

	<p>City Council Study Session Finance, Technology and Economic Development Special Focus Area May 26, 2020 - 5:30 PM Virtual AGENDA Watch the meeting LIVE!</p> <p>Watch the meeting video Meeting videos are not available until 72 hours after the meeting has concluded.</p>
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I. CALL TO ORDER

II. Virtual Participation Link

A. Virtual Participation Link

The Auburn City Council Study Session Meeting scheduled for Tuesday, May 26, 2020 at 5:30 p.m. will be held virtually and telephonically. To attend the meeting virtually please click the link or enter the meeting ID into the Zoom app or call into the meeting at the phone number listed below.

Per the Governor's Emergency Proclamation 20-28, the City of Auburn is prohibited from holding an in-person meeting at this time. All meetings will be held virtually and telephonically.

The link to the Virtual Meeting or phone number to listen to the Council Meeting is:

Join from a PC, Mac, iPad, iPhone or Android device:

Please click this URL to join. <https://zoom.us/j/99679636318>

Or join by phone:

253 215 8782

888 475 4499 (Toll Free)

Webinar ID: 996 7963 6318

B. Roll Call

III. ANNOUNCEMENTS, REPORTS, AND PRESENTATIONS

IV. AGENDA ITEMS FOR COUNCIL DISCUSSION

A. 2021-2026 Transportation Improvement Program Annual Update (Gaub)(20 Minutes)

B. Ordinance No. 6761 (Tate)(30 Minutes)

An Ordinance relating to Flood Hazard Areas and amending Chapter 15.68 of the Auburn City Code

V. FINANCE, TECHNOLOGY AND ECONOMIC DEVELOPMENT DISCUSSION ITEMS

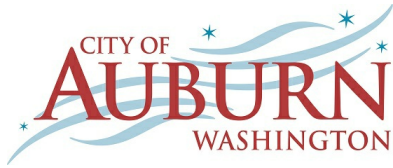
A. COVID-19 Local Business Support Update (Hinman)(20 Minutes)

VI. OTHER DISCUSSION ITEMS

VII. NEW BUSINESS

VIII. ADJOURNMENT

Agendas and minutes are available to the public at the City Clerk's Office, on the City website (<http://www.auburnwa.gov>), and via e-mail. Complete agenda packets are available for review at the City Clerk's Office.



AGENDA BILL APPROVAL FORM

Agenda Subject:

2021-2026 Transportation Improvement Program Annual Update (Gaub)(20 Minutes)

Date:

May 18, 2020

Department:

Public Works

Attachments:

[2021-2026 TIP Update Memo](#)

[2021-2026 Draft TIP](#)

Budget Impact:

Current Budget: \$0

Proposed Revision: \$0

Revised Budget: \$0

Administrative Recommendation:

For discussion only.

Background Summary:

The City's Transportation Improvement Program (TIP) identifies projects and programs needed to address transportation needs over the next 6-year period. RCW 35.77.010 requires the City to create a TIP and update it at least once per year. Often the TIP is updated more frequently as additional transportation needs and funding are identified throughout the year. The TIP identifies secured or reasonably expected revenues and expenditures for each of the projects and programs included in the TIP.

The TIP is a multiyear planning tool and document for the development of transportation facilities within the City and does not represent a financial commitment by the City. Once the TIP is approved, projects are budgeted and funded through the City's biennial budget. The TIP sets priorities for the allocation secured and unsecured funding and is a prerequisite of most grant programs. Staff also uses the TIP to coordinate future transportation projects with needed utility improvements. The projects and programs identified in the TIP that increase the capacity of the transportation system to address growth and development provide the basis for the City's transportation impact fee program.

The reason that the 2021-2026 Transportation Improvement Program Annual Update is being brought forward to the City Council while under Governor Inslee's various orders related to the COVID-19 outbreak is because City action is required by the end of June 2020.

Reviewed by Council Committees:**Councilmember:****Staff:**

Gaub

Meeting Date: May 26, 2020

Item Number:



Memorandum

To: Mayor Backus
Councilmembers

From: James Webb, Senior Traffic Engineer, PE, PTOE

Date: May 13, 2020

Re: 2021-2026 Transportation Improvement Program – Annual Update

BACKGROUND SUMMARY

The City's Transportation Improvement Program (TIP) identifies projects and programs needed to address transportation needs over the next 6-year period. RCW 35.77.010 requires the City to create a TIP and update it at least once per year. Often the TIP is updated more frequently as additional transportation needs and funding are identified throughout the year. The TIP identifies secured or reasonably expected revenues and expenditures for each of the projects and programs included in the TIP.

The TIP is a multiyear planning tool and document for the development of transportation facilities within the City and does not represent a financial commitment by the City. Once the TIP is approved, projects are budgeted and funded through the City's biennial budget. The TIP sets priorities for the allocation of secured and unsecured funding and is a prerequisite of most grant programs. Staff also uses the TIP to coordinate future transportation projects with needed utility improvements. The projects and programs identified in the TIP that increase the capacity of the transportation system to address growth and development provide the basis for the City's transportation impact fee program.

SUMMARY OF PROPOSED AMENDMENTS TO THE TIP

The currently proposed TIP approaches the balancing of anticipated revenues with needed projects differently than previous TIPs. Previously, the total cost of projects in the first three years of the TIP was balanced to the amount of funding anticipated to be available. However, for the second three years (years 4, 5, and 6) the total projects were not balanced to the anticipated funding due to the high degree of uncertainty in estimating future funding and revenues. This approach resulted in the TIP including many projects in years 4, 5, and 6 that could not be realistically implemented due to funding constraints. To present an overall more realistic and achievable plan, the proposed 2021-2026 TIP financially constrains all six years of the TIP with the exception of the Traffic Impact Fee fund. The proposed TIP shows a negative traffic impact fee fund balance in years 4, 5, and 6 due to projects being included in the TIP as placeholders for

capacity improvements that will be needed should more development occur than is assumed in the conservative revenue projections.

Completed Projects to be Removed: The following projects have, or are anticipated to be, completed by the end of 2020 and therefore are not included in the proposed 2021-2026 TIP:

Intersection Projects

- I-6: Lakeland Tapps Parkway ITS Expansion (\$1.01M)

Non-Motorized and Transit Projects

- N-5: F Street SE Non-Motorized Improvements (\$3.94M)

Preservation Projects

- P-7: AWN Preservation Phase 2 (\$1.628)
- P-8: AWN Preservation Phase 3 (\$1.95M)

Roadway Projects

- R-15: Poplar Curve Safety Improvements (\$0.268M)

Preliminary Engineering and Miscellaneous Projects

- S-3: A Street SE Corridor Study (\$0.10M)

Removed from TIP/Remain in Comprehensive Transportation Plan: The following projects are proposed to be removed from the TIP as potential funding has not been identified within the 6-year TIP timeframe or for other reasons as stated below. The City will continue to seek funding and partnerships for these projects. The projects will remain in the Comprehensive Transportation Plan and will be considered for inclusion in future TIPs based on project prioritization and funding availability:

Intersection Projects

- I-7: SE 320th Street/116th Avenue SE Roundabout (\$1.725M)
- I-9: M Street SE/29th Street SE Intersection Improvements (\$1.00M)
- I-12: C Street SW/15th Street SW Intersection Improvements (\$1.2M)
- I-13: 124th Avenue SE/SE 320th Street Intersection Improvements (\$1.95M)
- I-14: 124th Avenue SE/SE 284th Street (\$0.70M)

Preservation Projects

- P-6: 15th Street SW Reconstruction (\$3.375M)

Roadway Projects

- R-2: I Street NE Corridor (45th Street NE to S 277th Street) (\$6.76M) – This project is being completed by a developer without City funding.
- R-10: Auburn Way (4th Street NE to 4th Street SE) (\$4.428M) – Elements of the project have been included as part of Auburn Way N Preservation Phase 3 project (P-8) and the Auburn Way N/1st Street NE Signal Replacement Project (I-1). The remaining elements of the project will remain in the Comprehensive Transportation Plan.
- R-12: R Street Bypass (\$6.35M)
- R-13: SE 320th Street Corridor Improvements (116th Avenue SE to 122nd Avenue SE) (\$3.62M)
- R-14: W Valley Highway Improvements (15th Street NW to W Main Street) (\$3.25M)
- R-17: M Street SE Corridor (8th Street SE to Auburn Way S) (\$7.3M)
- R-18: Auburn Way S Bypass (\$40M) –This project is being completed by MIT and WSDOT without City funding.
- R-19: Auburn Way S Streetscape Improvements (SR 18 to M Street SE) (\$4.5M) –The project scope needs to be re-evaluated due to other recently completed and currently underway projects on the Auburn Way corridor.
- R-20, 21, 22: Lea Hill Road Segments 1, 2, and 3 (\$30.7M) – The Lea Hill Road Corridor study was recently completed and will be presented to Council on June 8th. Projects R-20, R-21, and R-22 were re-packaged and prioritized based on the study findings. New TIP project I-6 and existing project R-27 include improvements recommended by the study. The remaining improvements will be incorporated into the Comprehensive Plan.
- R-23: W Valley Highway Improvement (SR 18 to 15th Street SW) (\$2.4M)
- R-25: R Street SE Corridor Extension (\$10M) –The City will continue to seek project funding and/or partnership with the Muckleshoot Indian Tribe to complete the project improvements with the development of the decommissioned Miles sand and gravel pit.

New Projects Added to the TIP: The following projects are proposed to be added to the updated TIP based on prioritization of anticipated funding for capacity, safety, non-motorized, and street preservation needs:

Intersection Projects

- I-6: Lea Hill Road/112th Avenue SE Roundabout (\$5.17M) – This project includes improvements recommended in the Lea Hill Road Corridor study (see notes under removed projects R-20, R-21, R-22 above).The project will build a roundabout at the Lea Hill Road intersection with 112th Avenue SE and modify the Lea Hill intersection with 105th Pl. SE.
- I-7: Auburn Avenue/E Main Street Signal Replacement (\$0.05M) – This project will replace the existing traffic signal. The existing signal was constructed in 1968, and is approaching the end of its service life.
- I-13: SE 304th Street/132nd Avenue SE (\$1.35M) – This project will build a new roundabout at the SE 304th Street intersection with 132nd Avenue SE. The intersection is currently stop-controlled on the side street approach and does not meet adopted LOS standards.

Preservation Projects

- P-6: Lake Tapps Pkwy/Sumner-Tapps Hwy E Preservation (\$1.38M) – This project will grind and overlay these roadways and implement ADA improvements. Grant funding was applied for in 2020.
- P-7: 2021 Local Street Preservation Project (\$2.5M) – The project will re-build pavement and replace water main on G Street SE (E Main Street to 4th Street SE) and grind and overlay pavement and replace water main in the Riverwalk/Forest Ridge Neighborhood.
- P-8: 2022 Local Street Preservation Project (\$1.65M) – The project will re-build pavement and replace water main on I Street SE (E Main Street to 4th Street SE).

Roadway Projects

- R-2: Stewart Road (Lake Tapps Parkway Corridor (\$0.15M) – the project will provide funds to the City of Sumner to support their project to replace the bridge over the White River. This is the last remaining segment of Stewart Road to be improved. The project will relieve congestion along the A Street SE and C Street SW corridors in Auburn.

Other Modifications:

Other changes proposed to be made as part of the annual update are to revise certain project descriptions, cost estimates, and anticipated funding sources to be more representative of project scopes and available funding sources.

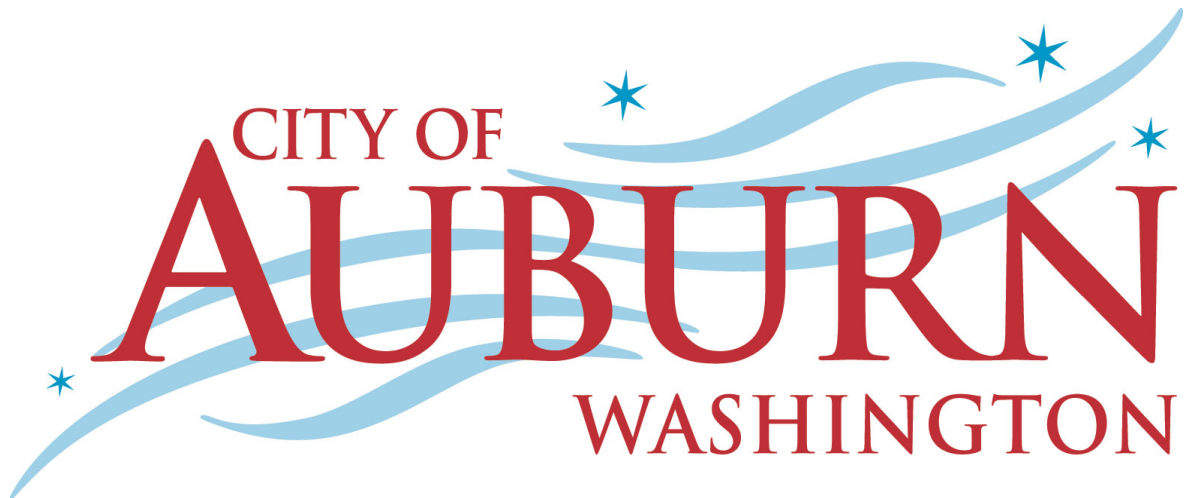
SUMMARY

Overall the changes proposed above will reduce the funding programmed during the six year period from \$181M (2020-2025) to \$78.1M (2021-2026). This reduction was needed to balance project programming with realistic forecast levels of funding (including realistic levels of grant funding).

CURRENT STATUS AND NEXT STEPS:

Staff will work to incorporate any City Council comments provided at the Study Session into the final document. It will then be finalized for adoption based on the schedule below.

- **MAY 26, 2020:** COUNCIL STUDY SESSION
- **JUNE 1, 2020:** RESOLUTION TO SCHEDULE PUBLIC HEARING
- **JUNE 15, 2020:** PUBLIC HEARING & RESOLUTION FOR ADOPTION

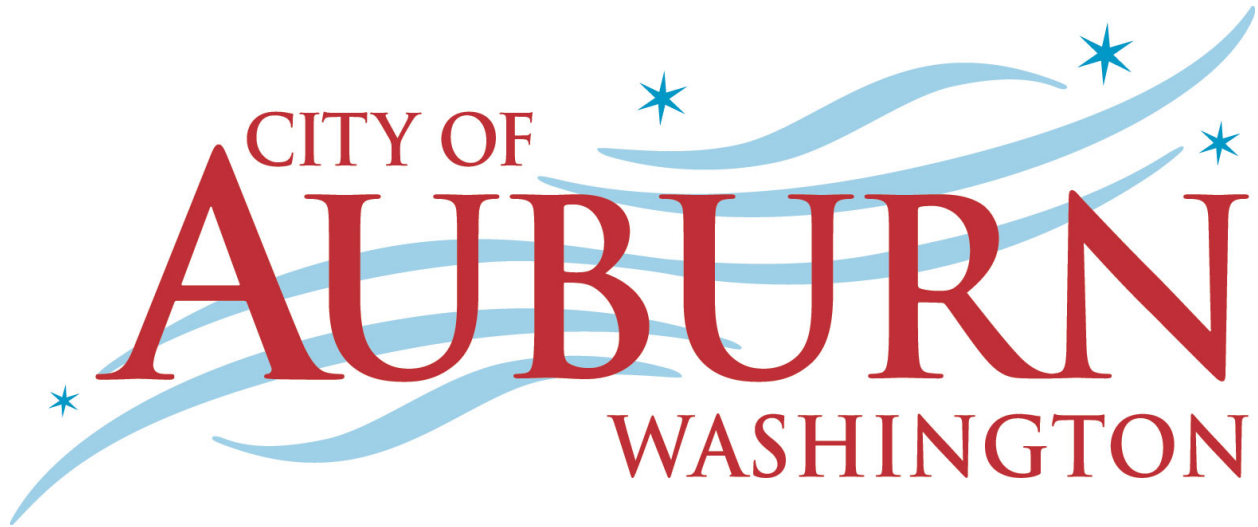


Transportation Improvement Program

2021-2026

**Adopted by Auburn City Council
June XX, 2020**

**City of Auburn
25 West Main Street
Auburn, WA 98001
(253)-931-3010
www.auburnwa.gov**



Cover Photos: Left: S 277th St, Right: 44th St NW

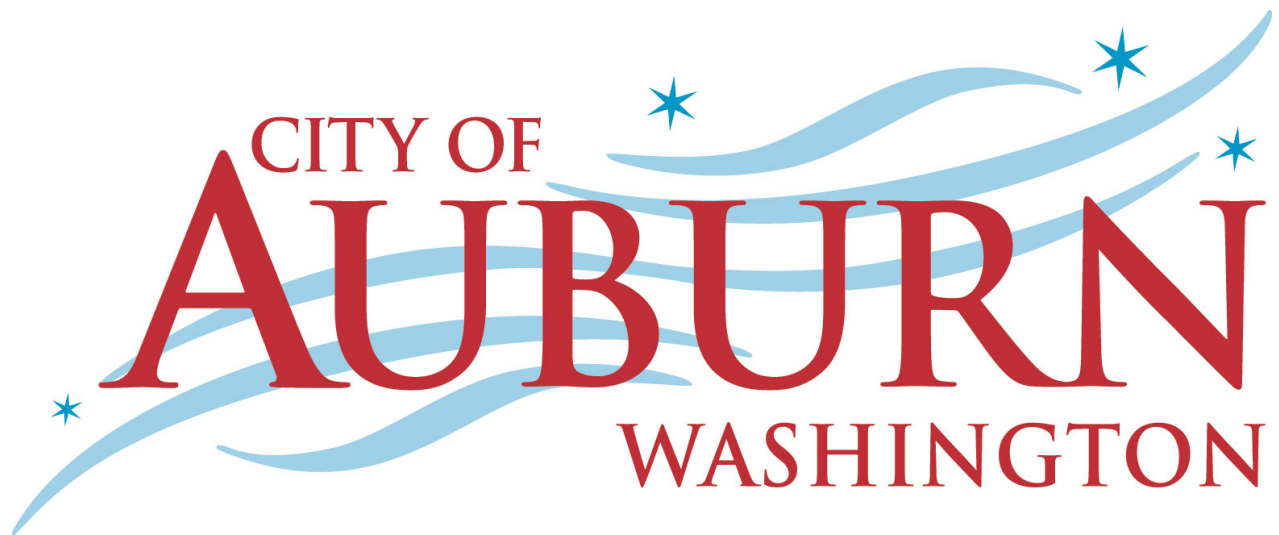
Placeholder for Resolution

Placeholder for Resolution

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EXECUTIVE SUMMARY

The Transportation Improvement Program (TIP) is a 6-year plan for transportation improvements that support the City of Auburn's current and future growth. The TIP along with the Comprehensive Transportation Plan (CTP) serve as source documents for the City of Auburn Capital Facilities Plan which is a Comprehensive Plan element required by Washington's Growth Management Act. The program may be revised at any time by a majority of the City Council after a public hearing.

INTRODUCTION

Purpose

The TIP sets priorities for the allocation of secured and unsecured funding and is a prerequisite of most grant programs. Staff also uses the TIP to coordinate future transportation projects with needed utility improvements. The projects and programs identified in the TIP that increase the capacity of the transportation system to address growth and development provide the basis for the City's transportation impact fee program.

Statutory Requirements

Six Year Transportation Improvement Program - RCW 35.77.010 requires that each city prepare and adopt a comprehensive transportation improvement program for the ensuing six calendar years consistent with its CTP. This six-year TIP shall be filed with the Secretary of the Washington State Department of Transportation (WSDOT) each year within 30 days of adoption.

Projects of Regional Significance - RCW 35.77.010 also requires each city to specifically set forth those projects and programs of regional significance for inclusion in the transportation improvement program for that region. The 2021-2026 TIP includes three projects of regional significance:

TIP Project Number	Project Title
TIP# R-6	AWS Widening (Hemlock to Poplar)
TIP# R-7	M St NE Widening (E Main St to 4th St NE)

Methodology

Annual updates of the TIP begins with developing a revenue forecast to provide a reasonable estimate of funding available to accomplish the transportation improvement needs. Since the desire to construct transportation improvements typically exceeds the available forecast revenue, it is necessary to prioritize the transportation needs of the City.

Transportation needs are identified by examining the latest information concerning level of service, safety and crash history, growth trends, traffic studies and the City's adopted CTP. The likelihood of receiving federal or state grants for various improvements, community interests and values are also considered. All of these factors yield a prioritized list of transportation improvements.

