Damages	-	2,000
Permits	-	(708)
State Auditor Fees	-	16,264
State Excise Tax	71,729	83,398
Election	16,480	-
Dues and Subscriptions	25,973	27,768
Auto and Truck Expense	27,670	24,670
Shop supplies	7,045	7,986
Travel and Per Diem	880	14,715
Seminars and Workshops	16,230	36,169
Customer Records and Accounts	78,804	173,216
Office Supplies	15,578	9,055
Safety Supplies	7,382	17,422
Postage	16	407
Maintenance	54,211	44,131
Telephone	29,086	23,376
Utilities	17,526	15,059
Miscellaneous	26,744	39,534
Total	$ 2,217,461	$ 2,035,465

Appendix E
Comments and Approvals

THIS PAGE IS INTENTIONALLY LEFT BLANK.

General Sewer Plan - Ecology Comment Sheet for Valley View Sewer District

GSP Revision Date: April 18, 2024
GSP Contact: Paul Weller

Reviewed By: Sean Wilson, P.E.
Review Date:

Comment No.	Page #	Section	Comment	Ecology Reviewer	GSP Response	GSP Responder	Ecology Acceptance Comments
1	N/A	General	Please include a description or map that shows the relationship between existing unsewered areas and wellhead protection areas. If no wells exist in or near the District, please state this. It is difficult to determined if unsewered areas pose a risk to water wells or surface waters.	Wilson	The following statement was added into section 8.6.6: "Wellhead protection areas and unsewered areas are interconnected concepts related to safeguarding drinking water sources. A wellhead protection area is a designated zone around a groundwater well or a surface water intake where activities are regulated to prevent contamination of the drinking water supply. On the other hand, unsewered areas refer to regions lacking a centralized sewage system, relying instead on individual septic systems or other decentralized methods for wastewater disposal. The relationship between the two lies in the potential risk to drinking water sources in unsewered areas, as improper wastewater management can lead to groundwater contamination and compromise the integrity of the wellhead protection area. Therefore, implementing proper wastewater treatment and disposal measures is crucial to ensure the protection of the water supply and the health of the surrounding community. After analyzing the locations of wellhead protection areas in comparison to existing unsewered areas in the District, it is confirmed that the two areas do not intersect. This means that the unsewered areas do not pose a risk to water wells or surface waters. "		
2	N/A	General	Although not required, inclusion of active links (a.k.a. internal references) significantly improve document readability.	Wilson	Comment is noted, the District will not be including active links into the document.		
3	N/A	General	Please include a reclaimed water discussion to (at a minimum)include identified potential users of reclaimed water within the district's service area. Has the district completed the County's "Water Reclamation Evaluation Checklist"? The regulatory requirements listed under RCW 90.48.112 appear to be incomplete. Additionally, RCW 90.46.120 requires Water System Planning under DOH's authority to evaluate opportunities for using reclaimed water in coordination with evaluations done in a general sewer plan submitted under RCW 90.48.110.	Wilson	Comment noted. The District does not have their own treatment plant not provide water to its customers, therefore a Water Reclamation Checklist is not needed. The following statement was added to Chapter 8 of the plan: "Valley View Sewer District is a sewer system that does not have its own treatment plant. The District also does not provide water to its clients. As a result, opportunities for reclaimed water are not discussed as part of this plan."		
4	N/A	General	Per RCW 90.48.495 Water conservation measures to be considered in general sewer plans. “The Department of Ecology shall require sewer plans to include a discussion of water conservation measures considered or underway that would reduce flows to the sewerage system and an analysis of their anticipated impact on public sewer service and treatment capacity.” The GSP does not really discuss water conservation. If the District has a water conservation program in a related Water System Plan, it merits mentioning in the GSP to help satisfy this requirement.	Wilson	The following comment was added into Chapter 8 of the plan: "The District does not provide water to its customers, therefore they do not have control over the water flows and do not have their own water conservation program. The District has similar boundaries with King County Water District 125 and coordinate with them on any conservation measures when necessary. For commercial properties within the District, low flow fixtures are encouraged whenever possible."		
5	1-3	Figure 1-1	In accordance with 173-240-050(3)(f), please include all domestic and industrial wastewater facilities within 20 miles.	Wilson	Figure 1-1 has been updated to show facilities within a 20 mile radius.		

Comment No.	Page #	Section	Comment	Ecology Reviewer	GSP Response	GSP Responder	Ecology Acceptance Comments
6	1-8	1.7.1	It is best practice to include interlocal agreements for treatment should be included as Appendices. They must be shared with Ecology for us to complete our review. Please include them with the GSP or send them electronically to us for review.	Wilson	Agreements are now included in Appendix F.		
7	2-1	2.1	It is suggested to include a figure that shows who is responsible for all areas inside the service area but not part of the district boundaries. From the narrative description, there appear to be areas within the boundary that are not serviced by the district but are instead serviced by another entity (e.g. City of Tukwila).	Wilson	Comment noted, we understand that having a map showing the different service boundaries would be of value, but unfortunately it is developer driven and it is difficult to see which clients are serviced due to proposals by developers, and this is why it is left undetermined within the plan.		
8	2-1	2.1	In accordance with 173-240-050(3)(c), please provide a narrative description or figure showing the expected extent of the district's service area.	Wilson	The District's service area is shown in Figure 2-2.		
9	2-5	Figure 2-2	If Figure 2-2 is intended to be the topographical map required by 173-240-050(3)(d)(v), the scale does not seem appropriate and makes any topography within the district unreadable.	Wilson	Noted, updated map is in Chapter 2		
10	3-1	3.2	What is the expected zoning classification beyond 2020?	Wilson	Comment noted. This plan update used PSRC data for projections. We are unsure of the zoning classification as we used data prior to 2020 for our analysis.		
11	3-5	3.4	The newly passed HB1110 will allow multi-family units on most lots (especially those in King County). How will HB 1110 affect zoning and population projections within the District?	Wilson	Comment noted, this is not included in the existing sewer plan because it was passed after this plan was written. We will include if it has a significant impact in the future, however for this update it will not be addressed.		
12	3-6	3.5	In accordance with 173-240-050(3)(i), please provide the quantity, periods of production, and characteristics of these industrial users. It also seems that there may be other industrial users. King County's pretreatment program can likely provide you with a list of all industrial users in the district.	Wilson	City of Seattle and King County Public Health was contacted in order to get a list of industrial users within the District. That list was added into Section 3.5.		
13	3-6	3.5	The GSP does not mention any pretreatment devices. Does the District require any pretreatment devices, such as for restaurants, car washes, etc.? If they do require pretreatment devices for certain industries this should be mentioned in the GSP. Please expand this section to include more detail on policies and practices related to coordinating with King County's Industrial Waste Program to ensure industrial facilities receive appropriate pretreatment permitting.	Wilson	The following text has been added in section 3.6: The District does not require pretreatment devices as part of their standard details and specifications. The District does encourage homeowners and businesses to avoid pouring F.O.G. down the drain or into the garbage disposal. The District has included a section on their website with steps to prevent F.O.G. backup.		
14	3-6	3.5	Given that the last I&I study was conducted over 20 years ago. Why is there no plan for a new I&I study within this GSP?	Wilson	The following statement was added to section 3.5: "Staff every year look at sewer Lift Stations and record rain fall events (daily rain fall, monthly, etc) to see spikes of rain and look at sites 2-3 times a week. Based on the District's regular inspection and recordings of rain volume, The District believes this information justifies their decision to have not had another I & I study since 1999."		
15	4-5	4.2.3	There appears to be a pumps station in the north east corner the Three Tree basin (North of 156th street). What is the purpose of that pump station?	Wilson	The following statement was added into section 4.2.3: "Located in the Northeast area of the basin is a pump station that is owned and maintained by the District, however it is located on private property. The pump station services 4 of the properties in that area, whose residents opted to connect to public sewer."		
16	4-5	4.2.3	There appears to be a placeholder phrase "Legal boundary discussion" at the end of the section.	Wilson	A typo, it has since been removed from the text.		

Comment No.	Page #	Section	Comment	Ecology Reviewer	GSP Response	GSP Responder	Ecology Acceptance Comments
17			I don't understand the statement "This small basin is not associated with King County". It seems that this area is as much associated with KC as Val006. Please elaborate.	Wilson	Comment noted, the statement has been removed because the small basin is associated with King County.		
18	1-8	1.7.1	The general sewer plan must address the requirement of WAC 173-240-050(3)(h), which requires "A statement regarding provisions for treatment and discussion of the adequacy of the treatment." Although Ecology recognizes that the District does not own and operate a sewage treatment facility, it must still demonstrate in the general sewer plan the adequacy of treatment for all wastewater generated during the planning period. The plan must include sufficient discussion necessary to demonstrate that the District's agreements with King County will provide adequate treatment throughout the planning period. Please identify the capacity available to the District at the King County facilities for treatment and identify whether any agreements contain capacity constraints that may limit or otherwise constrain the city's ability to provide sewer service.	Wilson	See appendix F for what the District has for agreements. A paragraph has been added to section 1.7.1 discussing the capacity of treatment.		
19	5-1	5.2	The orange book is available on the Ecology website not DOH. Please update the first paragraph of this section accordingly.	Wilson	Chapter has been revised accordingly.		
20	5-4	5.5.6	Please elaborate on what programs and projects will be used to reduce I&I, reference to another section of the GSP would be acceptable.	Wilson	The following text was included in Chapter 5: "In 2007, an initiative was undertaken within the District, involving the rehabilitation of approximately 80 Manholes in the McMicken basin. This undertaking was tracked using the McMicken Pump Station logs, providing a comprehensive record of the project's performance. The endeavor proved successful over an extended period, delivering positive outcomes. However, recent winters have brought about a set of challenges for our field team stationed at that site. Despite the incorporation of new connections, it seems that this expansion alone may not be the root cause of the capacity issues. If the resurgence of Inflow and Infiltration (I&I) is the underlying issue, a plausible explanation could be the behavior of cementitious grout, which exhibits expansion and shrinkage as the seasons shift from wet to dry. It's worth noting that historical knowledge suggests that certain older grout products remained effective for around ten water table cycles, offering intriguing insight into the potential factors influencing the present challenges faced by the District. In efforts to combat the persistent challenge of I&I, the District has proactively adopted a strategy involving the installation of Pipe Patch 2' Cured-In-Place Pipe (CIPP) Liners. These specialized liners are strategically placed on joints exhibiting severe Inflow and Infiltration issues. Importantly, these problematic mainline faults are identified through the careful examination of Closed-Circuit Television (CCTV) footage, showcasing the District's commitment to employing cutting-edge methods for problem identification and resolution. In 2010, the District secured a loan from the Public Works Trust Fund (PWTF). This financial support facilitated the rehabilitation of		
21	5-8	5.7.4	The first sentence seems to be repeated from the previous section.	Wilson	Comment noted, Chapter has been revised accordingly to remove repetition.		

Comment No.	Page #	Section	Comment	Ecology Reviewer	GSP Response	GSP Responder	Ecology Acceptance Comments
22	6-5	6.3	Recommended improvements to the existing plan were not presented in Chapter 3, please update reference.	Wilson	Comment noted, the text was updated to reference Chapter 5 instead.		
23	7-1	7.1	What alternatives were considered? Was sending flow from expanded sections to South Plant rather than SWSSD considered? To comply with 173-240-050(3)(k), more discussion of what alternatives were considered and why they were excluded is needed.	Wilson	The following statement was added into Section 7.1: "Different alternatives for sending flow from expanded sections are considered, specifically sending customers to Southwest Suburban Sewer District (SWSSD) and Midway Sewer District. If they were to switch to Midway, they would need to pay an Impact Charge. Along with this, Midway would need to service 200 residences in a short amount of time. Their system would possibly need upgrades in order to effectively service this amount of people. Possible connecting to SWSSD in order to save rate payers money in comparison to King County treatment, however that might not be feasible if gravity flow is not possible."		

King County
Utilities Technical Review Committee
Department of Local Services
201 S Jackson
Street KSC-LS-
0815
Seattle, WA
98104
www.kingcounty.
gov

Valley View Sewer District, 2023 General Sewer Plan (DRAFT)

Valley View Sewer District submitted a draft General Sewer Plan ("Plan") for review by the King County Utilities Technical Review Committee (UTRC) on June 20, 2023.

Staff has reviewed the Plan for local statutory requirements and impacts on service to residents in the unincorporated county.

On July 19, 2023, the UTRC held a meeting to review the plan and provide comments to the applicant on the draft Plan. The UTRC requests the following changes and/or clarifications:

General Comments

1) Please include a discussion addressing any concern regarding corrosion and odor control, and steps being taken by the District to address. (KCC 13.24.010 H.4)

   - *Comment noted. The following statement was added into section 8.6.7: "Rate payers often communicate with the District when issues arise, and the District acts promptly in problem solving. Odor complaints, while infrequent, are treated with equal seriousness. The District has observed that such complaints are generally transient and often linked to specific tenant-related factors. Whenever these issues do arise, the District's resourcefulness comes into play as it employs deodorizers within wet wells to mitigate any unpleasant odors. Moreover, the strategic design and operation of flows and lift stations contribute significantly to managing the potential for odors. These systems boast sufficient cycling, effectively minimizing the likelihood of odor-related complaints.*

     In essence, the District's proactive and collaborative approach to addressing challenges, along with its diligent use of effective odor-control methods, has resulted in a notably low occurrence of both corrosion and odor issues. This accomplishment reflects the District's commitment to maintaining a high standard of service and its continuous efforts to ensure the well-being and satisfaction of its community."

2) Please include a discussion addressing opportunities for reclaimed water. (KCC 13.24.010 H.5) Complete as part of the plan a checklist of informational questions regarding reclaimed water opportunities within the utility service area. See http://www.kingcounty.gov/depts/dnrp/utilities-technical-review-committee.aspx

   - *Comment noted. The District does not have their own treatment plant not provide water to its customers, therefore a Water Reclamation Checklist is not needed. The following statement was*

added to Chapter 8 of the plan: "The Valley View Sewer District operates as a vital sewer system serving its community, notable for its unique configuration. Unlike many other sewer systems, Valley View Sewer District does not possess its own dedicated treatment plant. Instead, it relies on established collaborative relationships with nearby treatment facilities, ensuring effective waste management and treatment processes. However, due to the specific nature of the District's operations, discussions regarding reclaimed water opportunities are notably absent from its current plan. Reclaimed water, which is treated wastewater that can be repurposed for non-potable uses like irrigation or industrial processes, isn't a central component of the District's agenda. This approach aligns with the District's concentrated focus on its core functions and reflects its commitment to fulfilling its primary role of efficient and responsible waste management. Therefore, reclaimed water is not discussed within this sewer plan."

3) The Plan should acknowledge all developments within UGA served by sewer unless on-site systems are temporarily allowed per KCC 13.24.136 and 13.08.070. (KCC 13.24.035)

    - *This information was added into the Executive Summary of the plan.*

4) Recognizing that there are unsewered areas within its service area, how many on-site septic systems exist within the District service area, and does the District have a proactive strategy to connect properties currently utilizing on-site septic systems.

    - *Presently, the District's service area accommodates a total of 1,618 on-site septic systems, serving as vital waste management components for the community. Recognizing the potential benefits of transitioning these sites to a centralized sewer system, the District is actively exploring avenues to effectuate this transformation. Nonetheless, the primary hurdle encountered is securing the necessary funding to undertake such a substantial endeavor. Undeterred by this financial challenge, the District remains resolute in its commitment to enhancing the sanitation infrastructure for its constituents.*

      In pursuit of its goal, the District exhibits a proactive approach by diligently seeking out various funding opportunities. Among these avenues, grant applications play a crucial role in acquiring the requisite funds to facilitate the conversion from on-site septic systems to a more efficient and interconnected sewer system. This strategic initiative not only underscores the District's dedication to improving environmental and public health conditions but also signifies its resourcefulness in addressing complex infrastructural needs.

      By consistently engaging with diverse funding prospects, the District is not only striving to address the immediate technological requirements but also exemplifying its strategic vision for the future. These efforts epitomize the District's unwavering commitment to fostering sustainable development and ameliorating the quality of life for the community it serves. Through the pursuit of funding opportunities and the subsequent transition to a comprehensive sewer system, the District embarks on a transformative journey that promises enduring benefits for both the environment and its residents.

<u>Comments on Specific Sections of the Draft Plan</u>

5) Section 3.5 Flow Projections. The text references previous studies and monitoring related to Infiltration and Inflow (I/I). These include an independent study conducted by the District as well as monitoring conducted through a regional program in 2002. In reference to the District's 1999 I/I monitoring, the draft Plan states the District's 1999 monitoring, "…indicates that currently I & I ranges from approximately 1,100 gpad in some basins to nearly 13,200 gpad…" in an individual sub-basin.

