

SYSTEM DEVELOPMENT CHARGE METHODOLOGIES



2019 SDC UPDATE

TABLE OF CONTENTS

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<i>Acknowledgments</i>	1
<i>Executive Summary</i>	2
<i>Introduction</i>	4
<i>General Policies</i>	8
<i>Parks Methodology</i>	11
<i>Transportation Methodology</i>	21
<i>Water Methodology Amendment</i>	32
<i>Wastewater Methodology Amendment</i>	37
<i>Stormwater Methodology Amendment</i>	42
<i>Methodology Implementation Schedule</i>	42

APPENDIX

<i>Table A-1</i>	44
<i>Table A-2</i>	44
<i>Table A-3</i>	45
<i>Table A-4</i>	45
<i>Campus Trip Rate</i>	51
<i>Water 309 - Maps</i>	59-67
<i>Wastewater 309 - Maps</i>	68-75

SYSTEM DEVELOPMENT CHARGE METHODOLOGIES

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Committee Members	City Staff and Consultants
Tom Andersen, Councilor (Ward 2), Chair	Glenn Davis, PE, CFM, Chief Development Engineer, Project Manager
Richard Berger, Development Community	Robert Chandler, PhD, PE, Assistant Public Works Director
Russ Beaton, Citizen at Large	Zach Diehl, Program Coordinator
Mike Erdmann, Home Builders Association	Patricia Farrell, Parks Planning and Natural Resources Manager
Rich Fry, Planning Commission	Deb Galardi, Galardi Rothstein Group, Consultant
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Steve McCoid, Councilor (Ward 4)	Julie Warncke, Transportation Planning Manager
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Table 1

EXECUTIVE SUMMARY

Overview

This Systems Development Charge methodology document (2019 Methodology) analyzes all five types of SDC-eligible infrastructure: parks, transportation, water, wastewater, and stormwater. This 2019 Methodology was generated under the direction of an SDC Methodology Committee and in compliance with Oregon Revised Statutes [ORS] 223.297 through 223.314 and Salem Revised Code 41.170.

Benefits of New Methodology

Infrastructure Type	Old Methodology	New Methodology
All	Accessory dwelling units were not addressed as a distinct use	Establishes a separate fee amount for accessory dwelling units and proposes a 5-year moratorium on SDC collection
Parks	A non-SDC funding source was needed in order to construct most new SDC-eligible park facilities	All growth-related, or capacity-increasing park facilities can be constructed with 100 percent SDC funding
Parks	Only residential projects were subject to SDCs	Collects SDCs from both residential and non-residential projects
Transportation	The funding levels were adopted at an amount less than was needed to fund all growth projects	Establishes SDCs commensurate with community-wide funding levels for major street improvement projects, approximately doubling the prior SDC
Transportation	A non-SDC funding source was required in order to construct most SDC-eligible street projects	Most growth-related improvements can be constructed with 100 percent SDC funding
Water/Wastewater	A cost-prohibitive connection fee was required in addition to SDCs, generally in older neighborhoods	Eliminates separate connection fees through a modest fee increase for all projects, providing additional incentives for in-fill development

Table 2

Fee Table Summary

The following table shows the existing and updated SDC amounts in FY 18/19 dollars, based on the proposed implementation schedule. See Inflationary Adjustments on page 8.

Fee Table Summary			
Infrastructure Type	Current Methodology	Effective 7/1/19	Effective 7/1/20
PARKS:			
Residential (\$/ Dwelling Unit)			
Single Family	\$4,613.45	\$4,404.00	\$4,195.00
Accessory	\$3,016.68	\$0.00	\$0.00
Multifamily	\$3,016.68	\$3,172.00	\$3,327.00
Manufactured Home Park	\$3,371.66	\$3,013.00	\$3,013.00

Table 3

Fee Table Summary			
Infrastructure Type	Current Methodology	Effective 7/1/19	Effective 7/1/20
PARKS:			
Nonresidential (\$/1,000 sf)			
Industrial/Employment	\$0.00	\$337.00	\$673.00
Commercial	\$0.00	\$673.00	\$1,345.00
Public	\$0.00	\$628.00	\$1,256.00
TRANSPORTATION:			
Cost per Average Daily Trip (All)	\$204.16	\$302.00	\$399.00
Single Family Dwelling Unit	\$1,927.27	\$2,846.92	\$3,766.56
Multi-Family Dwelling Unit	\$1,077.31	\$1,591.38	\$2,105.44
WATER:			
Non-Industrial (\$/meter equiv)			
Improvement	\$3,542.00	\$3,542.00	\$3,542.00
Reimbursement	\$1,135.00	\$1,255.00	\$1,375.00
Compliance	\$228.00	\$228.00	\$228.00
Industrial (\$/meter equiv)			
Improvement	\$2,022.00	\$2,022.00	\$2,022.00
Reimbursement	\$967.00	\$1,087.00	\$1,207.00
Compliance	\$228.00	\$228.00	\$228.00
WASTEWATER (\$/meter equiv)			
Improvement	\$2,721.00	\$2,721.00	\$2,721.00
Reimbursement	\$976.00	\$1,111.00	\$1,246.00
Compliance	\$112.00	\$112.00	\$112.00
STORMWATER			
Single family (\$/dwelling unit)	\$608.73	\$608.73	\$608.73
All other (\$/sf impervious)	\$0.20	\$0.20	\$0.20
SINGLE FAMILY DWELLING TOTAL	\$15,889.99	\$16,828.65	\$17,794.29

Table 3

INTRODUCTION

SDC Legislation in Oregon

Legislation contained in Oregon Revised Statutes [ORS] 223.297 through 223.314 authorize local governments to assess SDCs for the following types of capital improvements:

1. Drainage and flood control
2. Water supply, treatment, and distribution
3. Wastewater collection, transmission, treatment, and disposal
4. Transportation
5. Parks and recreation

The legislation provides guidelines on the calculation and modification of SDCs, accounting requirements to track SDC revenues, and the adoption of administrative review procedures.

Reimbursement and Improvement Fees

SDCs can be developed as: (1) a reimbursement fee, (2) an improvement fee, or (3) a combination of the two fees.

Reimbursement Fee

The reimbursement fee is based on the costs of capital improvements already constructed or under construction. The legislation requires the reimbursement fee to be established or modified by an ordinance or resolution setting forth the methodology used to calculate the charge. This methodology must consider the cost of existing facilities, prior contributions by existing users, gifts or grants from federal or state government or private persons, the value of unused capacity available for future system users, rate-making principles employed to finance the capital improvements, and other relevant factors. The objective of the methodology must be that future system users contribute an equitable share of the capital costs of existing facilities. Reimbursement fee revenues are restricted to capital expenditures within the specific system for which they are assessed, including debt service.

Improvement Fee

The methodology for establishing or modifying the improvement fee must be specified in an ordinance or resolution that demonstrates consideration of the projected costs of capital improvements identified in an adopted plan and list that are needed to increase capacity in the system to meet the demands of new development. Revenues generated through improvement fees are dedicated to capacity-increasing capital improvements or repaying the debt on such improvements. An increase in capacity is established if an improvement increases the level of service provided by existing facilities or provides new facilities.

Credits

The legislation requires that a credit be provided against the improvement fee for the construction of qualified public improvements, which are improvements that are required as a condition of development approval as identified in the system’s capital improvement program. Additionally, the improvements must either be (1) not located on or contiguous to the property being developed, or (2) located in whole or in part, on or contiguous to, property that is the subject of development approval and required to be built with larger or with greater capacity than is necessary for the particular development project to which the improvement fee is related.

Update and Review

The methodology for establishing or modifying improvement or reimbursement fees shall be available for public inspection. The local government must maintain a list of persons who have made a written request for notification prior to the adoption or amendment of such fees. The legislation includes provisions regarding notification of hearings and filing for reviews. “Periodic application of an adopted specific cost index or... modification to any of the factors related to the rate that are incorporated in the established methodology” are not considered “modifications” to the SDC. As such, the local government is not required to adhere to the notification provisions. The criteria for making adjustments to the SDC rate, which do not constitute a change in the methodology, are further defined as follows:

- a. “Factors related to the rate” are limited to changes to costs in materials, labor, or real property as applied to projects in the required project list.
- b. The cost index must consider average change in costs in materials, labor, or real property and must be an index published for purposes other than SDC rate setting.

The notification requirements for changes to the fees that do represent a modification to the methodology are 90-day written notice prior to first public hearing, with the SDC methodology available for review 60 days prior to public hearing.

Other Provisions

Other provisions of the legislation require:

- a. Preparation of a capital improvement program or comparable plan (prior to the establishment of a SDC), that includes a list of the improvements that the jurisdiction intends to fund with improvement fee revenues and the estimated timing, cost, and eligible portion of each improvement.
- b. Deposit of SDC revenues into dedicated accounts and annual accounting of revenues and expenditures, including a list of the amount spent on each project funded, in whole or in part, by SDC revenues.

- c. Creation of an administrative appeals procedure, in accordance with the legislation, whereby a citizen or other interested party may challenge an expenditure of SDC revenues.

Regulatory Criteria

This 2019 Methodology is prepared under the authority of ORS 223.297 to 223.314 and Salem Revised Code 41.170. There are four key criteria:

1. **Reimbursement Fee Considers Cost for Existing Facilities.** Pursuant to ORS 223.304(1) and SRC 41.170(a), reimbursement fees established by this 2019 Methodology consider the cost of construction for existing facilities and are calculated based on rate-making principles employed to finance publicly owned capital improvements. For reimbursement fees, this 2019 Methodology promotes the objective that future systems users shall contribute an equitable share of the cost of existing facilities.
2. **Improvement Fee Considers Cost for Increasing Future Capacity.** Pursuant to ORS 223.304(2) and SRC 41.170(b), improvement fees established by this 2019 Methodology consider the estimated cost of projected capital improvements needed to increase the capacity of the systems to which the fee is related, and are calculated to obtain the cost of capital improvements for the projected need for available system capacity for future users.
3. **Reimbursement Fee and Improvement Fee Address Different Capacities.** Pursuant to ORS 223.304(3), reimbursement fees for water and wastewater SDCs are limited to existing capacity, and improvement fees are limited to future system improvements. Therefore, the two fees do not account for the same system capacity.
4. **Both Fees Include Compliance Costs.** Pursuant to ORS 223.307(5), reimbursement and improvement fees established by this 2019 Methodology include the costs of complying with the provisions of ORS 223.297 to 223.314, including the costs of developing system development charge methodologies and providing an annual accounting of system development charge expenditures. Pursuant to ORS 223.307(5), costs for administration of the SDC program are collected as a separate compliance fee for water and wastewater charges pursuant to Resolution 2008-68 (Water and Wastewater). A separate compliance fee is not collected for parks, transportation, and stormwater.

Methodologies Replaced and Methodologies Retained

This 2019 Methodology modifies or replaces all prior methodologies for Parks, Transportation, Water, Wastewater, and Stormwater pursuant to SRC 41.170 as follows.

This 2019 Methodology replaces in their entirety the prior methodologies adopted

pursuant to SRC 41.170 for Parks under Resolution No. 99-119 and for Transportation under Resolution No. 95-131 as modified by Resolution Nos. 98-108, 2002-197, 2004-141, 2006-195, 2007-86, 2008-82, 2009-13, 2010-27, 2011-26, 2012-4, 2012-36, 2013-11, and 2014-72.

The Water and Wastewater methodology adopted under Resolution No. 2008-68 and modified in Resolution No. 2011-45, and Resolution No. 2012-32, remain in effect except as modified in this 2019 Methodology. The Stormwater methodology adopted under Resolution No. 2002-142 remains in effect. Where policies conflict, this 2019 Methodology supersedes the prior resolutions.

Adoption Process

SDC Methodology Committee

This 2019 Methodology was prepared under the direction of the SDC Methodology Committee. Membership of the committee is shown in **Table 4**.

Member	Affiliation
Tom Andersen, Chair	Councilor, Ward 2
Richard Berger	Development Community
Russ Beaton	Citizen at large
Mike Erdmann	Home Builders Association
Rich Fry	Planning Commission
Bill Fujii (Kasia Quillinan, alternate)	Salem Parks and Recreation Advisory Board
Steve McCoid	Councilor, Ward 4

Table 4

Approximately 20 committee meetings were held between June 2017 and September 2018. Committee meeting dates were published on the City’s website, and all meetings were open to the public.

Public Notice/Hearing

A public hearing for SDC methodology adoption is scheduled at City Council on February 25, 2019. Within 90 days of the public hearing, written notice of the hearing was mailed to parties interested in SDC methodology adoption pursuant to ORS 223.304(6) and (7). Additional notice was sent electronically to parties interested in administrative rule promulgation and land use matters.

The methodology was made available for review on the City’s website and at City Hall within 60 days of the public hearing pursuant to ORS 223.304(6) and (7).

GENERAL POLICIES

Infrastructure Master Plans

This 2019 Methodology is based on adopted infrastructure master plans as follows:

Master Plan	Date
Salem Comprehensive Parks System Master Plan	May 2013
Salem Transportation System Plan	February 2016
Salem Water System Master Plan	June 1994
Salem Wastewater Management Master Plan	January 2007
Salem Stormwater Master Plan	September 2000

Table 5

Planning Period

Parks and Transportation components of this 2019 Methodology use a 20-year planning period for calculating growth costs and growth units. Water, wastewater, and stormwater components of this 2019 Methodology retain the planning periods established in Resolution No. 2002-142 (Stormwater) and Resolution 2008-68 (Water and Wastewater)

Inflationary Adjustments

The fee tables will be updated annually by resolution of Council based on the December to December ENR Averaged Rates for Los Angeles, Seattle and San Francisco.

City-Wide Fees

All SDCs calculated in this 2019 Methodology are based on City-wide averages and do not vary by geographic subareas. There are, however, two primary types of area-based fees that are established and collected independent of SDCs; (1) Temporary Access Fees are authorized pursuant to SRC 200.080; (2) and Reimbursement Fees are authorized pursuant to SRC 200.350. Projected revenues from area-based fees are considered in the growth cost calculations as appropriate.

This 2019 Methodology authorizes calculation of an area-based supplemental SDC as follows:

1. Generate a supplemental 309 list pursuant to ORS 223.309 based on policies established in this 2019 Methodology that includes projects not included on the city-wide 309 list.
2. Establish a geographic area that benefits from the improvements described in the supplemental 309 list.
3. Calculate the growth units to be generated within the geographic area based on policies established in this 2019 Methodology.
4. Provide public notice of the supplemental fee table and 309 list pursuant to ORS 223.304(6) and (7).
5. Adopt a resolution establishing the supplemental SDC fee table and 309 list.

Compliance Fees

Pursuant to ORS 223.307(5), costs for administration of the SDC program are collected as a separate compliance fee for water and wastewater charges pursuant to Resolution 2008-68 (Water and Wastewater). A separate compliance fee is not collected for parks, transportation, and stormwater.

Reimbursement Fees

Reimbursement fees are adopted only for water and wastewater infrastructure. No reimbursement fees are being collected for parks, transportation, or stormwater because sufficient data is not available to calculate the fee and sufficient capacity is not available in the existing system to warrant calculation of a reimbursement fee.

Reimbursement fee calculations for water and wastewater are unchanged from the methodology adopted under Resolution No. 2008-68, except as follows:

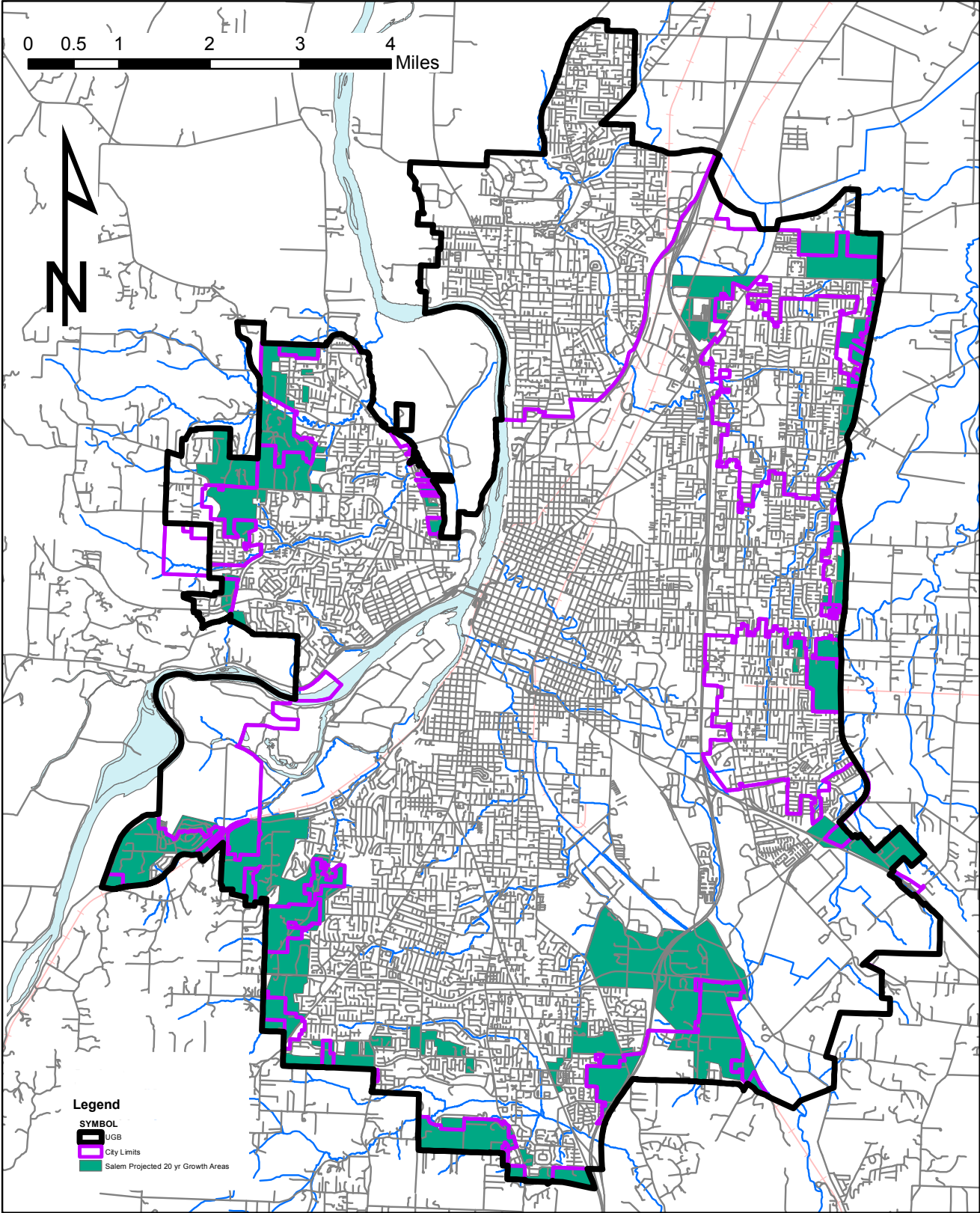
1. Resolution No. 2008-68 limited distribution capacity to water and wastewater mains over 8 inches in diameter. Capacity in mains 8 inches and less in diameter were excluded because those costs were funded through connection fees collected pursuant to SRC Chapter 21.
2. This 2019 Methodology creates an additional reimbursement fee amount for the capacity in mains 8 inches in diameter based on calculations used in Resolution 2008-68.
3. In order to prevent duplication of charges that would occur if both the SDC Reimbursement fee and a connection fee were charged, the applicable sections of SRC Chapter 21 that authorize collection of a connection fee are being repealed in conjunction with this 2019 Methodology adoption.

Improvement Fees

Buildable Lands Opportunity Boundary

Figure 1 shows the Buildable Lands Opportunity Boundary, which is the anticipated geographical area of growth within the planning period of this 2019 Methodology. This boundary was generated based on growth projections in the Economic Opportunity Analysis, Housing Needs Analysis, and infrastructure master plans. Growth costs have been calculated based on the infrastructure needed to serve property within this boundary.

Figure 1



Buildable Lands Opportunity Boundary

PARKS METHODOLOGY

Overview

The methodology used to calculate parks SDCs begins with determination of the growth costs, which is the costs in aggregate associated with meeting the capacity needs of growth. Then, growth costs are divided by the projected growth units, which is a function of population and employees, to determine the system-wide unit costs. Finally, the SDC schedule is developed that identifies how the system-wide costs will be assessed to individual development types.

Population and Employment

Park capacity is measured in terms of people served, which includes both resident population and resident and nonresident employees. **Table 6** provides population and employment data derived from recent City planning documents for use in the SDC analysis.

City of Salem - Population and Employment Data			
Item	Employment ¹	Population ²	Equivalent Population ³
2016	125,972	167,419	217,808
2035	159,506	272,851	336,653
Growth	33,535	105,432	118,846

¹ From Salem Economic Opportunities Analysis Report Table C-5 escalated to 2016 and 2035 with average annual growth of 1.25% per report. ² 2016 based on US Census data; 2035 from Parks Master Plan. ³ Based on nonresidential equivalency of 0.4 per employee.

Table 6.

The concept of equivalent population is used to recognize different utilization levels of parks by the general population (to estimate residential development capacity needs) and employees (to estimate nonresidential development needs). For purposes of this analysis, the equivalent population for nonresidential development is equal to 0.4 per employee. This ratio is based on national and local survey data related to nonresidential use of parks, which have found through park user surveys that nonresidents use parks at a frequency between 0.2 and 0.5 the frequency of residents. A nonresidential equivalency of 0.4 was selected by the City's SDC Methodology Committee, because it is in the middle of the range.

As shown in **Table 6**, future growth in population and employees through 2035 is estimated to be 105,432 and 33,535, respectively. Growth in equivalent population is estimated to be 118,846, and is used as a basis for determining planned levels of service for parks and facilities (discussed further below).

Level of Service

Through adoption of the Comprehensive Park System Master Plan, the City will acquire and develop the parks system consistent with the community's desired level of service (LOS). The planned LOS for a particular park or facility is defined as the quantity of future City-owned park acreage or facilities per 1,000 equivalent population served, as shown in the equation below:

$$\frac{\text{Existing } Q + \text{Planned } Q}{\text{Future Population Served}} = \text{Planned LOS}$$

Where:

Q = quantity (acres of parks, miles of trails, or number of facilities), and
Future Population Served = projected 2035 equivalent population.

The Comprehensive Park System Master Plan includes significant increases in total and developed park acreage for most parks types, in order to provide an enhanced future LOS for all park users (existing and future). However, based on a policy recommendation of the SDC Methodology Committee, the parks SDC is based on a project list that funds improvements for future development up to the existing LOS. The SDC Methodology Committee determined that basing the Parks SDC on the existing LOS was the preferred approach because non-SDC funding sources are not currently available to provide the additional improvements needed to raise the LOS. Under this framework, the SDCs will provide the needed funds to acquire and improve park land and facilities for future growth at a level not exceeding the existing LOS.

Table 7 shows the existing and future LOS by park type, and for total acreage and developed acreage, based on the SDC Project List (which is a subset of the total improvements from the Comprehensive Park System Master Plan). The Comprehensive Park System Master Plan identifies the following park classifications, in addition linear park/connector trail, special use facilities, and historical areas:

- Neighborhood
- Community
- Urban Park
- Natural Areas

As shown in **Table 7**, the planned future LOS, which is based on the SDC Project List, is at or below the current LOS for all park types, as well as trails and special use facilities. In a few cases, the future LOS is lower than the current LOS due to recent acreage acquisition.

City of Salem - Park SDC Analysis											
Existing and Planned Levels of Service (LOS)											
		Existing ¹				Additional Units from Project List		Future			
		Total		Developed				Total		Developed	
			LOS ²		LOS ²				LOS ²		LOS ²
Type	Unit Measure	Total Units	Units/1,000	Developed Units	Units/1,000	Total Units	Developed Units	Total Units	Units/1,000	Developed Units	Units/1,000
Park Type	Acres										
Neighborhood		257.4	1.18	186.9	0.86	137.0	102.0	394.4	1.17	288.9	0.86
Community		214.1	0.98	101.0	0.46	117.0	55.0	331.1	0.98	156.0	0.46
Urban Park		406.4	1.87	287.4	1.32	159.9	156.0	566.3	1.68	443.4	1.32
Natural Area		1,370.0	6.29	973.2	4.47	92.7	115.3	1,462.7	4.34	1,181.1	3.51
Recreation Trails	Miles										
Multi-Use Path		19.9	0.09	19.9	0.09	10.0	10.0	29.9	0.09	29.9	0.09
Major Facilities³	Numbers	21.0	0.10	21.0	0.10	9.0	9.0	30.0	0.09	30.0	0.09

1 City Owned.
2 Units divided by equivalent population (residential plus nonresidential equivalents).
3 Ballfields, soccer, and skate parks

Table 7

Growth Costs

Oregon SDC law provides that SDC may include either or both of the following:

- **Improvement fee**—the portion of the SDC charged to cover an equitable share of the capital improvements needed to meet the service requirements of future development.
- **Reimbursement fee**—the portion of the SDC charged to recoup the community’s past investment in parks and facilities related to the capacity needs of future growth.

Both fee components were evaluated for potential inclusion in the updated parks SDC methodology. However, surplus capacity was primarily limited to Natural Area parks which had been funded by grants or contributions, so the SDC committee recommended that the updated SDC methodology be limited to the improvement fee only.