Projects are grouped into the following categories based on the type of improvement:

- Intersection, Signal & Intelligent Transportation System Projects;
- Non-Motorized & Transit Projects;
- Preservation Projects;
- Roadway Improvement Projects; and
- Preliminary Engineering & Miscellaneous Projects.

Each project is identified as a Capacity or Non-capacity improvement and those that are located on a defined Arterial LOS Corridor (per with Table 2-2 of the City's CTP) are identified accordingly. Capacity projects from the 6-year plan are incorporated into the CTP as Group A projects. Longer term capacity projects are listed in the CTP as Group B Projects.

The TIP is proposed to be financially constrained for the entire six years of the TIP with the exception of the Traffic Impact Fee fund. The proposed TIP shows a negative traffic impact fee fund balance in years 4, 5, and 6 due to projects being included in the TIP as placeholders for capacity improvements that will be needed should more development occur than is assumed in the conservative revenue projections.

City of Auburn Transportation Improvement Program

Projects & Financing Plan Summary

TIP#	Intersection, Signal and ITS Projects	2021	2022	2023	2024	2025	2026	Total
I-1	<u>Auburn Way N/1st Street NE Signal Replacement</u>							
	Capital Costs	575,000	-	-	-	-	-	575,000
	Funding Sources:							
	Unrestricted Street Revenue	525,000	-	-	-	-	-	525,000
	Arterial Preservation Fund (105)	50,000	-	-	-	-	-	50,000
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-
	REET 2	-	-	-	-	-	-	-
I-2	<u>Traffic Signal Improvements</u>							
	Capital Costs	200,000	100,000	200,000	100,000	200,000	200,000	1,000,000
	Funding Sources:							
	Cap. Imp. Fund Balance	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	REET 2	200,000	100,000	200,000	100,000	200,000	200,000	1,000,000
I-3	<u>ITS Dynamic Message Signs</u>							
	Capital Costs	-	-	-	-	-	20,000	20,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	20,000	20,000
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-
I-4	<u>Street Lighting Improvement Program</u>							
	Capital Costs	50,000	50,000	50,000	50,000	50,000	50,000	300,000
	Funding Sources:							
	Cap. Imp. Fund Balance	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	REET 2	50,000	50,000	50,000	50,000	50,000	50,000	300,000
I-5	<u>Harvey Road/8th Street NE Intersection Improvements</u>							
	Capital Costs	83,598	83,196	82,794	82,382	81,990	81,589	495,549
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	83,598	83,196	82,794	82,382	81,990	81,589	495,549
I-6	<u>Lea Hill Road/112th Avenue SE Roundabout</u>							
	Capital Costs	-	-	-	350,000	420,000	2,200,000	2,970,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	1,100,000	1,100,000
	Traffic Impact Fees	-	-	-	350,000	420,000	1,100,000	1,870,000
I-7	<u>Auburn Avenue/E Main Street Signal Replacement</u>							
	Capital Costs	-	-	-	-	-	150,000	150,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	150,000	150,000
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-
I-8	<u>R Street SE/29th Street SE Intersection Improvements</u>							
	Capital Costs	750,000	500,000	250,000	3,500,000	-	-	5,000,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	750,000	500,000	250,000	3,500,000	-	-	5,000,000
I-10	<u>R Street SE/21st Street SE Roundabout</u>							
	Capital Costs	-	-	250,000	100,000	750,000	-	1,100,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	500,000	-	500,000
	Traffic Impact Fees	-	-	250,000	100,000	250,000	-	600,000
I-11	<u>Auburn Way S/6th Street SE Intersection Improvements</u>							
	Capital Costs	-	-	130,000	25,000	630,000	-	785,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	505,000	-	505,000
	Traffic Impact Fees	-	-	130,000	25,000	125,000	-	280,000

City of Auburn Transportation Improvement Program

TIP#	Intersection, Signal and ITS Projects	2021	2022	2023	2024	2025	2026	Total
I-13	<u>SE 304th Street/132nd Avenue SE Roundabout</u>							
	Capital Costs	-	-	250,000	50,000	1,200,000	-	1,500,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	250,000	50,000	1,200,000	-	1,500,000
I-15	<u>10th Street NW/A Street NW Intersection Improvements</u>							
	Capital Costs	-	200,000	650,000	-	-	-	850,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	200,000	650,000	-	-	-	850,000
I-16	<u>15th Street NW/SR 167 NB Ramps</u>							
	Capital Costs	1,525,000	-	-	-	-	-	1,525,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	225,000	-	-	-	-	-	225,000
	Other (Development)	1,300,000	-	-	-	-	-	1,300,000
I-17	<u>Citywide LED Street Lighting and Controls</u>							
	Capital Costs	39,012	39,012	-	-	-	-	78,024
	Funding Sources:							
	REET 2	37,000	37,000	-	-	-	-	74,000
	Secured Grants	2,012	2,012	-	-	-	-	4,024
	Other (PSE)	-	-	-	-	-	-	-
<u>Subtotal, Intersection, Signal and ITS Projects:</u>								
	Capital Costs	3,222,610	972,208	1,862,794	4,257,382	3,331,990	2,701,589	16,348,573
	Funding Sources:							
	Unrestricted Street Revenue	525,000	-	-	-	-	170,000	695,000
	Arterial Preservation Fund (105)	50,000	-	-	-	-	-	50,000
	Secured Grants	2,012	2,012	-	-	-	-	4,024
	Unsecured Grants	-	-	-	-	1,005,000	1,100,000	2,105,000
	Traffic Impact Fees	1,058,598	783,196	1,612,794	4,107,382	2,076,990	1,181,589	10,820,549
	REET 2	287,000	187,000	250,000	150,000	250,000	250,000	1,374,000
	Other (Development)	1,300,000	-	-	-	-	-	1,300,000
	Total Funding	3,222,610	972,208	1,862,794	4,257,382	3,331,990	2,701,589	16,348,573
TIP:	Non-Motorized and Transit Projects	2021	2022	2023	2024	2025	2026	Total
N-1	<u>Pedestrian Accessibility and Safety Program</u>							
	Capital Costs	100,000	100,000	100,000	100,000	100,000	100,000	600,000
	Funding Sources:							
	Unrestricted Street Revenue	100,000	100,000	100,000	100,000	100,000	100,000	600,000
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-
N-2	<u>ADA and Sidewalk Improvement Program</u>							
	Capital Costs	185,000	-	200,000	200,000	200,000	200,000	985,000
	Funding Sources:							
	Unsecured Grants	-	-	-	-	-	-	-
	REET 2	185,000	-	200,000	200,000	200,000	200,000	985,000
N-3	<u>Arterial Bicycle and Safety Improvement Program</u>							
	Capital Costs	100,000	-	100,000	-	100,000	-	300,000
	Funding Sources:							
	Unrestricted Street Revenue	100,000	-	100,000	-	100,000	-	300,000
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-
N-4	<u>Transit Partnership Routes</u>							
	Capital Costs	180,000	185,000	190,000	195,000	200,000	205,000	1,155,000
	Funding Sources:							
	Unrestricted Street Revenue	180,000	185,000	190,000	195,000	200,000	205,000	1,155,000
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-

City of Auburn Transportation Improvement Program

TIP#	Intersection, Signal and ITS Projects	2021	2022	2023	2024	2025	2026	Total
N-6	<u>Auburn Station Access Improvements</u>							
	Capital Costs	-	125,000	-	-	-	-	125,000
	Funding Sources:							
	Unrestricted Street Revenue	-	25,000	-	-	-	-	25,000
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	100,000	-	-	-	-	100,000
N-7	<u>Auburn Way S (SR 164) - Southside Sidewalk Improvements</u>							
	Capital Costs	-	95,000	750,000	-	-	-	845,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	80,000	600,000	-	-	-	680,000
	Traffic Impact Fees	-	-	-	-	-	-	-
	REET 2	-	15,000	150,000	-	-	-	165,000
N-8	<u>Evergreen Heights Safe Routes to School Improvements</u>							
	Capital Costs	-	-	-	-	-	410,000	410,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	410,000	410,000
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-
	REET 2	-	-	-	-	-	-	-
N-9	<u>Riverwalk Drive SE Non-Motorized Improvements</u>							
	Capital Costs	200,000	950,000	-	-	-	-	1,150,000
	Funding Sources:							
	Unrestricted Street Revenue	20,000	250,000	-	-	-	-	270,000
	Unsecured Grants	180,000	450,000	-	-	-	-	630,000
	Traffic Impact Fees	-	-	-	-	-	-	-
	Other (MIT)	-	250,000	-	-	-	-	250,000
N-10	<u>M Street SE Sidewalk Improvements</u>							
	Capital Costs	629,542	-	-	-	-	-	629,542
	Funding Sources:							
	Unrestricted Street Revenue	209,562	-	-	-	-	-	209,562
	Secured Grants	419,980	-	-	-	-	-	419,980
N-11	<u>Lea Hill Safe Routes to Schools</u>							
	Capital Costs	70,000	900,000	-	-	-	-	970,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	55,000	700,000	-	-	-	-	755,000
	REET 2	15,000	200,000	-	-	-	-	215,000
<u>Subtotal, Non-Motorized & Transit Projects:</u>								
	Capital Costs	1,464,542	2,355,000	1,340,000	495,000	600,000	915,000	7,169,542
	Funding Sources							
	Unrestricted Street Revenue	609,562	560,000	390,000	295,000	400,000	715,000	2,969,562
	Secured Grants	419,980	-	-	-	-	-	419,980
	Unsecured Grants	235,000	1,230,000	600,000	-	-	-	2,065,000
	Traffic Impact Fees	-	100,000	-	-	-	-	100,000
	REET 2	200,000	215,000	350,000	200,000	200,000	200,000	1,365,000
	Other (MIT)	-	250,000	-	-	-	-	250,000
	Total Funding	1,464,542	2,355,000	1,340,000	495,000	600,000	915,000	7,169,542

City of Auburn Transportation Improvement Program

TIP#	Preservation Projects	2021	2022	2023	2024	2025	2026	Total
P-1	<u>Arterial Street Preservation Program</u>							
	Capital Costs	900,498	1,500,000	147,372	1,133,870	2,100,000	2,200,000	7,981,740
	Funding Sources:							
	Arterial Preservation Fund (105)	900,498	1,500,000	147,372	1,133,870	2,100,000	2,200,000	7,981,740
	REET	-	-	-	-	-	-	-
P-2	<u>Local Street Preservation Program</u>							
	Capital Costs	-	150,000	1,650,000	1,650,000	1,650,000	1,650,000	6,750,000
	Funding Sources:							
	Local Street Pres. Fund (103)	-	-	-	-	-	-	-
	Utilities Transfer to 103 Fund	-	150,000	150,000	150,000	150,000	150,000	750,000
	REET	-	-	-	-	-	-	-
	REET 2	-	-	-	-	-	-	-
	Other (Unidentified 103 Funding)	-	-	1,500,000	1,500,000	1,500,000	1,500,000	6,000,000
P-3	<u>2nd Street SE Preservation</u>							
	Capital Costs	868,755	-	-	-	-	-	868,755
	Funding Sources:							
	Arterial Preservation Fund (105)	347,502	-	-	-	-	-	347,502
	Secured Grants	521,253	-	-	-	-	-	521,253
P-4	<u>Bridge Deck Preservation Program</u>							
	Capital Costs	-	100,000	100,000	100,000	100,000	100,000	500,000
	Funding Sources:							
	Arterial Preservation Fund (105)	-	100,000	100,000	100,000	100,000	100,000	500,000
	Unsecured Grants	-	-	-	-	-	-	-
P-5	<u>Bridge Structure Preservation Program</u>							
	Capital Costs	-	50,000	-	50,000	-	50,000	150,000
	Funding Sources:							
	Arterial Preservation Fund (105)	-	50,000	-	50,000	-	50,000	150,000
	Unsecured Grants	-	-	-	-	-	-	-
P-6	<u>Lake Tapps Pkwy/Sumner-Tapps Hwy E Preservation</u>							
	Capital Costs	25,000	75,000	1,284,356	-	-	-	1,384,356
	Funding Sources:							
	Arterial Preservation Fund (105)	25,000	75,000	534,356	-	-	-	634,356
	Unsecured Grants	-	-	750,000	-	-	-	750,000
P-7	<u>2021 Local Street Preservation Project</u>							
	Capital Costs	2,200,000	-	-	-	-	-	2,200,000
	Funding Sources:							
	Local Street Pres. Fund (103)	-	-	-	-	-	-	-
	Utilities Transfer to 103 Fund	-	-	-	-	-	-	-
	REET	2,200,000	-	-	-	-	-	2,200,000
	REET 2	-	-	-	-	-	-	-
	Other (Unidentified 103 Funding)	-	-	-	-	-	-	-
P-8	<u>2022 Local Street Preservation Project</u>							
	Capital Costs	150,000	1,500,000	-	-	-	-	1,650,000
	Funding Sources:							
	Local Street Pres. Fund (103)	-	-	-	-	-	-	-
	Utilities Transfer to 103 Fund	150,000	-	-	-	-	-	150,000
	REET	-	750,000	-	-	-	-	750,000
	REET 2	-	750,000	-	-	-	-	750,000
	Other (Unidentified 103 Funding)	-	-	-	-	-	-	-
P-9	<u>Lea Hill Bridge Deck Preservation</u>							
	Capital Costs	80,000	567,850	-	-	-	-	647,850
	Funding Sources:							
	Arterial Preservation Fund (105)	50,000	50,000	-	-	-	-	100,000
	Secured Grants	30,000	517,850	-	-	-	-	547,850
P-10	<u>A St SE Preservation (37th St SE to Lakeland Hills Way)</u>							
	Capital Costs	-	25,000	100,000	1,732,260	-	-	1,857,260
	Funding Sources:							
	Arterial Preservation Fund (105)	-	25,000	100,000	866,130	-	-	991,130
	Unsecured Grants	-	-	-	866,130	-	-	866,130

City of Auburn Transportation Improvement Program

TIP#	Preservation Projects	2021	2022	2023	2024	2025	2026	Total
P-11	<u>C Street SW Preservation (W Main St to GSA Signal)</u>							
	Capital Costs	25,000	100,000	2,236,544	-	-	-	2,361,544
	Funding Sources:							
	Arterial Preservation Fund (105)	25,000	100,000	1,118,272	-	-	-	1,243,272
	Unsecured Grants	-	-	1,118,272	-	-	-	1,118,272
P-12	<u>Lakeland Hills Way Preservation (57th Dr SE to Lake Tapps Pkwy)</u>							
	Capital Costs	1,100,000	-	-	-	-	-	1,100,000
	Funding Sources:							
	Arterial Preservation Fund (105)	352,000	-	-	-	-	-	352,000
	Secured Grants	748,000	-	-	-	-	-	748,000
P-13	<u>3rd Street SW Bridges Deck Preservation</u>							
	Capital Costs	120,000	553,540	-	-	-	-	673,540
	Funding Sources:							
	Arterial Preservation Fund (105)	100,000	50,000	-	-	-	-	150,000
	Secured Grants	20,000	503,540	-	-	-	-	523,540
Subtotal, Preservation Projects:								
	Capital Costs	5,469,253	4,621,390	5,518,272	4,666,130	3,850,000	4,000,000	28,125,045
	Funding Sources							
	Arterial Preservation Fund (105)	1,800,000	1,950,000	2,000,000	2,150,000	2,200,000	2,350,000	12,450,000
	Secured Grants	1,319,253	1,021,390	-	-	-	-	2,340,643
	Unsecured Grants	-	-	1,868,272	866,130	-	-	2,734,402
	REET	2,200,000	750,000	-	-	-	-	2,950,000
	REET 2	-	750,000	-	-	-	-	750,000
	Utilities Transfer to 103 Fund	150,000	150,000	150,000	150,000	150,000	150,000	900,000
	Other (Unidentified 103 Funding)	-	-	1,500,000	1,500,000	1,500,000	1,500,000	6,000,000
	Total Funding	5,469,253	4,621,390	5,518,272	4,666,130	3,850,000	4,000,000	28,125,045
TIP#	Roadway Projects	2021	2022	2023	2024	2025	2026	Total
R-1	<u>Neighborhood Traffic Safety Program</u>							
	Capital Costs	10,000	10,000	10,000	50,000	50,000	50,000	180,000
	Funding Sources:							
	Cap. Imp. Fund Balance	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	REET 2	10,000	10,000	10,000	50,000	50,000	50,000	180,000
R-2	<u>Stewart Road - Sumner (Lake Tapps Parkway Corridor)</u>							
	Capital Costs	-	-	-	150,000	-	-	150,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-
	Traffic Mitigation Fees	-	-	-	150,000	-	-	150,000
R-3	<u>M Street Underpass (3rd St SE to 8th St SE)</u>							
	Capital Costs	123,135	122,843	122,550	122,258	121,965	121,673	734,424
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Traffic Impact Fees	123,135	122,843	122,550	122,258	121,965	121,673	734,424
	Traffic Mitigation Fees	-	-	-	-	-	-	-
R-4	<u>A Street Loop</u>							
	Capital Costs	-	300,000	167,000	1,465,000	-	-	1,932,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	1,125,000	-	-	1,125,000
	Traffic Impact Fees	-	300,000	167,000	-	-	-	467,000
	Other (Sound Transit)	-	-	-	340,000	-	-	340,000
R-5	<u>A Street NW, Phase 2 (W Main St to 3rd St NW)</u>							
	Capital Costs	-	-	-	350,000	2,650,000	-	3,000,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	200,000	1,325,000	-	1,525,000
	Traffic Impact Fees	-	-	-	150,000	-	-	150,000
	Other (Development)	-	-	-	-	1,325,000	-	1,325,000

City of Auburn Transportation Improvement Program

TIP#	Roadway Projects	2021	2022	2023	2024	2025	2026	Total
R-6	<u>Auburn Way S Widening (Hemlock St SE to Poplar St SE)</u>							
	Capital Costs	1,500,000	750,000	5,580,120	2,800,000	-	-	10,630,120
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Secured Grants	648,750	-	-	-	-	-	648,750
	Unsecured Grants	-	-	3,000,000	1,500,000	-	-	4,500,000
	Traffic Impact Fees	851,250	750,000	1,830,120	1,300,000	-	-	4,731,370
	Other (Development)	-	-	750,000	-	-	-	750,000
R-7	<u>M Street NE Widening (E Main St to 4th St NE)</u>							
	Capital Costs	-	375,000	50,000	2,485,000	-	-	2,910,000
	Funding Sources:							
	Unrestricted Street Revenue	-	120,000	50,000	400,000	-	-	570,000
	Arterial Preservation Fund (105)	-	185,000	-	1,220,000	-	-	1,405,000
	REET 2	-	-	-	400,000	-	-	400,000
	Traffic Impact Fees	-	70,000	-	465,000	-	-	535,000
R-8	<u>49th Street NE (Auburn Way N to I St NE)</u>							
	Capital Costs	500,000	1,500,000	-	-	-	-	2,000,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-
	Other (Development)	500,000	1,500,000	-	-	-	-	2,000,000
R-9	<u>46th Place S Realignment</u>							
	Capital Costs	-	-	-	-	375,000	675,000	1,050,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	300,000	540,000	840,000
	Traffic Impact Fees	-	-	-	-	75,000	135,000	210,000
R-11	<u>124th Avenue SE Corridor Improvements (SE 312th St to SE 318th St)</u>							
	Capital Costs	-	-	-	-	-	400,000	400,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	400,000	400,000
R-16	<u>Regional Growth Center Access Improvements</u>							
	Capital Costs	410,000	100,000	1,500,000	-	-	-	2,010,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Secured Grants	325,000	-	1,300,000	-	-	-	1,625,000
	Traffic Impact Fees	85,000	100,000	200,000	-	-	-	385,000
R-24	<u>Stewart Road - City of Pacific (Lake Tapps Parkway Corridor)</u>							
	Capital Costs	100,000	-	-	-	-	-	100,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-
	Traffic Mitigation Fees	100,000	-	-	-	-	-	100,000
R-26	<u>E Valley Highway Widening</u>							
	Capital Costs	-	-	-	-	300,000	250,000	550,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	200,000	175,000	375,000
	Traffic Impact Fees	-	-	-	-	100,000	75,000	175,000
R-27	<u>Garden Avenue Realignment</u>							
	Capital Costs	150,000	500,000	-	-	-	-	650,000
	Funding Sources:							
	Unrestricted Street Revenue	-	-	-	-	-	-	-
	Unsecured Grants	-	-	-	-	-	-	-
	Traffic Impact Fees	150,000	500,000	-	-	-	-	650,000