Recognizing that the District's monitoring is over 20 years old and impacts of climate change on rainfall events, how can the draft Plan state what the current I/I range is today? Is it more accurate to state that it assumed to be these rates? If so, the Plan should provide justification for this assumption.

- *Despite the fact that the most recent Inflow and Infiltration (I&I) study dates back to 1999, the District's commitment to monitoring its sewer Lift Stations remains unwavering. Annually, the dedicated staff diligently assesses these stations and meticulously records a comprehensive range of rainfall events, spanning daily and monthly periods, to discern any discernible spikes linked to precipitation. This meticulous data collection regimen is further reinforced by the District's proactive site visits, which are conducted 2 to 3 times per week, solidifying their dedication to maintaining a vigilant oversight.*

  The District asserts that the continuous inspection of sewer Lift Stations and the meticulous documentation of rain volume collectively validate their rationale for not conducting additional I&I studies since 1999. This comprehensive data-driven approach serves as a testament to the District's commitment to efficiency and evidence-based decision-making.

  By harnessing the valuable insights gathered through this systematic evaluation of rainfall events and the resulting impact on sewer infrastructure, the District substantiates its perspective that these regular assessments adequately address any potential I&I concerns. This approach not only highlights the District's prudent resource management but also reflects its dedication to adopting a pragmatic strategy that efficiently safeguards its sewer system and optimally serves the community it supports. This information was added into Section 3.5 of the plan.

6) Section 4.2.3 Three Tree Basin. The text acknowledges that there is an unsewered area outside of the District's corporate boundaries yet within its sewer service area. It further specifies the need to coordinate with the City of Tukwila to agree upon who should provide sewer service in an area north of the intersection of State Route 518 on the west side of Interstate 5. Has the District entered into any discussions with the City at this point in time to discuss sewer service to this area? If not, it would be beneficial to provide a timeline for this discussion in the Plan. It would also be beneficial if the Plan provided a discussion of what the process would be if a property owner approached the District asking for service for this area.

   - *These properties are within Valley View's service area, however not annexed by the city. The District has tried to enter discussions about these unsewered areas with the City of Tukwila but there has been lack of response in order to move forward. The District is willing to provide service to these properties but with no response from the city, the property owners can be annexed by carrying a petition. Otherwise, these properties will continue to be unsewered unless response from the City occurs. This information was included in Section 4.2.3*

7) Section 4.2.4 Macadam Basin. The text acknowledges that areas within this subbasin are not within the District's corporate boundaries, however, it does not state if these areas are within its sewer service area. Please clarify. Additionally, the text references a need to coordinate with the City of Tukwila as these areas are within its municipal boundaries. When does the District anticipate approaching the City to begin discussions? Also, it may be beneficial if the Plan provided a discussion of what the process would be if a property owner approached the District asking for service to one of these unsewered areas.

    - *Similar to the properties within the Three Tree basin, the District has entered discussions with the City but has yet to hear a response. The District is willing to provide service to these properties but with no response from the city, the property owners can be annexed by carrying a petition. Otherwise, these properties will continue to be unsewered unless response from the City occurs. This information was included in Section 4.2.4*

8) Section 4.2.7 South Park Basin. The text states, "The Duwamish West sub-basin includes the area along the westerly banks of the Duwamish River in the northern portion of the District. This small basin is not associated with King County…Wastewater from the basin flows southeasterly and is discharged to the King County Wastewater Treatment Division's system…" Please clarify what is meant by "…the basin is not associated with King County…" Is this statement meant to say that there is no unincorporated King County area within the subbasin as it is associated with King County as the sewer is discharged to the County's wastewater treatment system.

    - *This text was a mistake, as the basin is associated with King County. The statement has been deleted.*

9) Section 4.2.7 South Park Basin. The text references a request by six homes located on South 104th to connect to the sewer system through a developer extension, however, the homes were not connected because it was determined to be too expensive. Please provide the reason why the homeowners made the request and clarify what component was too expensive for it to be a feasible project? (i.e. connection charges, sewer main extension). Also, who determined it was not feasible?

    - *This text is outdated, and the properties have been connected to sewer. This text has been deleted from the plan.*

10) Section 5.5.6 Infiltration and Inflow. The text references previous studies and programs that the District participated in that monitored infiltration and inflow rates. The text states, "…basin-wide I/I rates range from approximately 1,100 gpad to greater than 2,500 gpad." While this represents a basin-wide average, it would be appropriate to note the I/I within sub-basins may go beyond 2,500 gpad as noted in Section 3.5 (Flow Projections). Or please clarify the different I/I ranges as referenced in Section 3.5 and this section.

    - *Section 3.5 was noted and the text has been revised in Section 5.5.6: "The District's data and King County data for I/I monitoring at various locations throughout the District show that basin-wide I/I rates range from approximately 1,100 gpad to greater than 2,500 gpad. Sub-basins may go beyond 2,500 gpad as noted in Section 3.5."*

    - *We're monitoring, and when identified we video inspect, identity i&I, we can modify like pipe patch and seal manholes*

11) Section 5.5.6 Infiltration and Inflow. The text states, "Although it was assumed that I/I should be maintained at 1,100 gallons per day per acre in the systems analysis, the results form the various analyses indicate that some locations may require more attention than others." What is the District's basis/verification for assuming an I/I rate of 1,100? What may be the potential consequences if the I/I rate is greater than 1,100 gpad?

- *The assumption that I/I should be maintained at 1,100 gpad is frequently used industry standard. Inaccuracies in the I&I rate can lead to several outcomes, such as the failure to correctly pinpoint mainline segments experiencing capacity problems, improper prioritization of rehabilitation projects, and the potential for either insufficient or excessive funds collection through GFC Charges, which are crucial for financing projects outlined in the CIP.*

12) Section 5.5.6 Infiltration and Inflow. The text states, "The District will continue to develop other programs or projects in attempt to reduce I/I impacts." This statement infers the District has already completed projects to reduce I/I impacts. Please list or describe what projects the District completed and provide any findings or any measurements of effectiveness of these projects in reducing I/I. Does the District have potential capacity projects identified/funded that would mitigate the consequences if the I/I rate is greater than assumed.

- *In 2007, an initiative was undertaken within the District, involving the rehabilitation of approximately 80 Manholes in the McMicken basin. This undertaking was tracked using the McMicken Pump Station logs, providing a comprehensive record of the project's performance. The endeavor proved successful over an extended period, delivering positive outcomes. However, recent winters have brought about a set of challenges for our field team stationed at that site. Despite the incorporation of new connections, it seems that this expansion alone may not be the root cause of the capacity issues. If the resurgence of Inflow and Infiltration (I&I) is the underlying issue, a plausible explanation could be the behavior of cementitious grout, which exhibits expansion and shrinkage as the seasons shift from wet to dry. It's worth noting that historical knowledge suggests that certain older grout products remained effective for around ten water table cycles, offering intriguing insight into the potential factors influencing the present challenges faced by the District.*

  In efforts to combat the persistent challenge of I&I, the District has proactively adopted a strategy involving the installation of Pipe Patch 2' Cured-In-Place Pipe (CIPP) Liners. These specialized liners are strategically placed on joints exhibiting severe Inflow and Infiltration issues. Importantly, these problematic mainline faults are identified through the careful examination of Closed-Circuit Television (CCTV) footage, showcasing the District's commitment to employing cutting-edge methods for problem identification and resolution.

  In 2010, the District secured a loan from the Public Works Trust Fund (PWTF). This financial support facilitated the rehabilitation of approximately 200 stubs extending from the mainlines to property boundaries. The primary goal of this initiative was to mitigate the I&I issue. In preparation for this undertaking, the District conducted multiple TV surveys of the mains, revealing that the mainlines were not the source of the I&I. Contrary to this, the flow monitoring data consistently indicated the presence of I&I. To accurately pinpoint the source, the District conducted smoke testing within the basin, leading to the revelation that Inflow and Infiltration originated from privately owned side sewers. This revelation was pivotal in guiding the District's decision to replace over 200 stubs, effectively addressing the identified points of I&I ingress. It's important to acknowledge that while these efforts have yielded promising results, the availability of dependable post-project flow monitoring data remains uncertain, emphasizing the ongoing need for comprehensive and accurate assessment.

13) Section 6.2.2.2 Infiltration and Inflow. The text states, "…In order to accurately estimate I & I within the sub-basins, a number of sub-basin characteristics are considered….Based on this information, average I & I was adjusted for each sub-basin and considered in the analyses. I & I ranged from 1,100 per acre per day (in accordance with The District's contract with King County) to a small area of the Rainier Vista Basin where I & I rates are thought to be in excess of 13,200 gallons per acre per day

(gpad). The weighted average of I & I in the District at the present time is estimated at just over 2,500 … it is noted that if the District were able to reduce I & I in the… area where it currently exceeds 13,000 gpad, the District-wide average could be reduced to less than 2,000 gpad" The reference to the contracted I/I rate of 1,100 gpad with King County reads as if the contracted rate is a base assumption

Using existing data from before, no new I/I study for this plan. This is what the District is doing to decrease I/I. Grouting inside manholes, for areas that are known to have less severe faults where infilitration is seeping into joints, identified and part of comp plan (goal to get rid of older pipes), KC monitors outfall. VVSD aware that I/I exists and collectively make efforts to monitor and improve the most severe faults for the analysis. Is this correct, and if yes, is there evidence beside the 1999/2002 studies that provide a basis for this assumption? As this text references the possibility of reducing the District-wide average to 2,000 gpad if the assumed high I/I rate within the Rainier Vista Basin was reduced, what efforts are being pursued to reduce the I/I rate in this sub-basin. How would the District know if the I/I rates are reduced if a monitoring program is not established? Please clarify in the text.

- *Comment noted. While there has not been a formal I&I study since 1999, I&I rates are regularly monitored. Staff every year look at sewer Lift Stations and record rain fall events (daily rain fall, monthly, etc) to see spikes of rain and look at sites 2-3 times a week. Based on the District's regular inspection and recordings of rain volume, The District believes this information justifies their decision to have not had another I & I study since 1999. This information was added into Section 3.5 of the plan.*

14) Section 6.2.2.3 Pattern of Usage. This section goes into detail about the modeling of the peak flows., however, it is not clear if the there was any field monitoring or verification of these peaks. Please clarify.
    - *This statement was added to section 6.2.2.3: "It is important to note that while there has been flow monitoring in the past, there has not been recent monitoring done to confirm peak flows that are shown within the hydraulic model."*

15) Section 7.2 Recommended Improvement. The text states, "Regular renewal and replacement projects have primarily been identified by review of pumping and I & I flow monitoring records provided by the District. Although Valley View has remained at the forefront of reducing I & I…continued flow monitoring by the District remains a key element for identifying future improvement projects…The District moves flow meters and conducts manual and video inspections upstream until those pipes contributing the most I & I can be pinpointed. Video inspections assist both in the identification of which pipes require replacement or rehabilitation and in determining the best construction technology for the project…" Previous sections that discussed I/I continually referenced two studies (1999 and 2002) in which the I/I assumptions were based. This section now states that the District uses I/I flow monitoring records to determine renewal and replacement projects. Are these referenced monitoring records derived from the previous studies or are they from more recent monitoring? While the text indicates that the District is proactively addressing I/I rates, the previous sections don't list or describe any projects constructed or any measurements of effectiveness in the reduction of I/I. It may be beneficial to move some of the text under this section to previous section(s) that address I/I.

    - *The following text has been added to the Section 3.5 to address this concern:*

    Despite the fact that the most recent Inflow and Infiltration (I&I) study dates back to 1999, the District's commitment to monitoring its sewer Lift Stations remains unwavering. Annually, the dedicated staff diligently assesses these stations and meticulously records a comprehensive range of rainfall events, spanning daily and monthly periods, to discern any discernible spikes linked to precipitation. This meticulous data collection regimen is further reinforced by the

District's proactive site visits, which are conducted 2 to 3 times per week, solidifying their dedication to maintaining a vigilant oversight.

The District asserts that the continuous inspection of sewer Lift Stations and the meticulous documentation of rain volume collectively validate their rationale for not conducting additional I&I studies since 1999. This comprehensive data-driven approach serves as a testament to the District's commitment to efficiency and evidence-based decision-making.

By harnessing the valuable insights gathered through this systematic evaluation of rainfall events and the resulting impact on sewer infrastructure, the District substantiates its perspective that these regular assessments adequately address any potential I&I concerns. This approach not only highlights the District's prudent resource management but also reflects its dedication to adopting a pragmatic strategy that efficiently safeguards its sewer system and optimally serves the community it supports.

16) Appendix A – SEPA Checklist. Has the District issued an environmental review determination. Please include in the appendix for the final plan.

    - *Yes, it is now included in the appendix.*

The King County UTRC thanks you for the opportunity to review and comment. Please contact me at (206)263-3733 or dcardwell@kingcounty.gov if you have any questions.

Dan Cardwell 7/20/23

Dan Cardwell, Chair of the King County Utility Technical Review Committee Date

"WORKING TOWARD A BETTER ENVIRONMENT"

Valley View
SEWER DISTRICT

Valley View Sewer District
General Sewer Plan Update

Appendix F
Interlocal Agreements

THIS PAGE IS INTENTIONALLY LEFT BLANK.

VAL VUE SEWER DISTRICT
AND
MUNICIPALITY OF METROPOLITAN SEATTLE

AMENDMENT TO AGREEMENT
FOR SEWAGE DISPOSAL

THIS AMENDMENT made as of the 2nd day of October, 1992 ~~1990~~ between the Val Vue Sewer District, a municipal corporation of the State of Washington (hereinafter referred to as the "District") and the Municipality of Metropolitan Seattle, a metropolitan municipal corporation of the State of Washington (hereinafter referred to as "Metro");

WITNESSETH:

WHEREAS, the parties have entered into a long term Agreement for Sewage Disposal dated August 1, 1966 (hereinafter referred to as the "Basic Agreement"); and

WHEREAS, the Basic Agreement was amended and expanded by Agreements dated September 7, 1972 and May 11, 1976, between these parties and the Des Moines Sewer District (now known as the Midway Sewer District), which Agreements are to be terminated and replaced by this Amendment and by separate Agreements between the District and the Des Moines Sewer District (now known as the Midway Sewer District) and between Metro and the Des Moines Sewer District (now known as the Midway Sewer District), and;

WHEREAS, an advisory committee composed of elected and appointed officials in the metropolitan area was appointed by the Metropolitan Council to examine the structure of Metro's charges to its participants; and

WHEREAS, said advisory committee, following extensive research, study and deliberations, has recommended

certain changes in the structure of Metro's charges to its participants and implementation of said changes requires amendment of the Basic Agreement; and

WHEREAS, the parties have determined that the recommendations are in the best public interest and therefore desire to amend said Basic Agreement to implement said recommendations;

NOW, THEREFORE, it is hereby agreed as follows:

Section 1. Amendment of Section 2 of the Basic Agreement. Section 2 of the Basic Agreement is hereby amended to read as follows:

"Section 2. Delivery and Acceptance of Sewage. The District shall deliver to Metro all of the sewage and industrial waste collected by the District, except sewage and industrial waste from Area A, which is described in Exhibit A, and Metro shall accept the sewage and industrial waste delivered for treatment and disposal as hereinafter provided subject to such reasonable rules and regulations as may be adopted from time to time by the Metropolitan Council. Metro shall not directly accept sewage or waste from any person, firm or private corporation which is located within the boundaries of or is delivering its sewage into the Local Sewerage Facilities of the District without written consent of the District."

Section 2. Amendment of Section 5 of the Basic Agreement. Section 5 of the Basic Agreement is hereby amended to read as follows:

"Section 5. Payment for Sewage Disposal. For the disposal of sewage hereafter collected by the District and delivered to Metro the District shall pay to Metro on or before the last day of each month during the term of this Agreement, a sewage disposal charge determined as provided in this Section 5.

1. For the quarterly periods ending March 31, June 30, September 30 and December 31 of each year every Participant shall submit a written report to Metro setting forth:

(a) the number of Residential Customers billed by such Participant for local sewerage charges as of the last day of the quarter,

(b) the total number of all customers billed for local sewerage charges by such Participant as of such day, and

(c) the total water consumption during such quarter for all customers billed for local sewerage charges by such Participant other than Residential Customers.

The quarterly water consumption report shall be taken from water meter records and may be adjusted to exclude water which does not enter the sanitary facilities of the customer. Where actual sewage flow from an individual customer is metered, the metered sewage flows shall be reported in lieu of adjusted water consumption. The total quarterly water consumption report in cubic feet shall be divided by 2,250 to determine the number of Residential Customer equivalents represented by each Participant's customers other than single family residences. Metro shall maintain a permanent record of the quarterly customer reports from each Participant.

The District's first quarterly report shall cover the first quarterly period following the date when sewage is first delivered to Metro and shall be submitted within thirty days following the end of the quarter. Succeeding reports shall be made for each quarterly period thereafter and shall be submitted within thirty (30) days following the end of the quarter.