SDC Project List

Table 8 provides the listing of planned future park improvements associated with acquisition and development of new and existing park acreage based on the future LOS shown in **Table 7**. As the list of projects for all categories of parks is within the LOS provided currently, 100 percent of the future improvements shown in **Table 8** are needed to equitably recover future capacity costs from new development. Based on the project list shown in **Table 8**, the total growth costs are about \$187 million. A map of the parks is shown in **Figure 2** on page 52 in the Appendix.

Existing SDC Fund Balance

In addition to the projects shown in **Table 8**, the City intends to use SDC revenues that have been collected previously from what is now existing development, to further improve the parks system. Current parks SDC fund balance is about \$8 million (as of the beginning of fiscal year 2018/19), and the City’s current Capital Improvement Plan (CIP) has prioritized development of existing park acreage, and some additional land acquisition from these funds. **Table 9** shows the project list associated with previously collected SDC revenue. These improvements are excluded from the future growth costs for purposes of determining the updated Parks SDC presented in subsequent sections of this report, since the funds are already available.

City of Salem - Parks SDC Analysis (Growth Costs)								
Acreage								
	Project Number		Acquisition	Development	Total Cost ¹	Growth %	Growth Cost	
Neighborhood Park (NP)								
	NP	1 & 5	Fairgrounds	2	0	\$431,900	100%	\$431,900
	NP	13	W Boone Rd	5	0	\$1,095,000	100%	\$1,095,000
	NP	18	W. Skyline	5	0	\$1,095,000	100%	\$1,095,000
	NP	21	S River Road	5	0	\$1,095,000	100%	\$1,095,000
	NP	22	Croisan Mtn	5	0	\$1,095,000	100%	\$1,095,000
	NP	25	West Salem	5	0	\$1,095,000	100%	\$1,095,000
	NP	26	Davis Road	5	0	\$1,095,000	100%	\$1,095,000
	NP	28	Rees Hill	0	5	\$1,250,000	100%	\$1,250,000
	NP	29	Langley Rd	5	0	\$1,095,000	100%	\$1,095,000
	NP	30	Wallace Rd	5	0	\$1,095,000	100%	\$1,095,000
	NP	31	Homestead Rd	5	0	\$1,095,000	100%	\$1,095,000
	NP	32	Reed Road	0	5	\$1,250,000	100%	\$1,250,000
	NP	33	State & Cordon	5	4	\$1,850,000	100%	\$1,850,000

Table 8

City of Salem - Parks SDC Analysis (Growth Costs)

Acreage							
	Project Number		Acquisition	Development	Total Cost ¹	Growth %	Growth Cost
Neighborhood Park (NP)							
NP	43	Market & Cordon	0	0	\$1,095,000	100%	\$1,095,000
NP	44	Blossom Drive	0	0	\$1,095,000	100%	\$1,095,000
NP	45	Joseph Street	0	0	\$1,095,000	100%	\$1,095,000
NP	53	Doaks Ferry	0	0	\$1,095,000	100%	\$1,095,000
NP		Deer Park Rd	0	0	\$1,095,000	100%	\$1,095,000
NP		Hidden Valley	0	0	\$1,095,000	100%	\$1,095,000
NP		Turner Rd	0	0	\$1,095,000	100%	\$1,095,000
NP		Bailey Ridge	5	5	\$1,250,000	100%	\$1,250,000
NP		Brown Road	5	5	\$1,250,000	100%	\$1,250,000
NP		Eagles View	5	5	\$1,250,000	100%	\$1,250,000
NP		Ellen Lane	5	5	\$1,250,000	100%	\$1,250,000
NP		Eola Ridge	5	5	\$1,250,000	100%	\$1,250,000
NP		Fisher Road	3	3	\$1,250,000	100%	\$1,250,000
NP		Hilfiker	5	5	\$1,250,000	100%	\$1,250,000
NP		North Campus	5	5	\$1,250,000	100%	\$1,250,000
NP		Sather	5	5	\$1,250,000	100%	\$1,250,000
NP		Secor	5	5	\$1,250,000	100%	\$1,250,000
NP		NP-WARD 1	5	5	\$2,050,000	100%	\$2,050,000
NP		NP-WARD 2	5	5	\$2,050,000	100%	\$2,050,000
NP		NP-WARD 3	5	5	\$2,050,000	100%	\$2,050,000
NP		NP-WARD 4	5	5	\$2,050,000	100%	\$2,050,000
NP		NP-WARD 5	5	5	\$2,050,000	100%	\$2,050,000
NP		NP-WARD 6	5	5	\$2,050,000	100%	\$2,050,000
NP		NP-WARD 7	5	5	\$2,050,000	100%	\$2,050,000
NP		NP-WARD 8	5	5	\$2,050,000	100%	\$2,050,000
NP		Future NP	0	0	\$1,850,000	100%	\$1,850,000
		Subtotal	137	102	\$54,146,900	100%	\$54,146,900
Community Park (CP)							
CP	1	Grice Hill	0	2	\$1,400,000	100%	\$1,400,000
CP	3	Fairview	0	14	\$3,900,000	100%	\$3,900,000
CP	5	Geer Park	0	13	\$3,700,000	100%	\$3,700,000
CP	6	Rees Hill Road	0	15	\$4,100,000	100%	\$4,100,000
CP	7	Blossom	33	0	\$7,300,000	100%	\$7,300,000
	9	Langley	33	0	\$7,300,000	100%	\$7,300,000
CP	10	Cordon	18	0	\$4,056,000	100%	\$4,056,000
CP		Stephens Yoshikai	0	6	\$2,100,000	100%	\$2,100,000
CP		McKay	0	5	\$1,400,000	100%	\$1,400,000
CP		Future CP	33	0	\$7,300,000	100%	\$7,300,000
		Subtotal	117	55	\$42,556,000	100%	\$42,556,000

Table 8

City of Salem - Parks SDC Analysis (Growth Costs)							
Acreage							
	Project Number		Acquisition	Development	Total Cost ¹	Growth %	Growth Cost
Urban Parks (UP)							
UP	2	W Doaks Ferry	48	24	\$15,700,000	100%	\$15,700,000
UP	4	State & Cordon	33	20	\$11,400,000	100%	\$11,400,000
UP	5	Hazel Green	0	45	\$10,800,000	100%	\$10,800,000
		Battle Creek	0	30	\$6,900,000	100%	\$6,900,000
		Riverfront	0	22	\$5,100,000	100%	\$5,100,000
		Future UP	79	15	\$19,241,990	100%	\$19,241,990
		Subtotal	160	156	\$69,141,990	100%	\$69,141,990
Natural Area Parks (NA)							
NA	3	Eola Bend County Park	76	0	\$700,000	100%	\$700,000
NA	4	MacLey / Cordon	17	0	\$1,037,000	100%	\$1,037,000
		Claggett Creek Natural Area		22	\$1,891,600	100%	\$1,891,600
		Skyline Natural Area		35	\$2,114,560	100%	\$2,114,560
		Wallace Natural Area		58	\$3,368,960	100%	\$3,368,960
		Subtotal	93	115	\$9,112,120	100%	\$9,112,120
Connector Trails/Linear Parks							
	3	Bush / Pringle Trail Connector	0.20	0.20	\$300,000	100%	\$300,000
	4	Skyline / Croisan Trail	0.57	0.57	\$700,000	100%	\$700,000
	17	BPA Corridor Trail - South	2.84	2.84	\$1,000,000	100%	\$1,000,000
	18	BPA Corridor Trail - North	1.89	1.89	\$2,605,400	100%	\$2,605,400
	25	Claggett Creek Greenway Trail	1.00	1.00	\$1,200,000	100%	\$1,200,000
	31	Mill Creek Path (downtown)	1.30	1.30	\$1,500,800	100%	\$1,500,800
	33	Riverfront	1.80	1.80	\$2,100,000	100%	\$2,100,000
	44	Mill Creek Path (Southeast)	0.40	0.40	\$3,026,800	100%	\$3,026,800
		Subtotal	10	10	\$12,433,000	100%	\$12,433,000
		Total	557	439	\$187,390,010		\$187,390,010

Table 8

City of Salem Parks SDC Analysis CIP Funding from Existing SDC Fund Balance			
	Total Cost	SDC Share	SDC Cost
Neighborhood Park (NP)			
Bailey Ridge	\$50,000	100%	\$50,000
Bill Riegel Park	\$400,000	100%	\$400,000
Eagles View	\$64,700	100%	\$64,700
North Campus	\$1,985,000	100%	\$1,985,000
Pictsweet	\$950,000	100%	\$950,000
Reed Road	\$650,000	100%	\$650,000
Secor Park	\$266,500	100%	\$266,500
Subtotal	\$4,366,200	100%	\$4,366,200
Community Park (CP)			
Fairview	\$685,000	100%	\$685,000
Geer Park	\$600,000	100%	\$600,000
Rees Hill	\$1,500,000	100%	\$1,500,000
Stephens Yoshikai	\$70,000	100%	\$70,000
Subtotal	\$2,785,000	100%	\$2,785,000
City/Urban Park (UP)			
Battle Creek	\$367,600	100%	\$367,600
Bush's Pasture Park	\$70,000	100%	\$70,000
Riverfront Park	\$2,165,000	100%	\$2,165,000
Subtotal	\$2,602,600	100%	\$2,602,600
Connector Trails/Linear Parks			
Downtown Trail	\$30,000	100%	\$30,000
Subtotal	\$30,000		\$30,000
Total	\$9,783,800		

Table 9

Unit Costs

The unit cost calculations begin with allocation of the growth costs between residential and nonresidential development. For SDC development purposes, park costs are allocated to residential and nonresidential development based on each group's share of future equivalent population. The SDC committee recommended that neighborhood park costs be allocated only to residential development because the Comprehensive Park System Master Plan strongly emphasizes residential areas when targeting neighborhood park locations. Other park costs are allocated both to residential and nonresidential. As shown in **Table 10**, total growth in equivalent population is estimated to be 118,846, including 105,432 new residents (89 percent) and 13,414 nonresidential equivalents (11 percent).

City of Salem Parks SDC Analysis Equivalent Population Share				
	Growth	Equivalency	Residential Equivalents	% Total
Population	105,432	1.00	105,432	88.7%
Employment	33,535	0.40	13,414	11.3%
Total	138,967		118,846	

Table 10

Residential development is allocated 100 percent of the \$54.15 million in growth costs associated with neighborhood parks. For the remaining \$133.24 million in growth costs, residential development is allocated 89.7 percent of total growth costs (or \$118.2 million), and nonresidential is allocated 11.3 percent (or \$15.0 million).

City of Salem Parks SDC Analysis SDC Unit Cost Calculations			
	Growth Costs	Growth Units	\$/Units
Residential – Neighborhood Parks	\$54,146,900	1.00	105,432
Residential – Other	\$118,204,2983	0.40	13,414
Total	\$172,351,193	33,535	\$448.46
Nonresidential	\$15,038,817	33,535	\$448.46
Total	\$187,390,010		

Table 11 ³As discussed previously, the nonresidential equivalents are equal to the number of employees multiplied by an equivalency factor of 40 percent.

The growth capacity units for both residential and nonresidential developments are people; in the case of residential it is total population, and in the case of nonresidential the unit of measure is employment. The growth in population and employment during the planning period is estimated to be 105,432 and 33,535, respectively (from **Table 10**). Dividing the residential cost by the total growth in population yields a unit cost per person of almost \$1,635. Similarly, the unit cost for nonresidential is \$448.46 per employee.

SDC Schedule

SDCs are assessed to different development types based on average dwelling occupancy and employee density (employees per thousand square feet of building area), as estimated by local or regional data. Census data were used to establish average occupancy data for residential dwelling types, and for small units (as an estimate for Accessory Dwelling Units). The data used to estimate persons per household for the different types of housing as shown in **Table 12** are summarized in **Tables A-1** and **A-2** in the Appendix. The SDC for residential development is determined by multiplying the residential unit cost (\$1,634.71) from **Table 10**, by the number of people per household for each unit type. As shown in **Table 12**, the updated SDC per dwelling single family dwelling is \$4,195, and for a multifamily unit is \$3,327.

City of Salem Parks SDC Analysis Fee Schedule			
Development Type	Units	Updated	Current
Residential (\$/dwelling Unit)	pphh		
Single-Family	2.566	\$4,195	\$4,613
Accessory Dwelling Unit	1.600	\$2,616	\$3,017
Multifamily (>2 unit)	2.035	\$3,327	\$3,017
Manufactured Home Park	1.843	\$3,013	\$3,372
Nonresidential (\$/1,000 sf)	emp/1000 sf		
Industrial	1.5	\$673	\$0
Commercial	3.0	\$1,345	\$0
Public	2.8	\$1,256	\$0

Table 12

For nonresidential development, the SDC is assessed based on estimated employees (as determined from average employment density by Comprehensive Plan designation, and building size). Data from the Salem Economic Opportunities Analysis Report 2015 to 2035 (ECO Northwest, December 2014) were used to estimate the typical number of employees per 1,000 square feet of building area for Retail, Industrial, and Office & Commercial Services sectors. This information was then used to estimate employment density by Comprehensive Plan designation (Industrial, Commercial, and Public.) Additional information is provided in Appendix **Table A-3**.

The SDC for nonresidential development is determined by multiplying the nonresidential unit cost (\$448.46) from **Table 11**, by the number of employees per 1,000 square feet for each land use type. As shown in **Table 12**, the SDCs per 1,000 square feet range from \$673 for Industrial to \$1,345 for Commercial.

Non-residential growth units are not based on the initial or on-going use of the development, but on the Broad Zone Category in which the development is located pursuant to SRC Table 110-1 and as shown in **Table 13**.

Broad Zone Category	Applicable Zones
Commercial	<ul style="list-style-type: none"> Neighborhood Commercial Commercial Office Commercial Retail Commercial General Central Business District West Salem Central Business District
Mixed Use	<ul style="list-style-type: none"> Fairview Mixed-Use South Waterfront Mixed-Use Neighborhood Center Mixed-Use Mixed Use I Mixed Use II Edgewater/Second Street Mixed-Use Corridor
Public	<ul style="list-style-type: none"> Public Amusement Public and Private Cemeteries Public and Private Educational Services Public and Private Health Services Public Service Capitol Mall
Industrial and Employment	<ul style="list-style-type: none"> Employment Center Industrial Commercial Industrial Business Campus Industrial Park General Industrial Intensive Industrial Second Street Craft Industrial Corridor

Table 13

Temporary Access Fees

The SDC Methodology Committee recommended that Temporary Access Fees be authorized for residential developments not served by parks facilities. The committee recommended that the Temporary Access Fee for residential subdivisions be collected in the amount of the parks SDCs due based on one single family dwelling per lot.

TRANSPORTATION METHODOLOGY

Travel Demand Forecasts

Growth units for this 2019 Methodology are based on the regional travel demand model from the Mid-Willamette Valley Council of Governments SKATS-MPO. This model uses U.S. Bureau of Census population and demographic data, and forecast data that is produced through the Population Research Center at Portland State University in Portland, Oregon. Employment data are obtained through the Oregon Employment Department. Land utilization and land use designations are provided through the Salem Area Comprehensive Plan, vacant land studies, and assessor’s data. Trip generation and mode choice data are estimated through household activity surveys, census data, and land use data. Street system characteristics reflect the location, alignment, classification, capacity, and traffic control associated with each highway, arterial, and collector street facility in the region.

This 2019 Methodology calculates average daily vehicle trips (ADT) based on Equivalent Length New Daily Trips that originate and/or terminate with at least one trip end within the Salem Urban Area. Because the regional travel demand model accounts for the estimated origin and destination of each travel trip using trip purpose and type, the trips generated through the model estimation are considered to be adjusted to equivalent length trips.

The ADT used for this 2019 Methodology are based on an estimated 712,000 ADT in the base year of 2009 and an estimated 967,000 ADT in an ending forecast year of 2035. The increase in trips is therefore 255,000 ADT in 26 years, or 9,800 ADT per year. For this 2019 Methodology, intermediate forecasts for years 1998, 2008, 2018, and 2038 are established in **Table 15**.

Year	Average Daily Trips
1998	604,000
2008	702,000
2018	800,000
2038	996,000

Table 15

Growth Component Based on Non-growth Equivalency

The SDC Methodology Committee considered numerous approaches for calculating the growth component of transportation project costs. The committee recommends that the growth component of transportation projects shall be based on the community's historic investment in the transportation system on a cost per unit basis. This methodology ensures that the growth component of transportation project expenditures does not exceed the community's equivalent level of investment from non-growth funds.

To determine the community's historic non-growth investment in transportation projects, the total 20-year cost of transportation-related capital improvement projects, excluding those funded with SDCs, was calculated as shown in **Table 16**. These costs include major capital project costs, but do not include costs of operation and maintenance of the existing transportation system.

Funding Source	1998-2017
Street Bonds	\$198,000,000
Federal Transportation Funds	\$36,000,000
State Transportation Funds	\$14,000,000
Urban Renewal	\$32,000,000
Total	\$280,000,000

Table 16

Level of Service – Two Options

The committee did not reach unanimous consensus regarding how the non-growth units should be calculated. The majority opinion was supported by four committee members and recommended the 2008 ADT as non-growth units, which is the average ADT from the date range of 1998 to 2018. The minority opinion by three committee members adopted the staff recommendation to use the 1998 ADT value to determine non-growth units. Because the committee did not reach unanimous consent, the committee agreed to present both approaches in the proposed methodology for consideration by City Council. The two potential approaches for calculating historic non-growth costs per unit are shown in **Table 17**.

	Historic Non-Growth Costs	Divided By Historic Non-Growth Units	Equals Historic Cost-Per-Unit of Non-Growth	Equals Cost Per Unit of Growth
Majority Opinion	\$280,000,000	702,000 ADT	\$399/ADT	\$399/ADT
Minority Opinion	\$280,000,000	604,000 ADT	\$463/ADT	\$463/ADT

Table 17

The committee agreed that the historic cost per unit of non-growth should be used as the basis for the growth cost per unit in this 2019 Methodology. Therefore, the recommended growth cost per unit was \$399/ADT for the majority opinion and \$463/ADT for the minority opinion.

Growth Trips

The planning period for this 2019 Methodology is 20 years. The growth trips are 196,000 ADT based on the difference between the 2038 trips and the 2018 trips as shown below:

2038 Trips	Minus 2018 Trips	Equals Growth Trips
996,000	800,000	196,000

Table 18

Total Growth Costs

The total growth costs to be included on the 309 list are based on the growth cost per unit and the growth trips shown below.

Growth Costs	Growth Cost Per Unit	Multiplied by Growth Trips	Equals Total Growth Costs
Majority Opinion	\$399/ADT	196,000	\$78,200,000
Minority Opinion	\$463/ADT	196,000	\$90,700,000

Table 19

Total Combined Growth and Non-Growth Costs

Table 3-8 of the TSP Street System Element shows a total project cost of \$586 million based on 2009 dollars. This total cost is based on projects to be completed from year 2009 through year 2035. All projects included in TSP Table 3-8 provide additional capacity or increased mobility and are fully or partially eligible for growth funding. On page 3-18 of the TSP Street System Element, “Based on the current and expected performance of the street system, it is evident that additional investments will need to be made to improve system capacity. In addition to increasing capacity, some arterial streets need to be improved to full urban standards to increase bicycle and pedestrian mobility.”

TSP Table 3-8 shows a total project cost far exceeding the projected growth costs of 78.2 million dollars, and all TSP projects are fully or partially eligible for growth funding. The SDC committee recommended to include on the 309 list as many projects as possible to maximize flexibility in selecting projects to be funded with SDCs. Therefore, the total cost of projects on the 309 list is increased by the non-growth funding anticipated to be expended on major transportation projects. This additional non-growth cost is based on historic cost per unit of non-growth as shown in **Table 20**.

Non-Growth Costs	Cost Per Unit of Non-Growth	Multiplied by 2018 Trips	Equals Total Non-Growth Costs
Majority Opinion	\$399/ADT	800,000	\$319,200,000
Minority Opinion	\$463/ADT	800,000	\$370,400,000

Table 20

The total project costs shown on the 309 list shall not exceed the combined growth and non-growth costs as shown in **Table 21**.

Total Project Costs	Total Growth Costs	Total Non-Growth Costs	Maximum Limit of 309-List Total Costs
Majority Opinion	\$78,200,000	\$319,200,000	\$397,400,000
Minority Opinion	\$90,700,000	\$370,400,000	\$461,100,000

Table 21

In past methodologies, the growth costs for eligible projects were limited by mandating that each individual project be dual-funded by both SDC and non-SDC funds. In this 2019 Methodology, the total growth costs are restricted by limiting the total cost of projects on the 309 list and the total growth costs to be expended for those projects. Therefore, specific projects are not restricted from being funded either by SDC or non-SDC funds because the total growth costs of all 309 list projects is restricted on a cost-per-unit basis.

309-List – Majority Opinion

The majority opinion projects recommended for the 309 list are included in **Table 22**, and **23** and are depicted in **Figure 3 and 4** in the Appendix. Additional projects considered by the minority opinion are included in **Table 24**, and depicted in **Figure 5** in the Appendix.

Intersections

Intersections that already do not meet level of service standards were excluded from the 309 list as shown in **Figure 3**.

Street	Location	Estimated Cost	Growth Cost
Owens Street SE	Commercial Street SE	\$704,000	\$704,000
Battle Creek Road SE	at Reed Road SE	\$524,000	\$524,000
Fairview Av. SE	at Pringle Road SE	\$524,000	\$524,000
McGilchrist Street SE	at 22nd Av. SE	\$524,000	\$524,000
Sunnyside Road SE	at Mildred Lane SE	\$252,000	\$252,000
Turner Road SE	at Airway Drive SE	\$524,000	\$524,000
Cordon Road SE	Macleay Road SE	\$210,000	\$210,000
Baxter Road SE	at Commercial Street SE	\$420,000	\$420,000
12th Street SE	at Fairview Av. SE	\$20,000	\$20,000
Commercial Street SE	at Hilfiker Lane SE	\$682,000	\$682,000
12th Street SE	at Hines Av. SE	\$262,000	\$262,000
12th Street SE	at Hoyt Av. SE	\$262,000	\$262,000
13th Street SE	at Hines Av. SE	\$262,000	\$262,000
13th Street SE	at Hoyt Av. SE	\$262,000	\$262,000
Battle Creek Road SE	at Fabry Rd. SE	\$524,000	\$524,000
Battle Creek Road SE	at Hilfiker Lane SE	\$524,000	\$524,000

Table 22

Street	Location	Estimated Cost	Growth Cost
Commercial Street SE	at 12th Street SE	\$590,000	\$590,000
Commercial Street SE	at Natural Grocery	\$590,000	\$590,000
Fabry Road SE	at Reed Lane SE	\$524,000	\$524,000
Madrona Av. SE	at Fairview Ind. Drive SE	\$420,000	\$420,000
McGilchrist Street SE	at 12th Street SE	\$524,000	\$524,000
Mildred Lane SE	at Liberty Road S	\$524,000	\$524,000
Mildred Lane SE	at Lone Oak Road SE	\$524,000	\$524,000
Reed Road SE	at Fairview Industrial Drive SE	\$524,000	\$524,000
Davis Road S	at Liberty Road S	\$524,000	\$524,000
Liberty Road S	at Madrona Avenue S	\$3,734,000	\$3,734,000
Kuebler Blvd. S	at Skyline Road. S	\$420,000	\$420,000
Madrona Av. S	at Croisan Creek Rd. S	\$524,000	\$524,000
Doaks Ferry Rd. NW	at Brush College Road NW	\$524,000	\$524,000
Doaks Ferry Road NW	at Eola Drive NW	\$524,000	\$524,000
Glen Creek Rd. NW	at Cascade Drive/Parkway Avenue NW	\$524,000	\$524,000
Wallace Road NW	at Brush College Rd.	\$524,000	\$524,000
Marine Drive NW	at Glen Creek Road NW	\$524,000	\$524,000
Park Avenue NE	at D Street NE	\$524,000	\$524,000
Union Street NE	at Liberty Street NE	\$524,000	\$524,000
Hayesville Drive NE	at 49th Avenue NE	\$524,000	\$524,000
Brown Road NE	at Sunnyview Road NE	\$274,000	\$274,000
Center Street NE	at 17th Street NE	\$420,000	\$420,000
Evergreen Avenue NE	at Market Street NE	\$159,000	\$159,000
Hawthorne Avenue NE	at Center Street NE	\$972,000	\$972,000
Hood Street NE	at Broadway Street NE	\$682,000	\$682,000
Fisher Road NE	at Devonshire Av. NE	\$524,000	\$524,000
Sunnyview Road NE	at Lansing Av. NE	\$524,000	\$524,000
Park Avenue NE	at Market Street NE	\$393,000	\$393,000
State Street	at 17th Street NE/SE	\$420,000	\$420,000
36th Street SE	at Kuebler Boulevard SE	\$210,000	\$210,000
Cherry Avenue NE	at Salem Industrial Drive NE	\$168,000	\$168,000
Commercial Street SE	at Madrona Avenue SE	\$420,000	\$420,000
D Street NE	at Hawthorne Avenue NE	\$420,000	\$420,000
Edgewater Street NW	at Eola Drive NW	\$420,000	\$420,000
Lancaster Drive SE	at Hwy 22 (WB on-ramp)	\$524,000	\$524,000
Liberty Road S	at Salem Heights Avenue S/SE	\$420,000	\$420,000
Liberty Road S	at Kuebler Boulevard SE	\$842,000	\$842,000
Sunnyview Road NE	at Hawthorne Avenue NE	\$336,000	\$336,000
Turner Road SE	at Kuebler Boulevard SE	\$210,000	\$210,000

Table 22

Street	Location	Estimated Cost	Growth Cost
Cordon Road SE	at Hwy 22E Interchange EB	\$524,000	\$524,000
Cordon Road SE	at Hwy 22E Interchange WB	\$524,000	\$524,000
Madrona Avenue SE	at 22nd Street SE	\$524,000	\$524,000
Total		\$30,004,000	\$30,004,000

Table 22

Corridor Projects

The maximum eligibility have been determined based on the existing volume-to-capacity (V/C) ratio of the existing corridor. V/C ratios under 0.9 are 100% eligible. V/C ratios between 0.9 and 1.0 are 90% eligible. V/C ratios over 1.0 are 80% eligible.