City of Auburn Transportation Improvement Program

TIP# Roadway Projects	2021	2022	2023	2024	2025	2026	Total
Subtotal, Roadway Projects:							
Capital Costs	2,793,135	3,657,843	7,429,670	7,422,258	3,496,965	1,496,673	26,296,544
Funding Sources							
Unrestricted Street Revenue	-	120,000	50,000	400,000	-	-	570,000
Arterial Preservation Fund (105)	-	185,000	-	1,220,000	-	-	1,405,000
Capital Improvement Fund (328)	-	-	-	-	-	-	-
Secured Grants	973,750	-	1,300,000	-	-	-	2,273,750
Unsecured Grants	-	-	3,000,000	2,825,000	1,825,000	715,000	8,365,000
Traffic Impact Fees	1,209,385	1,842,843	2,319,670	2,037,258	296,965	731,673	8,437,794
Traffic Mitigation Fees	100,000	-	-	150,000	-	-	250,000
REET 2	10,000	10,000	10,000	450,000	50,000	50,000	580,000
Other (Development)	500,000	1,500,000	750,000	-	1,325,000	-	4,075,000
Other (Sound Transit)	-	-	-	340,000	-	-	340,000
Total Funding	2,793,135	3,657,843	7,429,670	7,422,258	3,496,965	1,496,673	26,296,544
TIP# Pre. Eng. and Misc. Projects	2021	2022	2023	2024	2025	2026	Total
<u>S-1 A Street NW - Phase 1 (3rd St NW to 14th St NW) - Env. Monitoring</u>							
Capital Costs	25,000	25,000	-	-	-	-	50,000
Funding Sources:							
Unrestricted Street Revenue	-	-	-	-	-	-	-
Secured Grants	-	-	-	-	-	-	-
Traffic Impact Fees	25,000	25,000	-	-	-	-	50,000
<u>S-2 S 277th St Corridor Capacity and Non-Motorized Trail Improvements - Env. Monitoring</u>							
Capital Costs	20,000	20,000	20,000	20,000	20,000	20,000	120,000
Funding Sources:							
Unrestricted Street Revenue	-	-	-	-	-	-	-
Unsecured Grants	-	-	-	-	-	-	-
Traffic Impact Fees	20,000	20,000	20,000	20,000	20,000	20,000	120,000
Subtotal, Pre. Eng. and Misc. Projects:							
Capital Costs	45,000	45,000	20,000	20,000	20,000	20,000	170,000
Funding Sources							
Unrestricted Street Revenue	-	-	-	-	-	-	-
Secured Grants	-	-	-	-	-	-	-
Unsecured Grants	-	-	-	-	-	-	-
Traffic Impact Fees	45,000	45,000	20,000	20,000	20,000	20,000	170,000
Traffic Mitigation Fees	-	-	-	-	-	-	-
Total Funding	45,000	45,000	20,000	20,000	20,000	20,000	170,000

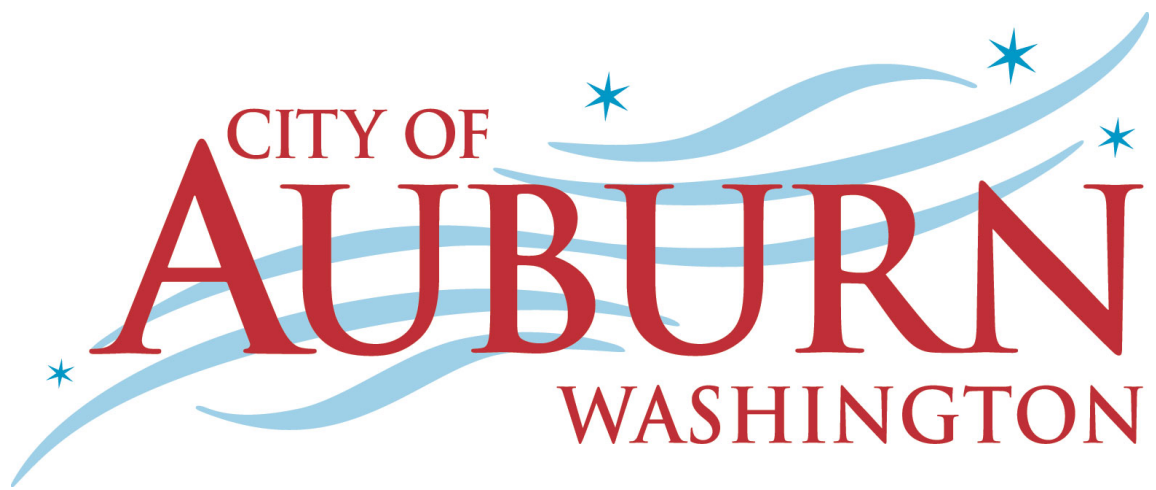
City of Auburn Transportation Improvement Program

PROJECT FINANCING SUMMARY:	2021	2022	2023	2024	2025	2026	Total
CAPITAL COSTS							
Int., Signal and ITS Projects	3,222,610	972,208	1,862,794	4,257,382	3,331,990	2,701,589	16,348,573
Non-Motorized Projects	1,464,542	2,355,000	1,340,000	495,000	600,000	915,000	7,169,542
Preservation Projects	5,469,253	4,621,390	5,518,272	4,666,130	3,850,000	4,000,000	28,125,045
Roadway Projects	2,793,135	3,657,843	7,429,670	7,422,258	3,496,965	1,496,673	26,296,544
Prel. Eng. and Misc. Projects	45,000	45,000	20,000	20,000	20,000	20,000	170,000
Total Costs	12,994,540	11,651,441	16,170,736	16,860,770	11,298,955	9,133,262	78,109,704

FUNDING SOURCES:							
Unrestricted Street Revenue	1,134,562	680,000	440,000	695,000	400,000	885,000	4,234,562
Secured Grants	2,714,995	1,023,402	1,300,000	-	-	-	5,038,397
Unsecured Grants	235,000	1,230,000	5,468,272	3,691,130	2,830,000	1,815,000	15,269,402
Traffic Impact Fees	2,312,983	2,771,039	3,952,464	6,164,640	2,393,955	1,933,262	19,528,343
Traffic Mitigation Fees	100,000	-	-	150,000	-	-	250,000
Utilities Transfer to 103 Fund	150,000	150,000	150,000	150,000	150,000	150,000	900,000
Other (Unidentified 103 Funding)	-	-	1,500,000	1,500,000	1,500,000	1,500,000	6,000,000
Arterial Preservation Fund (105)	1,850,000	2,135,000	2,000,000	3,370,000	2,200,000	2,350,000	13,905,000
REET	2,200,000	750,000	-	-	-	-	2,950,000
REET 2	497,000	1,162,000	610,000	800,000	500,000	500,000	4,069,000
Other (PSE)	-	-	-	-	-	-	-
Other (Development)	1,800,000	1,500,000	750,000	-	1,325,000	-	5,375,000
Other (MIT)	-	250,000	-	-	-	-	250,000
Other (Sound Transit)	-	-	-	340,000	-	-	340,000
Total Funding	12,994,540	11,651,441	16,170,736	16,860,770	11,298,955	9,133,262	78,109,704

Financial Constraint and Fund Balance Summary

	2021	2022	2023	2024	2025	2026
Unrestricted Street Revenue 102						
Beginning Fund Balance	649,241	114,679	39,679	204,679	119,679	329,679
Forecast Annual Revenue	600,000	605,000	605,000	610,000	610,000	615,000
Project Expenses	1,134,562	680,000	440,000	695,000	400,000	885,000
End of Year Fund Balance	114,679	39,679	204,679	119,679	329,679	59,679
Traffic Impact Fees						
Beginning Fund Balance	5,667,822	4,354,839	3,158,800	860,086	(3,568,117)	(4,138,812)
Forecast Annual Revenue	1,000,000	1,575,000	1,653,750	1,736,438	1,823,259	1,914,422
Project Expenses	2,312,983	2,771,039	3,952,464	6,164,640	2,393,955	1,933,262
End of Year Fund Balance	4,354,839	3,158,800	860,086	(3,568,117)	(4,138,812)	(4,157,652)
Traffic Mitigation Fees						
Beginning Fund Balance	137,807	82,057	126,307	494,807	344,807	344,807
Forecast Annual Revenue	44,250	44,250	368,500	-	-	-
Project Expenses	100,000	-	-	150,000	-	-
End of Year Fund Balance	82,057	126,307	494,807	344,807	344,807	344,807
Local Street Preservation Fund 103						
Beginning Fund Balance	1,323,778	1,323,778	1,323,778	1,323,778	1,323,778	1,323,778
Forecast Annual Revenue	2,350,000	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000
Project Expenses	2,350,000	1,650,000	1,650,000	1,650,000	1,650,000	1,650,000
End of Year Fund Balance	1,323,778	1,323,778	1,323,778	1,323,778	1,323,778	1,323,778
Arterial Preservation Fund 105						
Beginning Fund Balance	1,654,904	1,604,904	1,369,904	1,369,904	99,904	99,904
Forecast Annual Revenue	1,800,000	1,900,000	2,000,000	2,100,000	2,200,000	2,300,000
Project Expenses	1,850,000	2,135,000	2,000,000	3,370,000	2,200,000	2,350,000
End of Year Fund Balance	1,604,904	1,369,904	1,369,904	99,904	99,904	49,904
Grants						
Secured Grants	2,714,995	1,023,402	1,300,000	-	-	-
Unsecured Grants	235,000	1,230,000	5,468,272	3,691,130	2,830,000	1,815,000



Six Year Transportation Improvement Plan

TIP# I-1

ARTERIAL STREET FUND (102)

Project Title: **Auburn Way N/1st Street NE Signal Replacement**
 Project No: **CP1927**
 Project Type: **Non-Capacity**
 Project Manager: **Matt Larson**

STIP# AUB-N/A

Description:

The project will replace the existing traffic signal at the Auburn Way N/1st Street NE signal. The signal was constructed in 1968 and is approaching the end of its service life. The project scope also includes the construction of ADA improvements, curb-bulbs, and storm improvements.

Progress Summary:

Future Impact on Operating Budget:

This project will have no additional impact on the operating budget for street maintenance.

Activity:	Funding Sources:	2020 YE Prior to 2020 Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
	Unrestricted Street Revenue	150,000	50,000	525,000	-	-	-	-	-	725,000
	Arterial Preservation Fund (105)	-	-	50,000	-	-	-	-	-	50,000
	Unsecured Grant	-	-	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-	-	-
	REET 2	-	-	-	-	-	-	-	-	-
Total Funding Sources:		150,000	50,000	575,000	-	-	-	-	-	775,000
	Capital Expenditures:									
	Design	150,000	-	-	-	-	-	-	-	150,000
	Right of Way	-	50,000	-	-	-	-	-	-	50,000
	Construction	-	-	575,000	-	-	-	-	-	575,000
Total Expenditures:		150,000	50,000	575,000	-	-	-	-	-	775,000

Six Year Transportation Improvement Plan

TIP# I-2

CAPITAL IMPROVEMENT FUND (328)

Project Title: **Traffic Signal Improvements**
 Project No: **Varies**
 Project Type: **Non-Capacity (Annual)**
 Project Manager: **Scott Nutter**

STIP# AUB-N/A

Description:

The program will replace end of life capital replacement for traffic signal and Intelligent Transportation System equipment including cabinets, video detection cameras, field network devices, traffic cameras, battery backup components, and other related equipment. The program also includes minor safety improvements, operations improvements, and Accessible Pedestrian Signal Improvements based on the requirements of the Americans with Disabilities Act (ADA).

Progress Summary:

Project continues to complete various intersection improvements.

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Cap. Imp. Fund Balance	-	-	-	-	-	-	-	-	-	-
	Unsecured Grant	-	-	-	-	-	-	-	-	-	-
	REET 2	-	100,000	200,000	100,000	200,000	100,000	200,000	200,000	-	1,100,000
	Other	-	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	100,000	200,000	100,000	200,000	100,000	200,000	200,000	-	1,100,000
	Capital Expenditures:										
	Design	-	-	-	-	-	-	-	-	-	-
	Right of Way	-	-	-	-	-	-	-	-	-	-
	Construction	-	100,000	200,000	100,000	200,000	100,000	200,000	200,000	-	1,100,000
	Total Expenditures:	-	100,000	200,000	100,000	200,000	100,000	200,000	200,000	-	1,100,000

Six Year Transportation Improvement Plan**TIP# I-3****ARTERIAL STREET FUND (102)**

Project Title: **ITS Dynamic Message Signs**
 Project No: **CP1912**
 Project Type: **Non-Capacity (ITS)**
 Project Manager: **Seth Wickstrom**

STIP# AUB-N/A**Description:**

The program constructs Dynamic Message Signs at various locations throughout the City. Dynamic message signs are an important ITS tool for providing information to roadway users. Priority locations for sign placement are based on the Comprehensive Transportation Plans ITS map and include S. 277th, Auburn Way N, Auburn Way S, W Valley Highway, E Valley Highway, Lake Tapps Parkway, 15th St NW, and Lea Hill Rd.

Progress Summary:

The first two signs (Auburn Way S and S 277th Street) have been completed. The sign on 15th Street NW is currently in design and will be constructed during 2020.

Future Impact on Operating Budget:

The annual maintenance and operational costs for this project is estimated to be \$750 per sign.

Activity:	2020 YE	Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:	Prior to 2020									
Unrestricted Street Revenue	224,320	125,000	-	-	-	-	-	20,000	125,000	494,320
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
REET 2	97,500	-	-	-	-	-	-	-	-	97,500
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	321,820	125,000	-	-	-	-	-	20,000	125,000	591,820
Capital Expenditures:										
Design	32,500	-	-	-	-	-	-	20,000	-	52,500
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	289,320	125,000	-	-	-	-	-	-	125,000	539,320
Total Expenditures:	321,820	125,000	-	-	-	-	-	20,000	125,000	591,820

Six Year Transportation Improvement Plan

TIP# I-4

CAPITAL IMPROVEMENT FUND (328)

Project Title: **Street Lighting Improvement Program**
 Project No: **Varies**
 Project Type: **Non-Capacity (Annual)**
 Project Manager: **Scott Nutter**

STIP# AUB-N/A

Description:

The project constructs lighting improvements throughout the City, including conversion to LED lighting and installing new street lights.

Progress Summary:

Future Impact on Operating Budget:

This project will have no additional impact on the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Cap. Imp. Fund Balance	-	-	-	-	-	-	-	-	-	-
	Unsecured Grant	-	-	-	-	-	-	-	-	-	-
	REET 2	-	50,000	50,000	50,000	50,000	50,000	50,000	50,000	-	350,000
	Other	-	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	50,000	50,000	50,000	50,000	50,000	50,000	50,000	-	350,000
	Capital Expenditures:										
	Design	-	-	-	-	-	-	-	-	-	-
	Right of Way	-	-	-	-	-	-	-	-	-	-
	Construction	-	50,000	50,000	50,000	50,000	50,000	50,000	50,000	-	350,000
	Total Expenditures:	-	50,000	50,000	50,000	50,000	50,000	50,000	50,000	-	350,000

Six Year Transportation Improvement Plan

TIP# I-5

ARTERIAL STREET FUND (102)

Project Title: **Harvey Rd NE/8th St NE Intersection Improvements**
 Project No: **CP0611**
 Project Type: **Capacity**
 Project Manager: **N/A**

STIP# AUB-N/A

LOS Corridor ID# 5,19

Description:

Add one eastbound through/right turn-lane on 8th St NE to the west of Harvey Rd. Modify traffic signals and traffic channelization to accommodate the new lane. The additional lane will reduce traffic delays and queuing at the intersection of Harvey Rd and 8th St NE in all directions. This project will reconstruct M St NE from 4th St NE to 8th St NE, a segment of roadway approximately 0.3 miles long with a four-lane cross-section. The reconstruction will address the existing poor pavement condition and fill in any gaps in the sidewalk network.

Progress Summary:

Project was completed in 2010. Ongoing budget is for PWTFL debt payments.

Future Impact on Operating Budget:

This project will have no additional impact on the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2019	2019 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2020	2021	2022	2023	2024	2025	Beyond 2025	
	Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
	Unsecured Grant	-	-	-	-	-	-	-	-	-	-
	Traffic Impact Fees (Debt Service)	776,777	84,401	84,000	83,598	83,196	82,794	82,392	81,990	243,561	1,602,709
	Traffic Impact Fees	204,500	-	-	-	-	-	-	-	-	204,500
	PWTF	1,527,300	-	-	-	-	-	-	-	-	1,527,300
	Total Funding Sources:	1,731,800	84,401	84,000	83,598	83,196	82,794	82,392	81,990	243,561	1,807,209
	Capital Expenditures:										
	Design	327,500	-	-	-	-	-	-	-	-	327,500
	Right of Way	200,400	-	-	-	-	-	-	-	-	200,400
	Construction	1,203,900	-	-	-	-	-	-	-	-	1,203,900
	Long Term Debt: PWTF	776,777	84,401	84,000	83,598	83,196	82,794	82,392	81,990	243,561	1,602,709
	Total Expenditures:	1,731,800	84,401	84,000	83,598	83,196	82,794	82,392	81,990	243,561	1,807,209

Six Year Transportation Improvement Plan

TIP# I-6

ARTERIAL STREET FUND (102)

Project Title: **Lea Hill Road/112th Avenue SE Roundabout**
 Project No: **TBD**
 Project Type: **Safety, Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 19

Description:

The project will construct a single-lane roundabout at the 112th Avenue SE intersection with Lea Hill Road. The intersection is currently stop-controlled on the 112th Avenue SE approach. The project will also implement turn restrictions at the Lea Hill Road intersection with 105th Place SE, and remove the existing span wire traffic signal. The project will improve traffic operations, safety and non-motorized access.

Progress Summary:

The Lea Hill Road Corridor study was completed during 2020. This project is based on the study recommendations.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$1,000.

Activity:	Funding Sources:	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
			Prior to 2020	2021	2022	2023	2024	2025	2026	
	Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-
	Unsecured Grant	-	-	-	-	-	-	1,100,000	1,100,000	2,200,000
	Traffic Impact Fees	-	-	-	-	350,000	420,000	1,100,000	1,100,000	2,970,000
	Other	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	-	-	-	350,000	420,000	2,200,000	2,200,000	5,170,000
	Capital Expenditures:									
	Pre-Design	-	-	-	-	-	-	-	-	-
	Design	-	-	-	-	350,000	-	-	-	350,000
	Right of Way	-	-	-	-	-	420,000	-	-	420,000
	Construction	-	-	-	-	-	-	2,200,000	2,200,000	4,400,000
	Total Expenditures:	-	-	-	-	350,000	420,000	2,200,000	2,200,000	5,170,000

Six Year Transportation Improvement Plan

TIP# I-7

ARTERIAL STREET FUND (102)

Project Title: **Auburn Avenue/E Main Street Signal Replacement**
 Project No: **TBD**
 Project Type: **Non-Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A

Description:

This program will replace the existing traffic signal at the Auburn Avenue/E Main Street signal, which was constructed in 1968.

Progress Summary:

Future Impact on Operating Budget:

This project will have no additional impact on the operating budget for street maintenance.

Activity:	Funding Sources:	2020 YE Prior to 2020 Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
	Unrestricted Street Revenue	-	-	-	-	-	-	150,000	900,000	1,050,000
	Unsecured Grant	-	-	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-	-	-
	REET 2	-	-	-	-	-	-	-	-	-
Total Funding Sources:		-	-	-	-	-	-	150,000	900,000	1,050,000
	Capital Expenditures:									
	Design	-	-	-	-	-	-	150,000	-	150,000
	Right of Way	-	-	-	-	-	-	-	-	-
	Construction	-	-	-	-	-	-	-	900,000	900,000
Total Expenditures:		-	-	-	-	-	-	150,000	900,000	1,050,000

Six Year Transportation Improvement Plan

TIP# I-8

ARTERIAL STREET FUND (102)

Project Title: **R Street SE/29th Street SE Intersection Improvements**
 Project No: **TBD**
 Project Type: **Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 16, 27

Description:

The project will construct a second southbound through lane between 22nd Street SE and 33rd Street SE and a new signal at the 29th Street SE intersection. The improvements are needed to address recurring southbound congestion along the R Street corridor during the weekday PM peak hour.