2. (a) To form a basis for determining the monthly sewage disposal charge to be paid by each

Participant during any particular quarterly period, Metro shall ascertain the number of Residential Customers and Residential Customer equivalents of each Participant. This determination shall be made by taking the sum of the actual number of Residential customers reported as of the last day of the next to the last preceding quarter and the average number of Residential Customer Equivalents per quarter reported for the four quarters ending with said next to the last preceding quarter, adjusted for each Participant to eliminate any Residential Customers or Residential Customer equivalents whose sewage is delivered to a governmental agency other than Metro or other than a Participant for disposal outside of the Metropolitan Area.

(b) For the initial period until the District shall have submitted six consecutive quarterly reports, the reported number of Residential Customers and Residential Customer equivalents of the District shall be determined as provided in this subparagraph (b). On or before the tenth day of each month beginning with the month prior to the month in which sewage from the District is first delivered to Metro, the District shall submit a written statement of the number of Residential Customers and Residential Customer equivalents estimated to be billed by the District during the next succeeding month. For the purpose of determining the basic reported number of Residential Customers and Residential Customer equivalents of the District for such next succeeding month, Metro may at its discretion adopt either such estimate or the actual number of Residential Customers and Residential Customer equivalents reported by the District as of the last day of the next to the last preceding reported quarter. After the District shall have furnished six consecutive quarterly reports the reported number of Residential Customers and Residential Customer

equivalents of the District shall be determined as provided in the immediately preceding subparagraph (a).

(c) If the District shall fail to submit the required monthly and/or quarterly reports when due, Metro may make its own estimate of the number of Residential Customers and Residential Customer equivalents of the District and such estimate shall constitute the reported number for the purpose of determining sewage disposal charges.

3. The monthly sewage disposal charge payable to Metro shall be determined as follows:

(a) Prior to July 1st of each year Metro shall determine its total monetary requirements for the disposal of sewage during the next succeeding calendar year. Such requirements shall include the cost of administration, operation, maintenance, repair and replacement of the Metropolitan Sewerage System, establishment and maintenance of necessary working capital and reserves, the requirements of any resolution providing for the issuance of revenue bonds of Metro to finance the acquisition, construction or use of sewerage facilities, plus not to exceed 1% of the foregoing requirements for general administrative overhead costs.

(b) To determine the monthly rate per Residential Customer or Residential Customer equivalent to be used during said next succeeding calendar year, the total monetary requirements for disposal of sewage as determined in subparagraph 3(a) of this section shall be divided by twelve and the resulting quotient shall be divided by the total number of Residential Customers and Residential Customer equivalents of all Participants for the October-December quarter preceding said July 1st; provided, however, that the monthly rate shall not be less than Two Dollars ($2.00) per month per Residential Customer or Residential

Customer equivalent at any time during the period ending July 31, 1972.

(c) The monthly sewage disposal charge paid by each Participant to Metro shall be obtained by multiplying the monthly rate by the number of Residential Customers and Residential Customer equivalents of the Participant. An additional charge may be made for sewage or wastes of unusual quality or composition requiring special treatment, or Metro may require pretreatment of such sewage or wastes. An additional charge may be made for quantities of storm or ground waters entering those Local Sewerage Facilities which are constructed after January 1, 1961 in excess of the minimum standard established by the general rules and regulations of Metro.

4. The parties acknowledge that, by resolution of the Metropolitan Council, Metro may impose a charge or charges directly on the future customers of a Participant for purposes of paying for capacity in Metropolitan Sewage Facilities and that such charges shall not constitute a breach of this agreement or any part thereof. The proceeds of said charge or charges, if imposed, shall be used only for capital expenditures or defeasance of outstanding revenue bonds prior to maturity.

In the event such a charge or charges are imposed, the District shall, at Metro's request, provide such information regarding new residential customers and residential customer equivalents as may be reasonable and appropriate for purposes of implementing such a charge or charges.

5. A statement of the amount of the monthly sewage disposal charge shall be submitted by Metro to each Participant on or before the first day of each month and payment of such charge shall be due on the last day of such month. If any charge or portion thereof due to Metro shall

remain unpaid for fifteen days following its due date, the Participant shall be charged with and pay to Metro interest on the amount unpaid from its due date until paid at the rate of 6% per annum, and Metro may, upon failure to pay such amount, enforce payment by any remedy available at law or equity.

6. The District irrevocably obligates and binds itself to pay its sewage disposal charge out of the gross revenues of the sewer system of the District. The District further binds itself to establish, maintain and collect charges for sewer service which will at all times be sufficient to pay all costs of maintenance and operation of the sewer system of the District, including the sewage disposal charge payable to Metro hereunder and sufficient to pay the principal of and interest on any revenue bonds of the District which shall constitute a charge upon such gross revenues. It is recognized by Metro and the District that the sewage disposal charge paid by the District to Metro shall constitute an expense of the maintenance and operation of the sewer system of the District. The District shall provide in the issuance of future sewer revenue bonds of the District that expenses of maintenance and operations of the sewer system of the District shall be paid before payment of principal and interest of such bonds. The District shall have the right to fix its own schedule of rates and charges for sewer service provided that same shall produce revenue sufficient to meet the covenants contained in this Agreement.

Section 3. Effective Date of Amendment. This amendment shall take effect at the beginning of the first quarter following the date first written above with quarters beginning January 1, April 1, July 1, and October 1.

Section 4. Basic Agreement Unchanged. Except as otherwise provided in this amendment, all provisions of the

basic agreement shall remain in full force and effect as written therein.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first written above.

VAL VUE SEWER DISTRICT

ATTEST:

MUNICIPALITY OF
METROPOLITAN SEATTLE

~~Gary Zimmerman~~
Chair of the Council

ATTEST:

MAY 9 1992

MIDWAY SEWER DISTRICT

PO Box 3487 • Kent WA 98032-0209 • 3030 S 240 St

Manager
KEN J. KASE
(206) 824-4960
FAX NO.
(206) 878-2692

March 11, 2005

Dana Dick, General Manager
Val Vue Sewer District
PO Box 69550
Seattle, WA 98168

RE: Service Agreements between Midway and Val Vue

Dear Dana,

Please find the following attached documents:

1. Des Moines Sewer District – Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Service Area Agreement (dated September 7, 1972)

2. Resolution No. 2510 of the Municipality of Metropolitan Seattle (dated September 7, 1972)

3. Des Moines Sewer District – Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Amendment to Service Area Agreement (dated May 11, 1976)

4. Letter from Robert McAdams to Terry Matelich, (dated July 6, 1989)

5. Letter from Robert McAdams to Jim Henry. (dated October 24, 1989)

6. Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Amendment to Agreement For Sewage Disposal (dated October 2, 1992)

7. Midway Sewer District – Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Agreement Teminating Prior Service Area Agreements (dated February 24, 1993)

8. Midway Sewer District – Val Vue Sewer District Sewer Service Area Agreement, (dated June 23, 1993)

9. Midway Sewer District – Val Vue Sewer District Sewer Service Area Agreement, (dated June 8, 1994)

There is apparently another agreement, dated August 1, 1966, between the "parties", mentioned in the October 2, 1992, agreement. I do not have a copy of this 1966 agreement. It appears that this 1966 agreement was the first in a string of agreements and amendments. It probably does

not matter anymore, as the February 24, 1993 agreement terminates all of the prior agreements. I provided you with the earlier agreements to give you some background on this whole matter.

If you want to meet and discuss the agreements between the two Districts let me know.

Sincerely,

Ken J. Kase

Ken J. Kase
Manager

Enclosures

June 16, 2005

DRAFT

Board of Commissioners
Midway & Val Vue Sewer District

RE: Sewer service area agreements between Val Vue and Midway Sewer Districts

Dear Board Members:

The two Districts have a history of entering into service area agreements, usually for the provision of sewer service to properties within one district to be provided by the neighboring district. I am aware of at least 7 such agreements with the oldest one dated August 1, 1996. Fortunately, we need not consider the first five service agreements because they have been terminated by the February 24, 1993 agreement. These service agreements are as follows:

1. Val Vue – Metro Service Area Agreement (dated August 1, 1996)

2. Des Moines Sewer District – Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Service Area Agreement (dated September 7, 1972)

3. Des Moines Sewer District – Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Amendment to Service Area Agreement (dated May 11, 1976)

4. Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Amendment to Agreement For Sewage Disposal (dated October 2, 1992) (This agreement replaced and terminated the August 1, 1996, September 7, 1972, & May 11, 1976 agreements.)

5.. Midway Sewer District – Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Agreement Terminating Prior Service Area Agreements (dated February 24, 1993)

6. Midway Sewer District – Val Vue Sewer District Sewer Service Area Agreement, (dated June 23, 1993)

7. Midway Sewer District – Val Vue Sewer District Sewer Service Area Agreement, (dated June 8, 1994)

The two Districts also have two truck/generator agreements and one agreement for the allowance of Vactor truck contents disposal. I will not be discussing these agreements in this notice.

There are some problems with these existing service area agreements that I will point out.

DRAFT

A. Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Amendment to Agreement For Sewage Disposal (dated October 2, 1992) – This agreement also replaces and terminates the August 1, 1996, September 7, 1972, & May 11, 1976 agreements, however Midway was not a part of this agreement. I am not an attorney but it seems to me that if this agreement terminates other agreements that Midway is a party to then Midway ought to also be a signatory.

B. Midway Sewer District – Val Vue Sewer District – Municipality of Metropolitan Seattle Sewer Agreement Terminating Prior Service Area Agreements (dated February 24, 1993) - This agreement also replaces and terminates the August 1, 1996, September 7, 1972, & May 11, 1976 agreements. It does not, however terminate the October 2, 1992 agreement. I am not sure that this is a problem but it could be.

C. Midway Sewer District – Val Vue Sewer District Sewer Service Area Agreement, (dated June 23, 1993). This agreement identifies a fairly extensive area known as "Parcel One of Area B". According to this agreement the sewage in this area is to be collected by Midway and conveyed to Val Vue. It is puzzling to me why this area would be included in this agreement at all as by this date in 1993, Midway had a sewer collection system in place which was conveying the sewage to the Midway treatment plant. In my opinion, "Parcel One of Area B" of this agreement should not have been made part of this agreement. In fact neither Val Vue or Midway has fully complied with the stipulations set forth in Section 1 and 2 of this agreement. This agreement is further complicated by rates as set forth in Section 3. Each District is to pay the other 2/3 of their sewer rate for properties served. This currently does not make sense as Val Vue customers $32.60 per month and Midway customers pay 18.00 per month. This means that Midway looses money for each Midway customer that flows to Val Vue and Val Vue makes money for each customer that flows to Midway (Midway pays $21.52 to Val Vue for each residential customer and Val Vue pays $12.00 to Midway for each residential customer.

D. Midway Sewer District – Val Vue Sewer District Sewer Service Area Agreement, (dated June 8, 1994). This agreement has not presented any problems to either District, however the area described

DES MOINES SEWER DISTRICT -
VAL VUE SEWER DISTRICT -
MUNICIPALITY OF METROPOLITAN SEATTLE

SEWER SERVICE AREA AGREEMENT

THIS AGREEMENT, made and entered into this 7th day of September, 1972, between the DES MOINES SEWER DISTRICT, a municipal corporation of King County, Washington, hereinafter called "Des Moines", VAL VUE SEWER DISTRICT, a municipal corporation of King County, Washington, hereinafter called "Val Vue", and the MUNICIPALITY OF METROPOLITAN SEATTLE, a municipal corporation of the State of Washington, hereinafter called "Metro";

W I T N E S S E T H:

WHEREAS, Val Vue, under date of August 1, 1966, entered into an agreement with Metro (hereinafter called the "Val Vue-Metro Agreement") for the disposal of sewage and, pursuant thereto, Val Vue is required to and does deliver all the sewage and industrial waste collected by it to Metro; and

WHEREAS, said agreement provides "The Metropolitan Sewerage System shall generally include sewage disposal facilities with capacity to receive sewage from natural drainage areas of approximately one thousand acres or more."; and

WHEREAS, part of said sewage and industrial waste collected by Val Vue comes from an area within the Val Vue boundary but outside the Lake Washington-Green River Drainage Basin and is therefore being pumped by Val Vue to Metro and which area is all situated in King County, Washington, as described in Exhibit A, attached hereto and by this reference made a part hereof, and is hereinafter called "Area A"; and

WHEREAS, the State of Washington, Department of Social and Health Services, Division of Health, has asserted that it conditioned its approval of sewers in said area on the ultimate service of that area by gravity flow to Puget Sound as soon as facilities were available for such gravity service; and

WHEREAS, Des Moines has made available gravity sewage collection service to serve said area, and the parties hereto seek hereby to conform to the directions of the State Division of Health and eliminate said pumping and arrange for a gravity flow connection for Area A to Des Moines; and

WHEREAS, such alteration of service required a modification of the Val Vue-Metro Agreement; and

WHEREAS, that part of the Des Moines service area situated in King County, Washington, described in Exhibit B attached hereto and by this reference made a part hereof, and hereinafter called "Area B", is within the Lake Washington-Green River Drainage Basin and thereby can be served by gravity flow by Metro; and

WHEREAS, the parties desire hereby to eliminate the need for pumping for Area B and arrange for such a gravity flow connection for Area B when such service has been made available by Metro to that point in the vicinity of Area B situated in King County, Washington, described as follows:

> A point of Metro's selection on the easterly boundary of Interstate Highway 5 at the South 188th Street Interchange

and is hereinafter called "Point X"; and

WHEREAS, the net effect of the two alterations in service area does not diminish the area or the customer potential served by Metro;

NOW, THEREFORE, Des Moines, Val Vue and Metro, in consideration of the mutual covenants herein contained, hereby all agree as follows:

Section 1. Service to Val Vue by Des Moines. Val Vue shall now deliver all sewage collected by it within Area A to the collection lines of Des Moines and Val Vue shall pay Des Moines the same charges therefor from time to time that it would otherwise be paying to Metro but for this agreement, and no further payments therefor shall be made by Val Vue to Metro.

Section 2. Val Vue Drainage Area not Diminished by Area A. That the number of acres within the boundaries of Area A as herein defined shall not be deducted from area served by Val Vue in determining whether Metro is obligated under the agreement of August 1, 1966, to supply trunk or interceptor sewer facilities to drainage areas of approximately one thousand acres.

Section 3. Amendment of Val Vue-Metro Agreement - Delivery and Acceptance of Sewage. Section 2 of the Val Vue-Metro Agreement is hereby amended to read as follows:

"Section 2. Delivery and Acceptance of Sewage.

The District shall deliver to Metro all of the sewage and industrial waste collected by the District, except sewage and industrial waste from Area A, and Metro shall accept the sewage and industrial waste delivered for treatment and disposal as hereinafter provided subject to such reasonable rules and regulations as may be adopted from time to time by the Metropolitan Council. Metro shall not directly accept sewage or waste from any person, firm or private corporation which is located within the boundaries of or is delivering its sewage into the local sewerage facilities of the District without the written consent of the District. The District shall not deliver sewage to any other agency for disposal without the written consent of Metro."

Section 4. Interim Payment of Metro Charges. Val Vue shall continue to report and collect sewage disposal charges for payment to Metro from those customers served by Metro within Area A until such time as the actual gravity flow connection is made to Des Moines. Customer reporting shall continue to be in accordance with Section 5 of the Val Vue-Metro Agreement.

Section 5. Service to Des Moines by Metro. Des Moines shall deliver to Metro all sewage it collects within Area B at such time as Metro makes available, at no cost to Des Moines, collection lines capable of accepting such service, that is, with sufficient capacity to serve 125 acres, more or less, at Point X. Des Moines shall construct, at its expense, the necessary sewer crossing of Interstate Highway 5 at the South 188th Street Interchange at that time and shall connect to the Metro Facility at Point X. Des Moines shall at such time enter into a sewage disposal agreement with Metro for Metro service to Area B in substantially the form of the Val Vue-Metro Agreement, with such modifications thereto as are made with Metro component agencies generally.

IN WITNESS WHEREOF, the parties have hereunto made and entered into this agreement the day and year first above written.