Project Title	Location	Functional Class	2017 Cost Estimate	Maximum Eligibility	TSDC Eligible Cost ³
12th Street SE	McGilchrist Street SE to Fairview Avenue SE	Major Arterial	\$1,463,000	80%	\$1,170,400
27th Avenue SE	Kuebler Boulevard SE to Marietta Street SE	Collector	\$1,264,000	100%	\$1,264,000
32nd Avenue SE/Trelstad Avenue SE	I-5 to 36th Avenue SE signal at Kuebler Boulevard SE	Minor Arterial	\$3,458,000	100%	\$3,458,000
35th Avenue NW	Osage Drive NW to Orchard Heights Road NW	Collector	\$2,643,000	100%	\$2,643,000
New Collector	35th Avenue NW extension to 37th Avenue NW	Collector	\$1,301,000	100%	\$1,301,000
36th Avenue SE	Kuebler Boulevard SE to Langley Street SE	Minor Arterial	\$1,182,000	100%	\$1,182,000
36th Avenue SE	Langley Street SE to Wiltsey Road SE	Collector	\$1,567,000	100%	\$1,567,000
37th Avenue NW	Orchard Heights Place NW to the UGB	Collector	\$1,825,000	100%	\$1,825,000
5th Avenue NW	Cameo Street NW to Marine Drive NW	Collector	\$705,000	100%	\$705,000
Airport Road SE	State Street to Mission Street SE	Minor Arterial	\$2,982,000	80%	\$2,385,600
Auburn Road NE	Cordon Road NE to 46th Ave NE	Collector	\$1,796,000	100%	\$1,796,000
Battle Creek Road SE	Kuebler Boulevard SE to Hillrose Street SE	Minor Arterial	\$8,197,000	80%	\$6,557,600
Battle Creek Road SE	Kuebler Boulevard SE to Wiltsey Road SE	Minor Arterial	\$4,682,000	100%	\$4,682,000
Blossom Drive NE	Lilac Lane NE to Portland Road NE	Collector	\$1,330,000	100%	\$1,330,000

Table 23

Project Title	Location	Functional Class	2017 Cost Estimate	Maximum Eligibility	TSDC Eligible Cost ³
Brentwood Drive SE	Battle Creek Road SE to Robins Lane SE	Collector	\$3,348,000	100%	\$3,348,000
Brush College Road NW	Doaks Ferry Road NW to BPA Power Lines	Minor Arterial	\$4,995,000	100%	\$4,995,000
Byers Street S/ Deer Run S	Viewcrest Road S to end of roadway	Minor Arterial	\$2,629,000	100%	\$2,629,000
Capitol Street NE	Market Street NE to Fairgrounds Road NE	Major Arterial	\$53,000	100%	\$53,000
Center Street NE	Lancaster Drive NE to Cordon Road NE	Major Arterial	\$6,718,000	100%	\$6,718,000
Chemawa Road NE	I-5 to Portland Road	Parkway	\$3,340,000	100%	\$3,340,000
Cherry Avenue NE	BNRR to Auto Group	Major Arterial	\$3,746,000	90%	\$3,371,400
Christina Street NW	Elliot Street NW to Michigan City Lane NW	Collector	\$5,203,000	100%	\$5,203,000
Colorado Way NW	Grice Hill Road NW to connection to Landagard Drive NW	Collector	\$4,916,000	100%	\$4,916,000
Commercial Street SE	Baxter Road SE to I-5 Interchange	Major Arterial	\$9,748,000	100%	\$9,748,000
Commercial Street SE	Division St NE to D St NE	Parkway	\$200,000	100%	\$200,000
Cordon Road SE	Highway 22 to Caplinger Road SE	Parkway	\$4,509,000	80%	\$3,607,200
Croisan Creek Road S	Kuebler Boulevard S to Skyline Road S/Davis Road S	Collector	\$1,745,000	100%	\$1,745,000
Croisan Ridge Way S	End of Croisan Ridge Way S to Heath Street S Extension	Collector	\$4,144,000	100%	\$4,144,000
Davis Road S	Skyline Road S to Liberty Road S	Collector	\$3,791,000	100%	\$3,791,000
Deer Run Avenue S	Byers Street S to Heath Street S Extension	Minor Arterial	\$585,000	100%	\$585,000
Doaks Ferry Road NW	Brush College Road NW to Orchard Heights Road NW	Major Arterial	\$7,824,000	100%	\$7,824,000
Doaks Ferry Road NW	Glen Creek Road NW to Eola Drive NW	Major Arterial	\$4,553,000	100%	\$4,553,000
Doaks Ferry Road NW	Eola Drive NW to UGB	Major Arterial	\$2,724,000	90%	\$2,451,600
Eola Drive NW	Doaks Ferry Road NW to UGB	Collector	\$1,926,000	100%	\$1,926,000

Table 23

Project Title	Location	Functional Class	2017 Cost Estimate	Maximum Eligibility	TSDC Eligible Cost ³
Fabry Road SE	Reed Lane SE to Battle Creek Road SE	Minor Arterial	\$3,897,000	100%	\$3,897,000
Fern Drive S	Heath Street S to River Road S	Collector	\$2,331,000	100%	\$2,331,000
Fisher Road NE	Sunnyview Road NE to Market Street NE	Collector	\$2,200,000	100%	\$2,200,000
Front Street NE	Norway Street NE to Division Street NE	Minor Arterial	\$5,320,000	100%	\$5,320,000
Gath Road SE	Turner Road SE to UGB	Collector	\$1,567,000	100%	\$1,567,000
Glen Creek Road NW	just east of 31st Court NW to Doaks Ferry Road NW	Collector	\$1,245,000	100%	\$1,245,000
Greencrest Street NE	Auburn Road NE to State Street NE	Collector	\$3,285,000	100%	\$3,285,000
Grice Hill Road NW	South terminus of Colorado Drive NW to Orchard Heights Road NW	Collector	\$1,222,000	100%	\$1,222,000
Grice Hill Road NW	realigned Orchard Heights Road NW to Colorado Way NW	Collector	\$4,980,000	100%	\$4,980,000
Hayesville Drive NE	Portland Road NE to Astoria Street NE	Collector	\$1,020,000	100%	\$1,020,000
Hazelgreen Road NE	Portland Road NE to Cordon Road NE	Parkway	\$7,959,000	100%	\$7,959,000
Heath Street S	Fern Drive S to Deer Run Avenue S Extension	Collector	\$3,868,000	100%	\$3,868,000
Herrin Road NE	45th Avenue NE to Cordon Road NE	Collector	\$3,208,000	100%	\$3,208,000
Hilfiker Lane SE	Sunnyside Road SE to Commercial Street SE	Minor Arterial	\$589,000	100%	\$589,000
Indian School Road NE	Chemawa Road NE to Blossom Drive NE	Collector	\$3,181,000	100%	\$3,181,000
Islander Avenue NW	West Meadows Drive NW to 35th Avenue NW extension	Collector	\$3,571,000	100%	\$3,571,000
Kale Street NE	Portland Road NE to Cordon Road NE	Minor Arterial	\$5,179,000	100%	\$5,179,000
Kuebler Boulevard S	Liberty Road S to Skyline Road S.	Parkway	\$1,499,000	100%	\$1,499,000
Kuebler Boulevard SE	I-5 interchange to Turner Road SE	Parkway	\$17,822,000	90%	\$16,039,800
Kuebler Boulevard SE	Highway 22 to Turner Road SE	Parkway	\$13,087,000	100%	\$13,087,000

Table 23

Project Title	Location	Functional Class	2017 Cost Estimate	Maximum Eligibility	TSDC Eligible Cost ³
Kuebler Boulevard S	Sprague High School to Croisan Creek Road S	Minor Arterial	\$1,375,000	100%	\$1,375,000
Kuebler Road S	Croisan Creek Road S to UGB	Minor Arterial	\$5,267,000	100%	\$5,267,000
Lancaster Drive SE	Cranston Street SE to Kuebler Boulevard SE	Major Arterial	\$4,184,000	100%	\$4,184,000
Liberty Road S	Holder Lane to south UGB	Major Arterial	\$2,423,000	100%	\$2,423,000
Lone Oak Road SE	Muirfield Avenue SE to Rees Hill Road SE	Collector	\$5,099,000	100%	\$5,099,000
Lone Oak Road SE	Holder Lane SE to Mildred Lane SE	Collector	\$6,633,000	100%	\$6,633,000
Macleay Road SE	Pennsylvania Avenue SE to Cordon Road SE	Minor Arterial	\$5,398,000	100%	\$5,398,000
Marietta Street SE	27th Avenue SE to Fairview Industrial Drive SE	Collector	\$1,596,000	100%	\$1,596,000
Marine Drive NW	Moyer Drive NW to River Bend Road NW	Collector	\$9,379,000	100%	\$9,379,000
McGilchrist Street SE	12th Street SE to 25th Street SE	Major Arterial	\$22,291,000	80%	\$17,832,800
Michigan City Lane NW	Wallace Road NW to end of roadway	Collector	\$3,036,000	100%	\$3,036,000
Mildred Lane Extension	Liberty Road S to Skyline Road S	Minor Arterial	\$8,705,000	100%	\$8,705,000
Mildred Lane SE	Lone Oak Road SE to Sunnyside Road SE	Minor Arterial	\$4,463,000	100%	\$4,463,000
Mousebird Avenue NW	Royal Crown Avenue NW to Macaw Street NW	Collector	\$160,000	100%	\$160,000
New Collector	Kale Street NE to Hazelgreen Road NE	Collector	\$2,809,000	100%	\$2,809,000
New Collector	Lancaster Drive SE to Turner Road SE	Collector	\$8,942,000	100%	\$8,942,000
New Collector	Pringle Road SE to Reed Road SE	Collector	\$4,791,000	100%	\$4,791,000
New Minor Arterial	Deer Run Avenue to River Road S	Minor Arterial	\$4,350,000	100%	\$4,350,000
Orchard Heights Realignment	BPA Power Line to Orchard Heights Place NW	Minor Arterial	\$4,682,000	100%	\$4,682,000
Orchard Heights Road NW	Parkway Drive NW to Snowbird Drive NW	Minor Arterial	\$3,804,000	100%	\$3,804,000

Table 23

Project Title	Location	Functional Class	2017 Cost Estimate	Maximum Eligibility	TSDC Eligible Cost ³
Orchard Heights Road NW	Titan Drive NW to UGB	Minor Arterial	\$3,696,000	100%	\$3,696,000
Orchard Heights Road NW	Orchard Heights Place NW to UGB	Minor Arterial	\$1,393,000	100%	\$1,393,000
Red Leaf Drive S	Davis Road S to Mildred Lane S Extension	Collector	\$1,653,000	100%	\$1,653,000
Reed Lane SE	Fabry Road SE to Soapstone Avenue SE	Collector	\$1,803,000	100%	\$1,803,000
Reed Road SE	Battle Creek Road SE to Strong Road SE	Minor Arterial	\$2,365,000	100%	\$2,365,000
Rees Hill Road SE	Sunnyside Road SE to Champion Hill Road SE	Collector	\$3,462,000	100%	\$3,462,000
River Bend Road NW	Wallace Road NW to UGB	Collector	\$572,000	100%	\$572,000
River Road S	Croisan Creek Road S to UGB	Minor Arterial	\$13,034,000	100%	\$13,034,000
Salem Industrial Drive NE	Bill Frey Drive NE to Hyacinth Street NE	Collector	\$2,245,000	100%	\$2,245,000
Skyline Road S	Maplewood Drive S to Mildred Lane S	Minor Arterial	\$3,372,000	100%	\$3,372,000
State Street	Lancaster Drive to Cordon Road	Major Arterial	\$1,946,000	100%	\$1,946,000
Strong Road SE	Reed Road SE to Marietta Street SE	Collector	\$2,716,000	100%	\$2,716,000
Summer Street NE	Fairgrounds Road NE to Marion Street NE	Major Arterial	\$74,000	100%	\$74,000
Sunnyside Road SE	Kuebler Boulevard SE to Mildred Lane SE	Minor Arterial	\$6,012,000	90%	\$5,410,800
Sunnyside Road SE	Pawnee Circle SE to the UGB	Minor Arterial	\$5,033,000	100%	\$5,033,000
Sunnyview Road NE	Walker Road NE to Cordon Road NE	Minor Arterial	\$1,017,000	100%	\$1,017,000
Swegle Road NE	Hoffman Road NE to Cordon Road NE	Minor Arterial	\$779,000	100%	\$779,000
Turner Road SE	Airway Drive SE to Gath Road SE	Minor Arterial	\$6,824,000	90%	\$6,141,600
Turner Road SE	Gath Road SE to UGB	Minor Arterial	\$4,658,000	100%	\$4,658,000
Ward Drive NE	Janice Avenue NE to Cordon Road NE	Collector	\$2,969,000	100%	\$2,969,000
Wiltsey Road SE	Battle Creek Road SE to 36th Avenue SE	Collector	\$3,161,000	100%	\$3,161,000

Table 23

Project Title	Location	Functional Class	2017 Cost Estimate	Maximum Eligibility	TSDC Eligible Cost ³
Preliminary Alignment Studies	Future street alignment studies	Various		100%	\$1,000,000
Subtotal Corridor Projects					\$365,691,800

Table 23

Additional Projects – Minority Opinion

Project Title	Location	Functional Class	Estimate	Maximum Eligibility	Growth Cost
12th Street SE	Fairview Avenue SE to Vista Avenue SE	Major Arterial	\$1,330,000	100%	\$1,330,000
25th Street SE	Mission Street SE to McGilchrist Street SE	Major Arterial	\$4,082,000	100%	\$4,082,000
Cherry Avenue NE	Johnson Street NE to Pine Street NE	Major Arterial	\$2,133,000	100%	\$2,133,000
Croisan Creek Road S	River Road S to Heath Street S	Collector	\$3,684,000	100%	\$3,684,000
Croisan Scenic Way S	Joplin Street S to Croisan Creek Road S	Minor Arterial	\$7,722,000	100%	\$7,722,000
Gaffin Road SE	Cordon Road SE to west of Highway 22 interchange	Collector	\$2,769,000	100%	\$2,769,000
Hawthorne Avenue SE	Market Street NE to Mission Street SE	Major Arterial	\$21,002,000	100%	\$21,002,000
Hilfiker Lane SE	Commercial Street SE to Pringle Road SE via Hillrose Street SE	Collector	\$5,142,000	100%	\$5,142,000
Hyacinth Road NE	Portland Road NE to Salem Parkway NE	Major Arterial	\$4,586,000	80%	\$3,668,800
Pringle Road SE	Copper Glen Drive SE to Hillrose Street SE	Minor Arterial	\$2,733,000	100%	\$2,733,000
Additional Corridor Projects					\$54,265,800

Table 24

Fee Table

Accessory Dwelling Units

The committee unanimously recommended to temporarily suspend accessory dwelling unit (ADU) fees for a period of five years. The fee amount for ADUs is included in the fee table below for reference if the temporary suspension is removed in the future.

Table 25 shows the proposed fee amounts based on the majority and minority opinions.

Sample Uses	Current Fee	Majority Opinion	Minority Opinion
Cost per ADT (All)	\$204.16	\$399.00	\$463.00
Single Family	\$1,953.81	\$3,798.48	\$4,407.76
Multi-Family	\$1,371.96	\$2,653.35	\$3,078.95
Manufactured Home Park	\$1,018.76	\$1,931.28	\$2,241.06
Accessory Dwelling	\$1,371.96	\$2,279.09	\$2,644.66

Table 25. ¹ Accessory dwelling cost is 60 percent of single family based on census data.

Fee Calculation

Fees shall be determined based on the most current version of the Institute of Transportation Engineers Trip Generation Manual and on linked trip and trip length factors as shown in **Table A-4**. Fee calculations shall be as follows:

TSDC Fee = Raw Trips x Linked trip factor x trip length factor.

WATER METHODOLOGY AMENDMENT

The calculations adopted under Resolution No. 2008-68 remain in full force and effect, except as amended in Resolution No. 2011-45, Resolution No. 2012-32, and as described below.

Reimbursement Fee Cost Basis

The distribution component of the SDC reimbursement fee adopted in Resolution No. 2008-68 was limited to mains larger than 8 inches in diameter. Reimbursement funding for mains 8 inches and less in diameter was previously collected through connection fees pursuant to SRC Chapter 21.

The SDC Methodology Committee recommended the capacity of water mains 8 inches and smaller be incorporated into the SDC reimbursement fee and that the authorization for a connection fee in SRC Chapter 21 be repealed. Based on Table 2-3 of Resolution No. 2008-68, the Reimbursement Fee Cost Basis for distribution mains 8 inches or less in diameter is \$7,230,998 as shown in **Table 26**.

Distribution Mains 8 inches or less	Quantity
Book Value	\$120,412,800
Developer Funded	(\$85,979,475)
Adjusted Value	\$34,433,325
SDC Cost Percentage	21%
Reimbursement Fee Cost Basis	\$7,230,998

Table 26

Based on Table 2-7 of Resolution No. 2008-68, the SDC reimbursement fee is increased by \$240, as shown in **Table 27**.

Distribution Mains 8 inches or less	Quantity
Reimbursement Fee Cost Basis	\$7,230,998
Growth Capacity Requirements	31.3
Unit Cost	\$231,022
Capacity Requirements Per Unit	0.001037
Reimbursement Fee Per Unit	\$240

Table 27

Improvement Fee Cost Basis

Growth Costs

In order to retain the improvement fee amount of \$3,542 in Resolution No. 2018-27, the total growth costs are limited to the total anticipated revenues to be collected over the 20-year planning period. Pursuant to Resolution No. 2008-68 Table 2-6, the total meter equivalents anticipated over a 50-year planning period is 66,054. The total growth costs are limited to no greater than \$93,586,724 based on **Table 28**.

	Cost per Meter Equivalent	Multiplied by Meter Equivalents	Maximum Limit of Growth Costs
Total Growth Costs	\$3,542	26,422 M.E. (66,054 M.E. x 20yr/50yr)	\$93,586,724

Table 28

The 309 List is shown in **Tables 29 and 30**. Additional growth costs of \$43,909,000 are anticipated from other funding, including but not limited to area-based fees as described in City-Wide Fees on pages 36-38.

309 List

Major Facilities

Project Title	Level	Estimated Cost	Growth Cost
Gerens New Collector Well #1 GW Development	GERENS	\$7,079,000	\$7,079,000
Gerens New Collector Well #2 GW Development	GERENS	\$7,079,000	\$7,079,000
Upper Trans Capacity Increase, City of Turner Res	TURNER	\$3,918,000	\$3,918,000

Project Title	Level	Estimated Cost	Growth Cost
Upper Trans Capacity Increase, Turner Res & WPS	TURNER	\$859,000	\$859,000
Boone Rd PRV S2 to G0	G-0	\$50,000	\$50,000
Hemlock Well Improvement & Enhancement	G-0	\$1,000,000	\$900,000
Boone Rd PRV-18" S2 to S1	S-1	\$50,000	\$50,000
Boone S-1 PS	S-1	\$1,145,000	\$1,145,000
Candalaria Reservoir Replacement	S-1	\$6,718,000	\$5,084,000
Coburn S-1 Reservoir	S-1	\$6,709,000	\$6,709,000
Illahe S1 to G0 PRV	S-1	\$50,000	\$50,000
Croisan S-2 PS #2	Croisan S-2	\$1,718,000	\$1,615,000
Increase Boone S2 PS Capacity	S-2	\$7,051,000	\$5,288,000
ASR Well Capacity Expansion	S-2	\$3,500,000	\$3,500,000
ASR Well Capacity Expansion	S-2	\$2,800,000	\$2,800,000
Rock Ridge WPS - Electrical Generator	Rock Ridge S-3	\$209,000	\$209,000
Rock Ridge WPS - Increase Capacity	Rock Ridge S-3	\$191,000	\$191,000
S4 Domestic Closed End WPS, Island 3	S-4	\$72,000	\$72,000
S4 Domestic Closed End WPS, Island 2	S-4	\$72,000	\$72,000
Increase Deer Park PS	T	\$1,715,000	\$755,000
Orchard Hts W-2 PS	W-2	\$1,145,000	\$1,145,000
Orchard Hts W-2 Reservoir	W-2	\$6,799,000	\$6,799,000
Subtotal Major Facilities		\$59,929,000	\$55,369,000

Table 29

Pipes

	Distribution	Feeder	Trunk	Transmission	Total	Growth Share
Geren				\$5,648,000	\$5,648,000	\$5,648,000
G-0	\$299,000	\$19,708,000	\$4,044,000	\$16,763,000	\$40,814,000	\$33,918,000
S-1	\$1,105,000	\$6,049,000	\$14,919,000		\$22,073,000	\$20,239,000
S-2	\$733,000	\$3,938,000	\$4,720,000	\$971,000	\$10,362,000	\$8,985,000
S-3	\$875,000	\$4,809,000	\$699,000		\$6,383,000	\$6,383,000
S-4	\$251,000	\$1,548,000	\$170,000		\$1,969,000	\$1,969,000
W-1	\$929,000	\$4,834,000	\$1,332,000		\$7,095,000	\$6,364,000
W-2	\$305,000	\$1,135,000	\$3,063,000		\$4,503,000	\$4,268,000
Subtotal Pipes	\$4,497,000	\$42,021,000	\$28,947,000	\$17,734,000	\$93,199,000	\$82,126,000

Table 30

Total Growth Share

Category	Quantity
Major Facility Growth Share	\$55,369,000
Pipes Growth Share	\$82,126,000
Subtotal Growth Share	\$137,495,000
Non-Growth Funding	(\$43,909,000)
Total Growth Share	\$93,586,000

Table 31

Fee Tables

The SDC committee recommended retaining the SDC fee amounts shown in Resolution No. 2018-27, except for adding an 8-inch component to the SDC reimbursement fee in lieu of connection fees formerly collected under SRC Chapter 21. The amended fee tables are shown in **Tables 32-35**. Consistent with Resolution No. 2006-68, Suburban East Salem Water District and City of Turner are assigned separate fee tables; other outside-City connections are charged the City of Salem fee amounts.

City of Salem (Except Industrial)

Meter Size	Ratio	Improvement	Reimbursement	Compliance
5/8" Disc/Compound	1	\$3,542	\$1,375	\$228
3/4" Disc/Compound	1	\$3,542	\$1,375	\$228
1" Disc/Compound	1.7	\$6,021	\$2,338	\$388
1.5" Disc/Compound	3.3	\$11,687	\$4,538	\$753
2" Disc/Compound	5.3	\$18,770	\$7,288	\$1,209
3" Disc/Compound	10.7	\$37,894	\$14,714	\$2,440
4" Disc/Compound	16.7	\$59,143	\$22,964	\$3,809
6" Disc/Compound	33.3	\$117,932	\$45,791	\$7,594
4" Turbine	21	\$74,372	\$28,877	\$4,789
6" Turbine	46.7	\$165,388	\$64,217	\$10,650
8" Turbine	80	\$283,320	\$110,008	\$18,244
10" Turbine	126.7	\$448,709		\$28,894

Table 32

City of Salem, Industrial

Meter Size	Ratio	Improvement	Reimbursement	Compliance
5/8" Disc/Compound	1	\$2,022	\$1,207	\$228
3/4" Disc/Compound	1	\$2,022	\$1,207	\$228
1" Disc/Compound	1.7	\$3,438	\$2,052	\$388
1.5" Disc/Compound	3.3	\$6,673	\$3,983	\$753
2" Disc/Compound	5.3	\$10,718	\$6,397	\$1,209
3" Disc/Compound	10.7	\$21,638	\$12,915	\$2,440
4" Disc/Compound	16.7	\$33,771	\$20,158	\$3,809
6" Disc/Compound	33.3	\$67,340	\$40,195	\$7,594
4" Turbine	21	\$42,467	\$25,348	\$4,789
6" Turbine	46.7	\$94,437	\$56,370	\$10,650
8" Turbine	80	\$161,777	\$96,564	\$18,245
10" Turbine	126.7	\$256,215	\$152,934	\$28,894

Table 33

Suburban East Salem Water District

Meter Size	Ratio	Improvement	Reimbursement	Compliance
5/8" Disc/Compound	1	\$2,022	\$967	\$228
3/4" Disc/Compound	1	\$2,022	\$967	\$228
1" Disc/Compound	1.7	\$3,438	\$1,644	\$388
1.5" Disc/Compound	3.3	\$6,673	\$3,191	\$753
2" Disc/Compound	5.3	\$10,718	\$5,125	\$1,209
3" Disc/Compound	10.7	\$21,638	\$10,347	\$2,440
4" Disc/Compound	16.7	\$33,771	\$16,150	\$3,809
6" Disc/Compound	33.3	\$67,340	\$32,203	\$7,594
4" Turbine	21	\$42,467	\$20,308	\$4,789
6" Turbine	46.7	\$94,437	\$45,162	\$10,650
8" Turbine	80	\$161,777	\$77,364	\$18,245
10" Turbine	126.7	\$256,215	\$122,526	\$28,894

Table 34

City of Turner

Meter Size	Ratio	Improvement	Reimbursement	Compliance
5/8" Disc/Compound	1	\$675	\$837	\$182
3/4" Disc/Compound	1	\$675	\$837	\$309
1" Disc/Compound	1.7	\$1,147	\$1,424	\$600
1.5" Disc/Compound	3.3	\$2,247	\$2,764	\$963
2" Disc/Compound	5.3	\$3,576	\$4,438	\$1,944
3" Disc/Compound	10.7	\$7,220	\$8,961	\$3,035
4" Disc/Compound	16.7	\$11,268	\$13,985	\$6,051

Table 35

Meter Size	Ratio	Improvement	Reimbursement	Compliance
6" Disc/Compound	33.3	\$22,468	\$27,887	\$3,816
4" Turbine	21	\$14,169	\$17,586	\$8,486
6" Turbine	46.7	\$31,510	\$39,109	\$14,537
8" Turbine	80	\$53,978	\$66,995	\$23,023
10" Turbine	126.7	\$85,487	\$106,104	

Table 35

WASTEWATER METHODOLOGY AMENDMENT

The calculations adopted under Resolution No. 2008-68 remain in full force and effect, except as amended in Resolution No. 2011-45, Resolution No. 2012-32, and as described below.