Progress Summary:

The R Street Corridor study was completed during 2020. This project is based on the study recommendations.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$500.

Activity:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	750,000	500,000	250,000	3,500,000	-	-	-	5,000,000
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	750,000	500,000	250,000	3,500,000	-	-	-	5,000,000
Capital Expenditures:										
Design	-	-	750,000	250,000	-	-	-	-	-	1,000,000
Right of Way	-	-	-	250,000	250,000	-	-	-	-	500,000
Construction	-	-	-	-	-	3,500,000	-	-	-	3,500,000
Total Expenditures:	-	-	750,000	500,000	250,000	3,500,000	-	-	-	5,000,000

Six Year Transportation Improvement Plan

TIP# I-10

ARTERIAL STREET FUND (102)

Project Title: **R Street SE/21st Street SE Roundabout**
 Project No: **TBD**
 Project Type: **Capacity, Safety**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 16

Description:

The project will construct a single lane roundabout in place of the existing east/west stop-control on 21st Street SE. The project is needed to address an existing LOS deficiency, and will improve safety at the intersection.

Progress Summary:

This improvement was recommended in the R Street Corridor study which was completed during 2020.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$1,000.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
	Unsecured Grant	-	-	-	-	-	-	500,000	-	-	500,000
	Traffic Impact Fees	-	-	-	-	250,000	100,000	250,000	-	-	600,000
	Other	-	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	-	-	-	250,000	100,000	750,000	-	-	1,100,000
	Capital Expenditures:										
	Design	-	-	-	-	250,000	-	-	-	-	250,000
	Right of Way	-	-	-	-	-	100,000	750,000	-	-	850,000
	Construction	-	-	-	-	-	-	-	-	-	-
	Total Expenditures:	-	-	-	-	250,000	100,000	750,000	-	-	1,100,000

Six Year Transportation Improvement Plan

TIP# I-11

ARTERIAL STREET FUND (102)

Project Title: **Auburn Way S/6th Street SE Intersection Improvements**
 Project No: **TBD**
 Project Type: **Capacity, Safety**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 3

Description:

The project will construct a dedicated southbound right-turn pocket on Auburn Way S at 6th Street SE. The project will address an existing level of service deficiency at the intersection.

Progress Summary:

Federal grant funding for construction is proposed to be applied for in 2022. If awarded construction would occur in 2025.

Future Impact on Operating Budget:

This annual maintenance cost for this project is estimated to be \$500.

Activity:	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
		Prior to 2020	2021	2022	2023	2024	2025	2026	Beyond 2026
Funding Sources:									
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	505,000	-	-
Traffic Impact Fees	-	-	-	-	130,000	25,000	125,000	-	-
Other	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	-	-	130,000	25,000	630,000	-	-
Capital Expenditures:									
Design	-	-	-	-	130,000	-	-	-	-
Right of Way	-	-	-	-	-	25,000	-	-	-
Construction	-	-	-	-	-	-	630,000	-	-
Total Expenditures:	-	-	-	-	130,000	25,000	630,000	-	-

Six Year Transportation Improvement Plan**TIP# I-13****ARTERIAL STREET FUND (102)**

Project Title: **SE 304th Street/132nd Avenue SE Roundabout**
 Project No: **TBD**
 Project Type: **Safety, Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A**LOS Corridor ID# 19****Description:**

The project will construct a single-lane roundabout at the SE 304th Street intersection with 132nd Avenue SE on Lea Hill. The roundabout will replace the existing stop-controlled on the SE 304th Street approach. The project is needed to address a level of service deficiency at the intersection.

Progress Summary:**Future Impact on Operating Budget:**

The annual maintenance cost for this project is estimated to be \$1,000.

Activity:	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
		Prior to 2020	2021	2022	2023	2024	2025	2026 Beyond 2026	
Funding Sources:									
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	-	-	250,000	50,000	1,200,000	-	1,500,000
Other	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	-	-	250,000	50,000	1,200,000	-	1,500,000
Capital Expenditures:									
Pre-Design	-	-	-	-	-	-	-	-	-
Design	-	-	-	-	250,000	-	-	-	250,000
Right of Way	-	-	-	-	-	50,000	-	-	50,000
Construction	-	-	-	-	-	-	1,200,000	-	1,200,000
Total Expenditures:	-	-	-	-	250,000	50,000	1,200,000	-	1,500,000

Six Year Transportation Improvement Plan

TIP# I-15

ARTERIAL STREET FUND (102)

Project Title: **10th Street NW/A Street NW Intersection Improvements**
 Project No: **TBD**
 Project Type: **Capacity, Safety**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 18

Description:

The project will construction a new traffic signal in place of the existing stop-control on the 10th Street NW approach. The project is needed to address a level of service deficiency at the intersection.

Progress Summary:

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$1,000.

Activity:	2020 YE		Budget			Forecast Project Cost				Total Project Cost
	Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	-	200,000	650,000	-	-	-	-	850,000
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	-	200,000	650,000	-	-	-	-	850,000
Capital Expenditures:										
Design	-	-	-	200,000	-	-	-	-	-	200,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	650,000	-	-	-	-	650,000
Total Expenditures:	-	-	-	200,000	650,000	-	-	-	-	850,000

Six Year Transportation Improvement Plan**TIP# I-16****ARTERIAL STREET FUND (102)**

Project Title: **15th Street NW/SR 167 NB Ramps**
 Project No: **TBD**
 Project Type: **Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A**LOS Corridor ID# 9****Description:**

The project will construct a new westbound right-turn pocket on 15th Street NW at the intersection with the SR 167 northbound ramps. The widening is needed to improve the level of service and manage vehicle queues at the intersection.

Progress Summary:

The design and construction of the project is anticipated as part of an adjacent development project.

Future Impact on Operating Budget:

This annual maintenance cost for this project is estimated to be \$500.

Activity:		2020 YE	Budget			Forecast Project Cost				Total Project Cost
Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
<i>Unrestricted Street Revenue</i>	-	-	-	-	-	-	-	-	-	-
<i>Unsecured Grant</i>	-	-	-	-	-	-	-	-	-	-
<i>Traffic Impact Fees</i>	-	-	225,000	-	-	-	-	-	-	225,000
<i>Other (Development)</i>	-	125,000	1,300,000	-	-	-	-	-	-	1,425,000
Total Funding Sources:	-	125,000	1,525,000	-	-	-	-	-	-	1,650,000
Capital Expenditures:										
<i>Design</i>	-	125,000	-	-	-	-	-	-	-	125,000
<i>Right of Way</i>	-	-	-	-	-	-	-	-	-	-
<i>Construction</i>	-	-	1,525,000	-	-	-	-	-	-	1,525,000
Total Expenditures:	-	125,000	1,525,000	-	-	-	-	-	-	1,650,000

Six Year Transportation Improvement Plan**TIP# I-15****ARTERIAL STREET FUND (102)**

Project Title: **10th Street NW/A Street NW Intersection Improvements**
 Project No: **TBD**
 Project Type: **Capacity, Safety**
 Project Manager: **TBD**

STIP# AUB-N/A**LOS Corridor ID# 18****Description:**

The project will construction a new traffic signal in place of the existing stop-control on the 10th Street NW approach. The project is needed to address a level of service deficiency at the intersection.

Progress Summary:**Future Impact on Operating Budget:**

The annual maintenance cost for this project is estimated to be \$1,000.

Activity:	2020 YE		Budget			Forecast Project Cost				Total Project Cost
	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	-	200,000	650,000	-	-	-	-	850,000
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	-	200,000	650,000	-	-	-	-	850,000
Capital Expenditures:										
Design	-	-	-	200,000	-	-	-	-	-	200,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	650,000	-	-	-	-	650,000
Total Expenditures:	-	-	-	200,000	650,000	-	-	-	-	850,000

Six Year Transportation Improvement Plan

TIP# I-17

CAPITAL IMPROVEMENT FUND (328)

Project Title: **Citywide LED Street Lighting and Controls**
 Project No: **cp1920**
 Project Type: **Non-Capacity**
 Project Manager: **Scott Nutter**

STIP# AUB-N/A

Description:

The project will convert all City owned street lights to LED. The first phase of the project will convert all City owned "cobra head" street lights to LED and add smart lighting control technology. Federal grant funding for this phase of the project was awarded in 2019. Future phases to upgrade other types of City street lights (such as decorative residential and downtown lights) to LED will be considered as additional funding is available.

Progress Summary:

A detailed audit of all existing City owned lights and the design phase of the project have been completed. The construction phase of the project is programmed to begin during Spring 2020.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
		Prior to 2020	2021	2022	2023	2024	2025	2026	Beyond 2026
Funding Sources:									
Cap. Imp. Fund Balance	-	-	-	-	-	-	-	-	-
Secured Grant	-	497,988	2,012	2,012	-	-	-	-	502,012
REET 2	-	1,813,000	37,000	37,000	-	-	-	-	1,887,000
Other (PSE)	-	350,000	-	-	-	-	-	-	350,000
Total Funding Sources:	-	2,660,988	39,012	39,012	-	-	-	-	2,739,012
Capital Expenditures:									
Design	-	112,294	-	-	-	-	-	-	112,294
Right of Way	-	-	-	-	-	-	-	-	-
Construction	-	2,548,694	39,012	39,012	-	-	-	-	2,626,718
Total Expenditures:	-	2,660,988	39,012	39,012	-	-	-	-	2,739,012



Six Year Transportation Improvement Plan

TIP# N-1

ARTERIAL STREET FUND (102)

Project Title: **Pedestrian Accessibility and Safety Program**
 Project No: **Varies**
 Project Type: **Non-Capacity (Annual)**
 Project Manager: **James Webb**

STIP# AUB-N/A

Description:

The program will construct small pedestrian improvement projects at locations throughout the City. Projects are prioritized annually based on pedestrian demands, existing deficiencies, and citizen requests.

Progress Summary:

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:		2020 YE	Budget			Forecast Project Cost				
Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	Total Project Cost
Unrestricted Street Revenue	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	-	700,000
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
REET	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	-	700,000
Capital Expenditures:										
Design	-	10,000	10,000	10,000	10,000	10,000	10,000	10,000	-	70,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	90,000	90,000	90,000	90,000	90,000	90,000	90,000	-	630,000
Total Expenditures:	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	-	700,000

Six Year Transportation Improvement Plan

TIP# N-2

CAPITAL IMPROVEMENT FUND (328)

Project Title: **ADA and Sidewalk Improvement Program**
 Project No: **Varies**
 Project Type: **Non-Capacity (Annual)**
 Project Manager: **James Webb**

STIP# AUB-N/A

Description:

The program will construct citywide accessibility improvements to the public right-of-way sidewalk system including adding/upgrading curb ramps, removing barriers to access and completing gaps. Projects are prioritized annually based on pedestrian demands, existing deficiencies, and citizen requests.

Progress Summary:

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Cap. Imp. Fund Balance	-	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
REET 2	-	200,000	185,000	-	200,000	200,000	200,000	200,000	-	1,185,000
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	200,000	185,000	-	200,000	200,000	200,000	200,000	-	1,185,000
Capital Expenditures:										
Design	-	20,000	20,000	-	20,000	20,000	20,000	20,000	-	120,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	180,000	165,000	-	180,000	180,000	180,000	180,000	-	1,065,000
Total Expenditures:	-	200,000	185,000	-	200,000	200,000	200,000	200,000	-	1,185,000

Six Year Transportation Improvement Plan

TIP# N-3

ARTERIAL STREET FUND (102)

Project Title: **Arterial Bicycle and Safety Improvement Program**
 Project No: **Varies**
 Project Type: **Non-Capacity (Safety)**
 Project Manager: **James Webb**

STIP# AUB-N/A

Description:

The program will construct bicycle and safety improvements on classified roadways throughout the City. Projects are prioritized bi-annually based upon field studies and community feedback.

Progress Summary:

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Unrestricted Street Revenue	-	-	100,000	-	100,000	-	100,000	-	100,000	400,000
	Unsecured Grant	-	-	-	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
	Other	-	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	-	100,000	-	100,000	-	100,000	-	100,000	400,000
	Capital Expenditures:										
	Design	-	-	10,000	-	10,000	-	10,000	-	10,000	40,000
	Right of Way	-	-	-	-	-	-	-	-	-	-
	Construction	-	-	90,000	-	90,000	-	90,000	-	90,000	360,000
	Total Expenditures:	-	-	100,000	-	100,000	-	100,000	-	100,000	400,000

Six Year Transportation Improvement Plan**TIP# N-4****ARTERIAL STREET FUND (102)**

Project Title: **Transit Partnership Routes**
 Project No: **N/A**
 Project Type: **Other**
 Project Manager: **Celile Malik**

STIP# AUB-N/A**Description:**

Operating costs associated with the Commuter Shuttle (PT497) from the Lakeland Hills neighborhood to Auburn Station.

Progress Summary:

The Lakeland Hills route, PT497, began in 2009. The route is operated in partnership with King County Metro and Pierce Transit and is being extended. Route 910 is a KC Metro Transit Now Partnership Program currently authorized until September 2020. The agreement for the Route 910 is will not be renewed as King County Metro is ending this program.

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:		2020 YE	Budget			Forecast Project Cost				Total Project Cost
Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
<i>Unrestricted Street Revenue</i>	-	400,000	180,000	185,000	190,000	195,000	200,000	205,000	-	1,555,000
<i>Unsecured Grant</i>	-	-	-	-	-	-	-	-	-	-
<i>REET</i>	-	-	-	-	-	-	-	-	-	-
<i>Other (Agencies)</i>	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	400,000	180,000	185,000	190,000	195,000	200,000	205,000	-	1,555,000
Capital Expenditures:										
<i>Design</i>	-	-	-	-	-	-	-	-	-	-
<i>Right of Way</i>	-	-	-	-	-	-	-	-	-	-
<i>Transit Service</i>	-	400,000	180,000	185,000	190,000	195,000	200,000	205,000	-	1,555,000
Total Expenditures:	-	400,000	180,000	185,000	190,000	195,000	200,000	205,000	-	1,555,000

Six Year Transportation Improvement Plan

TIP# N-6

ARTERIAL STREET FUND (102)

Project Title: **Auburn Station Access Improvements**
 Project No: **TBD**
 Project Type: **Non-Capacity, Transit**
 Project Manager: **TBD**

STIP# AUB-N/A

Description:

The project will reconstruct the channelization and curb radii to improve turning radii for transit vehicles at the northeast corner of A St SW/2nd St SW.

Progress Summary:

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	2020 YE		Budget			Forecast Project Cost				Total Project Cost
	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Unrestricted Street Revenue	-	-	-	25,000	-	-	-	-	-	25,000
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
Other (King County Metro)	-	-	-	100,000	-	-	-	-	-	100,000
Total Funding Sources:	-	-	-	125,000	-	-	-	-	-	125,000
Capital Expenditures:										
Design	-	-	-	15,000	-	-	-	-	-	15,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	110,000	-	-	-	-	-	110,000
Total Expenditures:	-	-	-	125,000	-	-	-	-	-	125,000

Six Year Transportation Improvement Plan

TIP# N-7

CAPITAL IMPROVEMENT FUNDS (328)

Project Title: **Auburn Way S (SR 164) - Southside Sidewalk Improvements**
 Project No: **TBD**
 Project Type: **Non-motorized, Safety**
 Project Manager: **TBD**

STIP# AUB-N/A

Description:

The project will construct missing sidewalk along the south side of Auburn Way S. The existing sidewalk along the south side currently ends at the intersection with Howard Road and restarts to the west of the intersection with Muckleshoot Plaza. The sidewalk gap extends for approximately 1,700 feet. The project also includes a Rapid Flashing Rectangular Beacon (RRFB) across Howard Road to provide a connection from the existing non-motorized facilities to the proposed improvements. TIB awarded funding to design and construct the missing sidewalk along the north side of Auburn Way S, with construction anticipated to be completed by the end of 2019.

Progress Summary:

Grant funding for the project will be applied for in 2020. Depending on the funding source the design phase could occur in 2021 with construction of the improvements in 2022, or the design phase could start in 2023 with construction of the improvements in 2024.

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Costs				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Cap. Imp. Fund Balance	-	-	-	-	-	-	-	-	-	-
	Unsecured Grant	-	-	-	80,000	600,000	-	-	-	-	680,000
	Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
	REET2	-	-	-	15,000	150,000	-	-	-	-	165,000
	Other	-	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	-	-	95,000	750,000	-	-	-	-	845,000
	Capital Expenditures:										
	Design	-	-	-	95,000	-	-	-	-	-	95,000
	Right of Way	-	-	-	-	-	-	-	-	-	-
	Construction	-	-	-	-	750,000	-	-	-	-	750,000
	Total Expenditures:	-	-	-	95,000	750,000	-	-	-	-	845,000

Six Year Transportation Improvement Plan

TIP# N-8

CAPITAL IMPROVEMENT FUNDS (328)

Project Title: **Evergreen Heights Safe Routes to School Improvements**
 Project No: **TBD**
 Project Type: **Capacity, Non-Motorized**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 37

Description:

Phase 1 of the project included the vertical realignment of S 316th Street along the school frontage to address a sight-distance problems associated with the school driveways and at the intersection with 56th Avenue S. This improvement is being constructed by the school district as part of their half street improvements associated with on-site improvements to the school.

Phase 2 of the project will realign the 56th Avenue S approach to S 316th Street to the east to remove the offset between the street approach and school driveway, and a roundabout will be constructed at the S 316th Street/56th Avenue S intersection replacing the existing all-way stop-control. Other project elements include street lighting and required storm water system improvements.

Progress Summary:

A partnership with the Auburn School District was created for the Phase 1 improvements, which were completed during 2019.

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Unrestricted Street Revenue	24,500	-	-	-	-	-	-	410,000	2,270,000	2,704,500
	Unsecured State Grant	-	-	-	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
	Other (ASD)	122,500	-	-	-	-	-	-	-	-	122,500
	REET2	-	-	-	-	-	-	-	-	-	-
	Traffic Mitigation Fees	100,000	-	-	-	-	-	-	-	-	100,000
	Total Funding Sources:	247,000	-	-	-	-	-	-	410,000	2,270,000	2,927,000
	Capital Expenditures:										
	Design	-	-	-	-	-	-	-	200,000	-	200,000
	Right of Way	-	-	-	-	-	-	-	210,000	-	210,000
	Construction	247,000	-	-	-	-	-	-	-	2,270,000	2,517,000

Six Year Transportation Improvement Plan

TIP # N-9

ARTERIAL STREET FUND (102)

Project Title: **Riverwalk Drive SE Non-Motorized Improvements**
 Project No: **TBD**
 Project Type: **Non-Motorized**
 Project Manager: **TBD**

STIP# AUB-N/A

Description:

The project will construct sidewalks, street lighting, and related storm improvements along the east side of Riverwalk Drive SE between Auburn Way S and Howard Road SE. This project will close a major gap in sidewalk system and ties into the proposed improvements on Auburn Way South. The project will also install a RRFB at the intersection with Howard Road. The project is a proposed to be in partnership with the Muckleshoot Indian Tribe.

Progress Summary:

Grant funding was applied for in 2020. If awarded, design will begin in 2021.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$2,000.

Activity:	Funding Sources:	2020 YE Prior to 2020 Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
	Unrestricted Street Revenue	-	20,000	250,000	-	-	-	-	-	270,000
	Unsecured Grant	-	180,000	450,000	-	-	-	-	-	630,000
	Traffic Impact Fees	-	-	-	-	-	-	-	-	-
	Other (MIT)	-	-	250,000	-	-	-	-	-	250,000
	Total Funding Sources:	-	200,000	950,000	-	-	-	-	-	1,150,000
	Capital Expenditures:									
	Design	-	200,000	-	-	-	-	-	-	200,000
	Right of Way	-	-	-	-	-	-	-	-	-
	Construction	-	-	950,000	-	-	-	-	-	950,000
	Total Expenditures:	-	200,000	950,000	-	-	-	-	-	1,150,000

Six Year Transportation Improvement Plan**TIP# N-10****ARTERIAL STREET FUND (102)**

Project Title: **M Street SE Sidewalk Improvements**
 Project No: **CP2012**
 Project Type: **Non-Motorized**
 Project Manager: **Luis Barba**

STIP# AUB-N/A**Description:**

The project will construct sidewalks along the M Street SE corridor between Auburn Way S and 8th Street SE. The project will complete the missing sections of sidewalk along the west side of M Street SE between Auburn Way S and 8th Street SE, and will complete the missing segments of sidewalk along the east side between Auburn Way S and 12th Street SE. The project will construct approximately 2,000 linear feet of new sidewalk to match adjacent widths. The project will also construct ADA compliant curb ramps, relocate existing utility poles and overhead signage to provide ADA access.