VAL VUE SEWER DISTRICT

By _____
Andrew W. Simkus

By _____
Betty Lunz

By _____
Col. Blaine W. Butters

ATTEST:

_____
Secretary

DES MOINES SEWER DISTRICT

By _____
J. R. Stockdale

By _____
Homer J. Kline

By _____
Patrick B. McHugh

ATTEST:

_____
Secretary

MUNICIPALITY OF METROPOLITAN SEATTLE

By _____
C. Carey Donworth
Chairman of the Council

ATTEST:

_____
B. J. Carol
Clerk of the Council

AREA A DESCRIPTION

PARCEL ONE:

That portion of the Southeast 1/4 of Section 28, Township 23 North, Range 4 East, W.M., in King County, Washington, described as follows:

Beginning at the Southwest corner of the Northeast 1/4 of the Northwest 1/4 of the Southeast 1/4 of said Section 28; thence North 1°32'50" East along the west line of said subdivision to a point on the north margin of So. 170th Street as conveyed to King County by deed recorded under King County Auditor's File No. 4638060; thence continuing North 1°32'50" East along said west line to the north line of said Southeast 1/4; thence South 89°10'27" East along said north line to the east line of the West 1/2 of the Northeast 1/4 of the Northwest 1/4 of the Southeast 1/4 of said Section 28; thence South 1°29'36" West 607.32 feet; more or less, to the north margin of So. 170th Street; thence South 1°29'36" West 60 feet, more or less, to the south margin of So. 170th Street; thence easterly along said south margin and along the easterly extension of said south margin to the Northwest corner of Lot 14, Tagas Addition as recorded in Volume 44 of Plats, page 86, records of King County, Washington; thence southerly along the west line of said Lot 14 to the Southwest corner thereof; thence easterly along the south line of said Lot 14 to the westerly margin of 29th Ave. South; thence northerly along said westerly margin to the westerly extension of the south line of Lot 1, said Tagas Addition; thence easterly along said westerly extension and along the south line of said Lot 1 to the easterly boundary of said Tagas Addition; thence southerly along said easterly boundary to the north line of the Southeast 1/4 of the Southeast 1/4 of said Section 28; thence easterly along said north line 300.00 feet; thence south parallel to the west line of the east half of the Southeast 1/4 of the Southeast 1/4 of said Section to the north line of the South 292 feet of said Southeast 1/4; thence east along said north line to the east line of said Southeast 1/4; thence south along said east line to the Southeast corner of said Southeast 1/4; thence westerly along the south line of said Southeast 1/4 to the west line of the East 1/2 of the Southeast 1/4 of the Southeast 1/4 of said Section; thence northerly along said west line to the north line of the Southeast 1/4 of the Southeast 1/4 of said Section; thence westerly along said north line to the westerly margin of PSH No. 1; thence southerly along said westerly margin 249.96 feet; thence westerly, parallel with the south line of the North 1/2 of said Southeast 1/4 130.00 feet; thence northerly, parallel to the westerly margin of PSH No. 1 to the south line of the North 1/2 of said Southeast 1/4; thence westerly along said south line to the southwest corner of the East 1/2 of the Southeast 1/4 of the Northwest 1/4 of the Southeast

Exhibit A (Continued)

1/4 of said Section 28; thence northerly along the west line of said subdivision to the north margin of So. 170th Street; thence westerly along said north margin to the Point of Beginning.

PARCEL TWO:

That portion of the Southwest 1/4 of Section 27, Township 23 North, Range 4 East, W.M. described as follows:

Beginning at the intersection of the south line of said Section 27 and the southerly extension of the west line of the east 47.2 feet of Lot 2, Block 28, McMicken Heights, Division 2, unrecorded; thence northerly along said west line to the north line of the south 1/2 of said Lot 2; thence east along the north line of the south 1/2 of Lots 2, 3 and 4, said Block 28 to the east line of the west 57.58 feet of said Lot 4; thence north along said east line to the south line of the north 100 feet of said Lot 4; thence east along said south line and along the easterly extension of said south line to the centerline of 34th Avenue So., thence southerly along said centerline to the westerly extension of north line of the south 1/2 of Lot 1, Block 27, said McMicken Heights Division No. 2, unrecorded; thence easterly along said westerly extension and along the north line of the south 1/2 of Lots 1 thru 6 in said Block 27; thence north along the west line of Lot 7 in said Block 27 to the north line of the south 147 feet of said Lot 7; thence easterly along said north line to the west line of Lot 8, said Block 27; thence southerly along said west line to the north line of the south 1/2 of said Lot 8; thence easterly along the north line of the South 1/2 of Lots 8, 9, 10 and 11 to the east line of the west 45.5 feet of said Lot 11; thence south along said east line and along the southerly extension of said east line to the south line of said Section 27; thence west along said south line to the Point of Beginning.

AREA B DESCRIPTION

Those portions of Sections 34 and 35, Township 23 North, Range 4 East, W.M., and that portion of Section 3, Township 22 North, Range 4 East, W.M., in King County, Washington, described as follows:

Beginning at the intersection of the North line of the SE 1/4 of said Section 34 with the Westerly margin of Interstate Highway No. 5 Freeway;

Thence Southerly and Westerly along said Westerly margin of Interstate Highway No. 5 Freeway to its intersection with the Easterly margin of Military Road (which is also the Westerly margin of said Interstate Highway No. 5 Freeway);

Thence Southerly along said Easterly margin of Military Road and the Westerly margin of said Interstate Highway No. 5 Freeway across So. 188th Street and continuing Southerly along said Easterly margin of Military Road (which is also the Westerly margin of Interstate Highway No. 5 Freeway) to its intersection with the West line of the NE 1/4 of the NE 1/4 of said Section 3;

Thence Northerly along said West line to its intersection with the North line of said Section 3 which is also the South line of said Section 34;

Thence Westerly along said South line of Section 34 to its intersection with the West line of the East 250 feet of the SW 1/4 of the SE 1/4 of said Section 34;

Thence Northerly along said West line to its intersection with the centerline of So. 188th Street;

Thence Westerly along said centerline to its intersection with the West line of the East 1/2 of the NW 1/4 of the SE 1/4 of said Section 34;

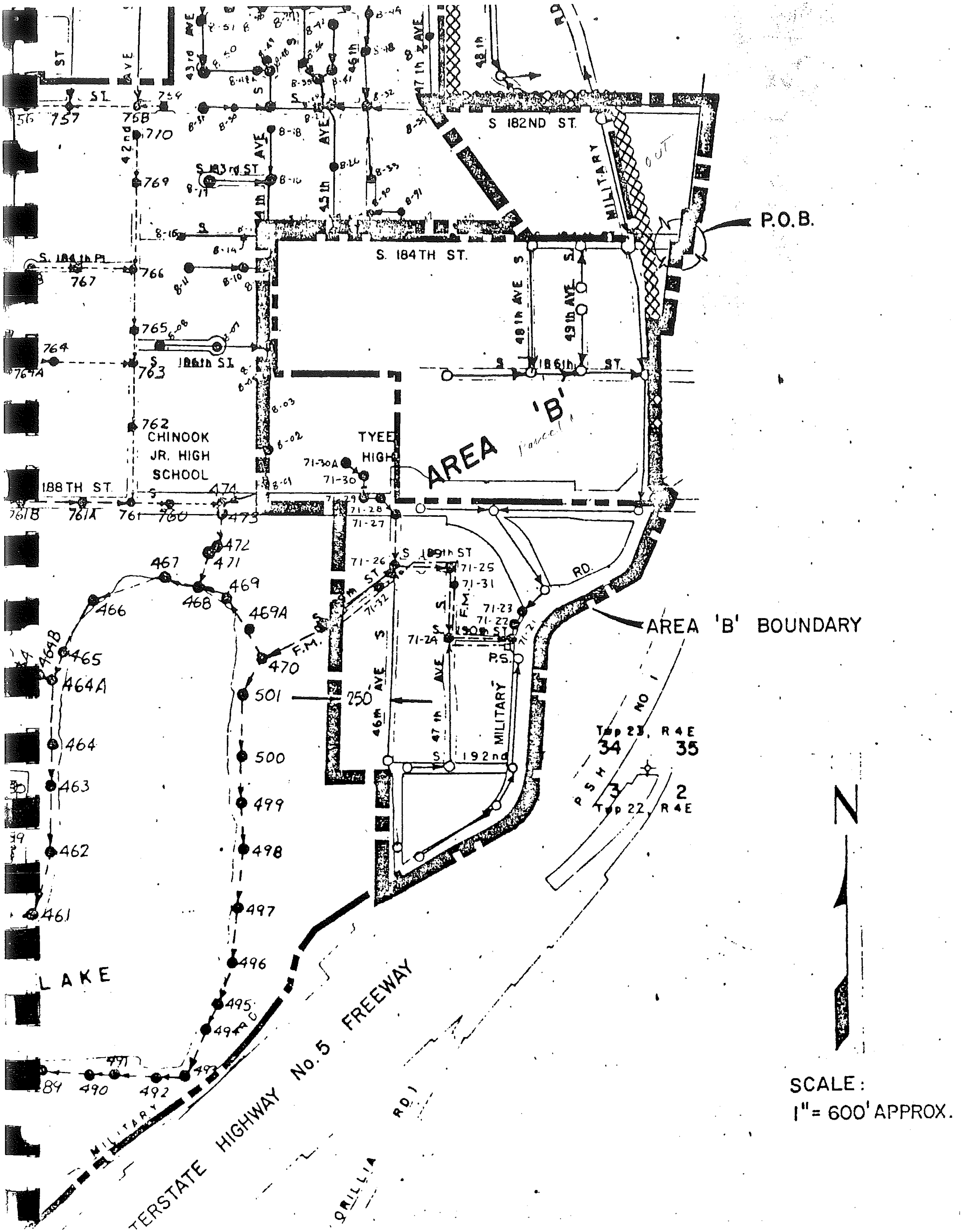
Thence Northerly along said West line to its intersection with the North line of the SE 1/4 of said Section 34;

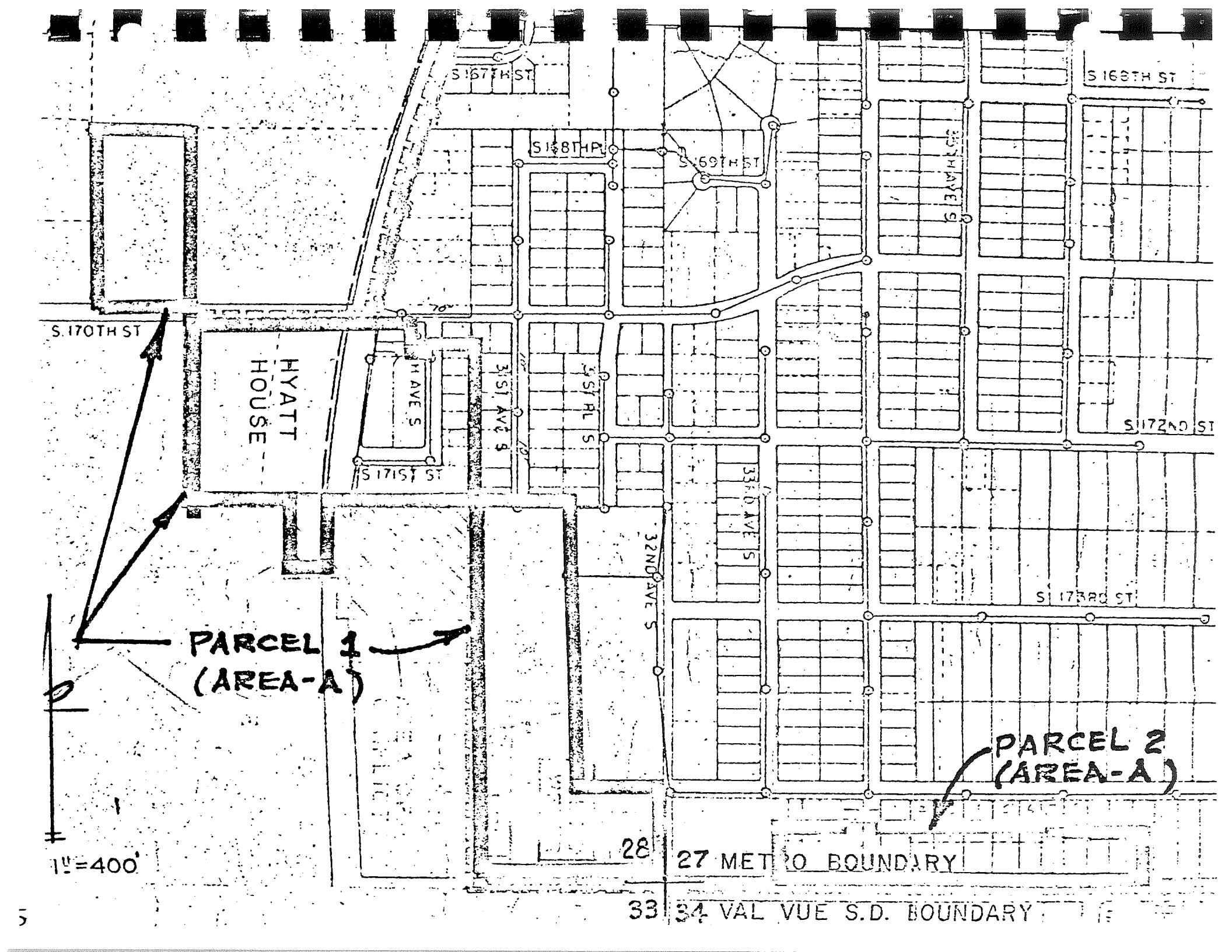
Thence Easterly along said North line to its intersection with the centerline of 48th Avenue So.;

Thence Northwesterly to the intersection of 47th Avenue So. and So. 182nd Street;

Thence Easterly along the centerline of So. 182nd Street to its intersection with the Westerly margin of said Interstate Highway No. 5 Freeway;

Thence Southerly along the Westerly margin of said Interstate Highway No. 5 Freeway to the Point of Beginning.


P.O.B.
S 182ND ST.
S. 184TH ST.
S 183rd ST
S. 184th Pl
186th ST.
188TH ST.
S 189th ST
S. 190th ST
S 192nd
48th AVE S
49th AVE S
46th AVE S
47th AVE S
45th AVE
42nd AVE
MILITARY
AREA 'B'
AREA 'B' BOUNDARY
CHINOOK JR. HIGH SCHOOL
TYEE HIGH
P.S.
F.M.
RD.
LAKE
INTERSTATE HIGHWAY No. 5 FREEWAY
PSH NO 1
Twp 23, R 4E
34
35
3
2
Twp 22, R 4E
N
SCALE:
1"= 600' APPROX.


S 167TH ST
S 168TH ST
S 168TH PL
S 169TH ST
33RD AVE S
S.170TH ST
HYATT HOUSE
34TH AVE S
31ST AVE S
31ST PL S
S 171ST ST
33RD AVE S
32ND AVE S
S 172ND ST
S 173RD ST
PARCEL 1 (AREA-A)
PARCEL 2 (AREA-A)
1"=400'
28
27 METRO BOUNDARY
33
34 VAL VUE S.D. BOUNDARY

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this 12th day of September, 1972, before me the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared ANDREW W. SIMKUS, BETTY LUNZ and COL. BLAINE W. BUTTERS, to me known to be the Commissioners of VAL VUE SEWER DISTRICT, the corporation that executed the foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned and on oath stated that they were authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

Bruce F. Donahue
Notary Public in and for the State of Washington, residing at Auburn

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this 13th day of September, 1972, before me the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared J. R. STOCKDALE, HOMER J. KLINE and PATRICK B. McHUGH, to me known to be the Commissioners of DES MOINES SEWER DISTRICT, the corporation that executed the foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned and on oath stated that they were authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

Edward K. Taylor
Notary Public in and for the State of Washington, residing at Mercer Island

STATE OF WASHINGTON)
) ss.
COUNTY OF KING)

On this 7 day of September, 1972, before me the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared C. CAREY DONWORTH and BETTY JEAN CAROL, to me known to be the Chairman of the Council and Clerk of the Council, respectively, of the MUNICIPALITY OF METROPOLITAN SEATTLE, the municipal corporation that executed the foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned and on oath stated that they were authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

L. Winston Olwick

Notary Public in and for the State of Washington, residing at Seattle

RESOLUTION NO. 1706

A RESOLUTION of the Council of the Municipality of Metropolitan Seattle authorizing the execution of an agreement with Val Vue Sewer District and Des Moines Sewer District conforming sewage disposal service responsibility to gravity drainage basins.

WHEREAS, a portion of Val Vue Sewer District presently pumps to Metro the sewage which it collects from a drainage basin which flows by gravity into Des Moines Sewer District; and

WHEREAS, Des Moines Sewer District presently pumps to the Des Moines treatment plant the sewage it collects from an area which drains by gravity into the Green River Basin; and

WHEREAS, it is desirable for all concerned that pumping costs be minimized and that gravity flow service be provided wherever possible; and

WHEREAS, the State of Washington Department of Health has urged that an appropriate division of sewage disposal service be made which will recognize gravity flow; and

WHEREAS, an agreement has been negotiated providing for the disposal of sewage from the affected areas and modifying the existing sewage disposal agreement between the Municipality and Val Vue Sewer District dated August 1, 1966;

NOW, THEREFORE, BE IT RESOLVED by the Council of the Municipality of Metropolitan Seattle as follows:

The service area agreement between Des Moines Sewer District, Val Vue Sewer District and the Municipality which is attached hereto and by this reference made a part hereof, be and it hereby is approved and the Chairman of the Council is authorized to execute same for and on behalf of the Municipality

ADOPTED at a regular meeting of the Council held on this 7th day of September, 1972.