Reimbursement Fee Cost Basis

The distribution component of the SRC reimbursement fee adopted in Resolution No. 2008-68 was limited to mains larger than 8 inches in diameter. Reimbursement funding for mains 8 inches and less in diameter was previously collected through connection fees pursuant to SRC Chapter 21.

The SDC Methodology Committee recommended the capacity of wastewater mains 8 inches and smaller be incorporated into the SDC reimbursement fee and that the authorization for a connection fee in SRC Chapter 21 be repealed. Based on Table 2-3 of Resolution No. 2008-68, the Reimbursement Fee Cost Basis for distribution mains 8 inches or less in diameter is \$6,041,997 as shown in **Table 36**.

Collection Mains 8 inches or less	Quantity
Book Value	\$127,385,765
Developer Funded	(\$83,918,157)
Adjusted Value	\$43,467,608
Available Capacity for Growth	13.9%
Available Capacity for Growth	\$6,041,997

Table 36

Based on Table 3-7 of Resolution 2008-68, the SDC reimbursement fee is increased by \$270 as shown in **Table 37**.

Collection Mains 8 inches or less	Quantity
Reimbursement Fee Cost Basis	\$6,041,997
Growth Capacity Requirements	22.4
Unit Cost	\$269,732
Capacity Requirements Per Unit	0.001001
Reimbursement Fee Per Unit	\$270

Table 37

Improvement fee Cost Basis

Growth Costs

In order to retain the improvement fee amount of \$3,542 in Resolution 2018-27, the total growth costs are limited to the total anticipated revenues to be collected over the 20-year planning period. Pursuant to Resolution No. 2008-68 Table 2-6, the total meter equivalents anticipated over a 50-year planning period is 66,054. The total growth costs are limited to no greater than \$93,586,724 based on **Table 38**.

	Cost per Meter Equivalent	Multiplied by Meter Equivalents	Maximum Limit of Growth Costs
Total Growth Costs	\$2,721	26,946 M.E. (67,364 M.E. x 20yr/50yr)	\$73,320,066

Table 38

309 List

The 309 list is shown on **Table 39 and 40**. Additional growth cuts of \$61,904,000 are anticipated from other funding.

Pumping and Treatment

Project Description	Location	Estimated Cost	Growth Ratio	Growth Cost
Pumping				
Construct PS	Eagle's View PS	\$523,000	100.0	\$523,000
Increase PS Capacity	Cordon PS	\$7,961,000	71.7	\$5,705,000
Increase PS Capacity	Battle Creek PS	\$7,961,000	41.1	\$3,273,000
Increase PS Capacity	Stoneway PS	\$437,000	30.6	\$134,000
West Salem SPS Capacity Improvement, Phase 1	West Salem PS	\$12,101,000	50.0	\$6,051,000
Abandon PS	Chemawa PS	\$4,554,000	66.7	\$3,040,000
Abandon PS	Mahrt PS	\$44,000	0.0	\$0
Construct PS	Auburn PS	\$820,000	100.0	\$820,000
Upgrade PS for depth and capacity	Jade PS	\$920,000	84.2	\$774,000
Construct PS	Illaha 2 PS	\$510,000	100.0	\$510,000
West Salem SPS Capacity Improvement, Phase 2	West Salem PS	\$15,285,000	22.2	\$3,397,000
Subtotal Pumping				\$24,227,000
Treatment				
Biosolids Imp. - Solids Thickening\ Dewatering	Willow Lake	\$12,000,000	26.3	\$3,156,000

Table 39

Project Description	Location	Estimated Cost	Growth Ratio	Growth Cost
Wet Weather Primary Clarifiers - 2	Willow Lake	\$20,486,000	15.3	\$3,134,000
Wet Weather Secondary Clarifiers - 4	Willow Lake	\$23,511,000	15.3	\$3,597,000
South Primary Effluent PS Rehabilitation	Willow Lake	\$8,347,000	15.3	\$1,277,000
WPCF- Phase 2: Facilities Plan Update (Study)	Willow Lake	\$669,000	15.3	\$102,000
Headworks 4th Bar-screen	Willow Lake	\$1,160,000	100.0	\$1,160,000
Trickling Filter Effluent Pump Replacements	Willow Lake WPCF	\$1,080,000	30.0	\$324,000
Subtotal Treatment				\$12,750,000

Table 39

Pipes

Basin	Main	Collector	Trunk	Interceptor	Total	Growth Share
38th Street	\$156,000	\$3,754,000			\$3,910,000	\$2,213,000
Airport		\$4,970,000		\$2,705,000	\$7,675,000	\$6,165,000
B Street	\$249,000	\$143,000			\$392,000	\$392,000
BC Pump	\$3,311,000				\$3,311,000	\$3,311,000
Brush College	\$5,970,000	\$11,401,000			\$17,371,000	\$16,450,000
Clark Creek	\$45,000	\$955,000			\$1,000,000	\$177,000
Cordon PS		\$224,000			\$224,000	\$31,000
Corrections	\$1,934,000	\$15,210,000	\$1,980,000		\$19,124,000	\$10,332,000
Croisan Creek	\$7,763,000	\$6,208,000	\$805,000		\$14,776,000	\$14,470,000
Cross St	\$190,000				\$190,000	\$190,000
East Chemawa	\$2,061,000	\$3,781,000	\$6,070,000		\$11,912,000	\$10,333,000
East Court	\$220,000	\$371,000			\$591,000	\$160,000
Eola	\$1,409,000	\$1,445,000			\$2,854,000	\$1,848,000
Fairview	\$330,000		\$2,565,000	\$7,696,000	\$10,591,000	\$5,777,000
Glen Creek	\$1,641,000				\$1,641,000	\$1,641,000
Jory Creek	\$1,250,000				\$1,250,000	\$1,250,000
Market St	\$1,555,000	\$2,140,000		\$1,986,000	\$5,681,000	\$3,306,000
North Keizer			\$3,939,000		\$3,939,000	\$2,836,000
North Trunk	\$541,000	\$880,000			\$1,421,000	\$1,421,000
Powell Creek	\$853,000	\$396,000			\$1,249,000	\$1,249,000
Railroad	\$4,816,000	\$5,473,000	\$484,000		\$10,773,000	\$10,773,000
RD-2	\$2,153,000	\$557,000		\$2,874,000	\$5,584,000	\$3,818,000
Stortz		\$148,000			\$148,000	\$104,000

Table 40

Basin	Main	Collector	Trunk	Interceptor	Total	Growth Share
Subtotal Pipes	\$36,447,000	\$58,056,000	\$15,843,000	\$15,261,000	\$125,607,000	\$98,247,000

Table 40

Total Growth Share

Category	Quantity
Pumping Growth Share	\$24,227,000
Treatment Growth Share	\$12,750,000
Pipes Growth Share	\$98,247,000
Subtotal Growth Share	\$135,224,000
Non-Growth Funding	(\$61,904,000)
Total Growth Share	\$73,320,000

Table 41

Fee Tables

The SDC committee recommended to retain the SDC fee amounts shown in Resolution 2018-27, except for adding an 8-inch component to the SDC reimbursement fee in lieu of connection fees formerly collected under SRC Chapter 21. The amended fee tables are shown in **Tables 42, 43, 44, and 45**. Consistent with Resolution 2006-68, East Salem Service District, City of Turner, City of Keizer, and Labish Village are assigned separate fee tables; other outside-City connections are charged the City of Salem fee amounts.

City of Salem

Meter Size	Ratio	Improvement	Reimbursement	Compliance
5/8" Disc/Compound	1	\$2,721	\$1,246	\$112
3/4" Disc/Compound	1	\$2,721	\$1,246	\$112
1" Disc/Compound	1.7	\$4,626	\$2,052	\$191
1.5" Disc/Compound	3.3	\$8,979	\$3,983	\$369
2" Disc/Compound	5.3	\$14,421 n	\$6,397	\$593
3" Disc/Compound	10.7	\$21,638	\$12,915	\$1,197
4" Disc/Compound	16.7	\$33,771	\$20,158	\$1,870
6" Disc/Compound	33.3	\$67,340	\$40,195	\$3,727
4" Turbine	21	\$42,467	\$25,348	\$2,351
6" Turbine	46.7	\$94,437	\$56,370	\$5,227
8" Turbine	80	\$161,777	\$96,564	\$8,956
10" Turbine	126.7	\$256,215	\$152,934	\$14,183

Table 42

East Salem Service District and City of Turner

Meter Size	Ratio	Improvement	Reimbursement	Compliance
5/8" Disc/Compound	1	\$317	\$153	\$112
3/4" Disc/Compound	1	\$317	\$153	\$112
1" Disc/Compound	1.7	\$539	\$260	\$191
1.5" Disc/Compound	3.3	\$1,047	\$505	\$369
2" Disc/Compound	5.3	\$1,680	\$811	\$593
3" Disc/Compound	10.7	\$3,394	\$1,637	\$1,197
4" Disc/Compound	16.7	\$5,296	\$2,554	\$1,870
6" Disc/Compound	33.3	\$10,562	\$5,093	\$3,727
4" Turbine	21	\$6,660	\$3,212	\$2,351
6" Turbine	46.7	\$14,812	\$7,142	\$5,227
8" Turbine	80	\$25,374	\$12,237	\$8,956
10" Turbine	126.7	\$40,186	\$19,379	\$14,183

Table 43

City of Keizer

Meter Size	Ratio	Improvement	Reimbursement	Compliance
5/8" Disc/Compound	1	\$99	\$45	\$112
3/4" Disc/Compound	1	\$99	\$45	\$112
1" Disc/Compound	1.7	\$168	\$77	\$191
1.5" Disc/Compound	3.3	\$327	\$148	\$369
2" Disc/Compound	5.3	\$523	\$237	\$593
3" Disc/Compound	10.7	\$1,057	\$480	\$1,197
4" Disc/Compound	16.7	\$1,650	\$749	\$1,870
6" Disc/Compound	33.3	\$3,290	\$1,494	\$3,727
4" Turbine	21	\$2,075	\$941	\$2,351
6" Turbine	46.7	\$4,615	\$2,093	\$5,227
8" Turbine	80	\$7,906	\$3,587	\$8,956
10" Turbine	126.7	\$12,520	\$5,680	\$14,183

Table 44

Labish Village

City (Except Industrial)	Ratio	Improvement	Reimbursement	Compliance
5/8" Disc/Compound	1	\$1,917	\$174	\$112
3/4" Disc/Compound	1	\$1,917	\$174	\$112
1" Disc/Compound	1.7	\$3,259	\$295	\$191
1.5" Disc/Compound	3.3	\$6,325	\$573	\$369
2" Disc/Compound	5.3	\$10,159	\$921	\$593
3" Disc/Compound	10.7	\$20,510	\$1,859	\$1,197

Table 45

City (Except Industrial)	Ratio	Improvement	Reimbursement	Compliance
4" Disc/Compound	16.7	\$32,011	\$2,901	\$1,870
6" Disc/Compound	33.3	\$63,831	\$5,784	\$3,727
4" Turbine	21	\$40,254	\$3,648	\$2,351
6" Turbine	46.7	\$89,517	\$8,111	\$5,227
8" Turbine	80	\$153,247	\$13,896	\$8,956
10" Turbine	126.7	\$242,865	\$22,007	\$14,183

Table 45

STORMWATER METHODOLOGY AMENDMENT

Resolution No. 2002-142 remains in effect. The methodology is being amended only to clarify that single family dwellings that include an accessory dwelling unit constructed either concurrent with or subsequent to the single family dwelling are charged the same fee as single family dwellings without an accessory dwelling unit. There is no additional fee for the accessory dwelling unit.

METHODOLOGY IMPLEMENTATION SCHEDULE

This methodology is tentatively scheduled to be effective on July 1, 2019. The fee changes shall be implemented in two phases. The first phase, to be implemented effective July 1, 2019, shall include one half of the difference between the existing fees and new fees. The second phase, to be implemented effective July 1, 2020, shall include the new fees in their entirety. **Table 46** illustrates how each fee shall be implemented based on the cost per unit for each type of infrastructure based on 2018 values.

The SDC Methodology Committee recommends that accessory dwelling units be exempted from payment of Parks, Transportation, and Stormwater SDCs until July 1, 2024.

Infrastructure Type	Effective 7/1/18 (Current)	Effective 7/1/19	Effective 7/1/20
PARKS:			
Residential (\$/DU)			
Single Family	\$4,613.45	\$4,404.00	\$4,195.00
Accessory	\$3,016.68	\$0.00	\$0.00
Multifamily	\$3,016.68	\$3,172.00	\$3,327.00
Manufactured Home Park	\$3,371.66	\$3,013.00	\$3,013.00
PARKS:			
Nonresidential (\$/1,000 sf)			
Industrial/Employment	\$0.00	\$337.00	\$673.00
Commercial	\$0.00	\$673.00	\$1,345.00
Public	\$0.00	\$628.00	\$1,256.00

Table 46

Infrastructure Type	Effective 7/1/18 (Current)	Effective 7/1/19	Effective 7/1/20
TRANSPORTATION :			
Cost per ADT (All)	\$204.16	\$302.00	\$399.00
Single Family	\$1,953.81	\$2,876.15	\$3,798.48
Multi-Family	\$1,371.96	\$2,012.66	\$2,653.35
WATER:			
Non-Industrial (\$/meter equiv)			
Improvement	\$3,542.00	\$3,542.00	\$3,542.00
Reimbursement	\$1,135.00	\$1,255.00	\$1,375.00
Compliance	\$228.00	\$228.00	\$228.00
WATER:			
Industrial (\$/meter equiv)			
Improvement	\$2,022.00	\$2,022.00	\$2,022.00
Reimbursement	\$967.00	\$1,087.00	\$1,207.00
Compliance	\$228.00	\$228.00	\$228.00
SEWER (\$/meter equiv):			
Improvement	\$2,721.00	\$2,721.00	\$2,721.00
Reimbursement	\$976.00	\$1,111.00	\$1,246.00
Compliance	\$112.00	\$112.00	\$112.00
STORMWATER			
Single family (\$/dwelling unit)	\$608.73	\$608.73	\$608.73
All other (\$/sf impervious)	\$0.20	\$0.20	\$0.20

Table 46

APPENDIX

Census Data Used to Determine Persons per Household 2006-2010 American Community Survey 5-Year Estimates Table B25024 Plus summary				
	Number of Units	Total Units Occupied	Total Vacant Units	Total Population in Occupied Units
Total	60,180	56,580	3,600	
1, detached	36,208	34,526	1,682	98,904
1, attached	2,450	2,427	23	
2	1,685	1,634	51	12,493
3 or 4	3,621	3,331	290	
5 to 9	5,178	4,783	395	23,139
10 to 19	2,942	2,338	604	
20 to 49	1,834	1,739	95	
50 or more	2,765	2,596	169	
Mobile home	3,450	3,159	291	
Boat, RV, van, etc.	3,450	3,159	291	6,034
	47	47	0	56

Table A-1

Census Data Used to Determine Persons per Unit Household size by unit in structure				
Units	Population	Units	Persons per Unit	Weighted for Group
Single Family / Duplex				
1, detached or attached:	94,827	36,953	2.566	
2	4,193	1,634	2.566	
Multunits				
3 or 4	7,559	3,331	2.269	2.035
5 to 19	15,120	7,121	2.123	
20 to 49	2,932	1,739	1.686	
50 or more	4,480	2,596	1.726	
Mobile home, boat, RV, van, etc.	5,909	3,206	1.843	

Table A-2. Source: 2006-2010 American Community Survey 5-Year Estimates

Parks SDC Analysis Nonresidential Employee Density Estimation	
	2035
Retail	
Square feet	12,480,673
Net Acres	955
Employees	39,388
Employees / 1,000 sf	3.2
Employees / net acre	
Retail	41
Industrial	20
Office & Commercial Services	36
Employees / Sq. Ft	
Industrial	1.5
Office & Commercial Services	2.8
<i>Estimated by Comp Plan Designation</i>	
Industrial	1.5
Commercial (avg of retail and office & services)	3.0
Public (office)	2.8

Table A-3. Source: Salem Economic Opportunities Analysis Rep

Transportation			
ITE LAND USE CODE	LAND USE	TRIP LENGTH FACTOR	LINKED TRIP FACTOR
21	Commercial Airport	1.00	1.00
22	General Aviation Airport	1.00	1.00
30	Intermodal Truck Terminal	1.00	1.00
90	Park-and-Ride Lot with Bus or Light Rail Service	1.00	1.00
110	General Light Industrial	1.00	1.00
130	Industrial Park	1.00	1.00
140	Manufacturing	1.00	1.00
150	Warehousing	1.00	1.00
151	Mini-Warehouse	0.47	1.00
154	High-Cube Transload and Short-Term Storage Warehouse	1.00	1.00
155	High-Cube Fulfillment Center Warehouse	1.00	1.00
156	High-Cube Parcel Hub Warehouse	1.00	1.00
157	High-Cube Cold Storage Warehouse	1.00	1.00

Table A-4

Transportation			
ITE LAND USE CODE	LAND USE	TRIP LENGTH FACTOR	LINKED TRIP FACTOR
160	Data Center	1.00	1.00
170	Utility	1.00	1.00
180	Specialty Trade Contractor	1.00	1.00
210	Single-Family Detached Housing	1.00	1.00
220	Multifamily Housing (Low-Rise)	0.97	1.00
221	Multifamily Housing (Mid-Rise)	0.97	1.00
222	Multifamily Housing (High-Rise)	0.97	1.00
225	Off-Campus Student Apartment	0.97	1.00
231	Mid-Rise Residential with 1st-Floor Commercial	TBD	TBD
232	High-Rise Residential with 1st-Floor Commercial	TBD	TBD
240	Mobile Home Park	0.97	1.00
251	Senior Adult Housing-Detached	0.95	1.00
252	Senior Adult Housing-Attached	0.95	1.00
253	Congregate Care Facility	0.95	1.00
254	Assisted Living	0.95	1.00
255	Continuing Care Retirement Community	0.95	1.00
260	Recreational Homes	1.00	1.00
265	Timeshare	1.00	1.00
270	Residential Planned Unit Development	0.97	1.00
310	Hotel	0.69	0.75
311	All Suites Hotel	0.69	0.75
312	Business Hotel	0.69	0.75
320	Motel	0.69	0.75
330	Resort Hotel	0.69	0.75
411	Public Park	0.90	1.00
416	Campground/Recreational Vehicle Park	0.90	1.00
420	Marina	0.91	1.00
430	Golf Course	0.91	1.00
431	Miniature Golf Course	0.91	1.00
432	Golf Driving Range	0.91	1.00
433	Batting Cages	0.91	1.00
434	Rock Climbing Gym	0.91	1.00
435	Multipurpose Recreational Facility	0.91	1.00
436	Trampoline Park	0.91	1.00
437	Bowling Alley	0.51	1.00
440	Adult Cabaret	1.00	1.00
444	Movie Theater	0.46	1.00
445	Multiplex Movie Theater	0.46	1.00

Table A-4

Transportation			
ITE LAND USE CODE	LAND USE	TRIP LENGTH FACTOR	LINKED TRIP FACTOR
452	Horse Racetrack	0.91	1.00
453	Automobile Racetrack	1.00	1.00
454	Dog Racetrack	0.90	1.00
460	Arena	1.00	1.00
462	Professional Baseball Stadium	1.00	1.00
465	Ice Skating Rink	0.90	1.00
466	Snow Ski Area	1.00	1.00
470	Bingo Hall	0.91	1.00
473	Casino/Video Lottery Establishment	0.91	1.00
480	Amusement Park	0.90	1.00
482	Water Slide Park	1.00	1.00
488	Soccer Complex	0.51	1.00
490	Tennis Courts	0.51	1.00
491	Racquet/Tennis Club	0.51	1.00
492	Health/Fitness Club	0.51	1.00
493	Athletic Club	0.51	1.00
495	Recreational Community Center	0.91	1.00
501	Military Base	1.00	1.00
520	Elementary School	1.00	1.00
522	Middle School/Junior High School	1.00	1.00
530	High School	1.00	1.00
534	Private School (K-8)	1.00	1.00
536	Private School (K-12)	1.00	1.00
537	Charter Elementary School	1.00	1.00
538	School District Office	0.96	1.00
540	Junior/Community College	1.00	1.00
550	University/College	1.00	1.00
560	Church	1.00	1.00
561	Synagogue	1.00	1.00
562	Mosque	1.00	1.00
565	Day Care Center	0.23	1.00
566	Cemetery	1.00	1.00
571	Prison	1.00	1.00
575	Fire and Rescue Station	0.96	1.00
580	Museum	1.00	1.00
590	Library	0.49	1.00
610	Hospital	0.95	1.00
620	Nursing Home	0.95	1.00

Table A-4

Transportation			
ITE LAND USE CODE	LAND USE	TRIP LENGTH FACTOR	LINKED TRIP FACTOR
630	Clinic	0.53	1.00
640	Animal Hospital/Veterinary Clinic	0.53	1.00
650	Free-Standing Emergency Room	0.95	1.00
710	General Office Building	0.65	1.00
712	Small Office Building	0.65	1.00
714	Corporate Headquarters Building	0.65	1.00
715	Single Tenant Office Building	0.65	1.00
720	Medical-Dental Office Building	0.53	1.00
730	Government Office Building	0.96	1.00
731	State Motor Vehicles Department	0.96	1.00
732	United States Post Office	0.96	1.00
733	Government Office Complex	0.96	1.00
750	Office Park	0.67	1.00
760	Research and Development Center	0.67	1.00
770	Business Park	0.67	1.00
810	Tractor Supply Store	0.60	0.75
811	Construction Equipment Rental Store	0.60	0.75
812	Building Materials and Lumber Store	0.49	0.75
813	Free Standing Discount Superstore	0.49	0.75
814	Variety Store	0.49	0.75
815	Free-Standing Discount Store	0.49	0.75
816	Hardware/Paint Store	0.49	0.75
817	Nursery (Garden Center)	0.49	0.75
818	Nursery (Wholesale)	0.65	0.75
820	Shopping Center (<50 KSF)	0.31	0.28
820	Shopping Center (50-100 KSF)	0.33	0.50
820	Shopping Center (100-200 KSF)	0.40	0.61
820	Shopping Center (200-300 KSF)	0.49	0.67
820	Shopping Center (300-400 KSF)	0.49	0.71
820	Shopping Center (400-500 KSF)	0.49	0.73
820	Shopping Center (>500 KSF)	0.49	0.80
823	Factory Outlet Center	0.49	0.75
840	Automobile Sales (New)	0.60	0.75
841	Automobile Sales (Used)	0.60	0.75
842	Recreational Vehicles Sales	0.60	0.75
843	Automobile Parts Sales	0.60	0.75
848	Tire Store	0.60	0.75

Table A-4

Transportation			
ITE LAND USE CODE	LAND USE	TRIP LENGTH FACTOR	LINKED TRIP FACTOR
849	Tire Superstore	0.60	0.75
850	Supermarket	0.14	0.46
851	Convenience Market	0.08	0.35
853	Convenience Market with Gasoline Pumps	0.32	0.22
854	Discount Supermarket	0.14	0.46
857	Discount Club	0.60	0.75
858	Farmers Market	0.49	0.75
860	Wholesale Market	1.00	1.00
861	Sporting Goods Superstore	0.49	0.75
862	Home Improvement Superstore	0.49	0.75
863	Electronics Superstore	0.49	0.75
864	Toy/Children's Superstore	0.49	0.75
865	Baby Superstore	0.49	0.75
866	Pet Supply Superstore	0.49	0.75
867	Office Supply Superstore	0.49	0.75
868	Book Superstore	0.49	0.75
869	Discount Home Furnishing Superstore	0.49	0.75
872	Bed and Linen Superstore	0.49	0.75
875	Department Store	0.49	0.75
876	Apparel Store	0.49	0.75
879	Arts and Crafts Store	0.49	0.75
880	Pharmacy/Drugstore w/o Drive-Thru	0.49	0.75
881	Pharmacy/Drugstore w/ Drive-Thru	0.49	0.75
882	Marijuana Dispensary	0.08	0.35
890	Furniture Store	0.49	0.75
895	Beverage Container Recycling Depot	1.00	1.00
897	Medical Equipment Store	0.49	0.75
899	Liquor Store	0.14	0.46
911	Walk-in Bank	0.17	0.55
912	Drive-in Bank	0.17	0.55
918	Hair Salon	0.53	1.00
920	Copy, Print and Express Ship Store	0.49	0.75
925	Drinking Place	0.65	1.00
926	Food Cart Pod	0.19	0.75
930	Fast Casual Restaurant	0.19	0.75
931	Quality Restaurant	0.65	0.75
932	High-Turnover (Sit-Down) Restaurant	0.19	0.75

Table A-4

Transportation			
ITE LAND USE CODE	LAND USE	TRIP LENGTH FACTOR	LINKED TRIP FACTOR
933	Fast-Food w/o Drive-Thru	0.09	0.75
934	Fast-Food w/ Drive-Thru	0.09	0.51
935	Fast-Food w/ Drive-Thru and No Seating	0.09	0.51
936	Coffee/Donut w/o Drive-Thru	0.09	0.75
937	Coffee/Donut w/ Drive-Thru (and Seating)	0.09	0.51
938	Coffee/Donut w/ Drive-Thru and No Seating	0.09	0.51
939	Bread/Donut/Bagel w/o Drive-Thru	0.09	0.75
940	Bread/Donut/Bagel w/ Drive-Thru	0.09	0.51
941	Quick Lubrication Vehicle Shop	0.65	0.75
942	Automobile Care Center	0.60	0.75
943	Automobile Parts and Service Center	0.60	0.75
944	Gasoline Station	0.07	0.77
945	Gasoline Station w/ Conv Market	0.07	0.77
947	Self-Service Car Wash	0.60	0.75
948	Automated Car Wash	0.60	0.75
949	Car Wash and Detail Center	0.60	0.75
950	Truck Stop	1.00	1.00
960	Super Convenience Market/Gas Station	0.32	0.22
970	Winery	0.65	0.75
COS-022	Hangar	1.00	1.00
COS-610	Salem Hospital Campus Rate	0.95	1.00
COS-840	Salem Car Dealer	0.60	0.75

Table A-4

Table A-4

Campus Trip Rate

Definitions

1. **Campus.**

An existing multi-building facility within a defined boundary. The facility will typically be in single ownership and will house a variety of buildings for various purposes, for an overall singular purpose. For example, a college campus will have a wide variety of buildings within a campus all for the overall singular purpose of teaching. A Campus does not include a shopping center, office, or business park.