Progress Summary:

Grant funding for the project was awarded by TIB in 2019. The design phase was initiated in 2020 and construction anticipated to be completed during 2021.

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	2020 YE		Budget			Forecast Project Cost				Total Project Cost	
	Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026		Beyond 2026
Unrestricted Street Revenue	-	14,980	209,562	-	-	-	-	-	-	-	224,542
Secured Grant	-	30,020	419,980	-	-	-	-	-	-	-	450,000
Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	45,000	629,542	-	-	-	-	-	-	-	674,542
Capital Expenditures:											
Design	-	45,000	-	-	-	-	-	-	-	-	45,000
Right of Way	-	-	-	-	-	-	-	-	-	-	-
Construction	-	-	629,542	-	-	-	-	-	-	-	629,542
Total Expenditures:	-	45,000	629,542	-	-	-	-	-	-	-	674,542

Six Year Transportation Improvement Plan

TIP# N-11

CAPITAL IMPROVEMENT FUND (328)

Project Title: **Lea Hill Safe Routes to Schools**
 Project No: **TBD**
 Project Type: **Non-Motorized**
 Project Manager: **TBD**

STIP# AUB-N/A

Description:

The project will construct non-motorized improvements along SE 304th St from Hazelwood Elementary School extending east to 124th Ave SE, and along the west side of 124th Ave SE to the south of SE 304th St. The project will complete multiple gaps in the existing non-motorized network. The project will also construct curb and gutter, ADA compliant curb ramps, driveways aprons and retaining walls associated with the new sidewalks. Utility poles will need to be relocated to accommodate the proposed sidewalk alignment in some locations. Additional lighting is proposed for pedestrian safety and will be incorporated onto existing/relocated utility poles, and an RRFB will be installed at the SE 304th St intersection with 116th Ave SE. Ancillary work, including but not limited to, property restoration, grading, storm upgrades, school zone beacon relocation, channelization, fencing, landscaping and mailbox relocation will be addressed with the project.

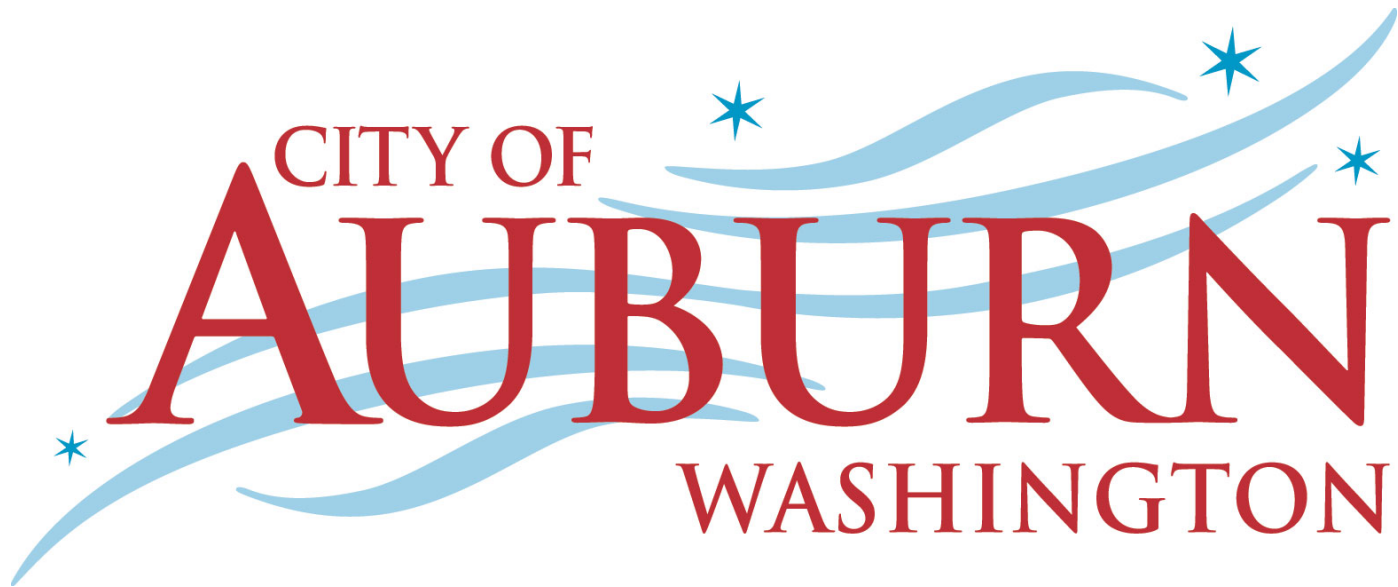
Progress Summary:

Grant funding will be applied for in 2020. If secured the design phase will be started in 2021 and construction completed during 2022.

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Unsecured State Grant	-	-	55,000	700,000	-	-	-	-	-	755,000
REET 2	-	-	15,000	200,000	-	-	-	-	-	215,000
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	70,000	900,000	-	-	-	-	-	970,000
Capital Expenditures:										
Design	-	-	70,000	-	-	-	-	-	-	70,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	900,000	-	-	-	-	-	900,000
Total Expenditures:	-	-	70,000	900,000	-	-	-	-	-	970,000



Six Year Transportation Improvement Plan

TIP# P-1

ARTERIAL PRESERVATION FUND (105)

Project Title: **Arterial Street Preservation Program**
 Project No: **Varies**
 Project Type: **Preservation**
 Project Manager: **Kenneth Clark**

STIP# AUB-N/A

Description:

The program preserves classified streets throughout the City. These projects may include a combination of crack seal, overlays, rebuilds, and spot repairs. This program is funded through a 1% utility tax that was adopted by City Council during 2008.

Progress Summary:

The 2020 construction cycle includes the reconstruction of 15th Street NW between West Valley Highway and the Terrace Drive. The project will also overlay 15th Street NW between West Valley Highway and SR 167. A crack seal project of arterial and collector streets is also proposed.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Arterial Preservation Fund	-	-	900,498	1,500,000	147,372	1,133,870	2,100,000	2,200,000	-	7,981,740
	REET	-	2,200,000	-	-	-	-	-	-	-	2,200,000
	Total Funding Sources:	-	2,200,000	900,498	1,500,000	147,372	1,133,870	2,100,000	2,200,000	-	10,181,740
	Capital Expenditures:										
	Design	-	330,000	135,075	225,000	22,106	170,081	315,000	330,000	-	1,527,261
	Right of Way	-	-	-	-	-	-	-	-	-	-
	Construction	-	1,870,000	765,423	1,275,000	125,266	963,790	1,785,000	1,870,000	-	8,654,479
	Total Expenditures:	-	2,200,000	900,498	1,500,000	147,372	1,133,870	2,100,000	2,200,000	-	10,181,740

Six Year Transportation Improvement Plan

TIP# P-2

LOCAL STREET PRESERVATION FUND (103)

Project Title: **Local Street Preservation Program**
 Project No: **Varies**
 Project Type: **Preservation**
 Project Manager: **Kenneth Clark**

STIP# AUB-N/A

Description:

The program preserves local (unclassified) streets. The work includes crack sealing, asphalt patching, pre-leveling, asphalt overlays and roadway reconstruction. Beginning in 2019 REET funding was dedicated by council to this program. Beyond 2022, funding for this program is shown as other because a dedicated funding source has not yet been identified.

Progress Summary:

This program has successfully completed overlays, chip seals and complete reconstructions since 2005. The program will focus on completing reconstruction needs in addition to regular maintenance treatments.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Local Street Preserv. Fund	-	650,000	-	-	-	-	-	-	-	650,000
	Utilities Transfer to 103 Fund	-	150,000	-	150,000	150,000	150,000	150,000	150,000	-	900,000
	REET	-	750,000	-	-	-	-	-	-	-	-
	REET 2	-	-	-	-	-	-	-	-	-	-
	Other (Unidentified 103 Funding)	-	-	-	-	1,500,000	1,500,000	1,500,000	1,500,000	-	6,000,000
	Total Funding Sources:	-	1,550,000	-	150,000	1,650,000	1,650,000	1,650,000	1,650,000	-	7,550,000
	Capital Expenditures:										
	Design	-	525,000	-	150,000	525,000	500,000	525,000	500,000	-	2,725,000
	Right of Way	-	-	-	-	-	-	-	-	-	-
	Construction	-	1,025,000	-	-	1,125,000	1,150,000	1,125,000	1,150,000	-	5,575,000

Six Year Transportation Improvement Plan

TIP# P-3

ARTERIAL PRESERVATION FUND (105)

Project Title: **2nd Street SE Preservation**
 Project No: **CP2003**
 Project Type: **Preservation**
 Project Manager: **Jai Carter**

STIP# AUB-N/A

Description:

This project will reconstruct 2nd Street SE between A Street SE and Auburn Way S. The reconstruction will utilize full depth reclamation techniques. The project will also address fixed objects located within the clear zone, remove barriers to ADA access, and install new LED street lighting.

Progress Summary:

Grant funding for this project was awarded by TIB in 2019. The design phase will be started in 2020 and construction completed during 2021.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	2020 YE		Budget			Forecast Project Cost				Total Project Cost
	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Arterial Preservation Fund	-	46,000	347,502	-	-	-	-	-	-	393,502
Secured State Grant	-	69,000	521,253	-	-	-	-	-	-	590,253
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	115,000	868,755	-	-	-	-	-	-	983,755
Capital Expenditures:										
Design	-	115,000	-	-	-	-	-	-	-	115,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	868,755	-	-	-	-	-	-	868,755
Total Expenditures:	-	115,000	868,755	-	-	-	-	-	-	983,755

Six Year Transportation Improvement Plan

TIP# P-4

ARTERIAL PRESERVATION FUND (105)

Project Title: **Bridge Deck Preservation Program**
 Project No: **Varies**
 Project Type: **Preservation**
 Project Manager: **Scott Nutter**

STIP# AUB-N/A

Description:

The program rehabilitates bridge decks as identified by the City's annual bridge inspection program.

Progress Summary:

The 2020 and 2021 budget are being used as the local match for grant funds awarded to P-9 and P-13.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	2020 YE	Budget			Forecast Project Cost				Total Project Cost	
		Prior to 2020	Estimate	2021	2022	2023	2024	2025		2026
Funding Sources:										
Arterial Preservation Fund	-	-	-	100,000	100,000	100,000	100,000	100,000	-	500,000
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	-	100,000	100,000	100,000	100,000	100,000	-	500,000
	-									
Capital Expenditures:										
Design	-	-	-	10,000	10,000	10,000	10,000	10,000	-	50,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	90,000	90,000	90,000	90,000	90,000	-	450,000
Total Expenditures:	-	-	-	100,000	100,000	100,000	100,000	100,000	-	500,000

Six Year Transportation Improvement Plan

ARTERIAL PRESERVATION FUND (105)

TIP# P-5

Project Title: **Bridge Structure Preservation Program**
 Project No: **Varies**
 Project Type: **Preservation**
 Project Manager: **Scott Nutter**

STIP# AUB-N/A

Description:

The program constructs improvements to bridge structures identified by the City's annual bridge inspection program.

Progress Summary:

The 2020 budget is being used as the local match for grant funds awarded to P-9 and P-13.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	2020 YE	Budget			Forecast Project Cost				Total Project Cost	
		Prior to 2020	Estimate	2021	2022	2023	2024	2025		2026
Funding Sources:										
Arterial Preservation Fund	-	-	-	50,000	-	50,000	-	50,000	-	150,000
Grants (Fed,State,Local)	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	-	50,000	-	50,000	-	50,000	-	150,000
Capital Expenditures:										
Design	-	-	-	5,000	-	5,000	-	5,000	-	15,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	45,000	-	45,000	-	45,000	-	135,000
Total Expenditures:	-	-	-	50,000	-	50,000	-	50,000	-	150,000

Six Year Transportation Improvement Plan

TIP# P-6

ARTERIAL PRESERVATION FUND (105)

Project Title: Lake Tapps Pkwy/Sumner-Tapps Hwy E Preservation
 Project No: TBD
 Project Type: Preservation
 Project Manager: TBD

STIP# AUB-N/A

Description:

The project will grind and overlay the Lake Tapps Parkway/Sumner-Tapps Highway E corridor from the intersection of Lake Tapps Parkway with Lakeland Hills Way to the intersection of Sumner-Tapps Highway E with 16th Street E (the Auburn City limit). Portions of the corridor include a center two-way left-turn lane which does not require preservation and would be omitted from the grind and overlay. The project scope also includes upgrades to ADA curb ramps and pedestrian push buttons, and replacement of vehicle detection at signalized intersections.

Progress Summary:

An application for grant funding for the project was submitted in 2020. If awarded, design will begin in 2022 and construction in 2023.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	2020 YE	Budget			Forecast Project Cost				Total Project Cost	
		Prior to 2020	Estimate	2021	2022	2023	2024	2025		2026
Funding Sources:										
Arterial Preservation Fund	-	-	25,000	75,000	534,356	-	-	-	-	634,356
Unsecured Grant	-	-	-	-	750,000	-	-	-	-	750,000
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	25,000	75,000	1,284,356	-	-	-	-	1,384,356
Capital Expenditures:										
Design	-	-	25,000	50,000	-	-	-	-	-	75,000
Right of Way	-	-	-	25,000	-	-	-	-	-	25,000
Construction	-	-	-	-	1,284,356	-	-	-	-	1,284,356
Total Expenditures:	-	-	25,000	75,000	1,284,356	-	-	-	-	1,384,356

Six Year Transportation Improvement Plan

TIP# P-7

LOCAL STREET PRESERVATION FUND (103)

Project Title: **2021 Local Street Preservation Project**
 Project No: **CP2019**
 Project Type: **Preservation**
 Project Manager: **Kim Truong**

STIP# AUB-N/A

Description:

This project will reconstruct G Street SE (from East Main Street to 4th Street SE) and the Riverwalk/Forest Ridge Neighborhood. The scope of includes the following: full-depth roadway replacement and/or grind and overlay and any needed utility improvements within the project limits.

Progress Summary:

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:		2020 YE	Budget			Forecast Project Cost				
Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	Total Project Cost
Local Street Preserv. Fund	-	-	-	-	-	-	-	-	-	-
Utilities Transfer to 103 Fund	-	-	-	-	-	-	-	-	-	-
REET	-	300,000	2,200,000	-	-	-	-	-	-	2,500,000
REET 2	-	-	-	-	-	-	-	-	-	-
Other (Unidentified 103 Funding)	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	300,000	2,200,000	-	-	-	-	-	-	2,500,000
Capital Expenditures:										
Design	-	300,000	-	-	-	-	-	-	-	300,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	2,200,000	-	-	-	-	-	-	2,200,000
Total Expenditures:	-	300,000	2,200,000	-	-	-	-	-	-	2,500,000

Six Year Transportation Improvement Plan

TIP# P-8

LOCAL STREET PRESERVATION FUND (103)

Project Title: **2022 Local Street Preservation Project**
 Project No: **TBD**
 Project Type: **Preservation**
 Project Manager: **TBD**

STIP# AUB-N/A

Description:

This project will reconstruct I Street SE (from East Main Street to 4th Street SE). The scope of work includes the following: full-depth roadway replacement and any needed utility improvements within the project limits.

Progress Summary:

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	2020 YE		Budget			Forecast Project Cost				Total Project Cost
	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Local Street Preserv. Fund	-	-	-	-	-	-	-	-	-	-
Utilities Transfer to 103 Fund	-	-	150,000	-	-	-	-	-	-	150,000
REET	-	-	-	750,000	-	-	-	-	-	750,000
REET 2	-	-	-	750,000	-	-	-	-	-	750,000
Other (Unidentified 103 Funding)	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	150,000	1,500,000	-	-	-	-	-	1,650,000
Capital Expenditures:										
Design	-	-	150,000	-	-	-	-	-	-	150,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	1,500,000	-	-	-	-	-	1,500,000
Total Expenditures:	-	-	150,000	1,500,000	-	-	-	-	-	1,650,000

Six Year Transportation Improvement Plan

TIP# P-9

ARTERIAL PRESERVATION FUND (105)

Project Title: **Lea Hill Bridge Deck Preservation**
 Project No: **CP2007**
 Project Type: **Preservation**
 Project Manager: **Kim Truong**

STIP# AUB-N/A

Description:

This project will grind and overlay the bridge deck in an effort to extend the overall service life of the bridge.

Progress Summary:

Federal Grant funding was awarded in 2020.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Costs				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Arterial Preservation Fund	-	-	50,000	50,000	-	-	-	-	-	100,000
Secured Federal Grant	-	-	30,000	517,850	-	-	-	-	-	547,850
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	80,000	567,850	-	-	-	-	-	647,850
Capital Expenditures:										
Design	-	-	80,000	-	-	-	-	-	-	80,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	567,850	-	-	-	-	-	567,850
Total Expenditures:	-	-	80,000	567,850	-	-	-	-	-	647,850

Six Year Transportation Improvement Plan

TIP# P-10

ARTERIAL PRESERVATION FUND (105)

Project Title: **A Street SE Preservation (37th Street SE to Lakeland Hills Way)**
 Project No: **TBD**
 Project Type: **Preservation**
 Project Manager: **TBD**

STIP# AUB-N/A

Description:

The project will grind and overlay A Street SE from 37th Street SE to the Auburn/Pacific City Limit and from the Pacific/Auburn City Limit to the intersection with Lakeland Hills Way). The project also includes ADA upgrades to curb ramps, pedestrian push buttons, and replacement of vehicle detection loops.

Progress Summary:

An application for grant funding for the construction phase of this project was submitted in 2020. If awarded, design would begin in 2022, with construction in 2024.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:		2020 YE	Budget			Forecast Project Cost				Total Project
Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	Cost
Arterial Preservation Fund	-	-	-	25,000	100,000	866,130	-	-	-	991,130
Unsecured Grant	-	-	-	-	-	866,130	-	-	-	866,130
Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	-	25,000	100,000	1,732,260	-	-	-	1,857,260
Capital Expenditures:										
Design	-	-	-	25,000	75,000	-	-	-	-	100,000
Right of Way	-	-	-	-	25,000	-	-	-	-	25,000
Construction	-	-	-	-	-	1,732,260	-	-	-	1,732,260
Total Expenditures:	-	-	-	25,000	100,000	1,732,260	-	-	-	1,857,260

Six Year Transportation Improvement Plan

TIP# P-11

ARTERIAL PRESERVATION FUND (105)

Project Title: **C Street SW Preservation (W Main St to GSA Signal)**
 Project No: **TBD**
 Project Type: **Preservation**
 Project Manager: **TBD**

STIP# AUB-N/A

Description:

The project will grind and overlay C Street SW from W Main Street to the GSA signal (approximately 2,000 feet to the south of 15th Street SW). The project also includes ADA upgrades to curb ramps and pedestrian push buttons, and replacement of vehicle detection loops.

Progress Summary:

An application for grant funding for the construction phase of this project is anticipated to be submitted in 2020. If awarded, design would begin in 2021, with construction in 2023.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Arterial Preservation Fund	-	-	25,000	100,000	1,118,272	-	-	-	-	1,243,272
Unsecured Grant	-	-	-	-	1,118,272	-	-	-	-	1,118,272
Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	25,000	100,000	2,236,544	-	-	-	-	2,361,544
Capital Expenditures:										
Design	-	-	25,000	75,000	-	-	-	-	-	100,000
Right of Way	-	-	-	25,000	-	-	-	-	-	25,000
Construction	-	-	-	-	2,236,544	-	-	-	-	2,236,544
Total Expenditures:	-	-	25,000	100,000	2,236,544	-	-	-	-	2,361,544

Six Year Transportation Improvement Plan

TIP# P-12

ARTERIAL PRESERVATION FUND (105)

Project Title: **Lakeland Hill Way Preservation (57th Drive SE to Lake Tapps Pkwy)**
 Project No: **CP2011**
 Project Type: **Preservation**
 Project Manager: **Seth Wickstrom**

STIP# AUB-N/A

Description:

The project will grind, patch, and overlay Lakeland Hills Way from 57th Drive SE to Lake Tapps Pkwy. The project also includes ADA upgrades to curb ramps and replacement of vehicle detection loops.