MUNICIPALITY OF METROPOLITAN SEATTLE

By /s/ C. CAREY DONN
Chairman of the Council

ATTEST:

B. J. Card
Clerk of the Council

RESOLUTION NO. 2510

A RESOLUTION of the Council of the Municipality of Metropolitan Seattle authorizing the execution of an amendment to an agreement with Val Vue and Des Moines Sewer Districts conforming sewage disposal service responsibility to gravity drainage basins.

WHEREAS, by Resolution No. 1706, adopted September 7, 1972, the Council of the Municipality approved the execution of an agreement with Val Vue Sewer District and Des Moines Sewer District to allocate sewage disposal service in certain areas within the districts on the basis of gravity flow; and

WHEREAS, Val Vue and Des Moines now desire to amend said agreement to reflect existing service areas and established district boundaries; and

WHEREAS, the effect of this amendment and reallocation of service areas will increase the Municipality's customer potential;

NOW, THEREFORE, BE IT RESOLVED by the Council of the Municipality of Metropolitan Seattle that the Municipality shall enter into the Amendment to Sewer Service Area Agreement with Des Moines Sewer District and Val Vue Sewer District, establishing service area boundaries, such agreement to be substantially in the form of Exhibit A attached hereto and by this reference made a part hereof; and the Chairman and Clerk of the Council are hereby authorized and directed to execute such agreement on behalf of the Municipality.

ADOPTED by the Council of the Municipality of Metropolitan Seattle at a regular meeting thereof held on the 6th day of May, 1976.

Bernice Stern ~~C. Carey Donworth~~
Acting Chairman of the Council

ATTEST:

Carl A. Johansen
Clerk of the Council

Executed in 3 counterparts of
which this is counterpart No. 1

DES MOINES SEWER DISTRICT-
VAL VUE SEWER DISTRICT-
MUNICIPALITY OF METROPOLITAN SEATTLE

AMENDMENT TO SEWER SERVICE AREA AGREEMENT

THIS AGREEMENT, made and entered into this 11th day of May, 1976, is between the DES MOINES SEWER DISTRICT, a municipal corporation of King County, Washington, hereinafter called "Des Moines", VAL VUE SEWER DISTRICT, a municipal corporation of King County, Washington, hereinafter called "Val Vue", and the MUNICIPALITY OF METROPOLITAN SEATTLE, a municipal corporation of the State of Washington, hereinafter called "Metro".

WHEREAS, the parties hereto made and entered into a Sewer Service Area Agreement dated September 7, 1972 whereby all sewage to be collected by Val Vue in that part of the boundaries of Val Vue and which was described in Exhibit A to said Agreement, and referred to as "Area A" throughout said Agreement, was to be delivered by Val Vue to Des Moines and to be serviced by Des Moines; and

WHEREAS, the parties have now determined that part of said Area A should not be delivered to and serviced by Des Moines, but should be serviced instead by Val Vue and Metro, and

WHEREAS, in said Agreement, all sewage to be collected by Des Moines in that part of the Des Moines Sewer Service area and which was described in Exhibit B to said Agreement, and referred to as "Area B" throughout said Agreement was to be delivered by Des Moines to Metro and to be serviced by Metro; and

WHEREAS, the parties have determined that part of said Area B should be serviced directly by Val Vue and Metro, and that Des Moines should not concern itself with such part of Area B; and

WHEREAS, the parties have determined that an additional area, located within the boundaries of Des Moines and not referred to in said Agreement, and hereafter referred to as Area C, should be delivered by Des Moines to and be serviced directly by Val Vue and Metro, now, therefore,

DES MOINES, VAL VUE and METRO, in consideration of the mutual covenants herein contained, hereby all agree as follows:

Section 1. The legal description in Exhibit A to the aforementioned Agreement and which is throughout said aforementioned Agreement referred to as "Area A", is hereby amended to exclude all of Parcel 2 thereof lying West of 34th Avenue South.

Section 2. The legal description in Exhibit B to the aforementioned Agreement and which is throughout said aforementioned Agreement referred to as "Area B", is hereby amended to exclude all area lying east of Military Road and North of South 184th Street extended, and Des Moines agrees to allow Val Vue to annex all or any portion of said excluded area.

Section 3. Area C, located in King County, Washington, is described as follows:

> Lots 1, 2, 3 and 4, of Mount View, according to plat thereof; recorded in Volume 65 of Plats, Page 99, records of King County, Washington.
>
> Lots 1, 2, 3, 4, 5 and 6, Block 7, of Rancho Vista Division No. 4, according to plat thereof; recorded in Volume 56 of Plats, Pages 63 and 64, records of King County, Washington.
>
> Lot 12, of Crestview Estates, according to plat thereof; recorded in Volume 58 of Plats, Page 90, records of King County, Washington.

is all within the boundaries of Des Moines, and all sewage collected by Des Moines within Area C shall be delivered by Des Moines to and be serviced by Val Vue and Metro.

IN WITNESS WHEREOF, the parties have hereunto made and entered into this Agreement the day and year first above written.

DES MOINES SEWER DISTRICT

By _____
J. R. Stockdale

By _____
Patrick B. McHugh

ATTEST:

By _____
William J. Kemp

_____
Secretary.

VAL VUE SEWER DISTRICT

By _____
B. W. Butters

By _____
Betty Lunz

ATTEST:

By _____
Andrew Simkus

_____
Secretary

MUNICIPALITY OF METROPOLITAN SEATTLE

By _____
C. Carey Donworth
Chairman of the Council

ATTEST:

_____
Secretary - Carl A. Johansen

STATE OF WASHINGTON)
ss.
COUNTY OF K I N G)

On this 4th day of February, 1976, before me the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared J. R. Stockdale, Patrick B. McHugh and William J. Kemp, to me known to be the Commissioners of Des Moines Sewer District, the corporation that executed the foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned and on oath stated that they were authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

Millard D Scottie
Notary Public in and for the State of Washington, residing at Mercer Island.

STATE OF WASHINGTON)
ss.
COUNTY OF K I N G)

On this 17 day of FEB, 1976, before me the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared B. W. Butters, Betty Lunz and Andrew Simkus, to me known to be the Commissioners of Val Vue Sewer District, the corporation that executed the foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned and on oath stated that they were authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

[illegible]
Notary Public in and for the State of Washington, residing at Sea

STATE OF WASHINGTON)
ss.
COUNTY OF K I N G)

On this 11TH day of May, 1976, before me the undersigned, a Notary Public in and for the State of Washington, duly commissioned and sworn, personally appeared C. Carey Donworth, and Carl A. Johansen, to me known to be the Chairman of the Council and Clerk of the Council, respectively, of the Municipality of Metropolitan Seattle, the municipal corporation that executed the foregoing instrument and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned and on oath stated that they were authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS my hand and official seal hereto affixed the day and year in this certificate above written.

Jack A. Yakola
Notary Public in and for the State of Washington, residing at SEATTLE

VAL VUE SEWER DISTRICT
AND
MUNICIPALITY OF METROPOLITAN SEATTLE

AMENDMENT TO AGREEMENT
FOR SEWAGE DISPOSAL

THIS AMENDMENT made as of the 2nd day of October, 1992 ~~1990~~ between the Val Vue Sewer District, a municipal corporation of the State of Washington (hereinafter referred to as the "District") and the Municipality of Metropolitan Seattle, a metropolitan municipal corporation of the State of Washington (hereinafter referred to as "Metro");

WITNESSETH:

WHEREAS, the parties have entered into a long term Agreement for Sewage Disposal dated August 1, 1966 (hereinafter referred to as the "Basic Agreement"); and

WHEREAS, the Basic Agreement was amended and expanded by Agreements dated September 7, 1972 and May 11, 1976, between these parties and the Des Moines Sewer District (now known as the Midway Sewer District), which Agreements are to be terminated and replaced by this Amendment and by separate Agreements between the District and the Des Moines Sewer District (now known as the Midway Sewer District) and between Metro and the Des Moines Sewer District (now known as the Midway Sewer District), and;

WHEREAS, an advisory committee composed of elected and appointed officials in the metropolitan area was appointed by the Metropolitan Council to examine the structure of Metro's charges to its participants; and

WHEREAS, said advisory committee, following extensive research, study and deliberations, has recommended

certain changes in the structure of Metro's charges to its participants and implementation of said changes requires amendment of the Basic Agreement; and

WHEREAS, the parties have determined that the recommendations are in the best public interest and therefore desire to amend said Basic Agreement to implement said recommendations;

NOW, THEREFORE, it is hereby agreed as follows:

Section 1. Amendment of Section 2 of the Basic Agreement. Section 2 of the Basic Agreement is hereby amended to read as follows:

"Section 2. Delivery and Acceptance of Sewage. The District shall deliver to Metro all of the sewage and industrial waste collected by the District, except sewage and industrial waste from Area A, which is described in Exhibit A, and Metro shall accept the sewage and industrial waste delivered for treatment and disposal as hereinafter provided subject to such reasonable rules and regulations as may be adopted from time to time by the Metropolitan Council. Metro shall not directly accept sewage or waste from any person, firm or private corporation which is located within the boundaries of or is delivering its sewage into the Local Sewerage Facilities of the District without written consent of the District."

Section 2. Amendment of Section 5 of the Basic Agreement. Section 5 of the Basic Agreement is hereby amended to read as follows:

"Section 5. Payment for Sewage Disposal. For the disposal of sewage hereafter collected by the District and delivered to Metro the District shall pay to Metro on or before the last day of each month during the term of this Agreement, a sewage disposal charge determined as provided in this Section 5.

1. For the quarterly periods ending March 31, June 30, September 30 and December 31 of each year every Participant shall submit a written report to Metro setting forth:

(a) the number of Residential Customers billed by such Participant for local sewerage charges as of the last day of the quarter,

(b) the total number of all customers billed for local sewerage charges by such Participant as of such day, and

(c) the total water consumption during such quarter for all customers billed for local sewerage charges by such Participant other than Residential Customers.

The quarterly water consumption report shall be taken from water meter records and may be adjusted to exclude water which does not enter the sanitary facilities of the customer. Where actual sewage flow from an individual customer is metered, the metered sewage flows shall be reported in lieu of adjusted water consumption. The total quarterly water consumption report in cubic feet shall be divided by 2,250 to determine the number of Residential Customer equivalents represented by each Participant's customers other than single family residences. Metro shall maintain a permanent record of the quarterly customer reports from each Participant.

The District's first quarterly report shall cover the first quarterly period following the date when sewage is first delivered to Metro and shall be submitted within thirty days following the end of the quarter. Succeeding reports shall be made for each quarterly period thereafter and shall be submitted within thirty (30) days following the end of the quarter.

2. (a) To form a basis for determining the monthly sewage disposal charge to be paid by each

Participant during any particular quarterly period, Metro shall ascertain the number of Residential Customers and Residential Customer equivalents of each Participant. This determination shall be made by taking the sum of the actual number of Residential customers reported as of the last day of the next to the last preceding quarter and the average number of Residential Customer Equivalents per quarter reported for the four quarters ending with said next to the last preceding quarter, adjusted for each Participant to eliminate any Residential Customers or Residential Customer equivalents whose sewage is delivered to a governmental agency other than Metro or other than a Participant for disposal outside of the Metropolitan Area.

(b) For the initial period until the District shall have submitted six consecutive quarterly reports, the reported number of Residential Customers and Residential Customer equivalents of the District shall be determined as provided in this subparagraph (b). On or before the tenth day of each month beginning with the month prior to the month in which sewage from the District is first delivered to Metro, the District shall submit a written statement of the number of Residential Customers and Residential Customer equivalents estimated to be billed by the District during the next succeeding month. For the purpose of determining the basic reported number of Residential Customers and Residential Customer equivalents of the District for such next succeeding month, Metro may at its discretion adopt either such estimate or the actual number of Residential Customers and Residential Customer equivalents reported by the District as of the last day of the next to the last preceding reported quarter. After the District shall have furnished six consecutive quarterly reports the reported number of Residential Customers and Residential Customer

equivalents of the District shall be determined as provided in the immediately preceding subparagraph (a).

(c) If the District shall fail to submit the required monthly and/or quarterly reports when due, Metro may make its own estimate of the number of Residential Customers and Residential Customer equivalents of the District and such estimate shall constitute the reported number for the purpose of determining sewage disposal charges.

3. The monthly sewage disposal charge payable to Metro shall be determined as follows:

(a) Prior to July 1st of each year Metro shall determine its total monetary requirements for the disposal of sewage during the next succeeding calendar year. Such requirements shall include the cost of administration, operation, maintenance, repair and replacement of the Metropolitan Sewerage System, establishment and maintenance of necessary working capital and reserves, the requirements of any resolution providing for the issuance of revenue bonds of Metro to finance the acquisition, construction or use of sewerage facilities, plus not to exceed 1% of the foregoing requirements for general administrative overhead costs.

(b) To determine the monthly rate per Residential Customer or Residential Customer equivalent to be used during said next succeeding calendar year, the total monetary requirements for disposal of sewage as determined in subparagraph 3(a) of this section shall be divided by twelve and the resulting quotient shall be divided by the total number of Residential Customers and Residential Customer equivalents of all Participants for the October-December quarter preceding said July 1st; provided, however, that the monthly rate shall not be less than Two Dollars ($2.00) per month per Residential Customer or Residential

Customer equivalent at any time during the period ending July 31, 1972.

(c) The monthly sewage disposal charge paid by each Participant to Metro shall be obtained by multiplying the monthly rate by the number of Residential Customers and Residential Customer equivalents of the Participant. An additional charge may be made for sewage or wastes of unusual quality or composition requiring special treatment, or Metro may require pretreatment of such sewage or wastes. An additional charge may be made for quantities of storm or ground waters entering those Local Sewerage Facilities which are constructed after January 1, 1961 in excess of the minimum standard established by the general rules and regulations of Metro.

4. The parties acknowledge that, by resolution of the Metropolitan Council, Metro may impose a charge or charges directly on the future customers of a Participant for purposes of paying for capacity in Metropolitan Sewage Facilities and that such charges shall not constitute a breach of this agreement or any part thereof. The proceeds of said charge or charges, if imposed, shall be used only for capital expenditures or defeasance of outstanding revenue bonds prior to maturity.

In the event such a charge or charges are imposed, the District shall, at Metro's request, provide such information regarding new residential customers and residential customer equivalents as may be reasonable and appropriate for purposes of implementing such a charge or charges.

5. A statement of the amount of the monthly sewage disposal charge shall be submitted by Metro to each Participant on or before the first day of each month and payment of such charge shall be due on the last day of such month. If any charge or portion thereof due to Metro shall

remain unpaid for fifteen days following its due date, the Participant shall be charged with and pay to Metro interest on the amount unpaid from its due date until paid at the rate of 6% per annum, and Metro may, upon failure to pay such amount, enforce payment by any remedy available at law or equity.

6. The District irrevocably obligates and binds itself to pay its sewage disposal charge out of the gross revenues of the sewer system of the District. The District further binds itself to establish, maintain and collect charges for sewer service which will at all times be sufficient to pay all costs of maintenance and operation of the sewer system of the District, including the sewage disposal charge payable to Metro hereunder and sufficient to pay the principal of and interest on any revenue bonds of the District which shall constitute a charge upon such gross revenues. It is recognized by Metro and the District that the sewage disposal charge paid by the District to Metro shall constitute an expense of the maintenance and operation of the sewer system of the District. The District shall provide in the issuance of future sewer revenue bonds of the District that expenses of maintenance and operations of the sewer system of the District shall be paid before payment of principal and interest of such bonds. The District shall have the right to fix its own schedule of rates and charges for sewer service provided that same shall produce revenue sufficient to meet the covenants contained in this Agreement.

Section 3. Effective Date of Amendment. This amendment shall take effect at the beginning of the first quarter following the date first written above with quarters beginning January 1, April 1, July 1, and October 1.

Section 4. Basic Agreement Unchanged. Except as otherwise provided in this amendment, all provisions of the

basic agreement shall remain in full force and effect as written therein.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the day and year first written above.