2. **Equivalent Length New Daily Trip (ELNDT).**

The trip generation for a given land use type as determined from using *Trip Generation* and modified by the adopted Trip Length and Linked Trip factors. The ELNDT is used to calculate the TSDC.

3. **Trip Generation**

The City's adopted database for trip generation information. Trip Generation is a document published by the Institute of Transportation, and periodically updated. The current Council-adopted version is the 6th edition.

Background

The City of Salem's TSDC methodology, adopted in 1995, and published in 2012, uses the Institute of Transportation Engineer's *Trip Generation* for determining the base trips for proposed development. These trips are then adjusted with factors for Trip Length and Linked Trips, resulting in an Equivalent Length New Daily Trip (ELNDT), and the ELNDT is what is used to calculate the TSDC.

Trip Generation is the professionally-accepted source for estimating the trip generation characteristics of land uses. It provides a variety of independent variables (employees, students, beds, acres square feet, dwelling units, etc.) upon which to estimate the trip generation of the proposed development. The City prefers using independent variables that can be easily verified at the time of building permit issuance—such as square feet or dwelling unit—so that no further verification is needed.

Trip Generation has its limitations, however. One such limitation is its use when a proposed expansion of a campus is proposed. Often, entities propose expansion of a campus' physical plant with no attendant increase in the service population of the campus (hospital beds, students, etc.). In other words, as in the case of a college campus, additional square footage is proposed but no additional students are planned. In these cases, it is understood that some additional trips will be generated by the new building, but not as many as if it were being developed as a free-standing facility. The purpose of the proposed new methodology is to allow campuses to determine an average overall trip rate for their facility and then apply it to proposed new buildings.

Methodolgy

The Methodology for calculating the TSDC for a campus shall be based upon the following. All data collection and analysis must be completed by a professional engineer registered in the State of Oregon. Acceptance of the data, analysis and proposed Campus Trip Rate will at the sole discretion of the Public Works Director.

Campus Boundary

The TSDC methodology will only be applicable within the defined boundary of the campus.

Trip Length Factor

A single composite trip length factor (TLF) and a single composite average daily trip rate (ADTR) shall be used to determine the equivalent length net daily trips (ELNDT) for any change in the amount of available floor space. A single composite trip length for the Campus is calculated according to the following equation:

$$TLF = \frac{\sum_{LU=1}^n ITE_{LU} GSF_{LU} TLF_{LU}}{\sum_{LU=1}^n ITE_{LU} GSF_{LU}}$$

WHERE,

- ITE_{LU} = The average daily trip rate for ITE Land Use Code "LU", as defined in the latest edition of Trip Generation, and where Land Use Code "LU" identifies a specific land use type existent on the hospital campus (for example, Hospital, Medical Office Building, and General Office). This variable is expressed in terms of average daily trip ends generated per thousand gross square feet of floor area.
- GSF_{LU} = The gross square feet of floor area, expressed in thousands, that is available on Campus and associated with ITE Land Use Code "LU".
- TLF_{LU} = The trip length factor associated with Land Use Code "LU", as defined in City's TSDC methodology as it was specified in March 2007.

Average Daily Trip Rate

A single average daily trip rate for the Campus is calculated according to the following equation:

$$ADTR = \frac{V_{obs}}{\sum_{LU=1}^n GSF_{LU}}$$

WHERE,

V_{obs} = The average daily total number of vehicle trip ends observed to enter and exit the Campus. V_{obs} is the result of actual field observation, and ideally represents the average of 24-hour observations on at least three mid-week days. However, it can also be estimated from mid-week day p.m. peak hour observations if 24-hour mid-week day observations are not available.

GSF_{LU} = The gross square feet of floor area, expressed in thousands, that is available on Campus and associated with ITE Land Use Code "LU".

Transportation System Development Charge

The single composite trip length factor and the single composite average daily trip rate that result from these calculations are used, together with the dollar charge per trip as established in the most current edition of City's TSDC methodology, to determine the appropriate charge or credit associated with construction or demolition of any building floor space located inside the Campus boundaries. This calculation is performed according to the following equation:

$$TSDC = (CPT)(TLF)(ADTR)(GSF_{add})$$

WHERE,

TSDC = Transportation System Development Charge (dollars).

CPT = Transportation system development charge per trip (dollars), as defined in the most current edition of City's TSDC methodology.

TLF = Composite trip length factor, calculated according to Equation (1).

ADTR = Composite average daily trip rate, calculated according to Equation (2) and expressed in terms of average daily trips per thousand gross square feet of floor area.

GSF_{Add} = The total gross square feet of floor space, expressed in thousands, that is being either added or demolished inside the hospital campus boundaries. This variable is a positive number if floor space is being added, and it is a negative number if floor space is being demolished.

Implementation

Upon acceptance of the Campus Trip Rate, the City will enter into an agreement with the entity for using the Campus Trip Rate for all new development within the campus.

Duration

The Campus Trip Rate will be effective on the date it is adopted and be effective for a minimum of five years. The property owner will be solely responsible for updating the Campus Rate after five years. If the Campus Trip Rate is not updated, it will automatically expire on December 31 st of the seventh year of its adoption.

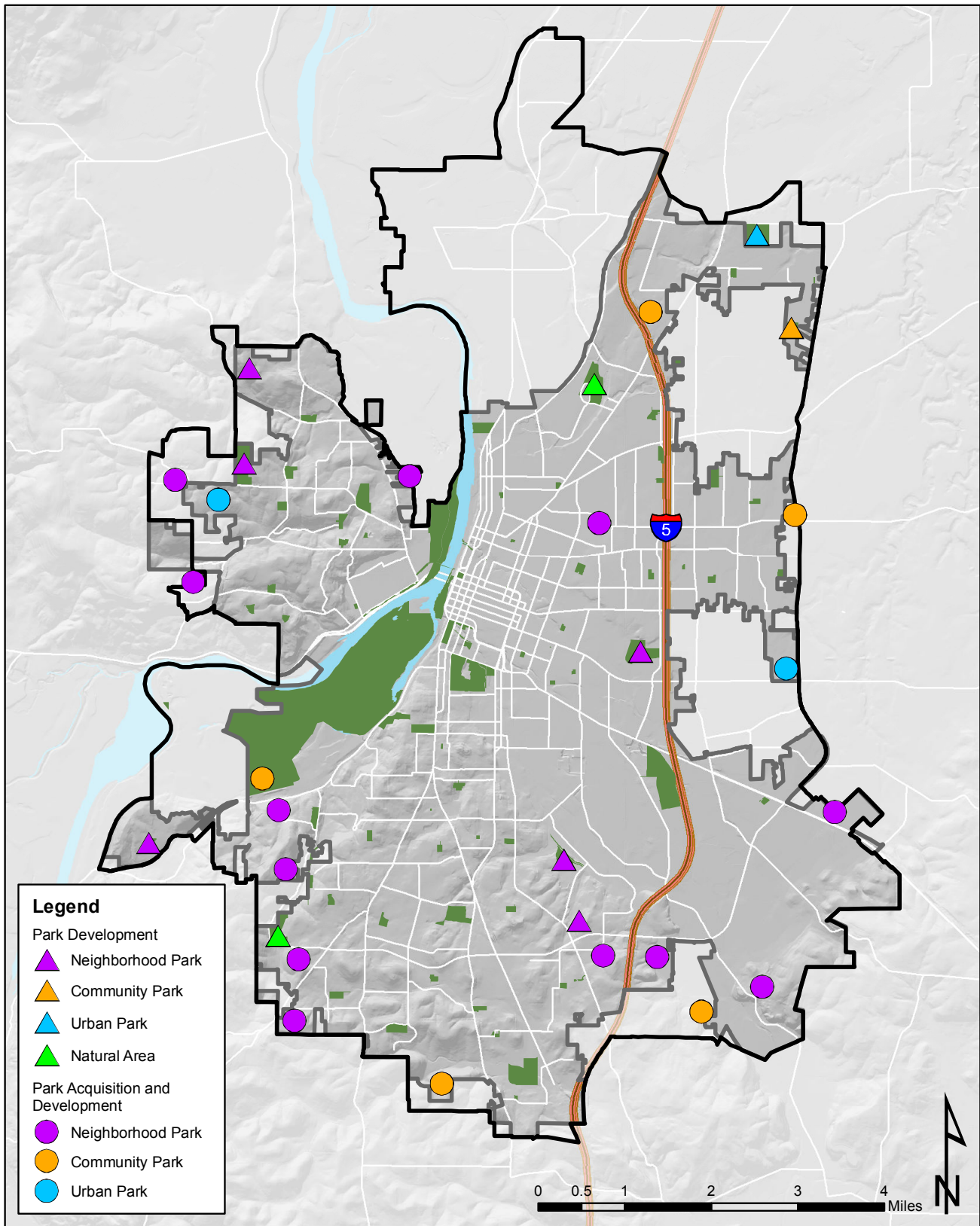
Updates

The property owner will be responsible for providing the City with updated information required to create the Campus Trip Rate, specifically the average daily vehicle trip ends (V obs) and the gross square feet of campus floor area (GSF LU). The updates shall be prepared in a form acceptable to City's Public Works Director by a professional traffic engineer registered in the State of Oregon.

Notice

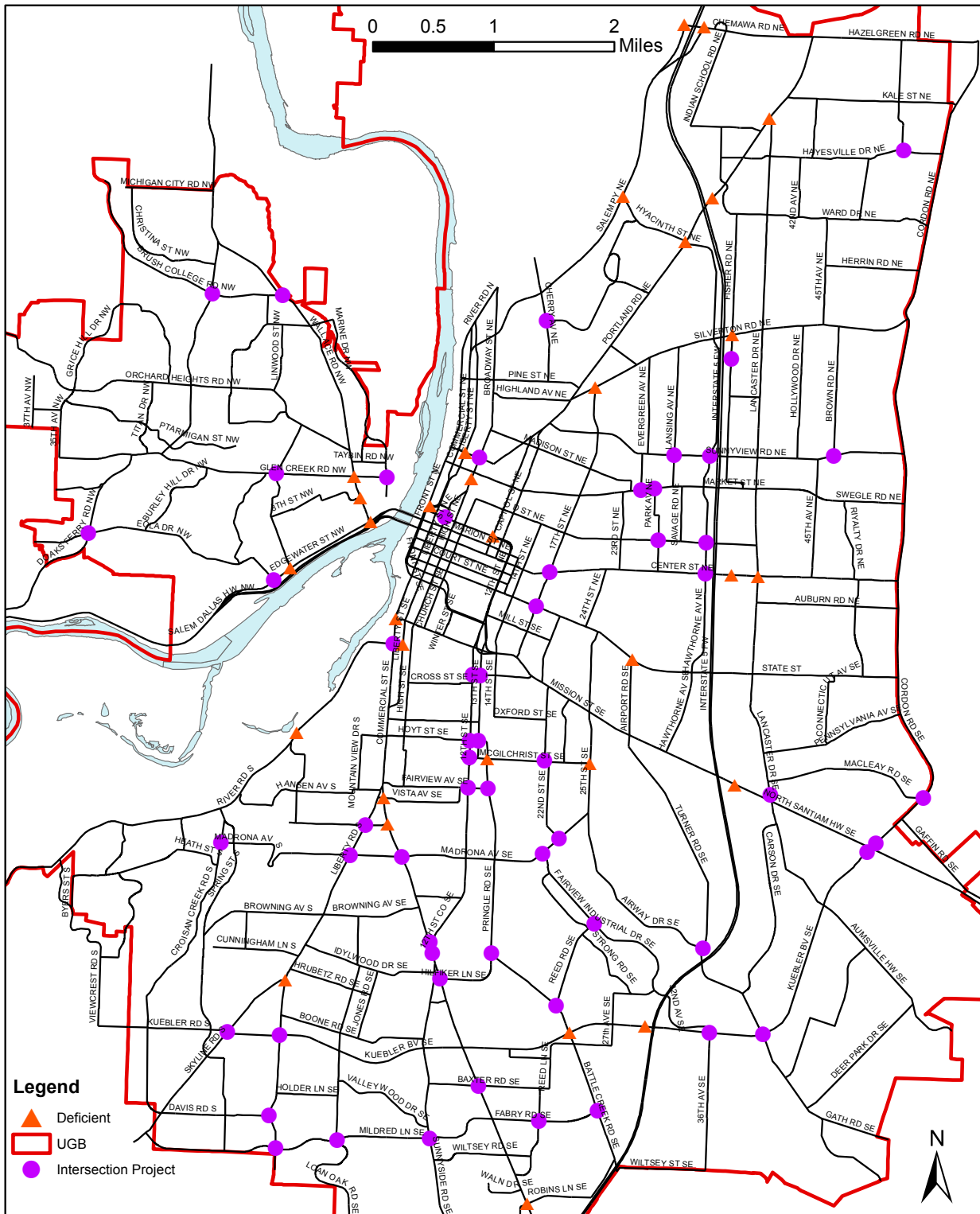
The City will publish the Campus Trip Rate in its TSDC methodology with its expiration date,

Figure 2



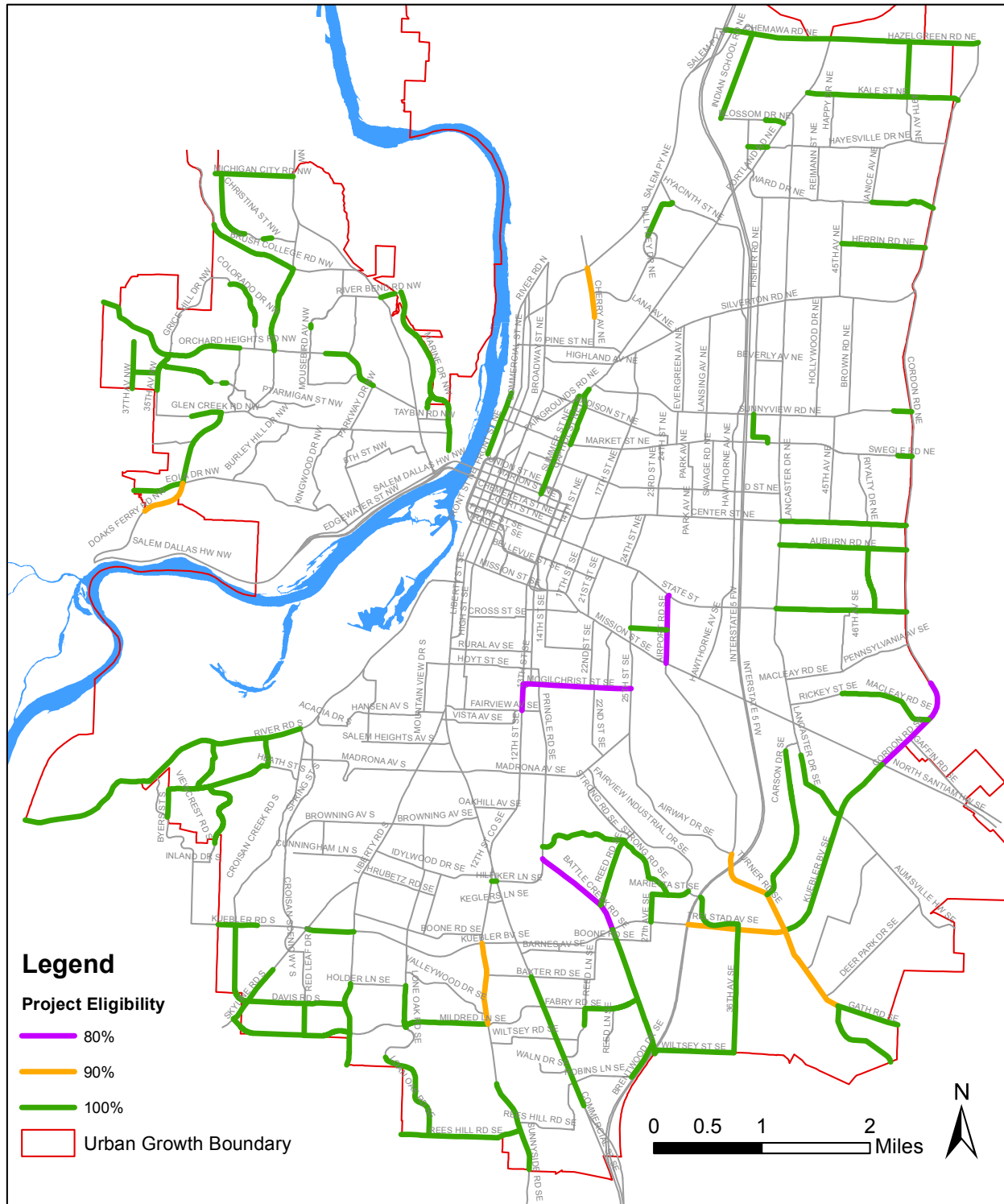
Park SDC Project Map

Figure 3



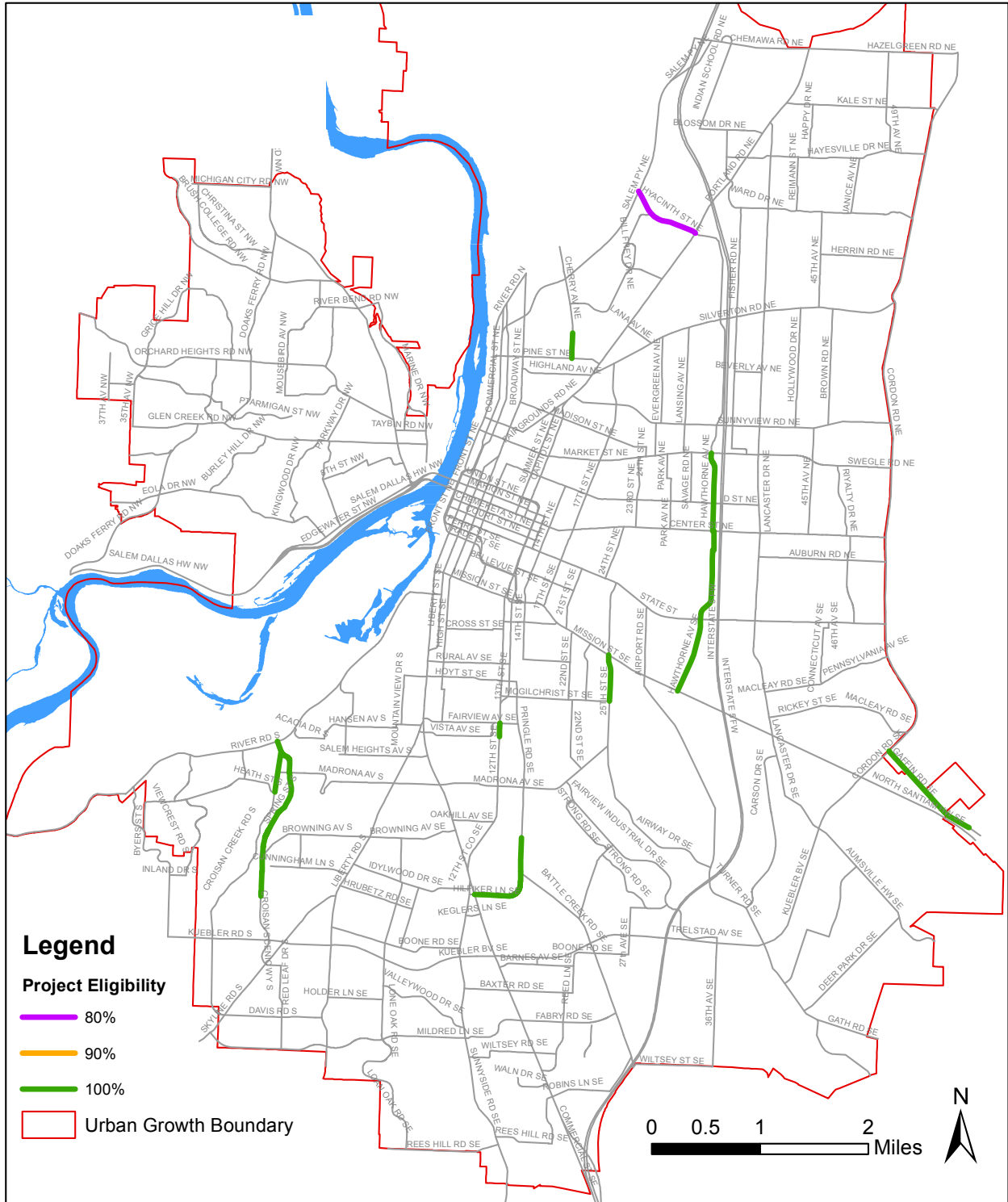
TSDC 309 List Intersection Projects Majority Opinion

Figure 4



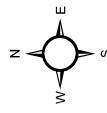
TSDC 309 List Corridor Projects Majority Opinion