Progress Summary:

Grant funding for the construction phase of this project was awarded in 2018.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Arterial Preservation Fund	-	100,000	352,000	-	-	-	-	-	-	452,000
Secured Federal Grant	-	-	748,000	-	-	-	-	-	-	748,000
Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	100,000	1,100,000	-	-	-	-	-	-	1,200,000
Capital Expenditures:										
Design	-	100,000	-	-	-	-	-	-	-	100,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	1,100,000	-	-	-	-	-	-	1,100,000
Total Expenditures:	-	100,000	1,100,000	-	-	-	-	-	-	1,200,000

Six Year Transportation Improvement Plan

TIP# P-13

ARTERIAL PRESERVATION FUND (105)

Project Title: **3rd Street SW Bridges Deck Preservation**
 Project No: **CP2006**
 Project Type: **Preservation**
 Project Manager: **Kim Truong**

STIP# AUB-N/A

Description:

This project will seal and overlay the 3rd Street SW bridge decks in an effort to extend the overall service life of the bridges. The following bridges are included in the project: 3rd Street off-ramp, 3rd Street SW over the BNSF tracks, and 3rd Street SW over A Street SW.

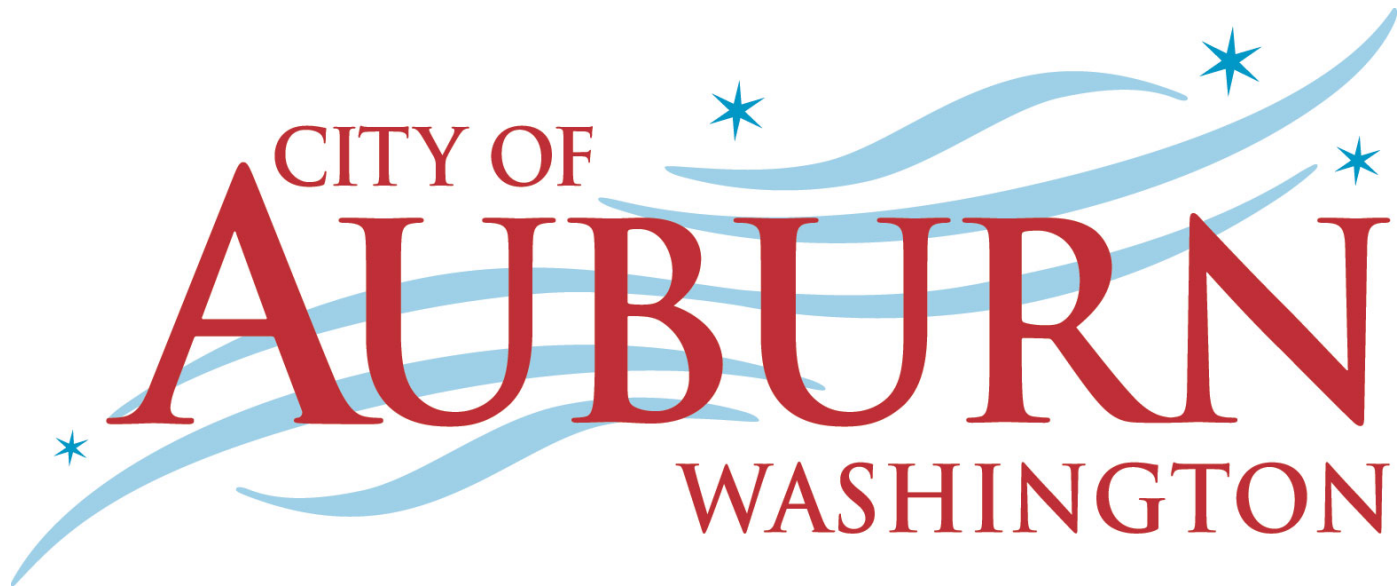
Progress Summary:

Federal Grant funding was awarded in 2020.

Future Impact on Operating Budget:

This project is anticipated to reduce the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Costs				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Arterial Preservation Fund	-	-	100,000	50,000	-	-	-	-	-	150,000
	Secured Federal Grant	-	-	20,000	503,540	-	-	-	-	-	523,540
	Other	-	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	-	120,000	553,540	-	-	-	-	-	673,540
	Capital Expenditures:										
	Design	-	-	120,000	-	-	-	-	-	-	120,000
	Right of Way	-	-	-	-	-	-	-	-	-	-
	Construction	-	-	-	553,540	-	-	-	-	-	553,540
	Total Expenditures:	-	-	120,000	553,540	-	-	-	-	-	673,540



Six Year Transportation Improvement Plan

TIP# R-1

CAPITAL IMPROVEMENT FUND (328)

Project Title: **Neighborhood Traffic Safety Program**
 Project No: **Varies**
 Project Type: **Non-Capacity**
 Project Manager: **Cecile Malik**

STIP# AUB-N/A

Description:

This project will implement low-cost traffic calming strategies, supported by engineering studies as necessary. Projects will be selected annually based on requests from residents, or police concerns, crash history, and available staff and financial resources.

Progress Summary:

Staffing constraints and limited resources make this project challenging to administer. Traffic calming strategies and approaches are being updated to be more sustainable, and adapted to the limited resources (staff and financial) available.

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Fund Balance	-	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
REET 2	-	10,000	10,000	10,000	10,000	50,000	50,000	50,000	-	190,000
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	10,000	10,000	10,000	10,000	50,000	50,000	50,000	-	190,000
Capital Expenditures:										
Design	-	1,000	1,000	1,000	1,000	5,000	5,000	5,000	-	19,000
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	9,000	9,000	9,000	9,000	45,000	45,000	45,000	-	171,000
Total Expenditures:	-	10,000	10,000	10,000	10,000	50,000	50,000	50,000	-	190,000

Six Year Transportation Improvement Plan

TIP# R-2

ARTERIAL STREET FUND (102)

Project Title: **Stewart Road - Sumner (Lake Tapps Parkway Corridor)**
 Project No: **N/A**
 Project Type: **Capacity**
 Project Manager: **City of Sumner**

STIP# AUB-N/A

LOS Corridor ID# N/A

Description:

This is a City of Sumner project to widen the Stewart Road (Lake Tapps Parkway) Corridor. The project will replace the existing bridge over the White River with a new wider one. Completion of this corridor widening is expected to significantly relieve traffic congestion in Auburn along the A St SE and C St SE corridors.

Progress Summary:

City of Sumner has initiated preliminary road design and is applying for grant funding to complete the project.

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
Traffic Mitigation Fees	-	-	-	-	-	150,000	-	-	-	150,000
Total Funding Sources:	-	-	-	-	-	150,000	-	-	-	150,000
Capital Expenditures:										
Design	-	-	-	-	-	-	-	-	-	-
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	150,000	-	-	-	150,000
Total Expenditures:	-	-	-	-	-	150,000	-	-	-	150,000

City of Auburn Transportation Improvement Program

Six Year Transportation Improvement Plan

TIP# R-3

ARTERIAL STREET FUND (102)

Project Title: **M Street Underpass (3rd St SE to 8th St SE)**
 Project No: **c201a0**
 Project Type: **Capacity**
 Project Manager: **Ryan Vondrak**

STIP# AUB-N/A

LOS Corridor ID# 6

Description:

The project constructed a grade separated railroad crossing of M Street SE at the BNSF Stampede Pass tracks.

Progress Summary:

Construction was completed in 2014. The project is now in Public Works Trust Fund Loan (PWTFLL) debt repayment.

Future Impact on Operating Budget:

N/A

Activity:	2020 YE		Budget			Forecast Project Cost				Total Project Cost
	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Secured Grants (Fed, State)	9,731,904	-	-	-	-	-	-	-	-	9,731,904
REET2	1,140,000	-	-	-	-	-	-	-	-	1,140,000
Traffic Impact Fees (Construction)	4,309,782	-	-	-	-	-	-	-	-	4,309,782
Traffic Impact Fees (Debt Service)	767,428	123,428	123,135	122,843	122,550	122,258	121,965	121,673	1,789,995	3,415,275
Traffic Mitigation Fees	660,000	-	-	-	-	-	-	-	-	660,000
PWTFLL (30 years)	3,284,857	-	-	-	-	-	-	-	-	3,284,857
Other (Agencies)	3,090,514	-	-	-	-	-	-	-	-	3,090,514
Total Funding Sources:	22,217,057	123,428	123,135	122,843	122,550	122,258	121,965	121,673	1,789,995	22,347,475
Capital Expenditures:										
Design	2,688,924	-	-	-	-	-	-	-	-	2,688,924
Right of Way	3,358,443	-	-	-	-	-	-	-	-	3,358,443
Construction	16,169,690	-	-	-	-	-	-	-	-	16,169,690
PWTF Debt Service	767,428	123,428	123,135	122,843	122,550	122,258	121,965	121,673	1,789,995	3,415,275
Total Expenditures:	22,217,057	123,428	123,135	122,843	122,550	122,258	121,965	121,673	1,789,995	22,347,475

Six Year Transportation Improvement Plan**TIP # R-4****ARTERIAL STREET FUND (102)**

Project Title: **A Street Loop**
 Project No: **TBD**
 Project Type: **Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A**LOS Corridor ID# 31****Description:**

The project will construct a new one-way (eastbound) roadway connection between A Street SW and A Street SE. The new intersection with A Street SE will allow an unsignalized right-turn movement onto southbound A Street SE, providing an alternative to the intersection of 2nd/3rd Street SE and A Street SE, which does not meet adopted LOS standards. The roadway will be constructed as a complete street to accommodate non-motorized road users.

Progress Summary:

Sound Transit has provided \$340,000 towards the construct phase as mitigation for the second parking garage. Grant applications for both state and federal funding have been submitted in 2020.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$1,000.

Activity:	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
		Prior to 2020	2021	2022	2023	2024	2025	2026	
Funding Sources:									
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-
Unsecured Federal Grant	-	-	-	-	1,125,000	-	-	-	1,125,000
Traffic Impact Fees	-	-	-	300,000	167,000	-	-	-	467,000
Other (Sound Transit)	-	-	-	-	340,000	-	-	-	340,000
Total Funding Sources:	-	-	-	300,000	167,000	1,465,000	-	-	1,932,000
Capital Expenditures:									
Design	-	-	-	300,000	-	-	-	-	300,000
Right of Way	-	-	-	-	167,000	-	-	-	167,000
Construction	-	-	-	-	-	1,465,000	-	-	1,465,000
Total Expenditures:	-	-	-	300,000	167,000	1,465,000	-	-	1,932,000

Six Year Transportation Improvement Plan

TIP# R-5

ARTERIAL STREET FUND (102)

Project Title: **A Street NW, Phase 2 (W Main St to 3rd St NW)**
 Project No: **TBD**
 Project Type: **Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 18

Description:

The project will widen A Street NW to create a three-lane roadway section between W Main St and 3rd St NW. This project will improve the connection between the A St NW Extension, (Phase 1) and Auburn Station and Central Business District. This project could be partially or fully funded by development and/or Sound Transit's parking garage/access improvements. The project is approximately 0.2 miles long.

Progress Summary:

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$500.

Activity:	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
		Prior to 2020	2021	2022	2023	2024	2025	2026	Beyond 2026
Funding Sources:									
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	200,000	1,325,000	-	-
Traffic Impact Fees	-	-	-	-	-	150,000	-	-	-
Other (Developer)	150,000	-	-	-	-	-	1,325,000	-	-
Total Funding Sources:	150,000	-	-	-	-	350,000	2,650,000	-	-
Capital Expenditures:									
Design	-	-	-	-	-	250,000	-	-	-
Right of Way	-	-	-	-	-	100,000	-	-	-
Construction	150,000	-	-	-	-	-	2,650,000	-	-
Total Expenditures:	150,000	-	-	-	-	350,000	2,650,000	-	-

Six Year Transportation Improvement Plan

TIP# R-6

ARTERIAL STREET FUND (102)

Project Title: **Auburn Way S Widening (Hemlock St SE to Poplar St SE)**
 Project No: **CP1622**
 Project Type: **Capacity**
 Project Manager: **Jeff Bender**

STIP# AUB-N/A

LOS Corridor ID# 4

Description:

The project will widen Auburn Way S between Hemlock St SE and Poplar St SE to accommodate two general purpose lanes in each direction, turn lanes, access management where feasible, U-turns, curb, gutter, sidewalk, illumination, transit stop improvements, a new traffic signal at Noble Court, Intelligent Transportation Systems, streetscape and storm improvements. The project length is approximately 0.4 miles. The project is needed to address traffic operations issues along the corridor.

Progress Summary:

The project will extend corridor improvements along Auburn Way S recently completed under previous projects. Grant funding for the design phase was awarded in 2019. Grant funding for the construction phase was applied for in 2020.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$2,500.

Activity:		2020 YE	Budget			Forecast Project Cost				Total Project Cost
Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Secured Federal Grant	-	648,750	648,750	-	-	-	-	-	-	1,297,500
Unsecured Federal Grant	-	-	-	-	3,000,000	1,500,000	-	-	-	4,500,000
Traffic Impact Fees	-	101,250	851,250	750,000	1,830,120	1,300,000	-	-	-	4,832,620
Other (Development)	-	-	-	-	750,000	-	-	-	-	750,000
Total Funding Sources:	-	750,000	1,500,000	750,000	5,580,120	2,800,000	-	-	-	11,380,120
Capital Expenditures:										
Pre-Design	-	-	-	-	-	-	-	-	-	-
Design	-	750,000	750,000	-	-	-	-	-	-	1,500,000
Right of Way	-	-	750,000	750,000	-	-	-	-	-	1,500,000
Construction	-	-	-	-	5,580,120	2,800,000	-	-	-	8,380,120
Total Expenditures:	-	750,000	1,500,000	750,000	5,580,120	2,800,000	-	-	-	11,380,120

Six Year Transportation Improvement Plan

TIP# R-7

ARTERIAL STREET FUND (102)

Project Title: **M Street NE Widening (E Main St to 4th St NE)**
 Project No: **asbd12**
 Project Type: **Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 5

Description:

This project will construct a complete four/five-lane street section on M St NE between south of E Main St and 4th St NE, and reconstruct the signal at E Main St. The project is needed to improve traffic operations along the M Street NE corridor, and replace the existing pavement which is in poor condition.

Progress Summary:

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$500.

Activity:	Funding Sources:	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost	
			Prior to 2020	2021	2022	2023	2024	2025	2026		Beyond 2026
	Unrestricted Street Revenue	-	-	-	120,000	50,000	400,000	-	-	-	570,000
	Arterial Street Fund (105)	-	-	-	185,000	-	1,220,000	-	-	-	1,405,000
	REET 2	-	-	-	-	-	400,000	-	-	-	400,000
	Traffic Impact Fees	-	-	-	70,000	-	465,000	-	-	-	535,000
	Other	-	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	-	-	375,000	50,000	2,485,000	-	-	-	2,910,000
	Capital Expenditures:										
	Pre-Design	-	-	-	-	-	-	-	-	-	-
	Design	-	-	-	375,000	-	-	-	-	-	375,000
	Right of Way	-	-	-	-	50,000	-	-	-	-	50,000
	Construction	-	-	-	-	-	2,485,000	-	-	-	2,485,000
	Total Expenditures:	-	-	-	375,000	50,000	2,485,000	-	-	-	2,910,000

Six Year Transportation Improvement Plan**TIP# R-8****ARTERIAL STREET FUND (102)**

Project Title: **49th Street NE (Auburn Way N to D St NE)**
 Project No: **TBD**
 Project Type: **Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A**LOS Corridor ID# N/A****Description:**

This project will construct the build-out of 49th Street NE between Auburn Way N and D Street NE. The improvements are funded by private development.

Progress Summary:**Future Impact on Operating Budget:**

The annual maintenance cost for this project is estimated to be \$500

Activity:	2020 YE	Budget			Forecast Project Cost					
Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	Total Project Cost
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
Other (Development)	-	-	500,000	1,500,000	-	-	-	-	-	2,000,000
Total Funding Sources:	-	-	500,000	1,500,000	-	-	-	-	-	2,000,000
Capital Expenditures:										
Design	-	-	350,000	-	-	-	-	-	-	350,000
Right of Way	-	-	150,000	-	-	-	-	-	-	150,000
Construction	-	-	-	1,500,000	-	-	-	-	-	1,500,000
Total Expenditures:	-	-	500,000	1,500,000	-	-	-	-	-	2,000,000

Six Year Transportation Improvement Plan

ARTERIAL STREET FUND (102)

TIP# R-9

Project Title: **46th Place S Realignment**
 Project No: **TBD**
 Project Type: **Capacity, Safety**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# N/A

Description:

The project will realign 46th Place S to the south of S 321st Street. The realignment will move the 46th Place S intersection with S 321st Street approximately 350 feet to the east of the current location. This will create two T-intersections (44th Avenue S and 46th Place S) in place of the existing four-leg intersection. The existing 46th Place S will be dead-ended to the south of S 321st Street. The project will improve safety and traffic operations at the intersections.

Progress Summary:

A portion of the right-of-way for the realigned roadway was dedicated as part of an adjacent development project.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$1,000.

Activity:	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
		Prior to 2020	2021	2022	2023	2024	2025	2026	Beyond 2026
Funding Sources:									
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	300,000	540,000	-
Traffic Impact Fees	-	-	-	-	-	-	75,000	135,000	-
Other	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	-	-	-	-	375,000	675,000	-
Capital Expenditures:									
Design	-	-	-	-	-	-	125,000	-	-
Right of Way	-	-	-	-	-	-	250,000	-	-
Construction	-	-	-	-	-	-	-	675,000	-
Total Expenditures:	-	-	-	-	-	-	375,000	675,000	-

Six Year Transportation Improvement Plan**TIP# R-11****ARTERIAL STREET FUND (102)**

Project Title: **124th Ave SE Widening (SE 312th St to SE 318th St)**
 Project No: **TBD**
 Project Type: **Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A**LOS Corridor ID# 23****Description:**

This project will widen 124th Avenue SE to create a four-lane section with bicycle and pedestrian facilities SE 318th St and SE 312th St. The project will also construct improvements at the SE 312th St/124th Ave SE intersection (including adding bike lanes, dual westbound left-turn lanes, dual southbound through-lanes, a northbound right-turn pocket, ITS improvements, and pedestrian safety improvements). The project is needed to improve traffic operations along the corridor and to accommodate all travel modes.

Progress Summary:

Phase 1 improvements between SE 318th and SE 316th were completed by GRC in 2012.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$1,000.

Activity:	2020 YE		Budget			Forecast Project Cost				Total Project Cost
	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	-	-	-	-	-	-	400,000	1,100,000	1,500,000
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	-	-	-	-	-	-	400,000	1,100,000	1,500,000
Capital Expenditures:										
Pre-Design	-	-	-	-	-	-	-	-	-	-
Design	-	-	-	-	-	-	-	400,000	-	400,000
Right of Way	-	-	-	-	-	-	-	-	1,100,000	1,100,000
Construction	-	-	-	-	-	-	-	-	-	-
Total Expenditures:	-	-	-	-	-	-	-	400,000	1,100,000	1,500,000

Six Year Transportation Improvement Plan

TIP# R-16

ARTERIAL STREET FUND (102)

Project Title: **Regional Growth Center Access Improvements**
 Project No: **TBD**
 Project Type: **Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 2

Description:

The project will construct improvements a northbound left-turn lane and a northbound/southbound crosswalk at the 3rd Street NE/Auburn Avenue intersection, and realign the 4th Street NE/Auburn Way N intersection to eliminate the split phase operation signal improving circulation and access. The project will improve traffic operations, safety, and circulation for both vehicles and non-motorized users.

Progress Summary:

Grant funding for the design and construction phases was awarded from Sound Transit in 2019.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$500.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Costs				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	<i>Unrestricted Street Revenue</i>	-	-	-	-	-	-	-	-	-	-
	<i>Secured Grant (Sound Transit)</i>	-	-	325,000	-	1,300,000	-	-	-	-	1,625,000
	<i>Traffic Impact Fees</i>	-	-	85,000	100,000	200,000	-	-	-	-	385,000
	<i>Other</i>	-	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	-	410,000	100,000	1,500,000	-	-	-	-	2,010,000
	Capital Expenditures:										
	<i>Design</i>	-	-	410,000	-	-	-	-	-	-	410,000
	<i>Right of Way</i>	-	-	-	100,000	-	-	-	-	-	100,000
	<i>Construction</i>	-	-	-	-	1,500,000	-	-	-	-	1,500,000
	Total Expenditures:	-	-	410,000	100,000	1,500,000	-	-	-	-	2,010,000

Six Year Transportation Improvement Plan

TIP# R-24

ARTERIAL STREET FUND (102)

Project Title: **Stewart Road - City of Pacific (Lake Tapps Parkway Corridor)**
 Project No: **N/A**
 Project Type: **Capacity**
 Project Manager: **City of Pacific**

STIP# AUB-N/A

LOS Corridor ID# N/A

Description:

This is a City of Pacific project to widen the Stewart Road (Lake Tapps Parkway) Corridor. This is the final segment of widening in the City of Pacific which will tie in with the City of Sumner's planned final widening segment and new bridge over the White River. Completion of this corridor widening is expected to significantly relieve traffic congestion in Auburn along the A St SE and C St SE corridors.