VAL VUE SEWER DISTRICT

ATTEST:

MUNICIPALITY OF
METROPOLITAN SEATTLE

~~Gary Zimmerman~~
Chair of the Council

ATTEST:

MAY 9 1992

MIDWAY SEWER DISTRICT
AND
VAL VUE SEWER DISTRICT

SEWER SERVICE AREA AGREEMENT

THIS AGREEMENT is made and entered into this 8th day of June, 1994, by and between MIDWAY SEWER DISTRICT a municipal corporation of the State of Washington, hereinafter referred to as "Midway" and VAL VUE SEWER DISTRICT, a municipal corporation of the State of Washington, hereinafter referred to as "Val Vue", upon the following terms and conditions:

WHEREAS, the nine parcels of real property, more particularly described on Attachment A hereto, which are located within the geographic boundaries of Val Vue, cannot be readily and economically served by the existing sewer system of Val Vue; and

WHEREAS, Midway has constructed an extension to its sewer system, at its cost, which is capable of adequately and economically serving the aforesaid real properties; and

WHEREAS, the parties desire to permit Midway to so provide sewerage disposal services to the subject area and to impose its usual charges and rates for connection and for service; and

WHEREAS, the parties are authorized to enter into sewer service area agreements, with consent of their respective boards of commissioners, pursuant to RCW 56.08.060;

NOW, THEREFORE, the parties hereto, in consideration of the mutual covenants herein contained, do hereby agree as follows;

SECTION 1. SERVICE BY MIDWAY. Midway hereby agrees to permit land owners or occupants of the aforesaid parcels of real property to connect to its sewerage disposal system, upon application and issuance of permit in accordance with the rules and regulations of Midway, and to provide disposal services pursuant to this Agreement.

SECTION 2. CONSENT OF VAL VUE. Val Vue hereby consents to the providing of sewerage disposal services by Midway to the aforesaid parcels of real property, and to assessment by Midway of connection charges and service charges, pursuant to Section 3 of this Agreement.

SECTION 3. APPLICABLE RATES AND RULES. Midway shall charge to owners of the aforesaid parcels of real property, and the real properties in rem, connection charges, sewerage disposal service charges, and all other charges, penalties, fees and other costs computed on the same basis as rates and charges to customers of Midway owning real property within the geographic boundaries of Midway, and the owners and occupants of the said real property shall be subject to the rules and regulations applicable to customers within the boundaries of Midway.

SECTION 4. TERMINATION. This Agreement shall not be deemed to constitute the extension of permanent sewer service outside of the existing boundaries of Midway, but shall continue on an annual basis, until such time as either party shall give to the other

notice of termination not less than one (1) year in advance of the stated termination date.

IN WITNESS WHEREOF, the parties have hereunto made and entered into this Agreement in duplicate (each of which may be considered alone as the Agreement) on the day and year first above written.

MIDWAY SEWER DISTRICT

By: _____

By: _____

By: _____

VAL VUE SEWER DISTRICT

By: _____

By: _____

By: _____

ATTACHMENT A

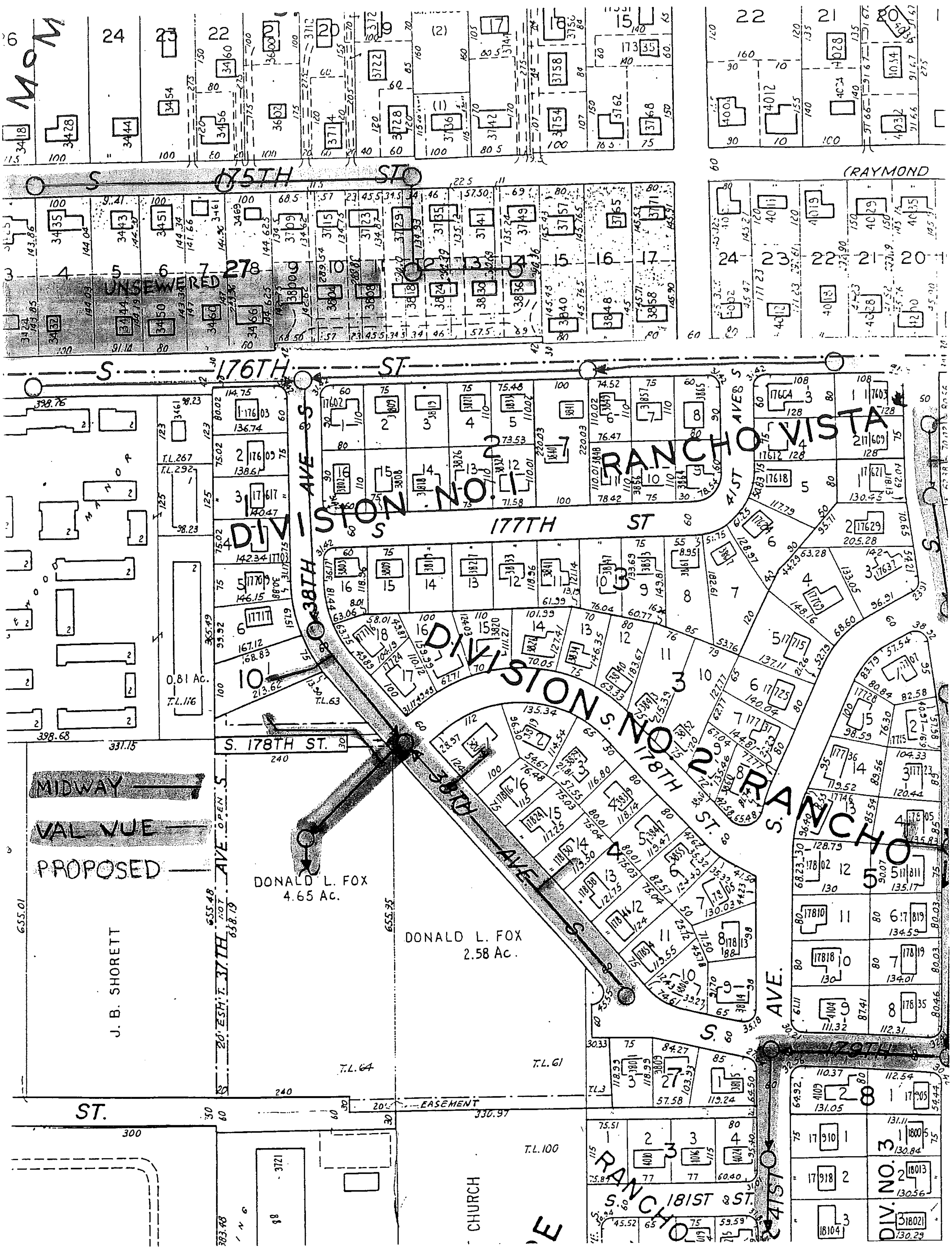
TO

SEWER SERVICE AREA AGREEMENT

The legal description of the sewer service area referred to in the attached Agreement is as follows:

That portion of the Southwest quarter of Section 27, Township 23 North, Range 4 East, W.M. described as follows:

Beginning at the intersection of the south line of said Section 27 and the southerly extension of the west line of Lot 3, Block 27, McMicken Heights, Division 2, unrecorded; thence northerly along said west line to the north line of the south half of said Lots 3 through 6 in said Block 27; thence easterly along said north line to the west line of Lot 7 in said Block 27; thence north along the west line of Lot 7 in said Block 27 to the north line of the south 147 feet of said Lot 7; thence easterly along said north line to the west line of Lot 9, in said Block 27; thence northerly along said west line 10.12 feet; thence South 88° 35' 00" East, 205.50 feet to the east line of the west 45.5 feet of Lot 11 in said Block 27; thence south along said east line and along the southerly extension of said east line to the south line of said Section 27; thence west along said south line to the Point of Beginning.



S 175TH ST
(RAYMOND
UNSEWERED
S 176TH ST
RANCHO VISTA
DIVISION NO. 1
S 177TH ST
41ST AVE S
DIVISION NO. 2
S 178TH ST
38TH AVE S
S. 178TH ST.
MANOR
WOOD
0.81 Ac.
T.L. 116
T.L. 63
T.L. 267
T.L. 292
MIDWAY
VAL VUE
PROPOSED
S 37TH AVE
OPEN
NOT
20' ESM'T.
DONALD L. FOX
4.65 Ac.
DONALD L. FOX
2.58 Ac.
J. B. SHORETT
T.L. 64
T.L. 61
T.L. 3
T.L. 100
EASEMENT
ST.
S. RANCHO AVE.
S. 179TH
S. 181ST ST.
41ST
RANCHO
DIV. NO. 3
CHURCH

EXHIBIT "B"

MIDWAY – VAL VUE SEWER DISTRICTS
SERVICE AREA AGREEMENT
TABULATION OF AFFECTED PROPERTIES

AREA 1

(Information current as of March 29, 2006, from records of King County)

King County Tax Parcel Number	Property Address	Property Owner
2823049053	17001 INTERNATIONAL BL	SEATTLE PORT OF (Radison Hotel)
8552400076	17002 INTERNATIONAL BL	EQUIVA SERVICES LLC (corner gas station)
8552400095	17108 INTERNATIONAL BL	LEGEND INVESTORS LLC
8552400090	17108 INTERNATIONAL BL	LEGEND INVESTORS LLC
2823049051	2930 S 176TH ST	RABADIA RAMESH R
2823049182	3000 S 176TH ST	WIRRULLA SEATAC LLC
2823049172	3100 S 176TH ST	DOLLAR DEVELOPMENT COMPANY
2823049185		WILLIAMS KENNETH
2823049189	3122 S 176TH ST	THE SOUTHLAND CORPORATION (7-11)
2823049188	17210 30th AV S (90 units)	KING CO HOUSING AUTHORITY
2823049183	17223 32 AV S (19 units) only the westerly portion of this property is served to Midway Sewer District	KING CO HOUSING AUTHORITY
2823049178	17341 32ND AV S (56 units)	KING CO HOUSING AUTHORITY
5379806560	3346 S 176TH ST (this parcel was combined with parcel 5379806570)	SHERMAN DEVELOPMENT L L C
5379806610	3352 S 176TH ST	MONROE DAVID D+LASKIE JENNI
5379806590	3358 S 176TH ST	COOK JESSIE J
5379806580	17515 34TH AV S	COOK JESSIE J

AREA 2

(Information current as of January 4, 2006, from records of King County)

King County Tax Parcel Number	Property Address	Property Owner
5379806360	3424 S 176TH ST	FOLEY JOSHUA+MIRIAM
5379806370	3432 S 176TH ST	GRACEY ETHA M
5379806380	3444 S 176TH ST	SLEIGHT JOAN I
5379806390	3450 S 176TH ST	FEINSTEIN HARLAN+SUZANNE
5379806400	3460 S 176TH ST	CHACE SUSAN P
5379806410	3466 S 176TH ST	LAUER ARNOLD J+ROSE M
5379806420	3800 S 176TH ST	WOLDEHAWARIAT ESAYAS
5379806430	3804 S 176TH ST	LE KIEM VAN
5379806440	3808 S 176TH ST	TESSEMA WONDIMU

EXHIBIT "B"

MIDWAY – VAL VUE SEWER DISTRICTS
SERVICE AREA AGREEMENT
TABULATION OF AFFECTED PROPERTIES

AREA 3

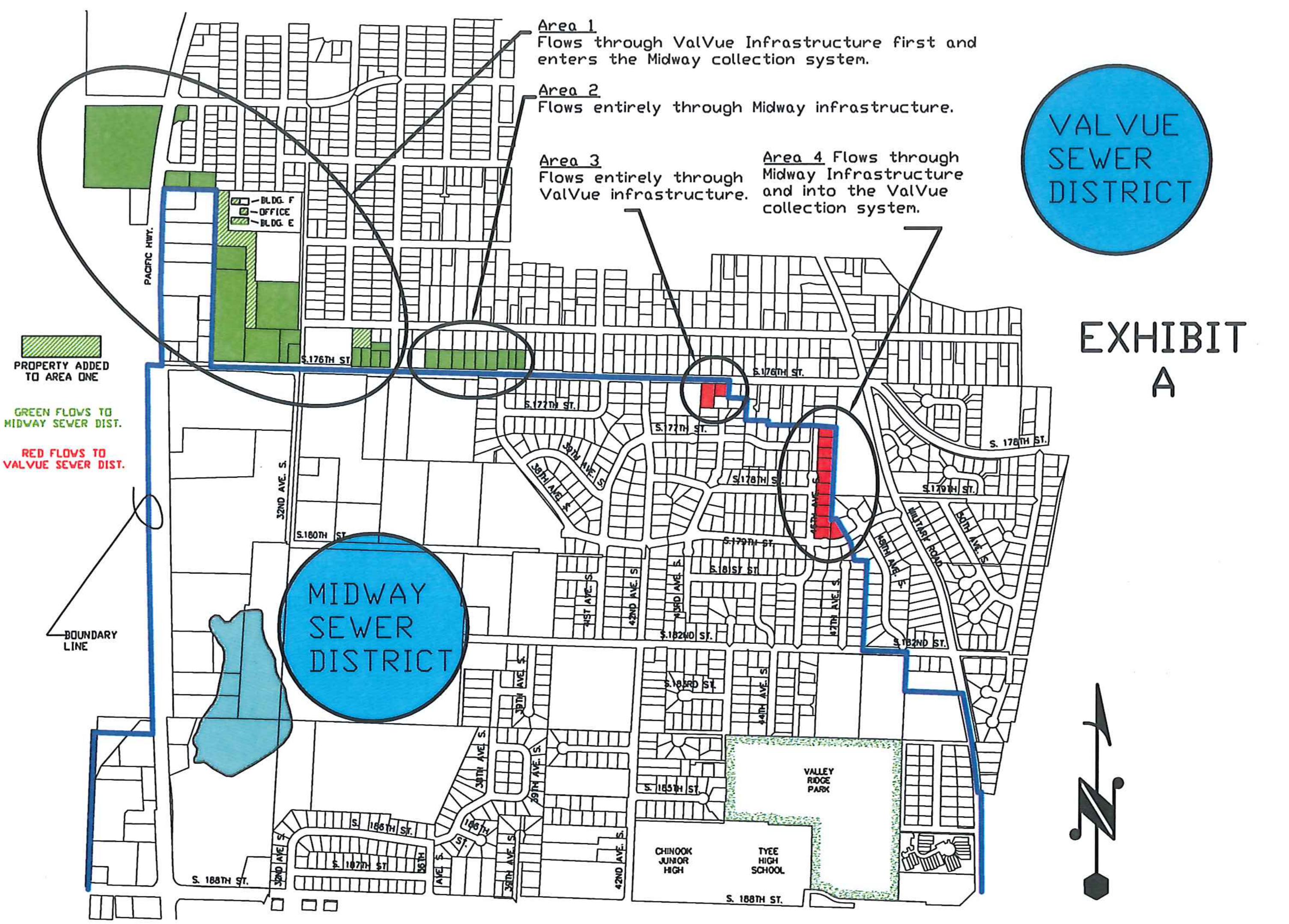
(Information current as of January 4, 2006, from records of King County)

King County Tax Parcel Number	Property Address	Property Owner
3423049167	4241 S 176TH ST	VOLKERS FRED C
3423049151	4251 S 176TH ST	Not Available

AREA 4

(Information current as of January 4, 2006, from records of King County)

King County Tax Parcel Number	Property Address	Property Owner
5702000040	17634 46TH AV S	GIRMAY GIDAY A
5702000030	17640 46TH AV S	TAYLOR ARTHUR J+JOANN
5702000020	17702 46TH AV S	VILLIERS REYNALDO+ANA MARIA
5702000010	17714 46TH AV S	DHAR MOHAMMAD A+RAFAT
7148000295	17724 46TH AV S	ASHBAUGH R E
7148000300	17732 46TH AV S	MINSER MARTIN E
7148000305	17804 46TH AV S	GREGERSON-DAHLE MIA+SCOTT T
7148000310	17812 46TH AV S	GOLDEN JAMES MICHAEL+PAMELA
7148000315	17820 46TH AV S	ROSS DONALD C
7148000320	17828 46TH AV S	COLAKAVIC DURAN+RAMIZA
1840000060	4704 S 179TH ST	GOSS JOSEPH J


Area 1
Flows through ValVue Infrastructure first and enters the Midway collection system.
Area 2
Flows entirely through Midway infrastructure.
Area 3
Flows entirely through ValVue infrastructure.
Area 4 Flows through Midway Infrastructure and into the ValVue collection system.
VALVUE SEWER DISTRICT
EXHIBIT A
MIDWAY SEWER DISTRICT
PROPERTY ADDED TO AREA ONE
GREEN FLOWS TO MIDWAY SEWER DIST.
RED FLOWS TO VALVUE SEWER DIST.
BOUNDARY LINE
BLDG. F
OFFICE
BLDG. E
PACIFIC HWY.
S.176TH ST
S.176TH ST.
S.177TH ST.
S.178TH ST.
S.179TH ST.
S.180TH ST
S.181ST ST
S.182ND ST.
S.183RD ST.
S.185TH ST.
S.186TH ST.
S.187TH ST
S. 188TH ST.
32ND AVE. S.
42ND AVE. S.
43RD AVE. S.
47TH AVE. S.
MILITARY ROAD
VALLEY RIDGE PARK
CHINOOK JUNIOR HIGH
TYEE HIGH SCHOOL

MIDWAY SEWER DISTRICT
VAL VUE SEWER DISTRICT
MUNICIPALITY OF METROPOLITAN SEATTLE

AGREEMENT TERMINATING PRIOR
SEWER SERVICE AREA AGREEMENTS

THIS AGREEMENT is made and entered into in triplicate this 24th day of February, 1993, by and between MIDWAY SEWER DISTRICT (formerly known as Des Moines Sewer District), a municipal corporation, hereinafter referred to as "Midway," VAL VUE SEWER DISTRICT, a municipal corporation, hereinafter referred to as "Val Vue," and the MUNICIPALITY OF METROPOLITAN SEATTLE, a municipal corporation, hereinafter referred to as "Metro," upon the following terms and conditions:

WHEREAS, the parties hereto made and entered into a Sewer Service Area Agreement, dated September 7, 1972, and subsequently entered into an Amendment thereto, dated May 11, 1976; and

WHEREAS, the parties have or shall enter into certain new Agreements establishing their respective rights and obligations, which will replace the aforesaid Sewer Service Area Agreement and Amendment;

NOW, THEREFORE, Midway, Val Vue and Metro, in consideration of the mutual covenants herein contained, hereby agree as follows:

Section 1. Termination of Sewer Service Area Agreement and Amendment. The Sewer Service Area Agreement, dated September 7, 1972, and the Amendment thereto, dated May 11, 1976, by and between these parties, are hereby revoked and terminated.