Figure 5



TSDC 309 List Additional Projects Minority Opinion

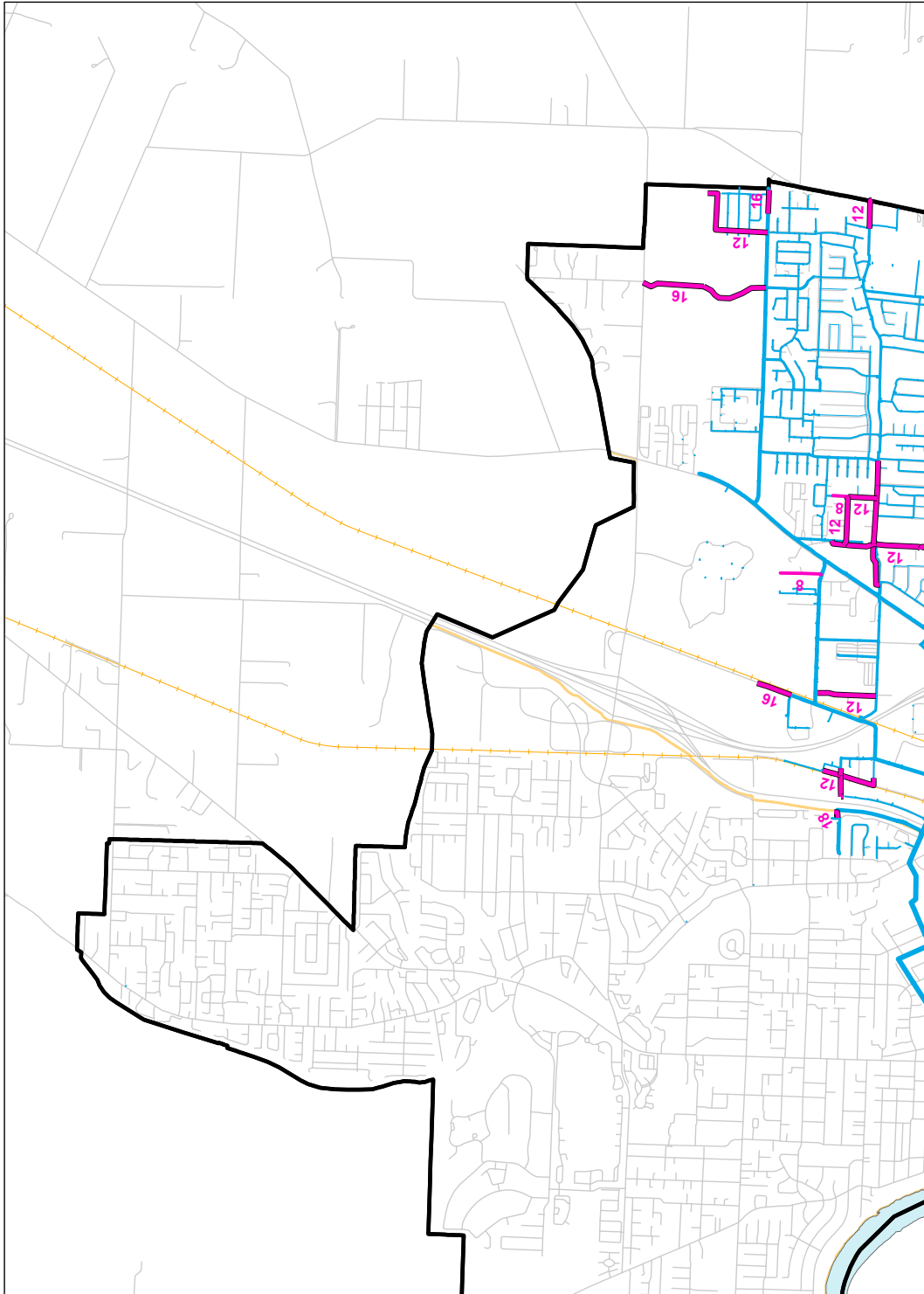
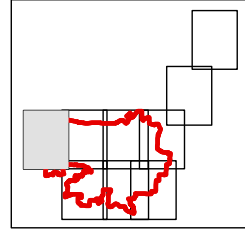
City of Salem
Water SDC
309 List Map
Water System
Master Plan
Oct 2018



Strategic Planning Section
 Public Works Department, City of Salem

Legend
Future Water Facilities (309 List)

- ▲ PWS
 - ▲ Pump Station
 - Reservoir
 - ⊕ Treatment Facility
 - ⊕ Well
 - ⊕ Existing Water Reservoir
 - ⊕ Existing Water Pump Station
- Future Water Pipes (309 List)**
- Diameter:**
 6" and Smaller
 Greater than 6" and Less than 24"
 24" and Larger

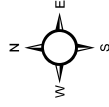


Sheet 1

City of Salem

Water SDC 309 List Map

Water System Master Plan Oct 2018



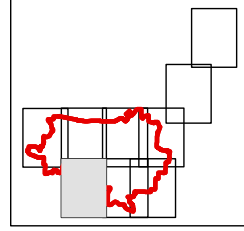
0 1,200 2,400 Feet

Strategic Planning Section
Public Works Department, City of Salem

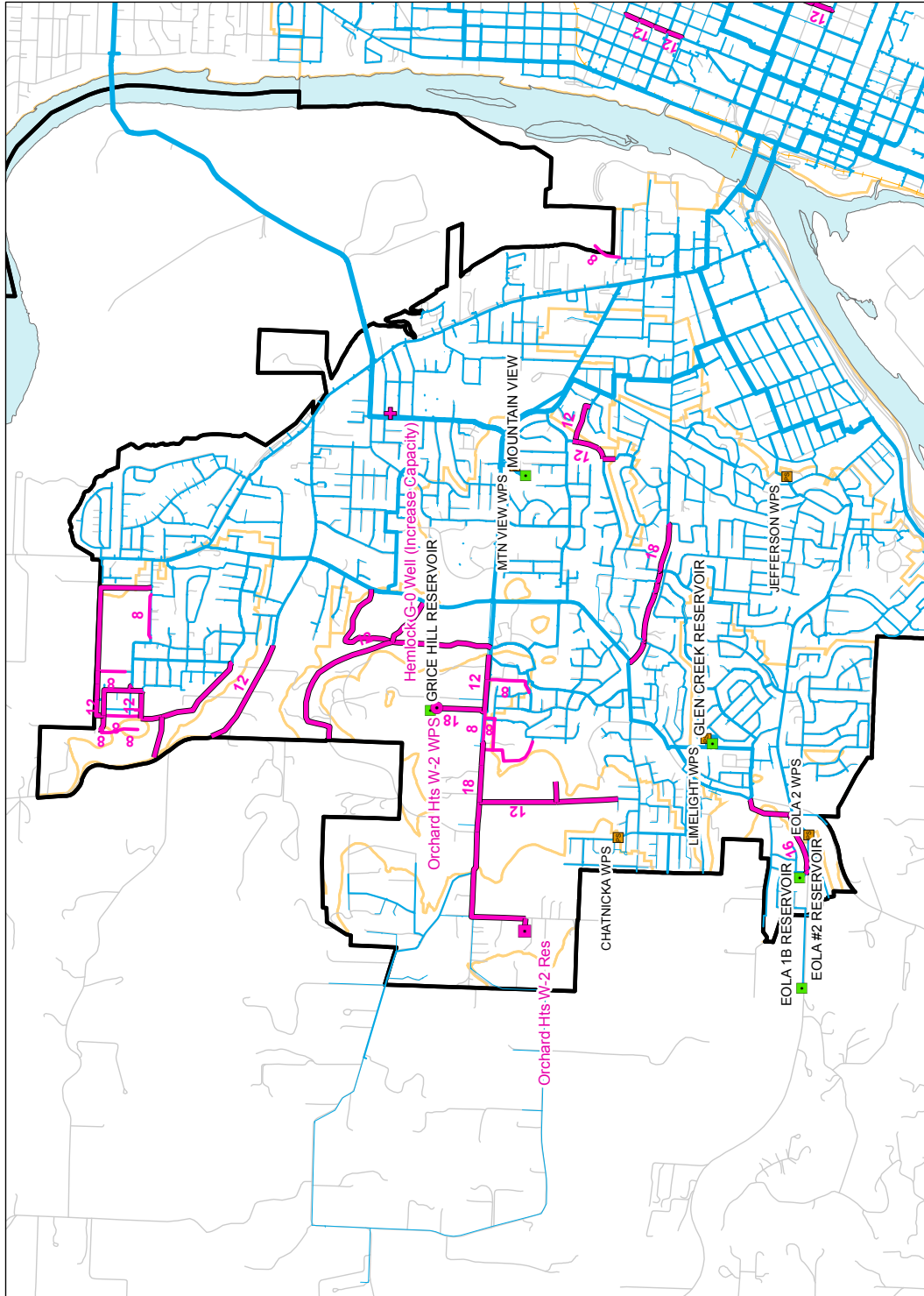
Legend

Future Water Facilities (309 List)

- Facility Type
- Private
- Pump Station
- Reservoir
- Treatment Facility
- Well
- Existing Water Reservoir
- Existing Water Pump Station
- Future Water Pump Station
- Future Water Pipe (309 List)
- Greater than 6" and Less than 24"
- 24" and Larger
- Lots



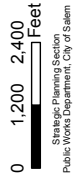
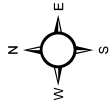
Sheet 2



City of Salem

Water SDC 309 List Map

Water System Master Plan Oct 2018

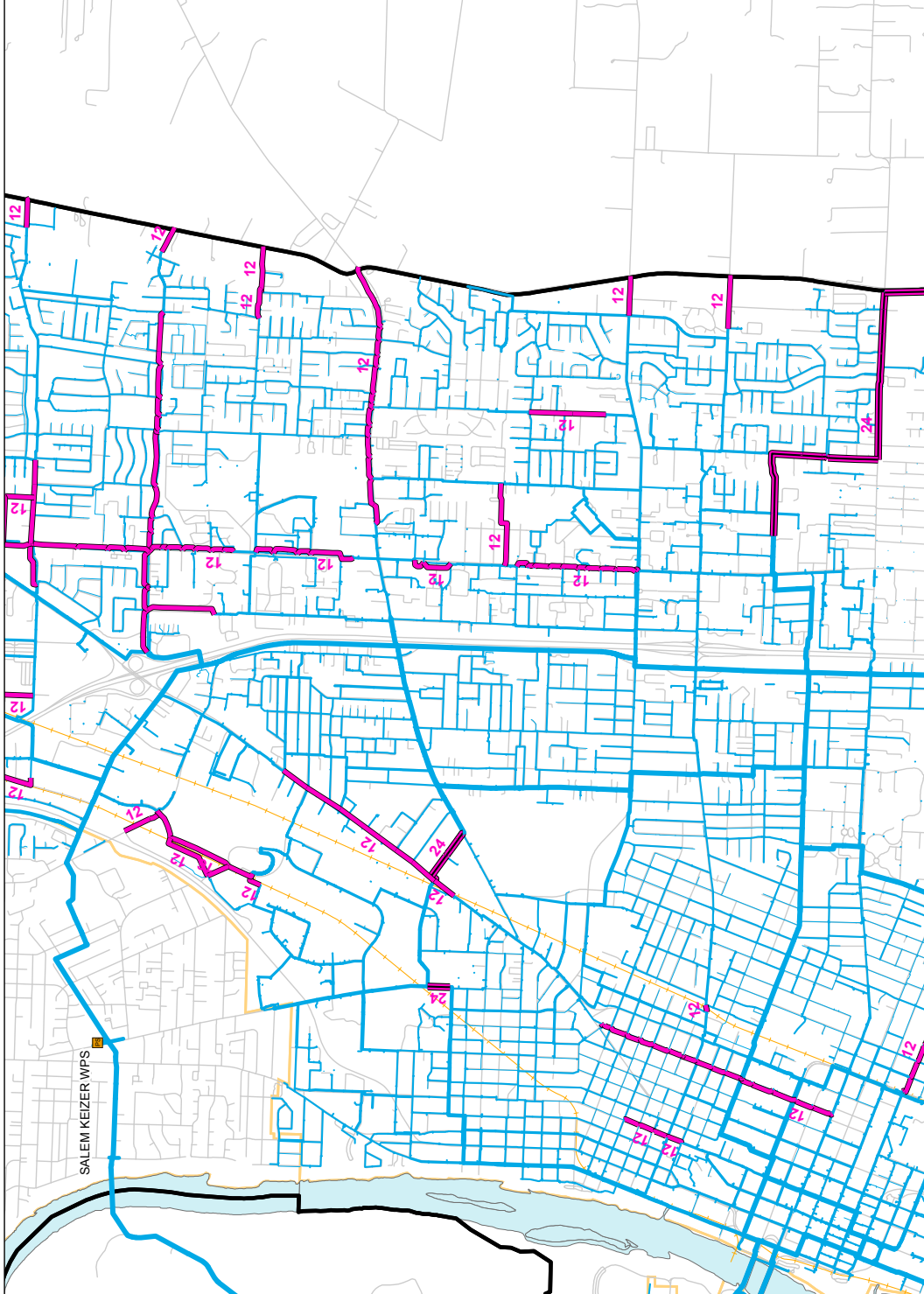
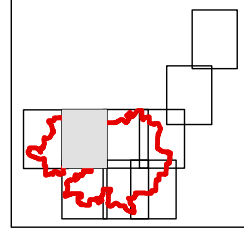


Strategic Planning Section
Public Works Department, City of Salem

Legend

Future Water Facilities (309 List)

- Facility Type
- PRV
- Pump Station
- Reservoir
- Treatment Facility
- WWT
- Energy Water Reservoir
- Energy Water Pump Station
- Future Water Pipes (309 List)
- Diameter
- 8" or Smaller
- Greater than 8" and Less than 24"
- 24" and Larger
- USB

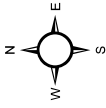


Sheet 3

City of Salem

Water SDC 309 List Map

Water System Master Plan Oct 2018

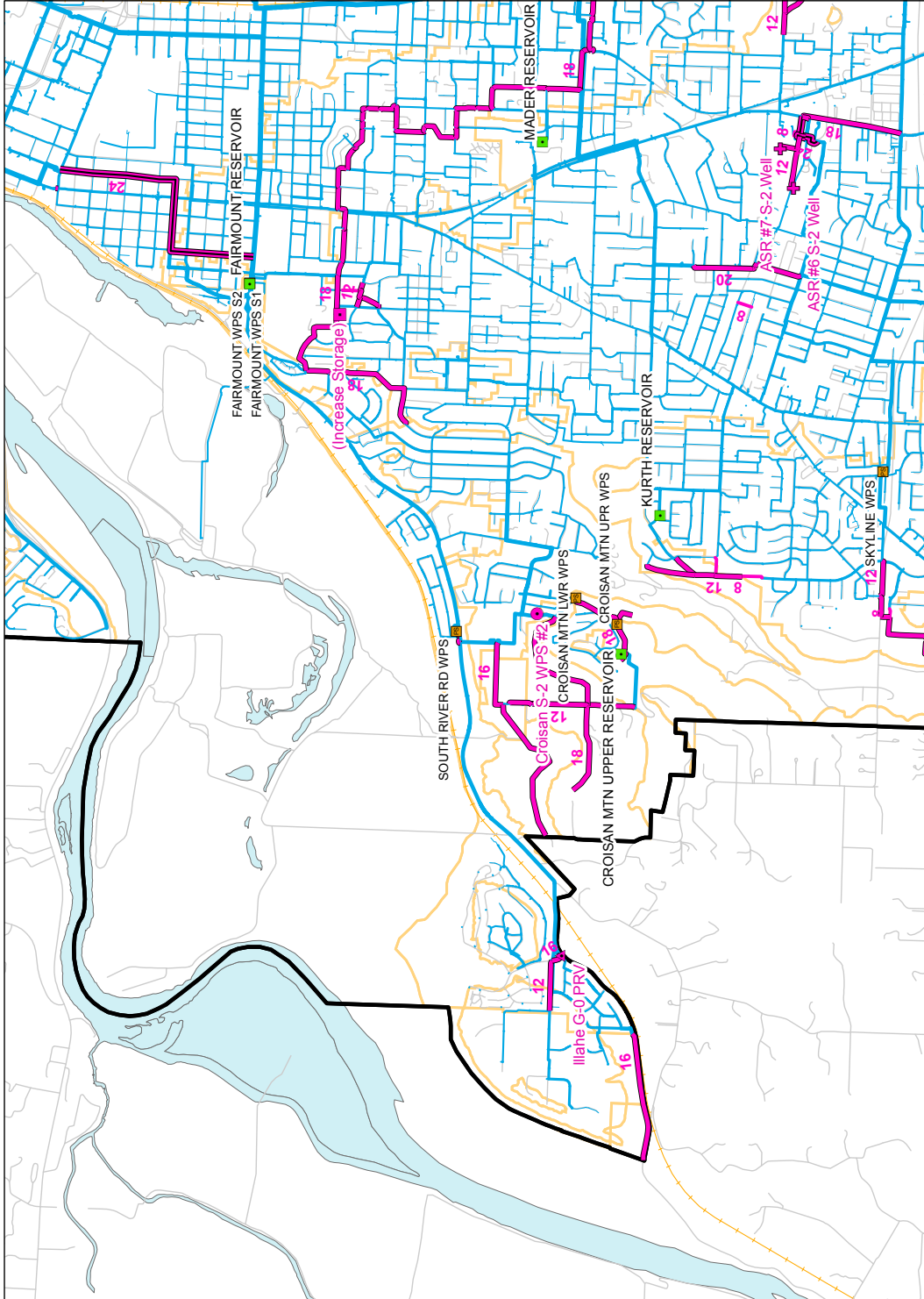
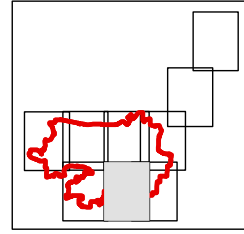


Strategic Planning Section
Public Works Department, City of Salem

Legend

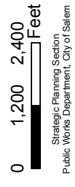
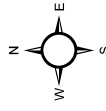
Future Water Facilities (309 List)

- Facility Type
- PRV
- Pump Station
- Reservoir
- Treatment Facility
- WWT
- Existing Water Resource
- Existing Water Pump Station
- Future Water Pipes (309 List)
- Diameter
- 8" and Smaller
- Greater than 8" and Less than 24"
- 24" and Larger
- CSB



Sheet 4

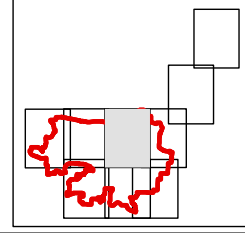
City of Salem
Water SDC
309 List Map
Water System
Master Plan
Oct 2018



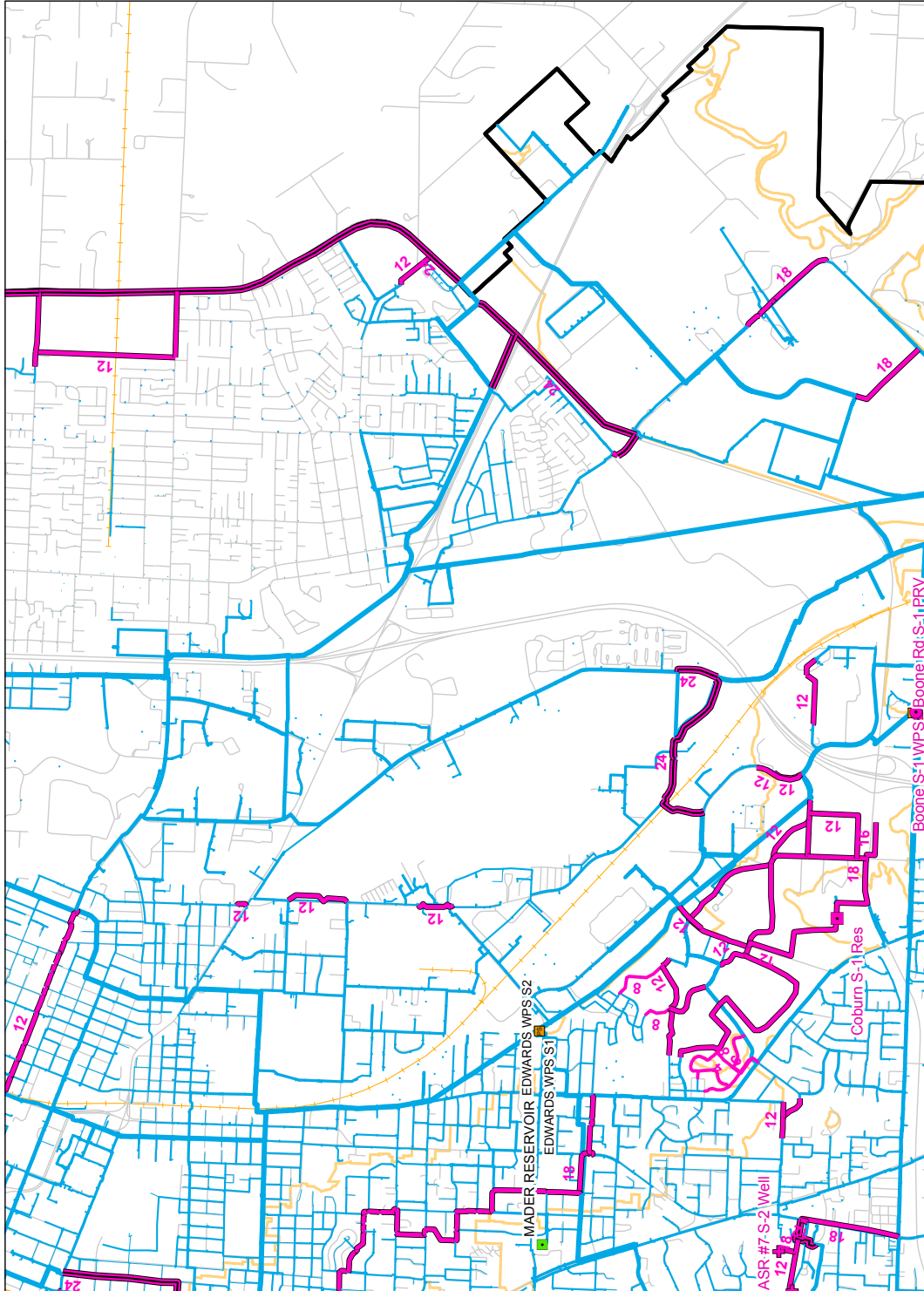
Staff: Planning Services
 Public Works Department, City of Salem

Legend
Future Water Facilities (309 List)

- Facility Type**
- PRV
 - Pump Station
 - Reservoir
 - Treatment Facility
 - Well
 - Existing Water Reservoir
 - Existing Water Pump Station
- Future Water Pipes (309 List)**
- 8" and Larger
 - 12" and Larger
 - 18" and Larger
 - 24" and Larger
 - UGB



Sheet 5

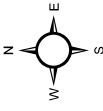


City of Salem

Water SDC

309 List Map

Water System
Master Plan
Oct 2018

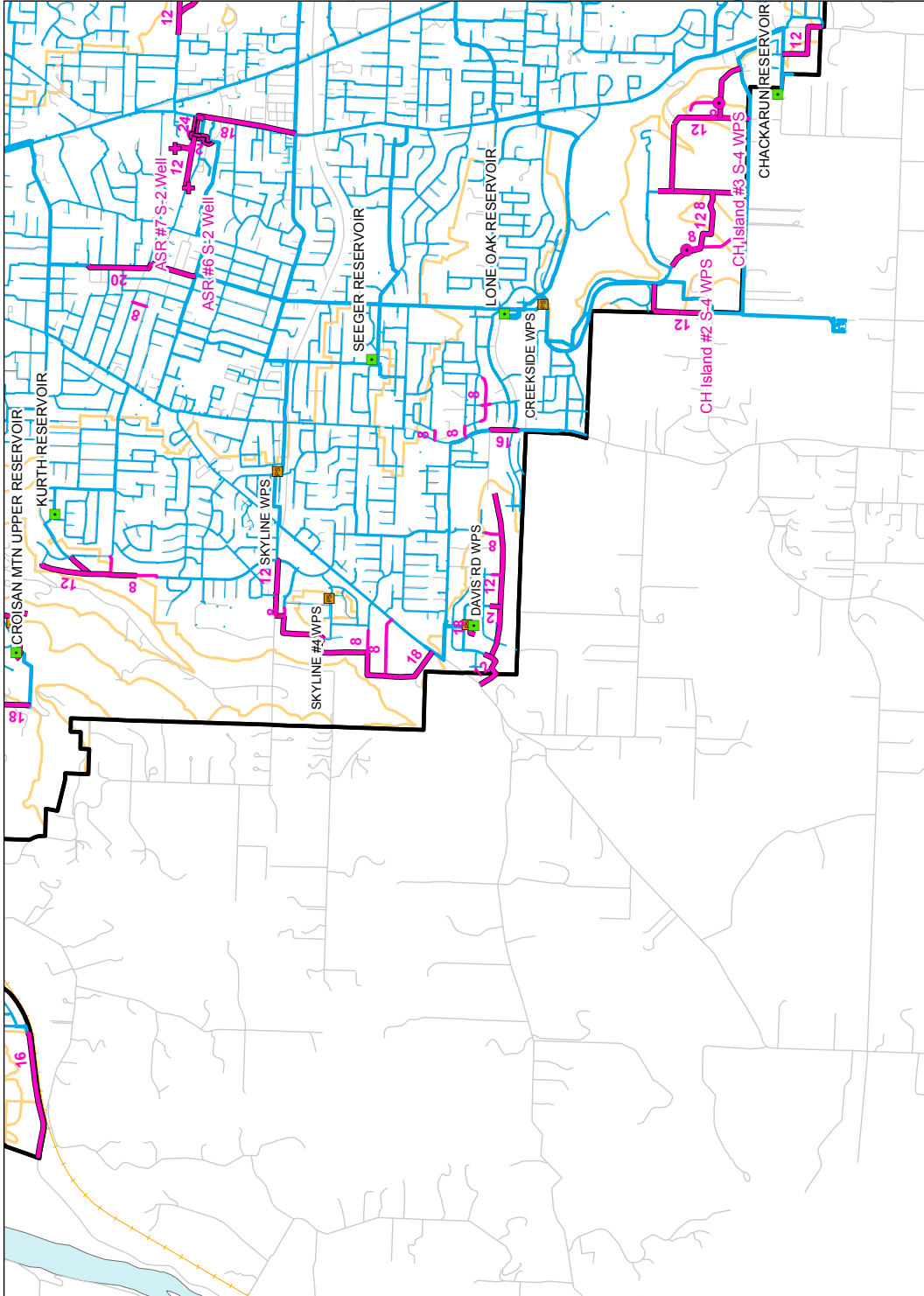
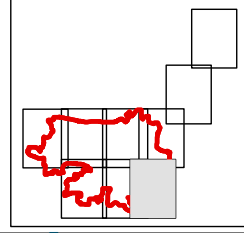