Progress Summary:

City of Pacific is in the process of completing the design phase and environmental permitting for the project. Construction is currently planned for 2021/22.

Future Impact on Operating Budget:

This project will have no impact on the operating budget for street maintenance.

Activity:	Funding Sources:	Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
	Unsecured Grant	-	-	-	-	-	-	-	-	-	-
	Traffic Impact Fees	-	-	-	-	-	-	-	-	-	-
	Traffic Mitigation Fees	-	-	100,000	-	-	-	-	-	-	100,000
	Total Funding Sources:	-	-	100,000	-	-	-	-	-	-	100,000
	Capital Expenditures:										
	Design	-	-	-	-	-	-	-	-	-	-
	Right of Way	-	-	-	-	-	-	-	-	-	-
	Construction	-	-	100,000	-	-	-	-	-	-	100,000
	Total Expenditures:	-	-	100,000	-	-	-	-	-	-	100,000

Six Year Transportation Improvement Plan

TIP# R-26

ARTERIAL STREET FUND (102)

Project Title: **E Valley Highway Widening**
 Project No: **TBD**
 Project Type: **Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A

LOS Corridor ID# 10

Description:

This project will widen E Valley Highway between Lakeland Hills Way and Terrace View Drive SE, approximately 0.6 miles. The roadway will have a four/five lane cross section with a trail connection along the east side. Other project elements include storm improvement, illumination and ITS. The project will provide congestion relief along the corridor and provide access for non-motorized users.

Progress Summary:

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$2,500.

Activity:	Funding Sources:	2020 YE Prior to 2020 Estimate	Budget			Forecast Project Cost				Total Project Cost
			2021	2022	2023	2024	2025	2026	Beyond 2026	
	Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-
	Unsecured Grant	-	-	-	-	-	200,000	175,000	1,000,000	1,375,000
	Traffic Impact Fees	-	-	-	-	-	100,000	75,000	200,000	375,000
	Other (Development)	-	-	-	-	-	-	-	-	-
	Total Funding Sources:	-	-	-	-	-	300,000	250,000	1,200,000	1,750,000
	Capital Expenditures:									
	Design	-	-	-	-	-	300,000	-	-	300,000
	Right of Way	-	-	-	-	-	-	250,000	-	250,000
	Construction	-	-	-	-	-	-	-	1,200,000	1,200,000
	Total Expenditures:	-	-	-	-	-	300,000	250,000	1,200,000	1,750,000

Six Year Transportation Improvement Plan**TIP# R-27****ARTERIAL STREET FUND (102)**

Project Title: **Garden Avenue Realignment**
 Project No: **TBD**
 Project Type: **Safety, Capacity**
 Project Manager: **TBD**

STIP# AUB-N/A**LOS Corridor ID# 19****Description:**

The project will construct a new east/west connection between Garden Avenue and 104th Avenue SE, and will cul-de-sac Garden Avenue to the north of 8th Street NE. This will improve traffic operations and safety along 8th Street NE.

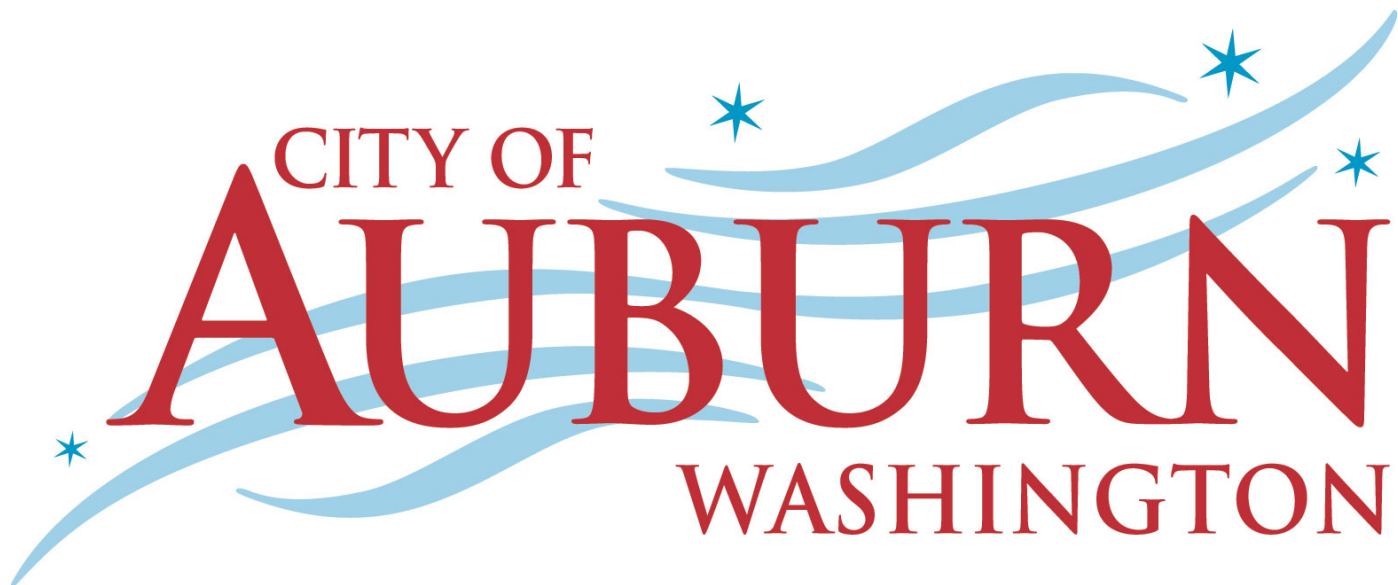
Progress Summary:

The previous project title (Lea Hill Rd Segment 1A) was updated based on recommendations of the recently completed Lea Hill Corridor Study. In 2016, a parcel at the intersection of Garden Avenue and 320th/8th Street was purchased for the project.

Future Impact on Operating Budget:

The annual maintenance cost for this project is estimated to be \$1,000.

Activity:	2020 YE		Budget			Forecast Project Cost				Total Project Cost
	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	
Funding Sources:										
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Unsecured Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	-	150,000	150,000	500,000	-	-	-	-	-	800,000
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	-	150,000	150,000	500,000	-	-	-	-	-	800,000
Capital Expenditures:										
Design	-	-	-	-	-	-	-	-	-	-
Right of Way	-	150,000	150,000	500,000	-	-	-	-	-	800,000
Construction	-	-	-	-	-	-	-	-	-	-
Total Expenditures:	-	150,000	150,000	500,000	-	-	-	-	-	800,000



Six Year Transportation Improvement Plan**TIP# S-1****ARTERIAL STREET FUND (102)**

Project Title: **A Street NW - Phase 1 (3rd St NW to 14th St NW) - Env. Monitoring**
 Project No: **c207a0**
 Project Type: **Environmental Monitoring**
 Project Manager: **Tim Carlaw**

STIP# AUB-N/A**LOS Corridor ID# 18****Description:**

The project constructed a new multi-lane arterial from 3rd Street NW to 14th Street NW completing a missing link along the corridor. This project improves mobility and was tied to corridor development. The project length was approximately three-quarters of a mile. The City purchased ROW from the northern property owner. If the property develops any access to A St NW, some or a portion of those funds may be reimbursed to the City (total cost was \$251,000).

Progress Summary:

Pre-design was completed prior to 2007. Final design and environmental permitting were completed in 2011. Construction was completed in 2012. The project is now in the wetland maintenance monitoring period required until 2023.

Future Impact on Operating Budget:

N/A

Activity:	Funding Sources:	2020 YE Prior to 2020	2020 YE Estimate	Budget			Forecast Project Cost				Total Project Cost
				2021	2022	2023	2024	2025	2026	Beyond 2026	
	Unrestricted Street Revenue	123,276	-	-	-	-	-	-	-	-	123,276
	Secured Grants (Fed, State)	6,562,702	-	-	-	-	-	-	-	-	6,562,702
	Traffic Impact Fees	1,288,115	25,000	25,000	25,000	-	-	-	-	-	1,363,115
	Other (Developer)	383,381	-	-	-	-	-	-	-	-	383,381
	Total Funding Sources:	8,357,474	25,000	25,000	25,000	-	-	-	-	-	8,432,474
	Capital Expenditures:										
	Design	2,247,331	-	-	-	-	-	-	-	-	2,247,331
	Right of Way	821,341	-	-	-	-	-	-	-	-	821,341
	Construction	5,000,640	-	-	-	-	-	-	-	-	5,000,640
	Monitoring	288,162	25,000	25,000	25,000	-	-	-	-	-	363,162
	Total Expenditures:	8,357,474	25,000	25,000	25,000	-	-	-	-	-	8,432,474

Six Year Transportation Improvement Plan

TIP# S-2

ARTERIAL STREET FUND (102)

Project Title: **S 277th St Corridor Capacity and Non-Motorized Trail Improvements - Env. Monitoring**
 Project No: **CP1821**
 Project Type: **Environmental Monitoring**
 Project Manager: **Tim Carlaw**

STIP# N/A

LOS Corridor ID# 15

Description:

This project will complete the environmental monitoring requirements related to the S 277th St corridor widening project between Auburn Way North and I St NE.

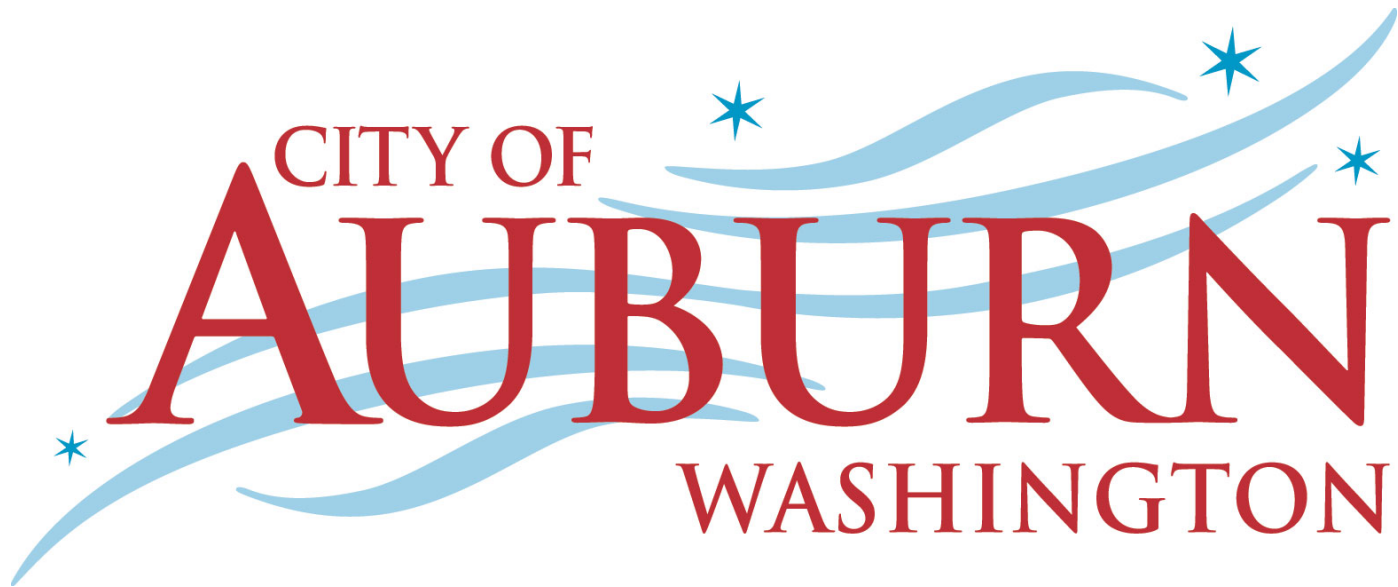
Progress Summary:

The 10 year monitoring period began in 2018 after final completion and will continue through 2028.

Future Impact on Operating Budget:

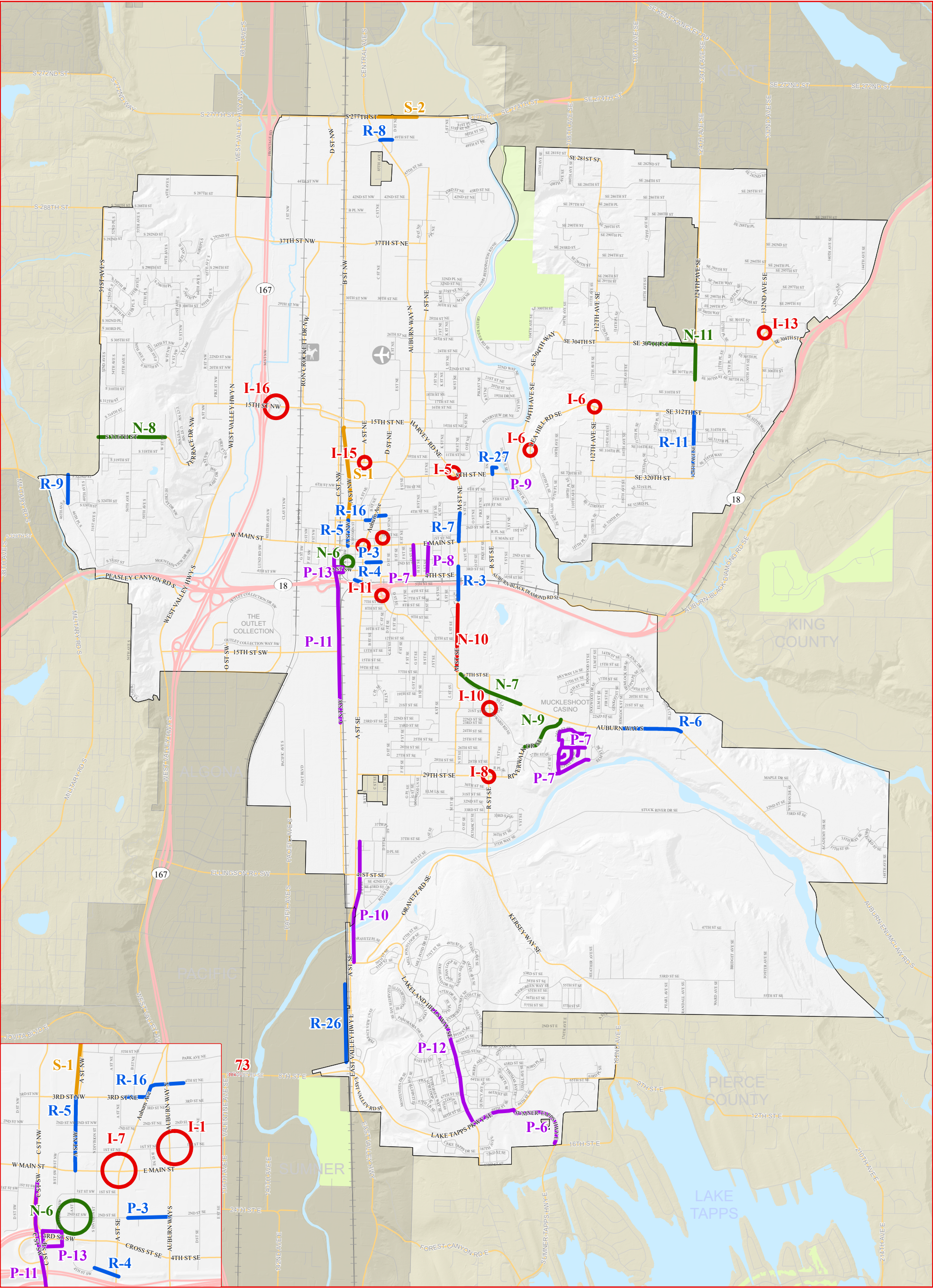
N/A

Activity:		2020 YE	Budget			Forecast Project Cost				
Funding Sources:	Prior to 2020	Estimate	2021	2022	2023	2024	2025	2026	Beyond 2026	Total Project Cost
Unrestricted Street Revenue	-	-	-	-	-	-	-	-	-	-
Unsecured Fed/State Grant	-	-	-	-	-	-	-	-	-	-
Traffic Impact Fees	12,706	20,000	20,000	20,000	20,000	20,000	20,000	20,000	40,000	192,706
Other	-	-	-	-	-	-	-	-	-	-
Total Funding Sources:	12,706	20,000	20,000	20,000	20,000	20,000	20,000	20,000	40,000	192,706
Capital Expenditures:										
Design	-	-	-	-	-	-	-	-	-	-
Right of Way	-	-	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-	-	-
Monitoring	12,706	20,000	20,000	20,000	20,000	20,000	20,000	20,000	40,000	192,706
Total Expenditures:	12,706	20,000	20,000	20,000	20,000	20,000	20,000	20,000	40,000	192,706