Section 2. Substitute Agreement Between Midway and Val Vue. Midway and Val Vue shall enter into a new Sewer Service Area Agreement on such terms and conditions as these two parties may mutually agree, providing: (a) for delivery by Val Vue to Midway of sewage from an area within the Val Vue boundaries but outside the Lake Washington - Green River Drainage Basin, and (b) for delivery by Midway to Val Vue of sewage from an area within the Midway Boundaries within the Lake Washington - Green River Drainage Basin.

Section 3. Amendment of Agreements for Sewage Disposal. Midway and Val Vue have or shall, respectively, enter into Agreements, or Amendments of existing Agreements, with Metro, for sewage disposal on such terms and conditions as the respective parties have or may mutually agree, to include a capacity fee.

Section 4. Execution in Counterparts. This Agreement may be entered into in counterparts, each fully signed copy of which shall be considered an original.

IN WITNESS WHEREOF, the parties have hereunto made and entered into this Agreement the date first above written.

MIDWAY SEWER DISTRICT

By: _____

By: _____

By: _____

Attest:

_____
Secretary

VAL VUE SEWER DISTRICT

By: Betty Lung

By: David L. Ruiter

By: Michael J. West

Attest:

David L. Ruiter
Secretary

MUNICIPALITY OF METROPOLITAN SEATTLE

Richard K. Sandaas,
Executive Director

Attest:

Bonnie Mattson
Clerk of the Council

k:\work\msd\agr-term

SEWER SERVICE AREA AGREEMENT

THIS AGREEMENT, made and entered into this 23rd of June, 1993, is between VAL VUE SEWER DISTRICT, a municipal corporation, herein VAL VUE, and MIDWAY SEWER DISTRICT, a municipal corporation (formerly DES MOINES SEWER DISTRICT), herein MIDWAY.

WHEREAS, a portion of sanitary sewage collected by VAL VUE originates from an area within the boundaries of VAL VUE but outside the Lake Washington-Green River Drainage Basin, and

WHEREAS, VAL VUE has, pursuant to a prior Sewer Service Area Agreement, delivered the said sanitary sewage to MIDWAY in order to make use of gravity collection and avoid the necessity of pumping; and

WHEREAS, a portion of the sanitary sewage collected by MIDWAY originates from an area within the boundaries of MIDWAY but inside the Lake Washington-Green River Drainage Basin; and

WHEREAS, MIDWAY has, pursuant to a prior Sewer Service Area Agreement, delivered the said sanitary sewage to VAL VUE in order to make use of gravity collection and avoid the necessity of pumping; and

WHEREAS, the parties desire to continue this arrangement and update the terms thereof;

NOW, THEREFORE,

For and in consideration of the mutual benefits each of the parties shall derive herefrom, it is hereby agreed between the parties as follows:

Section 1. Service To VAL VUE By MIDWAY. VAL VUE shall deliver by gravity all sanitary sewage collected by VAL VUE within the territory described as Area A on attached Exhibit A to the MIDWAY sewer system.

Section 2. Service to MIDWAY by VAL VUE. MIDWAY shall deliver by gravity all sanitary sewage collected by MIDWAY within the territory described as Area B on attached Exhibit B to the VAL VUE sewer system.

Section 3. Applicable Rates and Regulations. As consideration for MIDWAY providing sewage treatment for the sanitary sewage collected in Area A, as referred to in Section 1 above, VAL VUE shall pay to MIDWAY a sewage treatment charge computed at two-thirds of the rate charged by MIDWAY to properties with the same rate classifications within the boundaries of MIDWAY and the properties within Area A shall be subject to the sewer use regulations of MIDWAY. In addition, a general facilities charge imposed on new connections by MIDWAY shall be paid by VAL VUE to MIDWAY for all future connections within Area A, to be computed in the same manner as if the properties connected were within the boundaries of MIDWAY. As consideration for VAL VUE providing sewage treatment for the sanitary sewage collected in Area B, as referred to in Section 2 above, MIDWAY shall pay to VAL VUE a sewage treatment charge computed at two-thirds of the rate charged by VAL VUE to properties with the same rate classifications within the boundaries of VAL VUE and the properties within Area B shall be

subject to the sewer use regulations of VAL VUE. In addition, any charges and capacity fees imposed by the Municipality of Metropolitan Seattle on new connections by VAL VUE shall be paid by MIDWAY to VAL VUE for all future connections within Area B, to be computed in the same manner as if the properties connected were within the boundaries of VAL VUE. Periodic payments due under this paragraph from MIDWAY to VAL VUE may be offset against amounts owing from VAL VUE to MIDWAY, thus permitting a net payment by VAL VUE to MIDWAY.

IN WITNESS WHEREOF, the parties have entered into this Agreement in duplicate (each of which may be considered alone as the Agreement) the date first above written.

MIDWAY SEWER DISTRICT

By: _____

By: _____

By: _____

VAL VUE SEWER DISTRICT

By: _____

By: _____

By: _____

E:\WORK\MSD\AREA-AGR

AREA A

PARCEL ONE:

That portion of the Southeast 1/4 of Section 28, Township 23 North, Range 4 East, W.M., in King County, Washington, described as follows:

Beginning at the Southwest corner of the Northeast 1/4 of the Northwest 1/4 of the Southeast 1/4 of said Section 28; thence North 1°32'50" East along the west line of said subdivision to a point on the north margin of So. 170th Street as conveyed to King County by deed recorded under King County Auditor's File No. 4638060; thence continuing North 1°32'50" East along said west line to the north line of said Southeast 1/4; thence South 89°10'27" East along said north line to the east line of the West 1/2 of the Northeast 1/4 of the Northwest 1/4 of the Southeast 1/4 of said Section 28; thence South 1°29'36" West 607.32 feet; more or less, to the north margin of So. 170th Street; thence South 1°29'36" West 60 feet, more or less, to the south margin of So. 170th Street; thence easterly along said south margin and along the easterly extension of said south margin to the Northwest corner of Lot 14, Tagas Addition as recorded in Volume 44 of Plats, page 86, records of King County, Washington; thence southerly along the west line of said Lot 14 to the Southwest corner thereof; thence easterly along the south line of said Lot 14 to the westerly margin of 29th Ave. South; thence northerly along said westerly margin to the westerly extension of the south line of Lot 1, said Tagas Addition; thence easterly along said westerly extension and along the south line of said Lot 1 to the easterly boundary of said Tagas Addition; thence southerly along said easterly boundary to the north line of the Southeast 1/4 of the Southeast 1/4 of said Section 28; thence easterly along said north line 300.00 feet; thence south parallel to the west line of the east half of the Southeast 1/4 of the Southeast 1/4 of said Section to the north line of the South 292 feet of said Southeast 1/4; thence east along said north line to the east line of said Southeast 1/4; thence south along said east line to the Southeast corner of said Southeast 1/4; thence westerly along the south line of said Southeast 1/4 to the west line of the East 1/2 of the Southeast 1/4 of the Southeast 1/4 of said Section; thence northerly along said west line to the north line of the Southeast 1/4 of the Southeast 1/4 of said Section; thence westerly along said north line to the westerly margin of PSH No. 1; thence southerly along said westerly margin 249.96 feet; thence westerly, parallel with the south line of the North 1/2

of said Southeast 1/4 130.00 feet; thence northerly, parallel to the westerly margin of PSH No. 1 to the south line of the North 1/2 of said Southeast 1/4; thence westerly along said south line to the southwest corner of the East 1/2 of the Southeast 1/4 of the Northwest 1/4 of the Southeast 1/4 of said Section 28; thence northerly along the west line of said subdivision to the north margin of So. 170th Street; thence westerly along said north margin to the Point of Beginning.

PARCEL TWO:

That portion of the Southwest 1/4 of Section 27, Township 23 North, Range 4 East, W.M. described as follows:

Beginning at the intersection of the south line of said Section 27 and the southerly extension of the west line of the east 47.2 feet of Lot 2, Block 28, McMicken Heights, Division 2, unrecorded; thence northerly along said west line to the north line of the south 1/2 of said Lot 2; thence east along the north line of the south 1/2 of Lots 2, 3 and 4, said Block 28 to the east line of the west 57.58 feet of said Lot 4; thence north along said east line to the south line of the north 100 feet of said Lot 4; thence east along said south line and along the easterly extension of said south line to the centerline of 34th Avenue So., thence southerly along said centerline to the westerly extension of north line of the south 1/2 of Lot 1, Block 27, said McMicken Heights Division No. 2, unrecorded; thence easterly along said westerly extension and along the north line of the south 1/2 of Lots 1 thru 6 in said Block 27; thence north along the west line of Lot 7 in said Block 27 to the north line of the south 147 feet of said Lot 7; thence easterly along said north line to the west line of Lot 8, said Block 27; thence southerly along said west line to the north line of the south 1/2 of said Lot 8; thence easterly along the north line of the South 1/2 of Lots 8, 9, 10 and 11 to the east line of the west 45.5 feet of said Lot 11; thence south along said east line and along the southerly extension of said east line to the south line of said Section 27; thence west along said south line to the Point of Beginning.

Less all of said Parcel Two lying west of 34th Avenue South.

AREA B

PARCEL ONE

Those portions of Sections 34 and 35, Township 23 North, Range 4 East, W.M., and that portion of Section 3, Township 22 North, Range 4 East, W.M., in King County, Washington, described as follows:

Beginning at the intersection of the North line of the SE 1/4 of said Section 34 with the Westerly margin of Interstate Highway No. 5 Freeway;

Thence Southerly and Westerly along said Westerly margin of Interstate Highway No. 5 Freeway to its intersection with the Easterly margin of Military Road (which is also the Westerly margin of said Interstate Highway No. 5 Freeway);

Thence Southerly along said Easterly margin of Military Road and the Westerly margin of said Interstate Highway No. 5 Freeway across So. 188th Street and continuing Southerly along said Easterly margin of Military Road (which is also the Westerly margin of Interstate Highway No. 5 Freeway) to its intersection with the West line of the NE 1/4 of the NE 1/4 of said Section 3;

Thence Northerly along said West line to its intersection with the North line of said Section 3 which is also the South line of said Section 34;

Thence Westerly along said South line of Section 34 to its intersection with the West line of the East 250 feet of the SW 1/4 of the SE 1/4 of said Section 34;

Thence Northerly along said West line to its intersection with the centerline of So. 188th Street;

Thence Westerly along said centerline to its intersection with the West line of the East 1/2 of the NW 1/4 of the SE 1/4 of said Section 34;

Thence Northerly along said West line to its intersection with the North line of the SE 1/4 of said Section 34;

Thence Easterly along said North line to its intersection with the centerline of 48th Avenue So.;

Thence Northwesterly to the intersection of 47th Avenue So. and So. 182nd Street;

Thence Easterly along the centerline of So. 182nd Street to its intersection with the Westerly margin of said Interstate Highway No. 5 Freeway;

Thence Southerly along the Westerly margin of said Interstate Highway No. 5 Freeway to the Point of Beginning.

Less all of said Parcel One lying east of Military Road and North of South 184th Street as extended.

PARCEL TWO

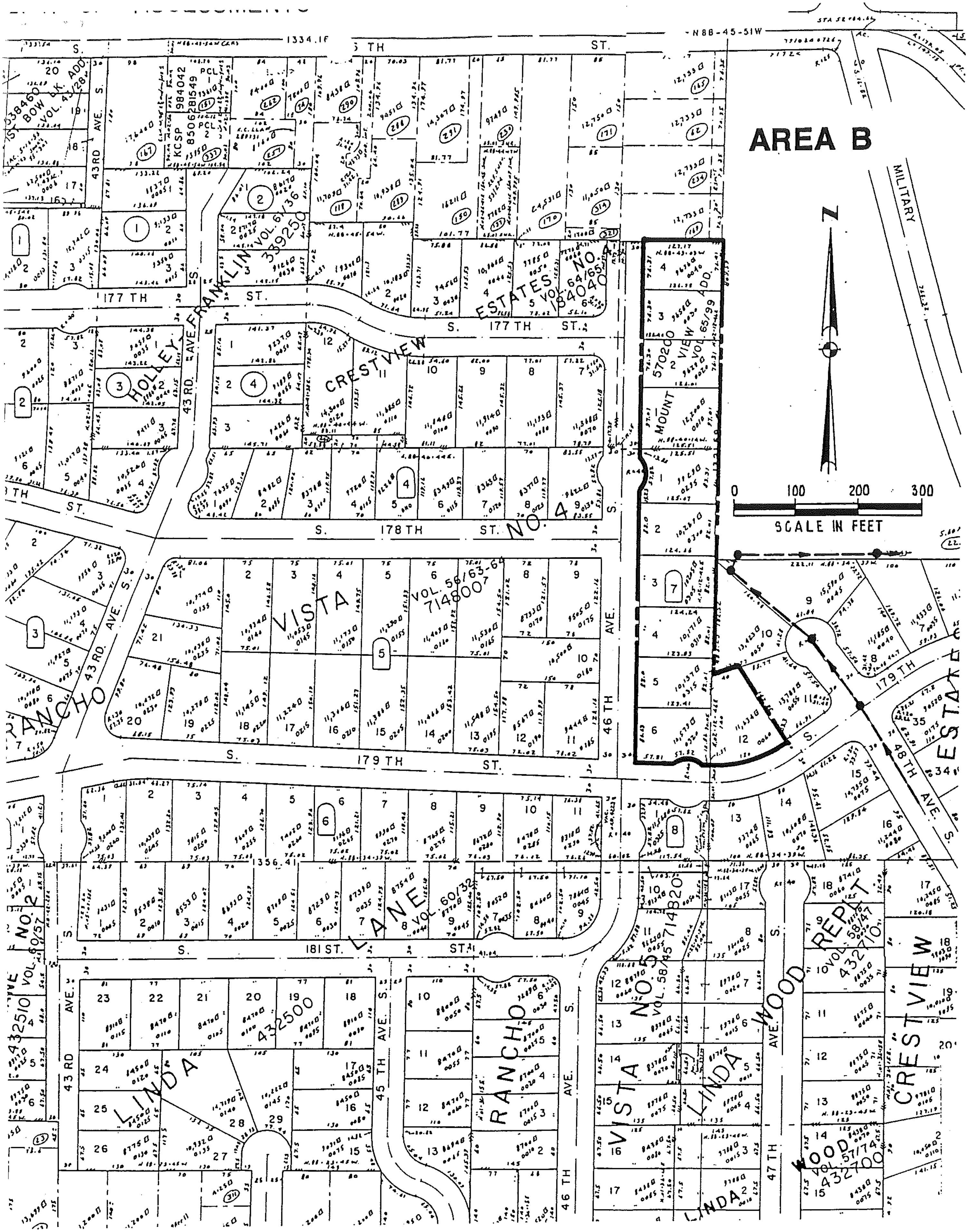
Lots 1, 2, 3 and 4, of Mount View, according to plat thereof; recorded in Volume 65 of Plats, Page 99, records of King County, Washington.