Strategic Planning Section
Public Works Department, City of Salem

Legend

Future Water Facilities (309 List)

- Feeder Type
- PKV
- Pump Station
- Reservoir
- Treatment Facility
- Well
- Electric Water Reservoir
- Electric Water Pump Station
- Future Water Pipe (309 List)
- Diameter
- 8" and Smaller
- Greater than 8" and Less than 24"
- 24" and Larger
- Other

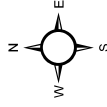


Sheet 6

City of Salem

Water SDC 309 List Map

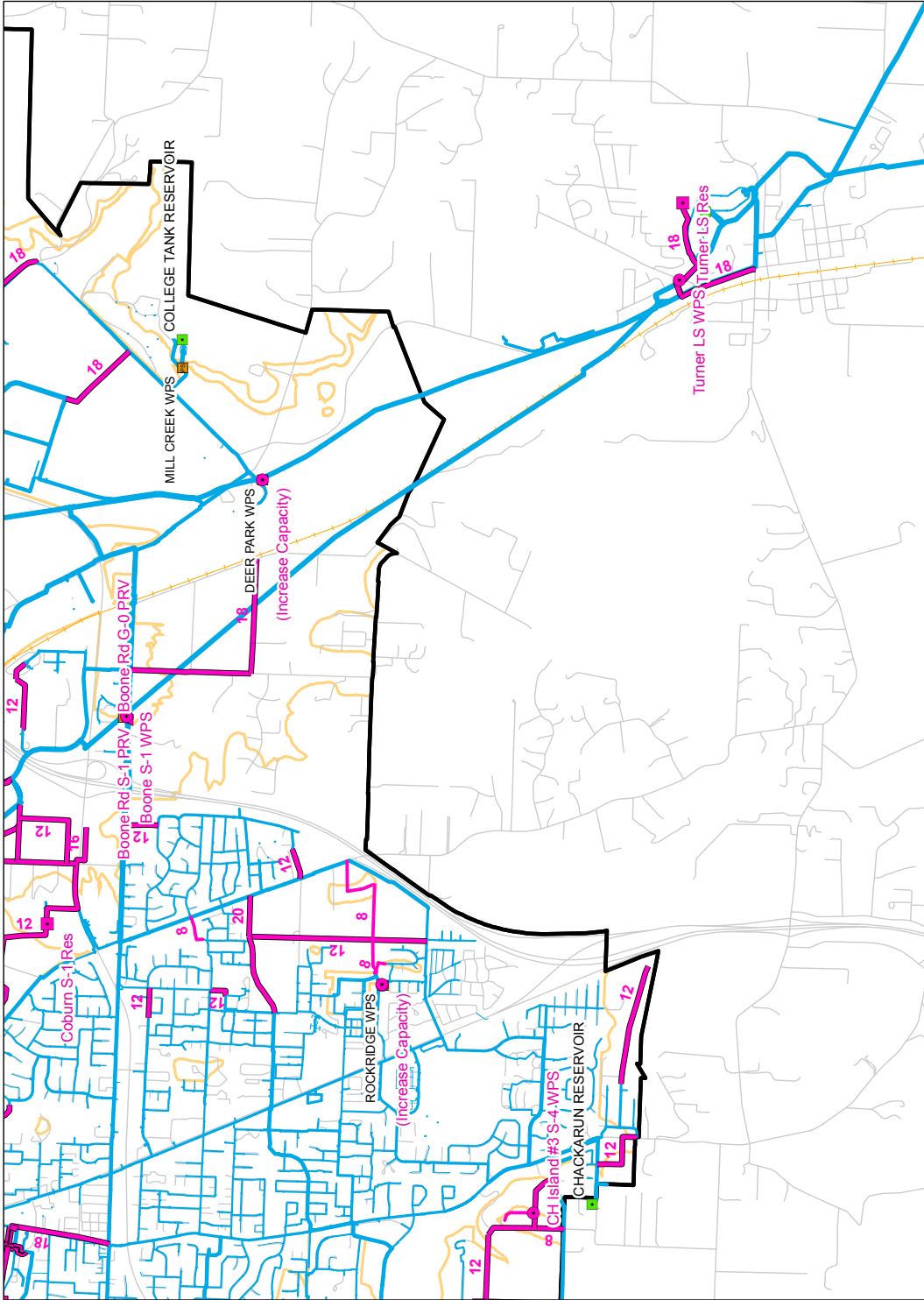
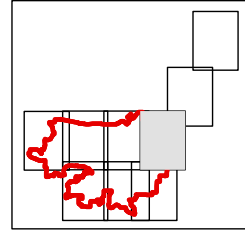
Water System Master Plan Oct 2018



0 1,200 2,400 Feet
 Strategic Planning Section
 Public Works Department, City of Salem

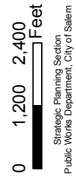
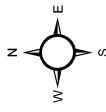
Legend

- Future Water Facilities (309 List)**
- PRV
 - Pump Station
 - Reservoir
 - Treatment Facility
 - Well
 - Existing Water Reserve
 - Existing Water Pump Station
- Future Water Pipes (309 List)**
- Diameter
- Greater than 36" and less than 42"
 - 24" and larger
 - 30"



Sheet 7

City of Salem
 Water SDC
 309 List Map
 Water System
 Master Plan
 Oct 2018

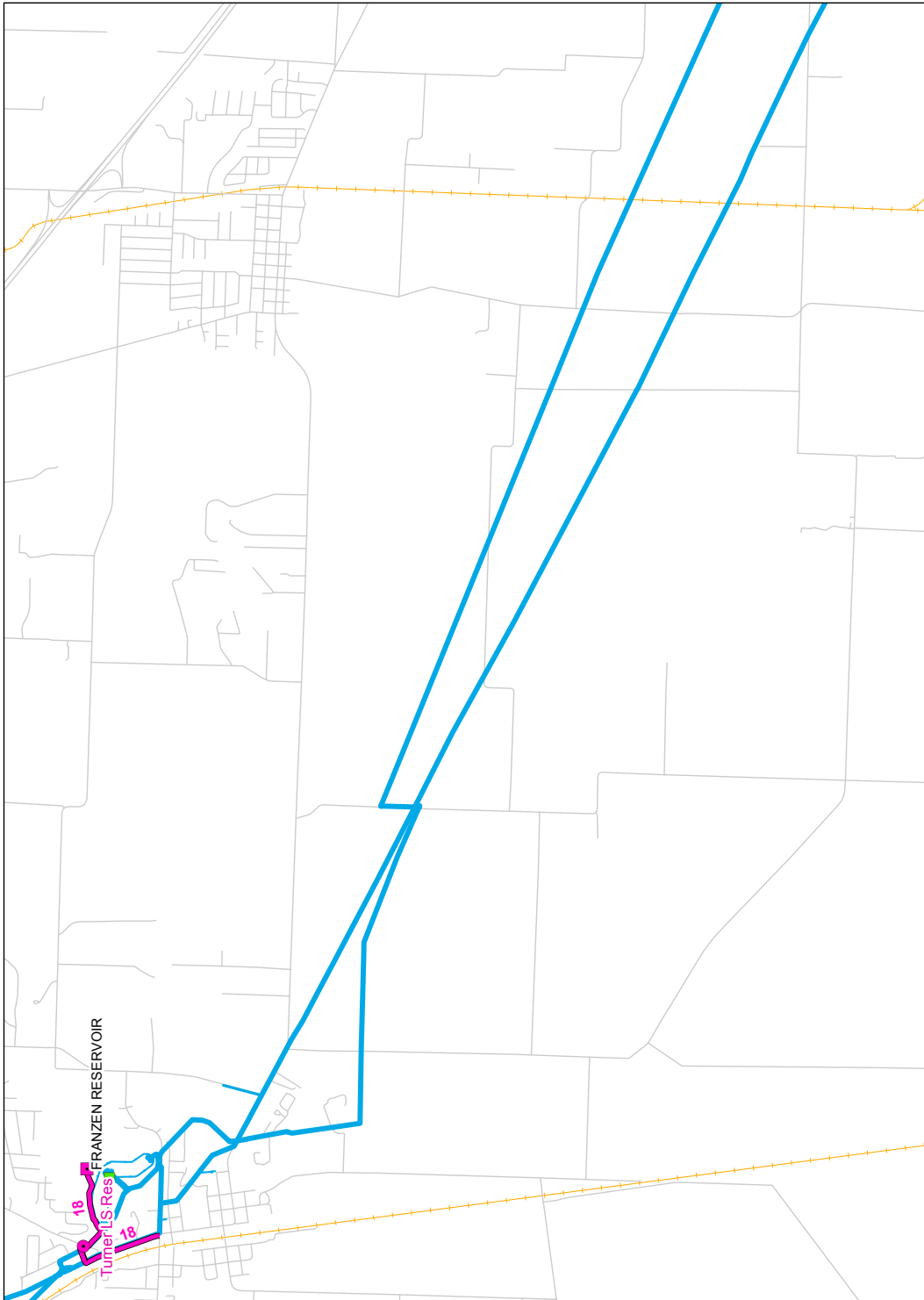
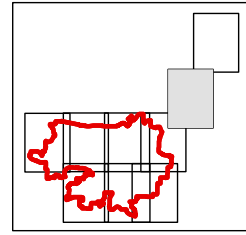


Strategic Planning Section
 Public Works Department, City of Salem

Legend

Future Water Facilities (309 List)

- Facility Type
- ▲ FRV
- Pump Station
- Reservoir
- Treatment Facility
- Well
- Existing Water Reservoir
- Existing Water Pump Station
- Future Water Pipes (309 List)**
- Diameter
- 24" and Smaller
- Greater than 24" (shown in blue)
- 18" and Larger
- 12" and Larger

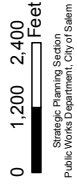
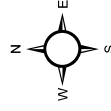


Sheet 8

City of Salem

Water SDC 309 List Map

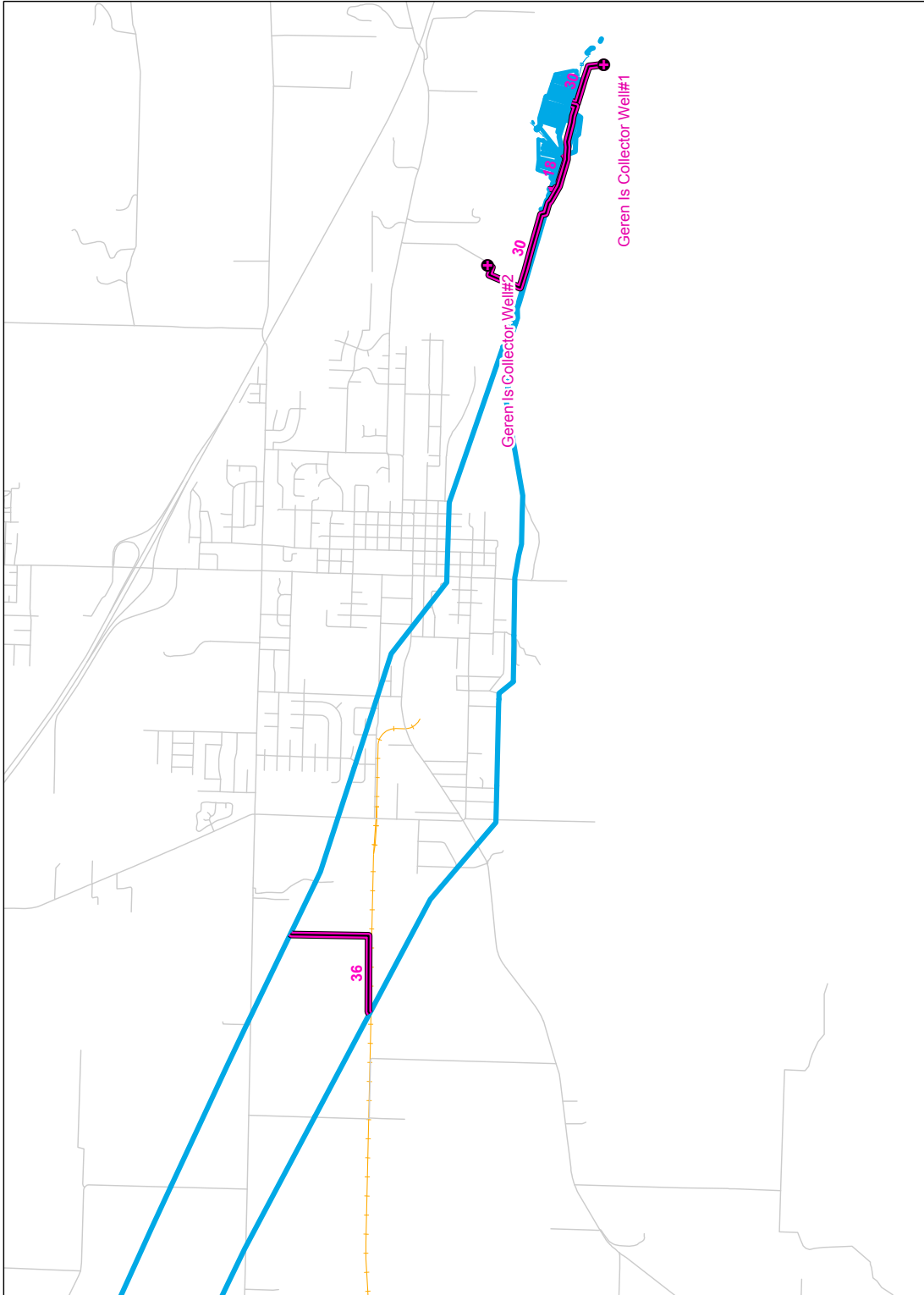
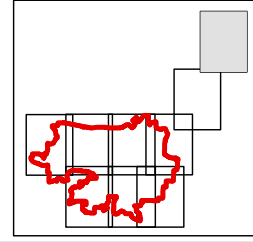
Water System Master Plan Oct 2018



Strategic Planning Section
Public Works Department, City of Salem

Legend

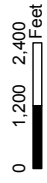
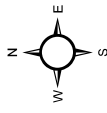
- Future Water Facilities (309 List)**
- Facility Type
 - Pump Station
 - Reservoir
 - Treatment Facility
 - Well
 - Existing Water Reservoir
 - Existing Water Pump Station
- Future Water Pipes (309 List)**
- Dimension and Material
 - Open from 8" and Less than 24"
 - 24" and Larger
 - 308



Sheet 9

Wastewater 309-List Maps

City of Salem
Sewer SDC
309 List Map
Sewer System
Master Plan
Oct 2018



Strategic Planning Section
 Public Works Department, City of Salem

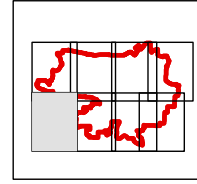
Legend

Future Sewer Facilities (309 List)

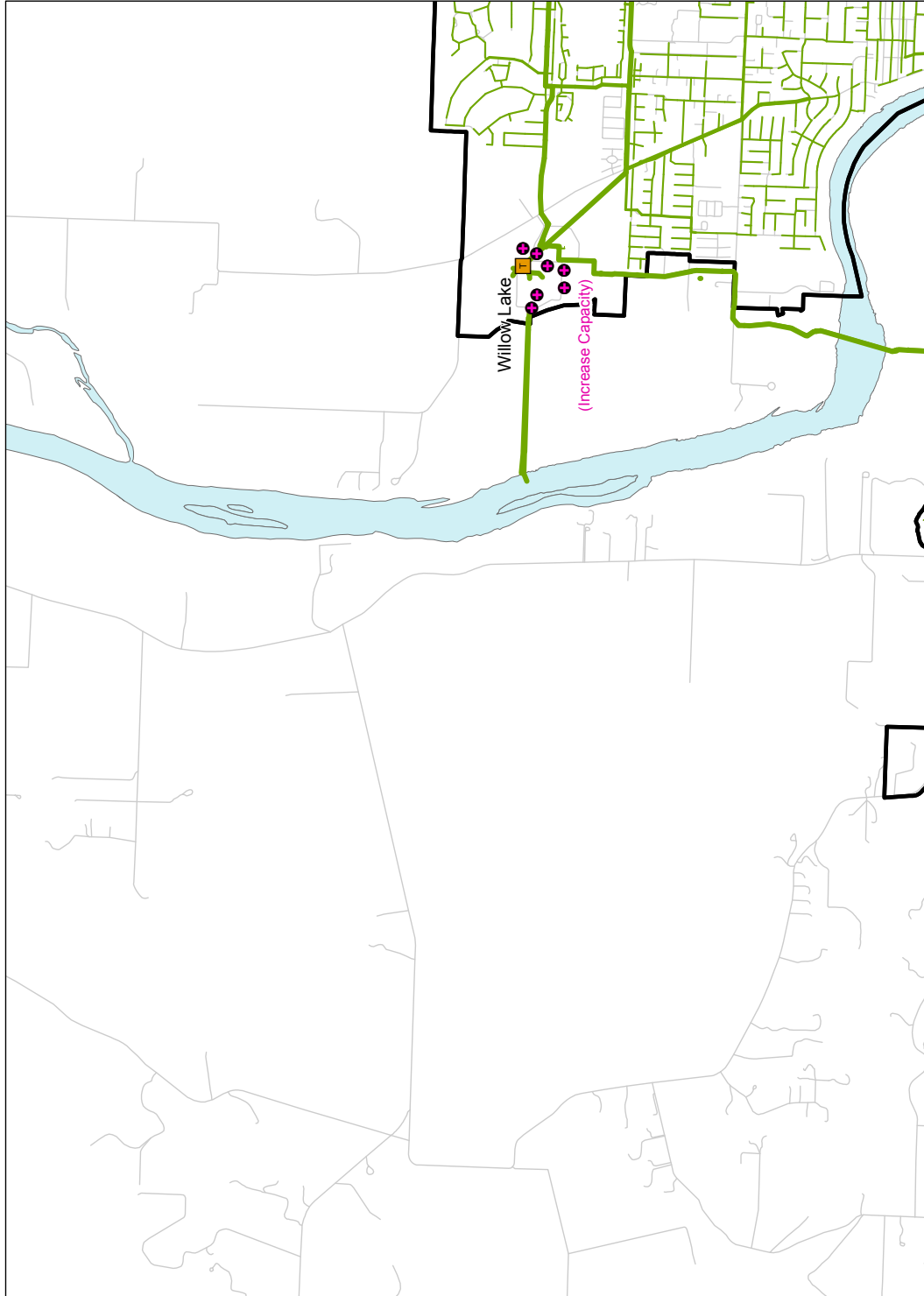
- Pump Station
- Treatment Facility
- Existing Treatment Facility
- Existing Sewer Pump Station
- Future Sewer Pump Station

Future Sewer Pipes (309 List)

- 8" and Smaller
- Greater than 8" and Less than 21"
- 21" and Larger
- UGB



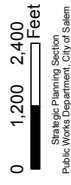
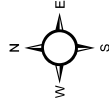
Sheet 1



City of Salem

Sewer SDC 309 List Map

Sewer System Master Plan Oct 2018

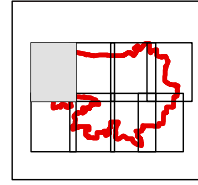


Strategic Planning Section
Public Works Department, City of Salem

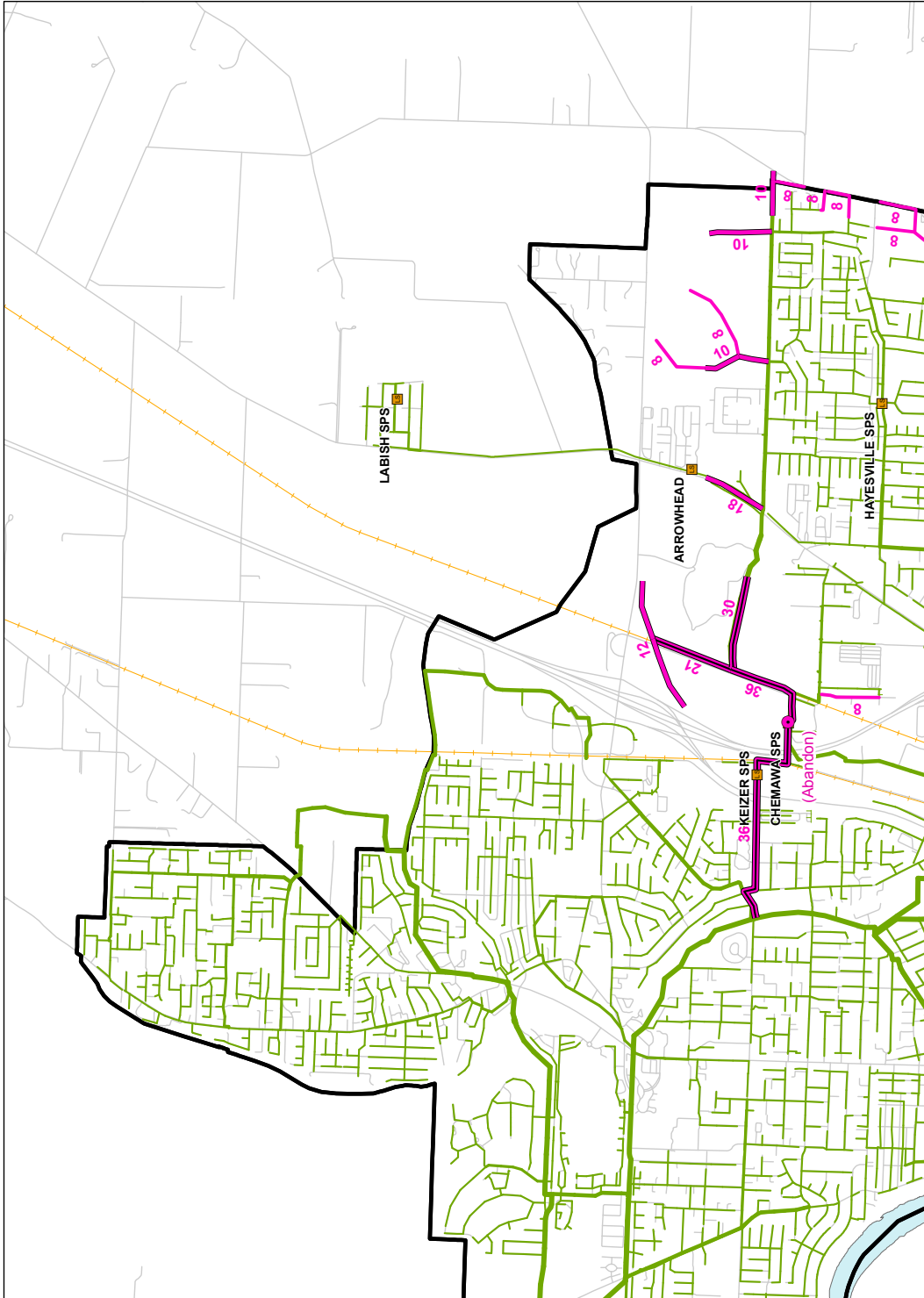
Legend

Future Sewer Facilities (309 List)

- Facility Type**
- Pump Station
 - Treatment Facility
 - Existing Treatment Facility
 - Existing Sewer Pump Station
- Future Sewer Pipes (309 List)**
- Diameter**
- 8" and Smaller
 - Greater than 8" and Less than 21"
 - 21" and Larger



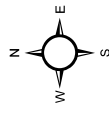
Sheet 2



City of Salem

Sewer SDC 309 List Map

Sewer System Master Plan Oct 2018

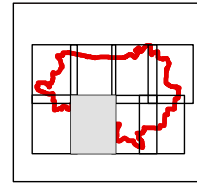


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 Strategic Planning Section
 Public Works Department, City of Salem