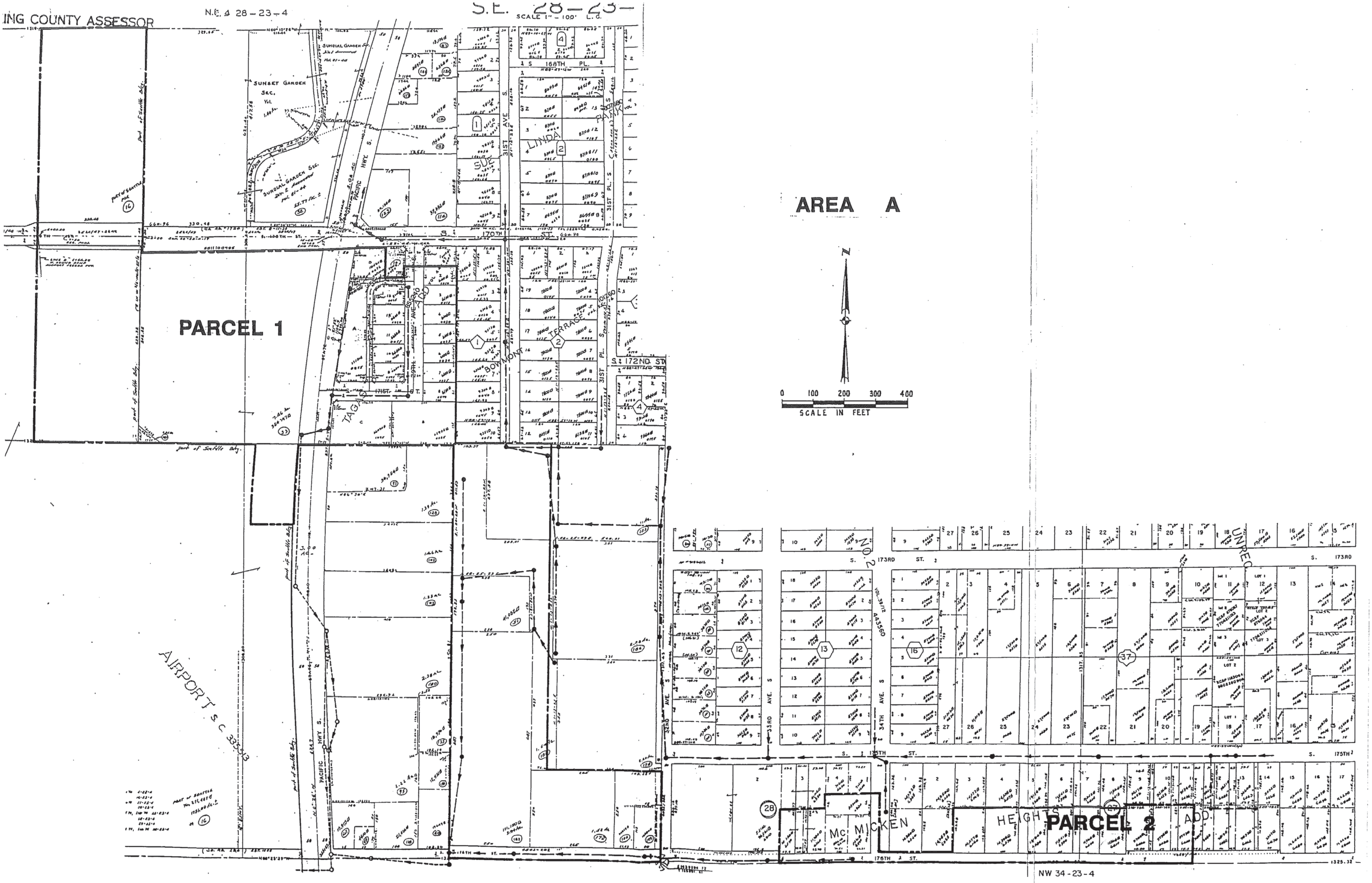
PARCEL THREE

Lots 1, 2, 3, 4, 5 and 6, Block 7, of Rancho Vista Division No. 4, according to plat thereof; recorded in Volume 56 of Plats, Pages 63 and 64, records of King County, Washington.

PARCEL FOUR

Lot 12, of Crestview Estates, according to plat thereof; recorded in Volume 58 of Plats, Page 90, records of King County, Washington.


AREA B
MILITARY
0 100 200 300
SCALE IN FEET
N
S. 177TH ST.
S. 178TH ST.
S. 179TH ST.
S. 181 ST.
43RD AVE. S.
43 RD AVE.
45 TH AVE. S.
46 TH AVE.
47 TH AVE. S.
48TH AVE. S.
FRANKLIN AVE. S.
HOLLEY
CRESTVIEW
ESTATES NO. 4
MOUNT VIEW ADD.
VISTA
LANE
LINDA
RANCHO
LINDA WOOD
CRESTVIEW
REPLAT
VOL. 61/36
339250
VOL. 64/65
184040
570200
VOL. 65/99
VOL. 56/63-64
714800
VOL. 60/32
VOL. 58/45
714820
VOL. 58/47
432710
432500
VOL. 57/74
432700
432510



ING COUNTY ASSESSOR
N.E. 4 28-23-4
S.E. 28-23-
SCALE 1" = 100'
AREA A
N
0 100 200 300 400
SCALE IN FEET
PARCEL 1
PARCEL 2
SUNSET GARDEN
SUNDIAL GARDEN
S. 168TH PL.
31ST AVE. S.
31ST PL. S
SUE LINDA
BOWMONT TERRACE
S. 170TH ST.
S. 172ND ST
S. 173RD ST.
S. 175TH ST.
176TH ST.
PACIFIC HWY. S.
32ND AVE. S
33RD AVE. S
34TH AVE. S
McMICKEN HEIGHTS ADD.
AIRPORT
NW 34-23-4

LAW OFFICES OF
ROBERT L. McADAMS
140 S.W. 153rd STREET
SEATTLE, WASHINGTON 98166

ROBERT L. McADAMS
ATTORNEY

(206) 246-3002
P.O. BOX 66489

July 06, 1989

Val Vue Sewer District
P.O. Box 68063
Seattle, Washington 98168

Attention: T. J. Matelich, Manager

Re: Changes to existing agreements necessitated by the June, 1989 report of Metro's Rate Structure Advisory Committee.

Dear Mr. Matelich:

Following our conference of June 29, 1989, a review was undertaken of the Findings and Recommendations on Structure of Metro Charges to Component Agencies published by Metro's Rate Structure Advisory Committee in June, 1989, together with a draft form of amendment to the agreement between Metro and the City of Seattle, as well as Val Vue's basic agreement with Metro and ancillary sewer service area agreements.

The basic agreement between Metro and Val Vue is dated August 01, 1966, and originally provided that all sewage and industrial waste collected by the District must be delivered to Metro for disposal. Section 5 of the basic agreement provided for payment by the District for such sewage disposal, based upon the number of residential customers and "residential customer equivalents" served by the District.

In essence, Metro has now determined to change the method for computing the number of residential customer equivalents and to impose a "capacity charge". The number of residential customer equivalents will now be computed by dividing by 2,250 (rather than the previous 2,700) the total quarterly water consumption by non-residential customers. Homes newly connecting to the sewer system between July 23, 1989 and January 01, 1996, will be charged $7.00 per month for a period of 15 years (payable semi-annually), for the purpose of sharing in the cost of capacity built into the system to serve future customers.

The aforesaid change in the method of computation and the additional capacity charge, require amendment of Section 5 and Section 6 of the basic agreement. The amendment can also eliminate the 25% surcharge referenced in subsection 2(d) of Section 5, which has never actually been imposed.

A further amendment to Section 2 of the basic agreement is also appropriate. This section originally required the District to deliver all sewage and industrial waste to Metro for disposal. A subsequent Sewer Service Area Agreement, dated September 07, 1972, did amend this Section to exclude "Area A" which now flows by gravity into the Des Moines Sewer District system for disposal. However, as will be described below, the 1972 agreement will be terminated. Thus, it is appropriate to amend Section 2 so as to require the District to deliver all sewage and industrial waste to Metro with the exception of waste collected from Area A.

A form of Amendment To Agreement For Sewage Disposal is enclosed herewith. This draft is in a form which shows the original language as well as changes. Language which is being added by the Amendment is underlined. Original language of the Agreement which is being deleted by the Amendment is shown within double parentheses and is lined-out. The terms added to Sections 5 and 6 are requested by Metro.

As noted previously, the Sewer Service Area Agreement of September 07, 1972 between the District and the Des Moines Sewer District amended Section 2 of the basic agreement between Metro and the District. Thus, Metro necessarily became a party to the latter Agreement. That Agreement was subsequently amended, on May 11, 1976. The Sewer Service Area Agreement, and Amendment, have now become somewhat convoluted and complicated by the three-party nature of the agreements. It is proposed that the Agreement of September 07, 1972 and the Amendment of May 11, 1976 be terminated and be replaced by an appropriate agreement between the District and the Des Moines Sewer District and by an agreement, if any is needed, between Metro and the Des Moines Sewer District.

Accordingly, enclosed is an Agreement Terminating Prior Sewer Service Area Agreements for signature by all three parties.

A proposed Sewer Service Area Agreement between Val Vue and the Des Moines Sewer District has been prepared and is enclosed. It is not necessary that Metro be a party to this Agreement, inasmuch as the basic agreement between the District and Metro excludes "Area A" and permits the District to collect sewage and industrial waste from outside its boundaries for delivery to, and disposal by, the Metro system. This new Sewer Service Area Agreement provides for disposal of wastes collected by Val Vue within Area A (generally the area of the former Hyatt House) through the Des Moines system, and for delivery by Des Moines of waste collected from Area C to Val Vue for subsequent delivery and disposal through the Metro system.

The earlier Sewer Service Area Agreement relating to Area A, provided that Val Vue would pay to Des Moines the same rate as charged by Metro. In view of the new capacity charge imposed by Metro, the method of payment has been amended to provide that the charge to Val Vue shall be based upon Des Moines' established rates (with an offset for the value of services provided to Des Moines by Val Vue in regard to Area C).

A third territory, labeled "Area B" lies immediately to the south of the Val Vue boundary. At some time in the future, sewage and industrial waste collected by Des Moines in this area will gravity flow directly into the Metro system. However, arrangements in this regard would properly be the subject of an agreement directly between Metro and the Des Moines Sewer District.

Finally, enclosed is a form of Resolution authorizing entry into the Agreements described above.

Sincerely,

ROBERT L. McADAMS

:kmb

Enclosures

LAW OFFICES OF
ROBERT L. McADAMS
140 S.W. 153rd STREET
SEATTLE, WASHINGTON 98166

ROBERT L. McADAMS
ATTORNEY

(206) 246-3002
P.O. BOX 66489

October 24, 1989

Midway Sewer District
P.O. Box 98704
Des Moines, Washington 98198

Attention: Mr. James R. Henry, Manager

Re: Changes to existing agreements necessitated by the June, 1989 report of Metro's Rate Structure Advisory Committee.

Dear Mr. Henry:

As you may know, Metro's Rate Structure Advisory Committee published "Findings and Recommendations on Structure of Metro Charges to Component Agencies", dated June 1989. As a result thereof, and pursuant to legislation enacted by the 1989 Legislature, a "capacity charge" will be assessed all users of Metro's sewage facilities.

Metro and Val Vue Sewer District are parties to a basic agreement, dated August 01, 1966, which will, of necessity, be amended to provide for the "capacity charge" and certain changes in methods of computation.

In addition, Val Vue Sewer District and Midway Sewer District (then the "Des Moines Sewer District") entered into a Sewer Service Area Agreement dated September 07, 1972 which amended Section 2 of the basic agreement between Metro and Val Vue Sewer District. Thus, Metro necessarily became a party to the Agreement between the two Sewer Districts. That Agreement was subsequently amended, on May 11, 1976. The original Agreement and the Amendment have now become somewhat convoluted and complicated by the three-party nature of these Agreements. It is therefore proposed that the Agreement of September 07, 1972 and the Amendment of May 11, 1976 be terminated and be replaced by an appropriate agreement between Val Vue Sewer District and Midway Sewer District. Enclosed herewith is a proposed form of Agreement Terminating Prior Sewer Service Area Agreements.

To the extent that Midway Sewer District is, or may in future, accept sewage flow from Metro, or deliver sewage to Metro, it may be necessary for Midway Sewer District and Metro to enter into a separate agreement.

It is appropriate that Val Vue Sewer District and Midway Sewer District enter into a service area agreement to replace the previous three-party agreement. A proposed form of Sewer Service Area Agreement is enclosed herewith for your consideration.

Also enclosed herewith, by way of background information, are copies of the following documents:

1. Amendment to Sewer Service Area Agreement, dated May 11, 1976, between Des Moines Sewer District, Val Vue Sewer District, and Metro.

2. Proposed Amendment to Agreement for Sewage Disposal between Val Vue Sewer District and Metro.

3. Copy of a letter from the undersigned attorney to T. J. Matelich, Manager of the Val Vue Sewer District, dated July 06, 1989, providing additional details in regard to this matter.

It is suggested that coordination be effected between yourself, as Manager of the Midway Sewer District, and Terry J. Matelich, as Manager of the Val Vue Sewer District, in regard to terms and conditions of the proposed Sewer Service Area Agreement. Thereafter, the Agreement can be reviewed by the attorneys for each district and a final draft can be prepared for presentation to the respective Boards.

To facilitate and expedite this matter, a copy of this letter, together with all enclosures, is being forwarded to the attorney for the Midway Sewer District.

Sincerely,

ROBERT L. McADAMS

:kmb

Enclosures

cc: Edward Taylor, Esq., w/enc.
T. J. Matelich

Certificate Of Completion

Envelope Id: 6A3006F8-5F6B-48C6-8BA9-E048D9CC950B
Status: Completed
Subject: Complete with Docusign: Ordinance 19894.docx
Source Envelope:
Document Pages: 4
Signatures: 3
Envelope Originator:
Certificate Pages: 5
Initials: 0
Cherie Camp
AutoNav: Enabled
401 5TH AVE
EnvelopeId Stamping: Enabled
SEATTLE, WA 98104
Time Zone: (UTC-08:00) Pacific Time (US & Canada)
Cherie.Camp@kingcounty.gov
IP Address: 198.49.222.20

Record Tracking

Status: Original
Holder: Cherie Camp
Location: DocuSign
3/5/2025 12:44:43 PM
Cherie.Camp@kingcounty.gov
Security Appliance Status: Connected
Pool: FedRamp
Storage Appliance Status: Connected
Pool: King County-Council
Location: Docusign

Signer Events	Signature	Timestamp
Girmay Zahilay girmay.zahilay@kingcounty.gov Security Level: Email, Account Authentication (None)	Signed by: Girmay Zahilay 1AEA3C5077F8485... Signature Adoption: Pre-selected Style Using IP Address: 71.227.166.164	Sent: 3/5/2025 12:48:12 PM Viewed: 3/5/2025 4:42:34 PM Signed: 3/5/2025 4:42:41 PM
Electronic Record and Signature Disclosure: Accepted: 3/5/2025 4:42:34 PM ID: 6ed0c5ab-1c69-4bc1-91f1-a6ab244361fa		
Melani Hay melani.hay@kingcounty.gov Clerk of the Council King County Council Security Level: Email, Account Authentication (None)	DocuSigned by: Melani Hay 8DE1BB375AD3422... Signature Adoption: Pre-selected Style Using IP Address: 67.160.85.70	Sent: 3/5/2025 4:42:42 PM Viewed: 3/5/2025 5:09:35 PM Signed: 3/5/2025 5:09:39 PM
Electronic Record and Signature Disclosure: Accepted: 9/30/2022 11:27:12 AM ID: 639a6b47-a4ff-458a-8ae8-c9251b7d1a1f		
Dow Constantine Dow.Constantine@kingcounty.gov King County Executive Security Level: Email, Account Authentication (None)	Signed by: Dow Constantine 4FBCAB8196AE4C6... Signature Adoption: Uploaded Signature Image Using IP Address: 75.172.31.78	Sent: 3/5/2025 5:09:40 PM Viewed: 3/7/2025 12:01:59 PM Signed: 3/7/2025 12:02:28 PM
Electronic Record and Signature Disclosure: Accepted: 3/7/2025 12:01:59 PM ID: 026d052c-903a-4464-8a4a-511366e80506		

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp
Ames Kessler akessler@kingcounty.gov Executive Legislative Coordinator & Public Records Officer King County Security Level: Email, Account Authentication (None) **Electronic Record and Signature Disclosure:** Not Offered via Docusign	COPIED	Sent: 3/5/2025 5:09:40 PM Viewed: 3/6/2025 9:31:53 AM

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	3/5/2025 12:48:12 PM
Certified Delivered	Security Checked	3/7/2025 12:01:59 PM
Signing Complete	Security Checked	3/7/2025 12:02:28 PM
Completed	Security Checked	3/7/2025 12:02:28 PM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, King County-Department of 02 (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

Getting paper copies

At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. You will have the ability to download and print documents we send to you through the DocuSign system during and immediately after the signing session and, if you elect to create a DocuSign account, you may access the documents for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a $0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact King County-Department of 02:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: cipriano.dacanay@kingcounty.gov

To advise King County-Department of 02 of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at cipriano.dacanay@kingcounty.gov and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

If you created a DocuSign account, you may update it with your new email address through your account preferences.

To request paper copies from King County-Department of 02

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with King County-Department of 02

To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to cipriano.dacanay@kingcounty.gov and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

Acknowledging your access and consent to receive and sign documents electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify King County-Department of 02 as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by King County-Department of 02 during the course of your relationship with King County-Department of 02.