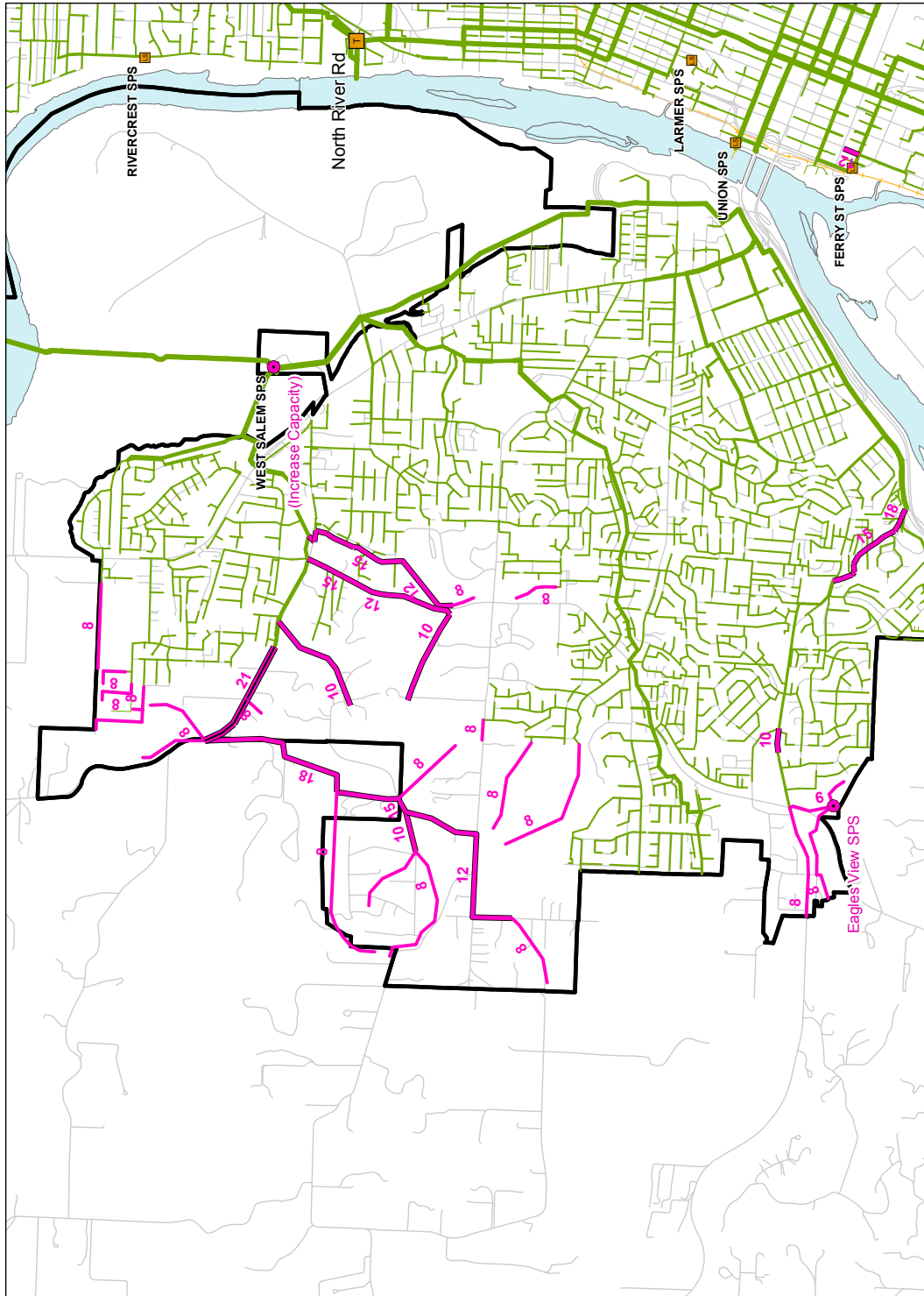
Legend

Future Sewer Facilities (309 List)

- Facility Type**
- Pump Station
- Treatment Facility
- Existing Treatment Facility
- Existing Sewer Pump Station
- Future Sewer Pipes (309 List)
- Diameter**
- 8" and Smaller
- Greater than 8" and Less than 21"
- 21" and Larger
- UGB



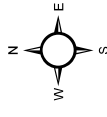
Sheet 3



City of Salem

Sewer SDC 309 List Map

Sewer System Master Plan Oct 2018

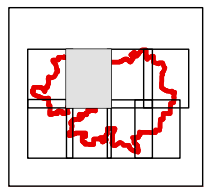


0 1,200 2,400 Feet
 Strategic Planning Section
 Public Works Department, City of Salem

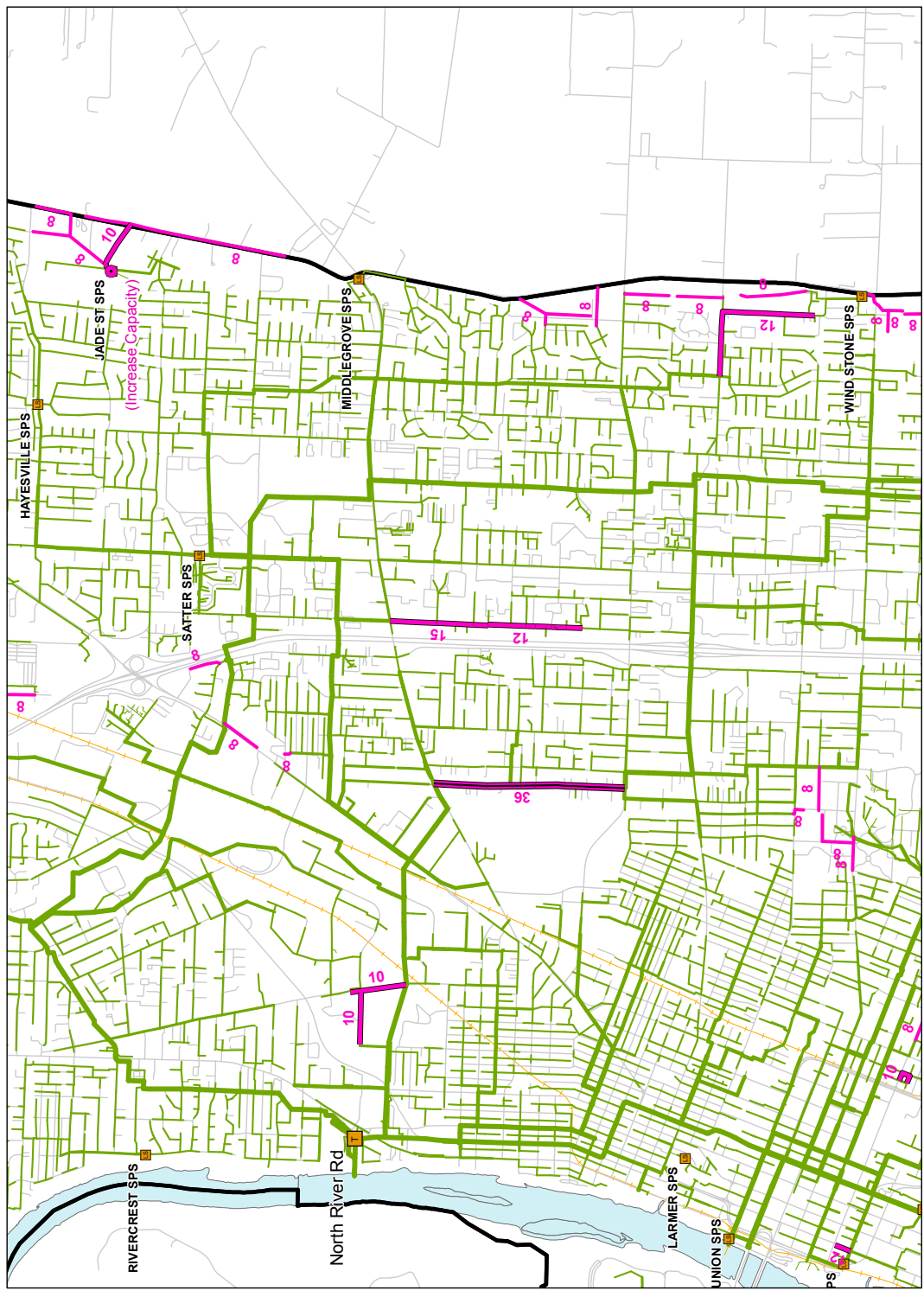
Legend

Future Sewer Facilities (309 List)

- Facility Type
 - Pump Station
 - Treatment Facility
- Existing Treatment Facility
 - Existing Sewer Pump Station
- Future Sewer Pipes (309 List)
 - Diameter
 - 8" and Smaller
 - Greater than 8" and Less than 21"
 - 21" and Larger
 - UGB



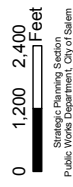
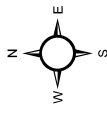
Sheet 4



City of Salem

Sewer SDC 309 List Map

Sewer System Master Plan Oct 2018

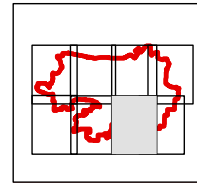


Strategic Planning Section
Public Works Department, City of Salem

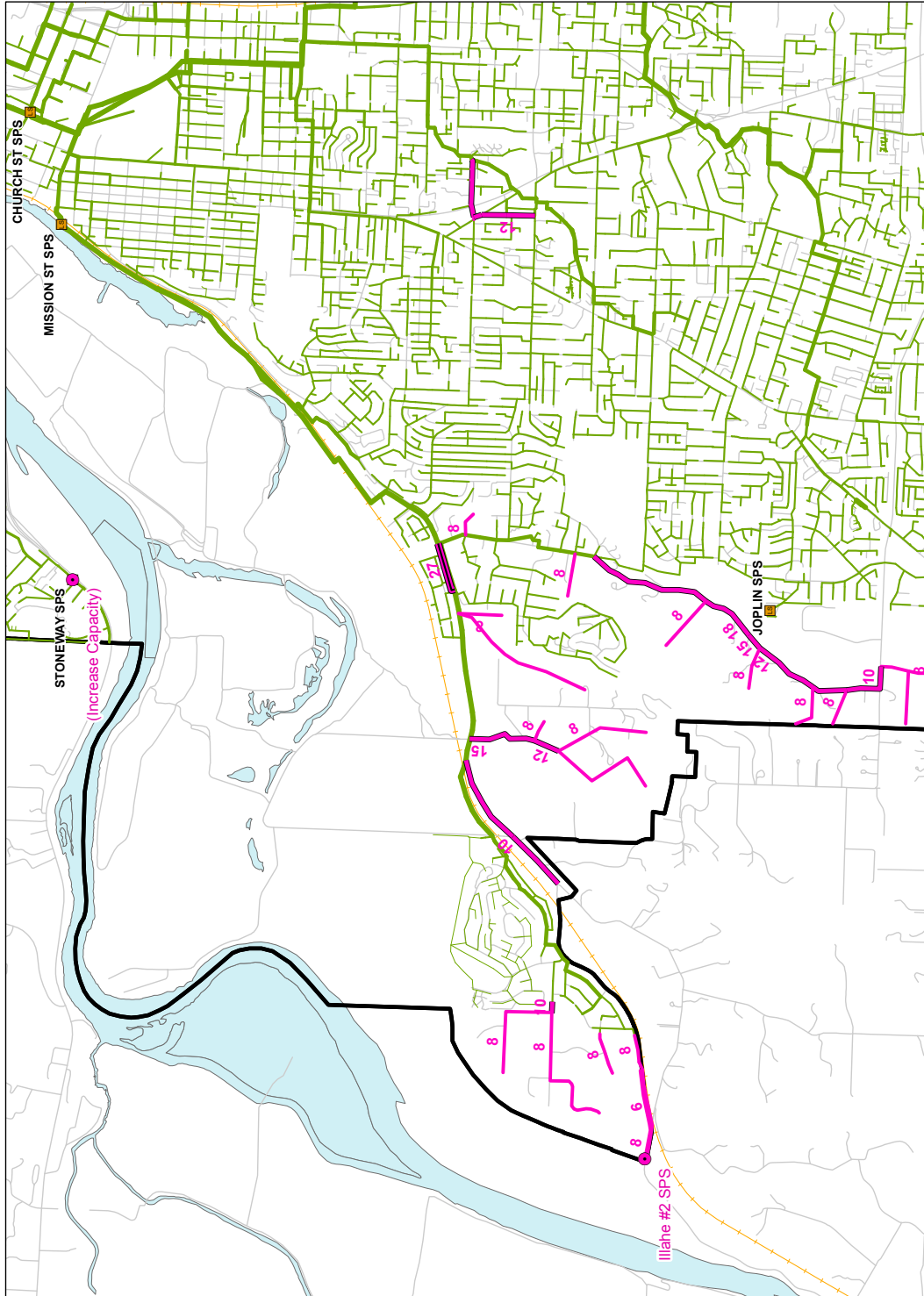
Legend

Future Sewer Facilities (309 List)

- Facility Type**
- Pump Station
 - Treatment Facility
 - Existing Treatment Facility
 - Existing Sewer Pump Station
 - Future Sewer Pump Station
- Future Sewer Pipes (309 List)**
- Diameter**
- 8" and Smaller
 - Greater than 8" and Less than 21"
 - 21" and Larger
 - UGB



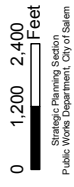
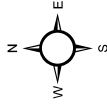
Sheet 5



City of Salem

Sewer SDC 309 List Map

Sewer System Master Plan Oct 2018

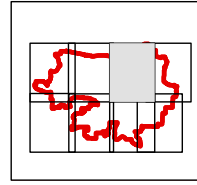


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Public Works Department, City of Salem

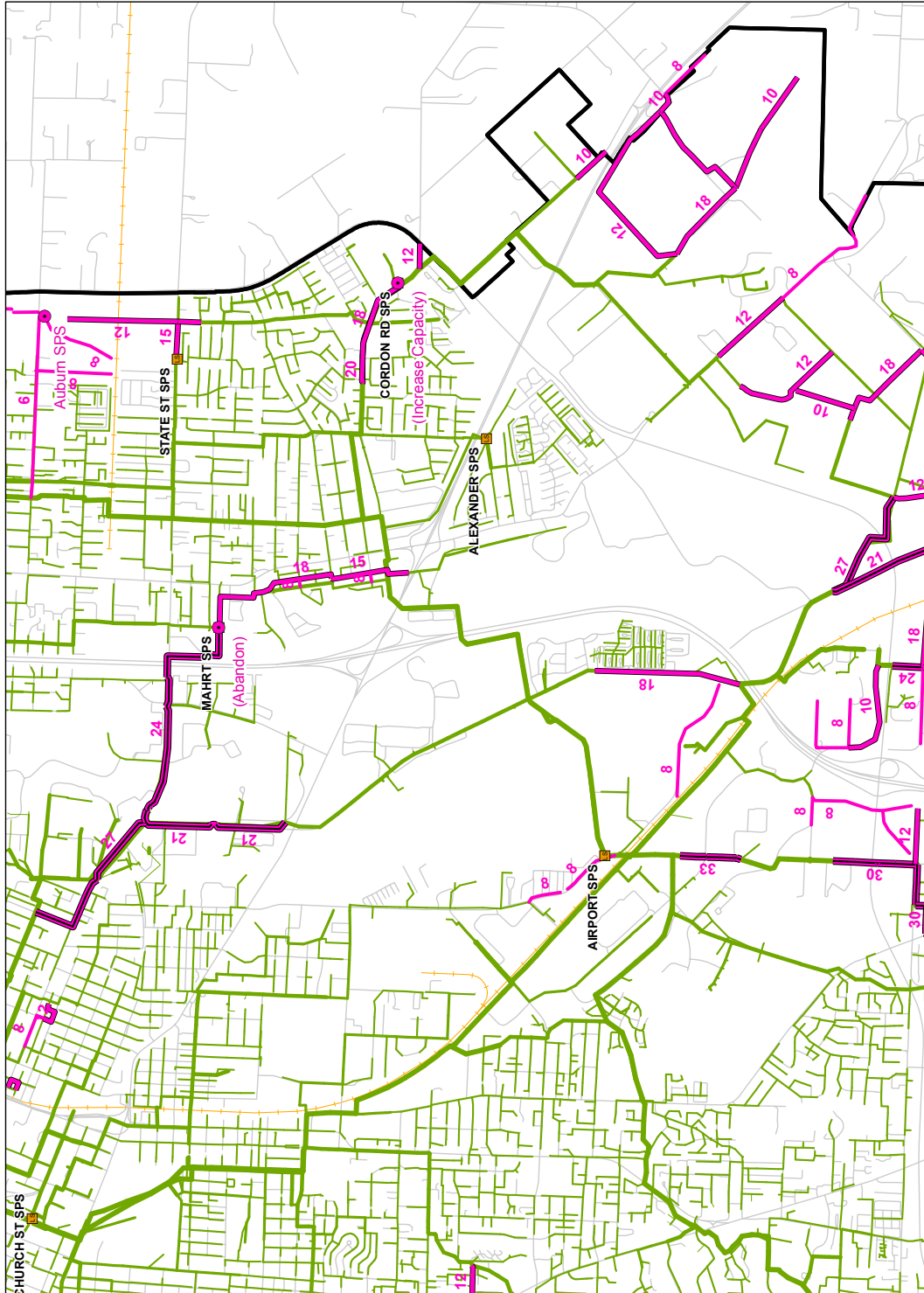
Legend

Future Sewer Facilities (309 List)

- Facility Type**
- Pump Station
 - Treatment Facility
 - Existing Treatment Facility
 - Existing Sewer Pump Station
 - Future Sewer Pipes (309 List)
- Diameter**
- 8" and Smaller
 - Greater than 8" and Less than 21"
 - 21" and Larger
 - UGB



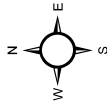
Sheet 6



City of Salem

Sewer SDC 309 List Map

Sewer System Master Plan Oct 2018

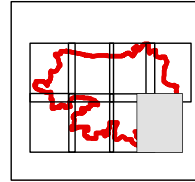


Strategic Planning Section
Public Works Department, City of Salem

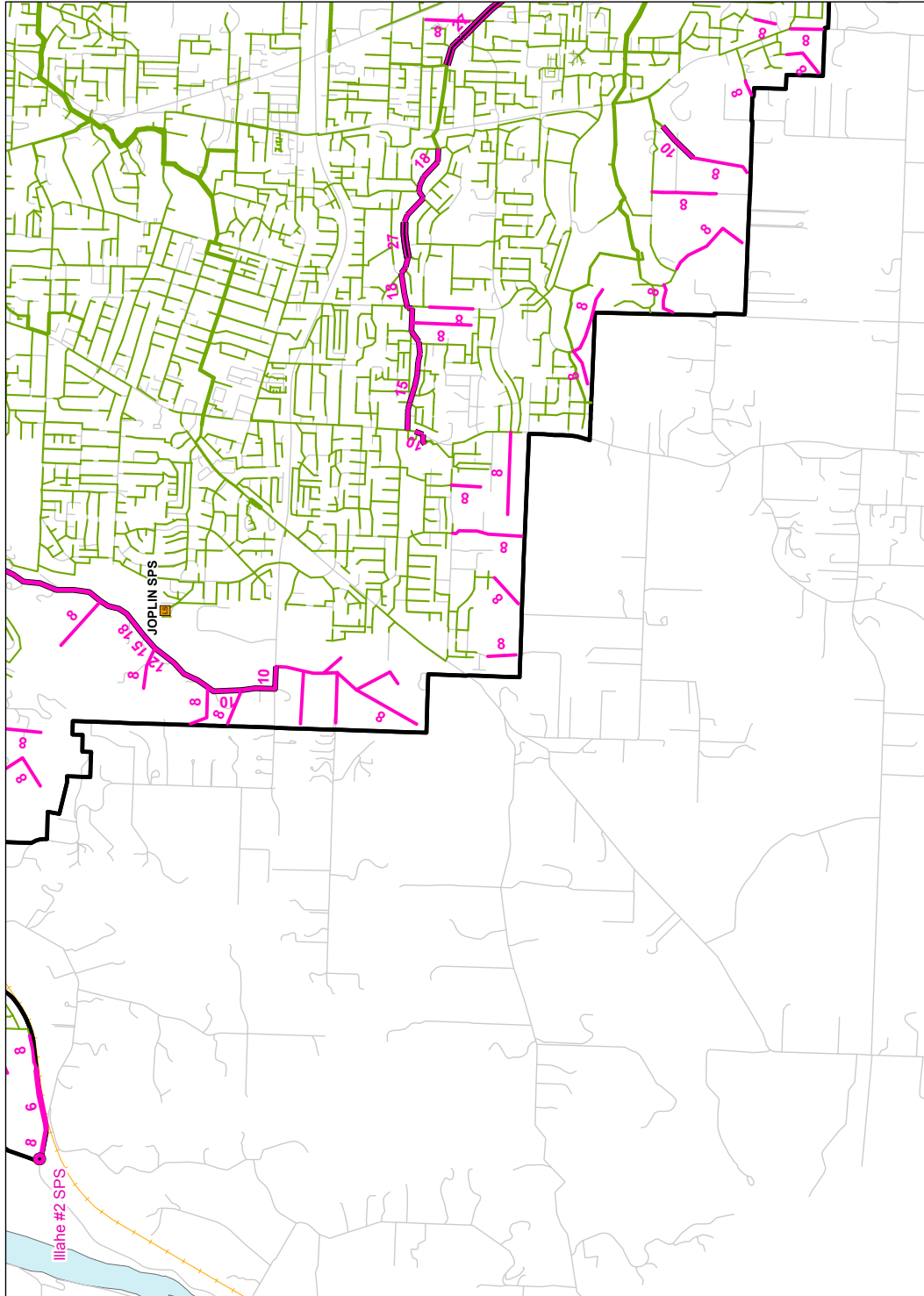
Legend

Future Sewer Facilities (309 List)

- Facility Type**
- Pump Station
 - Treatment Facility
 - Existing Treatment Facility
 - Existing Sewer Pump Station
 - Future Sewer Pump Station
- Diameter**
- 8" and Smaller
 - Greater than 8" and Less than 21"
 - 21" and Larger
 - UGB



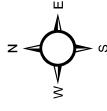
Sheet 7



City of Salem

Sewer SDC 309 List Map

Sewer System Master Plan Oct 2018

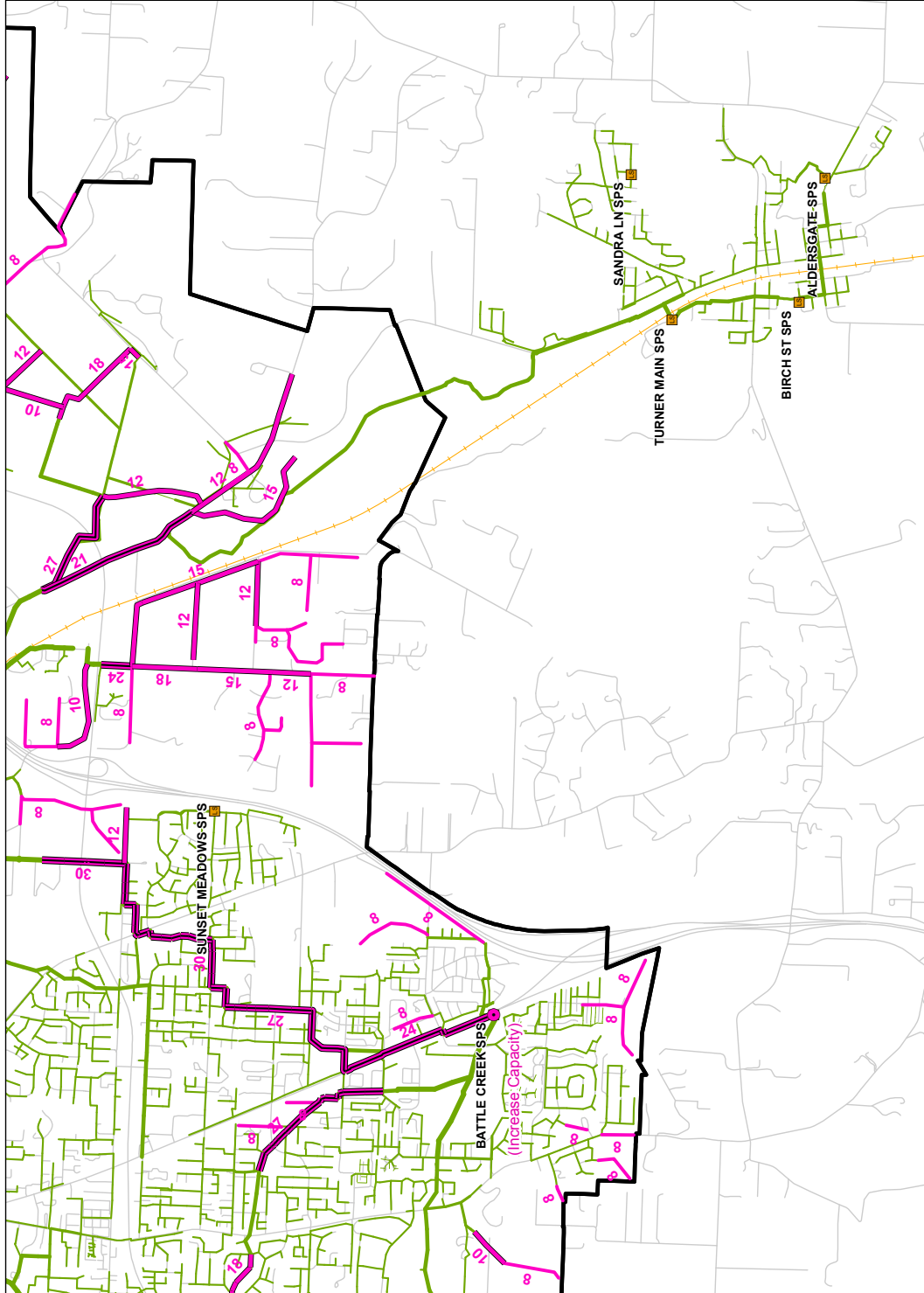
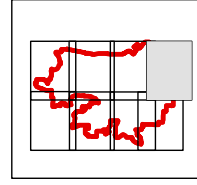


0 1,200 2,400 Feet
 Strategic Planning Section
 Public Works Department, City of Salem

Legend

Future Sewer Facilities (309 List)

- Facility Type
 - Pump Station
 - Treatment Facility
 - Existing Treatment Facility
 - Existing Sewer Pump Station
- Future Sewer Pipes (309 List)
 - Diameter
 - 8" and Smaller
 - Greater than 8" and Less than 21"
 - 21" and Larger
 - UGB



Sheet 8