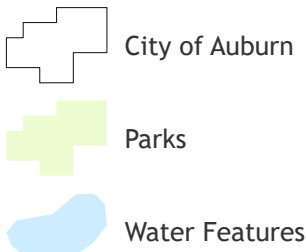


City of Auburn 2020-2025 Transportation Improvement Program Summary												
Project Number	TIP #	Project Title	Grant Status	Prior to 2021	2021	2022	2023	2024	2025	2026	Beyond 2026	Total Project Cost
cp1927	I-1	Auburn Way N/1st Street NE Signal Replacement	N/A	200,000	575,000	-	-	-	-	-	-	775,000
Various	I-2	Traffic Signal Improvements	N/A	100,000	200,000	100,000	200,000	100,000	200,000	200,000	-	1,100,000
cp1912	I-3	ITS Dynamic Message Signs	N/A	446,820	-	-	-	-	-	20,000	125,000	591,820
Various	I-4	Street Lighting Improvement Program	N/A	50,000	50,000	50,000	50,000	50,000	50,000	50,000	-	350,000
cp0611	I-5	Harvey Rd NE/8th St NE Intersection Improvements	N/A	1,149,678	83,598	83,196	82,794	82,382	81,990	81,589	161,972	1,807,199
cpxxxx	I-6	Lea Hill Rd/112th Ave SE Roundabout	Unsecured	-	-	-	-	350,000	420,000	2,200,000	2,200,000	5,170,000
cpxxxx	I-7	Auburn Avenue/E Main Street Signal Replacement	N/A	-	-	-	-	-	-	150,000	900,000	1,050,000
cpxxxx	I-8	29th St SE/R St SE Intersection Improvements	N/A	-	750,000	500,000	250,000	3,500,000	-	-	-	5,000,000
cpxxxx	I-10	R St SE/21st St SE Intersection Improvements	Unsecured	-	-	-	250,000	100,000	750,000	-	-	1,100,000
cpxxxx	I-11	Auburn Way S/6th St SE Intersection Improvements	Unsecured	-	-	-	130,000	25,000	630,000	-	-	785,000
cpxxxx	I-13	SE 304th Street/132nd Avenue SE Roundabout	N/A	-	-	-	250,000	50,000	1,200,000	-	-	1,500,000
cpxxxx	I-15	10th St NW/A St NW Intersection Improvements	N/A	-	-	200,000	650,000	-	-	-	-	850,000
cpxxxx	I-16	15th Street NW/SR 167 NB Ramps	N/A	125,000	1,525,000	-	-	-	-	-	-	1,650,000
cp1920	I-17	Citywide LED Street Lighting and Controls	Secured	2,660,988	39,012	39,012	-	-	-	-	-	2,739,012
Various	N-1	Pedestrian Accessibility and Safety Program	N/A	100,000	100,000	100,000	100,000	100,000	100,000	100,000	-	700,000
Various	N-2	ADA and Sidewalk Improvement Program	N/A	200,000	185,000	-	200,000	200,000	200,000	200,000	-	1,185,000
Various	N-3	Arterial Bicycle & Safety Improvement Program	N/A	-	100,000	-	100,000	-	100,000	-	100,000	400,000
N/A	N-4	Transit Partnership Routes	N/A	400,000	180,000	185,000	190,000	195,000	200,000	205,000	-	1,555,000
cpxxxx	N-6	Auburn Station Access Improvements	N/A	-	-	125,000	-	-	-	-	-	125,000
cpxxxx	N-7	Auburn Way S - Southside Sidewalk Improvements	Unsecured	-	-	95,000	750,000	-	-	-	-	845,000
cpxxxx	N-8	Evergreen Heights Safe Routes to Schools	N/A	247,000	-	-	-	-	-	410,000	2,270,000	2,927,000
cpxxxx	N-9	Riverwalk Drive Non-Motorized Improvements	Unsecured	-	200,000	950,000	-	-	-	-	-	1,150,000
cp2012	N-10	M Street SE Sidewalk Improvements	Secured	45,000	629,542	-	-	-	-	-	-	674,542
cpxxxx	N-11	Lea Hill Safe Routes to Schools	Unsecured	-	70,000	900,000	-	-	-	-	-	970,000
Various	P-1	Arterial Street Preservation Program	N/A	2,200,000	900,498	1,500,000	147,372	1,133,870	2,100,000	2,200,000	-	10,181,740
Various	P-2	Local Streets Improvement Program	N/A	1,550,000	-	150,000	1,650,000	1,650,000	1,650,000	1,650,000	-	8,300,000
cp2003	P-3	2nd Street SE Preservation	Secured	115,000	868,755	-	-	-	-	-	-	983,755
Various	P-4	Bridge Deck Preservation Program	N/A	-	-	100,000	100,000	100,000	100,000	100,000	-	500,000
Various	P-5	Annual Bridge Structure Preservation Program	N/A	-	-	50,000	-	50,000	-	50,000	-	150,000
cpxxxx	P-6	Lake Tapps Pkwy/Sumner-Tapps Pkwy E Preservation	Unsecured	-	25,000	75,000	1,284,356	-	-	-	-	1,384,356
cp2019	P-7	2021 Local Street Improvement Project	N/A	300,000	2,200,000	-	-	-	-	-	-	2,500,000
cpxxxx	P-8	2022 Local Street Improvement Project	N/A	-	150,000	1,500,000	-	-	-	-	-	1,650,000
cp2007	P-9	Lea Hill Bridge Deck Preservation	Secured	-	80,000	567,850	-	-	-	-	-	647,850
cpxxxx	P-10	A St SE Preservation (37th St SE to Lakeland Hills Way)	Unsecured	-	-	25,000	100,000	1,732,260	-	-	-	1,857,260
cpxxxx	P-11	C Street SW Preservation (W Main St to GSA Signal)	Unsecured	-	25,000	100,000	2,236,544	-	-	-	-	2,361,544
cp2011	P-12	Lakeland Hills Way Preservation (57th Dr SE to Lake Tapps Pkwy)	Secured	100,000	1,100,000	-	-	-	-	-	-	1,200,000
cp2006	P-13	3rd Street SW Bridge Deck Preseration	Secured	-	120,000	553,540	-	-	-	-	-	673,540
Various	R-1	Traffic Calming	N/A	10,000	10,000	10,000	10,000	50,000	50,000	50,000	-	190,000
N/A	R-2	Stewart Road - City of Sumner	N/A	-	-	-	-	150,000	-	-	-	150,000
c201a0	R-3	M Street Underpass	N/A	19,823,056	123,135	122,843	122,550	122,258	121,965	121,673	1,789,995	22,347,475
cpxxxx	R-4	A Street Loop	Unsecured	-	-	300,000	167,000	1,465,000	-	-	-	1,932,000
cpxxxx	R-5	A St NW, Phase 2 (W Main St to 3rd St NW)	Unsecured	150,000	-	-	-	350,000	2,650,000	-	-	3,150,000
cp1622	R-6	Auburn Way S Widening (Hemlock St SE to Poplar St SE)	Unsecured	750,000	1,500,000	750,000	5,580,120	2,800,000	-	-	-	11,380,120
cpxxxx	R-7	M St NE (E Main St to 4th St NE)	Unsecured	-	-	375,000	50,000	2,485,000	-	-	-	2,910,000
cpxxxx	R-8	49th St NE (Auburn Way N to I St NE)	N/A	-	500,000	1,500,000	-	-	-	-	-	2,000,000
cpxxxx	R-9	46th Place S Realignment	Unsecured	-	-	-	-	-	375,000	675,000	-	1,050,000
cpxxxx	R-11	124th Ave SE Corridor Improvements (SE 312th St to SE 318th St)	N/A	-	-	-	-	-	-	400,000	1,100,000	1,500,000
cpxxxx	R-16	Regional Growth Center Access Improvements	Secured	-	410,000	100,000	1,500,000	-	-	-	-	2,010,000
N/A	R-24	Stewart Road - City of Pacific	N/A	-	-	-	100,000	-	-	-	-	100,000
cpxxxx	R-26	E Valley Hwy Widening	Unsecured	-	-	-	-	-	300,000	250,000	1,200,000	1,750,000
cpxxxx	R-27	Garden Avenue Realignment	N/A	150,000	150,000	500,000	-	-	-	-	-	800,000
c207a0	S-1	A St NW, Phase 1 (3rd St NW to 14th St NW)	N/A	8,382,474	25,000	25,000	-	-	-	-	-	8,432,474
cp1821	S-2	S 277th St Monitoring	N/A	32,706	20,000	20,000	20,000	20,000	20,000	20,000	40,000	192,706
Total				39,287,722	12,894,540	11,651,441	16,270,736	16,860,770	11,298,955	9,133,262	9,886,967	127,284,393

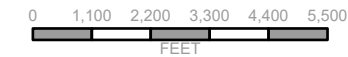
City of Auburn 2021 - 2026 Transportation Improvement Program (TIP)



- Intersection and ITS Improvements
- Non-Motorized/Transit Improvements
- Prelim Eng and Misc Improvements
- Preservation
- Roadway Improvements



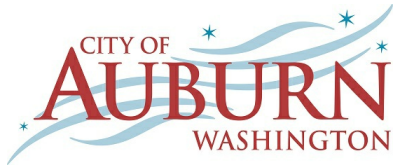
Appendix B



Printed On: 5/19/2020
Map ID: 6174



Information shown is for general reference purposes only and does not necessarily represent exact geographic or cartographic data as mapped. The City of Auburn makes no warranty as to its accuracy.



AGENDA BILL APPROVAL FORM

Agenda Subject:

Ordinance No. 6761 (Tate)(30 Minutes)

Date:

May 18, 2020

Department:

Community Development

Attachments:

[1. Memo: Floodplain Code Update](#)

[Ordinance No. 6761](#)

[3. Ch. 15.68 ACC Draft Changes - Track](#)

[Changes](#)

[4. Ch. 15.68 ACC Draft Changes](#)

[Floodplain Study Session Presentation](#)

Budget Impact:

Current Budget: \$0

Proposed Revision: \$0

Revised Budget: \$0

Administrative Recommendation:

Staff Recommendation: Schedule Ordinance No. 6761 for action by City Council at the regular meeting on June 1st, 2020.

Background Summary:

The reason that the Planning Commission's recommendation to adopt Ordinance 6761 is being brought forward to the City Council while under Governor Inslee's various orders related to the COVID-19 outbreak is because City action is required by August 19, 2020 under federal rule.

See Attached Memo

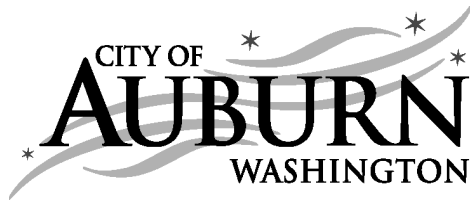
Reviewed by Council Committees:

Councilmember: Brown

Staff: Tate

Meeting Date: May 26, 2020

Item Number:



MEMORANDUM

TO: City Council Members

CC: Mayor Nancy Backus

FROM: Steven Sturza, PE, CFM, Development Engineer Manager,
Department of Community Development

DATE: May 26th, 2020

SUBJECT: Study Session for proposed Floodplain Development Code Revisions (ACC 15.68, 'Flood Hazards', to be retitled 'Floodplain Development Management') as recommended by Planning Commission

PURPOSE

City Council Study Session regarding policy updates to the City's Floodplain Development Code adopted in 2010 to comply with the current requirements set by the National Marine Fisheries Services' (NMFS) Biological Opinion, the National Flood Insurance Program (NFIP) in Western Washington, and Federal Emergency Management Agency (FEMA).

BACKGROUND

The City of Auburn is a participating community in the National Flood Insurance Program (NFIP). In 2010, the NMFS issued a Biological Opinion (referred to in this memo as the "Bi-Op") which concluded that continued implementation of the NFIP in the Puget Sound (Western Washington) region adversely affects the habitat of certain threatened and endangered species listed under the federal Endangered Species Act (ESA). The Bi-Op required changes to the way the NFIP is implemented in order to meet the requirements of the Endangered Species Act (ESA).

In 2010, a model floodplain management ordinance was published by FEMA. FEMA developed the model ordinance to provide NFIP communities with model language that could be adopted as part of a community's local land use and building regulatory codes to address the requirements of the Bi-Op. FEMA requires each NFIP community to select one of the following three approaches for implementation of the Bi- Op requirements, referred to as the "Three Doors Approach":

- Door #1: Adoption of the provisions of the FEMA model ordinance (programmatic approach);
- Door #2: Checklist (community by community approach); and
- Door #3: Permit by Permit Compliance (project by project approach)

In April 2010, the Auburn City Council adopted Ordinance No. 6295 which accepted the Planning Commission's recommendation to incorporate the provisions of the FEMA model ordinance into the City's Flood Hazard Area regulations (Chapter 15.68 ACC), and adopting a revised Regulatory Floodplain Map. The ordinance also amended sections of City Code chapters 14.03, 16.10, 17.04, 17.09, 17.14, and 18.70.

The City's amended Flood Hazard Area regulations were approved by FEMA on September 21, 2011, recognizing the City as a 'Door 1' community and providing the City with coverage under the Endangered Species Act for its floodplain management activities.

In December 2013 and again in December 2019, FEMA issued an updated Model Ordinance for regulating floodplain development. City staff has been waiting to update the code to coordinate with the updated Federal Insurance Rate Maps (FIRM) that are being issued by FEMA. As anticipated FEMA contacted the City of Auburn to update our FIRM references on February, 19th 2020 and have until August 19th, 2020 to make the update. City staff has prepared updates to ACC, Chapter 15.68 to include the changes from the Model Ordinance to be consistent with City standards/practices for Planning Commission's consideration.

City staff routed the City's updated ACC, Chapter 15.68 to FEMA and Department of Ecology's (DOE) NFIP State Coordinator, David Radabaugh at the end of 2019 for review and input to ensure it meets current standards. Between March 3rd and March 30th additional comments were provided by David Radabaugh. These additional comments from DOE were provided in response to the Letter of Determination from FEMA directing City of Auburn to update our floodplain code and adopt the new flood insurance studies that have been under review for the past 13-years. The proposed changes to the ACC, Chapter 15.68 are shown by ~~strikeout~~/underline code attached to this memo as Exhibit A. A clean version of the ACC, Chapter 15.68 is also provided as the changes are substantial and the marked up version of ACC 15.68 is difficult to read.

PLANNING COMMISSIONS RECOMMENDED UPDATES

Based on Staff's implementation of the Floodplain Development Code over the years, the Model Ordinance for the Puget Sound Region, and required changes from DOE, below are the substantive changes to ACC, Chapter 15.68 as recommended by Planning Commission:

- Reorganize ACC, Chapter 15.68 to correspond to the layout of the latest FEMA Model Ordinance for the Puget Sound Region. The changes that are transmitted under cover of this memo look extensive because of the amount of strikethrough and underline, however much of that is due to relocating existing adopted code language from one place to another. In other words, underlined language may not be new and may instead reflect a change in the organizational structure of the code. For this reason, staff is identifying this bulleted list of substantive changes.
- Update the definitions section to have the latest definitions per NFIP, NMFS, FEMA, DOE and City of Auburn. This comes from the latest Model Ordinance and current correspondence with FEMA and DOE.
- Definition of area to be regulated for floodplain development (see further discussion below)
- Designation of the Channel Migration Area (see further discussion below)
- Remove most of the permit application submittal criteria from ACC, Chapter 15.68 and include it in the floodplain development permit application.

- Information already provided in ACC 18.70.025 for variances is removed to avoid redundancy.
- Establishing a minimum setback for structures of 15 feet from the 'Protected Area', or if not met, a habitat assessment is required.
- Remove a date for assessing cumulative improvements.
- Increasing the requirements for what is to be addressed in Habitat Mitigation Plans prepared for developments located outside of the Protected Area (Note: Does not change the requirement of whether or not to prepare a Habitat Mitigation Plan).
- Update the Flood Insurance Study (FIS) and Flood Insurance Rate Map (FIRM) reference dates to be August 19, 2020 for King County and March 7, 2017 for Pierce County Areas. Please note that maps of the north end of the City of Auburn that show the existing and proposed special flood hazard areas were e-mailed and mailed to the Planning Commission members as requested at the Planning Commission meeting that occurred on March 3rd, 2020.

Key Ordinance Change No. 1 - Area to be Regulated

In the 2010 Model Ordinance used by the City for development of its current regulations, the area specified to be regulated is the Special Flood Hazard Area (SFHA) and all 'Protected Areas'. The 2013 revised Model Ordinance specifies that the area to be regulated is the SFHA (inclusive of any 'Protected Areas' that are located within the extent of the SFHA) and removes the reference to "Protected Areas".

Protected Areas include the Riparian Habitat Zone (RHZ), any mapped Channel Migration Area (CMAs), and the FEMA-designated floodway. The RHZ is a dimensioned zone adjacent to rivers and streams located within the SFHA, and varies in width from 150 feet to 250 on each side of the river or stream's Ordinary High Water Mark (OHWM). In a number of cases in Auburn, the extent of the RHZ reaches beyond the SFHA that the river or stream is located within, resulting in a regulated area that includes the SFHA and the additional area of the RHZ that occurs outside of the SFHA in which that reach of river or stream is located within. One significant area where this occurs is along the western shoreline of the Green River, where there are urban densities of existing single-family and multi-family residences. In a number of cases, these RHZ areas outside of the SFHA are also located behind existing levees, or at elevations that are not expected to experience flooding during the base flood (also referred to as the "100-year" or "1% annual recurrence probability" flood).

While the primary purpose of regulating this RHZ area outside of the SFHA is to protect or preserve critical floodplain habitat for federally-listed threatened and endangered species, many of these areas have previously been heavily developed, and consist of structures, paved or other impervious surfaces, and urban landscaping, and consequently offer little habitat value to aquatic species.

Auburn also has a mapped CMA for the Green River that is presently included as part of its regulatory floodplain as required by the original (2010) Model Ordinance. Similar to the RHZ, the CMA also extends beyond the SFHA area in a number of areas within the City, and in many cases portions of this area are also located behind existing levees.

The third element of the Protected Area, the FEMA-designated floodway, is in all cases located within the FEMA-designated SFHA and therefore does not result in any additional areas for floodplain regulation beyond the SFHA under the City's current regulations.

Planning Commission recommends revising the regulatory floodplain to include the SFHA and the Protected Area as it occurs within the SFHA, unless the area is undeveloped with predominately native vegetation that have benefits to endangered species, in which case the regulations for riparian habitat zones shall apply and be included in the regulatory floodplain. This so that existing built out areas are not exposed to development requirements that don't make sense when they are expanding or modifying a development. The intent is to apply the critical area and floodplain regulations to areas where it matters most and to not require habitat protection plans or other types of efforts in already built out areas.

Key Ordinance Change No. 2 - Designation of Channel Migration Area

The 2010 Model Ordinance required CMAs to be delineated as part of the regulatory floodplain map, in any areas where channel migration areas had previously been mapped and adopted for local regulatory purposes, with the addition of 50 feet. It further specified that if there was no adopted channel migration area map for a water body, that there was no requirement to prepare a new delineation of a CMA for floodplain regulatory purposes.

The 2013 revised Model Ordinance specifies that where a channel migration area has not been mapped/adopted by the community, that a floodplain permit applicant shall either designate the entire SFHA as the channel migration area, or conduct a study to identify the channel migration area in accordance with FEMA's Regional Guidance for Hydrologic and Hydraulic Studies. The revised Model Ordinance also specifies that the floodplain administrator shall use the most restrictive data available for determining the channel migration area.

At the time of the City's 2010 flood hazard area amendments, the only established mapped channel migration area in Auburn was associated with the Green River (identified by a 1993 King County channel migration study). As a result, the only CMA that is designated on the City's current regulatory floodplain map is the Green River CMA. A channel migration area has not yet been mapped for the White River or Mill Creek, and there is therefore no CMA designated or required to be evaluated for development applications in the SFHA for these water bodies.

The revised Model Ordinance requires that for any floodplain permit application for development located within the SFHA where a CMA has not yet been mapped (White River SFHA, Mill Creek SFHA, and portions of Green River SFHA), the applicant has the option of treating the entire SFHA within the project area as a CMA, or to submit a special hydrologic/hydraulic study that establishes the location of the CMA pursuant to FEMA's technical criteria.

Planning Commission recommends that we provide applicants for development within the floodplain the option to either provide a study that locates the CMA for their proposed development site as described in the revised Model Ordinance or designate that all areas in the SFHA for which no CMA has been mapped shall meet the requirements for a CMA (i.e. all SFHAs without a mapped CMA would be automatically included as part of the Protected Area).

ORDINANCE NO. 6761

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF
AUBURN, WASHINGTON, RELATING TO FLOOD HAZARD
AREAS AND AMENDING CHAPTER 15.68 OF THE
AUBURN CITY CODE**

WHEREAS, the City is required as a condition of continued eligibility in the National Flood Insurance Program to adopt floodplain management regulations that meet the requirements of the federal floodplain management criteria for flood-prone areas; and

WHEREAS, state law requires cities to periodically review and update their Critical Areas ordinances, one element of which is floodplain management regulations; and

WHEREAS, federal and state criteria for floodplain management have changed since the City last revised its floodplain management regulations, in 2010; and

WHEREAS, to assist local governments update their codes, FEMA (Federal Emergency Management Agency) provides cities with a floodplain management model ordinance; and

WHEREAS, the City must revise its regulations to reference the latest Flood Insurance Study, accompanying Flood Insurance Rate Maps (FIRMs), and supporting information being adopted by FEMA and

WHEREAS, updating the floodplain management regulations enhances flood safety and reduces flooding risks through preemptive planning and by improving local standards to reflect current science.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, DO ORDAIN as follows:

Section 1. Amendment to City Code. Chapter 15.68 of the Auburn City Code is repealed and reenacted to read as shown in Exhibit A.

Section 2. Implementation. The Mayor is authorized to implement those administrative procedures necessary to carry out the directives of this legislation.

Section 3. Severability. The provisions of this ordinance are declared to be separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section, or portion of this ordinance, or the invalidity of the application of it to any person or circumstance, will not affect the validity of the remainder of this ordinance, or the validity of its application to other persons or circumstances.

Section 4. Effective date. This Ordinance shall be effective and in force five days from and after the passage, approval, and publication of this Ordinance as provided by law but shall be implemented beginning on August 18, 2020.

INTRODUCED: _____

PASSED: _____

APPROVED: _____

NANCY BACKUS, MAYOR

ATTEST:

APPROVED AS TO FORM:

Shawn Campbell, MMC, City Clerk

Kendra Comeau, City Attorney

Published: _____

Ord. 6791 Exhibit A

ACC Chapter 15.68

Strikethrough Underline

Chapter 15.68

~~FLOOD HAZARD AREAS~~ FLOODPLAIN DEVELOPMENT MANAGEMENT

Sections:

~~Article I. — Purpose~~

~~15.68.010 — Reserved.~~

~~15.68.020 — Reserved.~~

~~15.68.030 — Statement of purpose.~~

~~15.68.040 — Methods of reducing flood losses.~~

~~Article II. — Definitions~~

~~15.68.050 — Interpretation of language.~~

~~15.68.060 — Definitions.~~

~~Article III. — General Provisions~~

~~15.68.070 — Land to which this chapter applies.~~

~~15.68.080 — Reserved.~~

~~15.68.090 — Penalties for noncompliance.~~

~~15.68.100 — Abrogation and greater restrictions.~~

~~15.68.110 — Interpretation.~~

~~15.68.120 — Warning and disclaimer of liability.~~

~~15.68.125 — Appeals.~~

~~Article IV. — Administration~~

~~15.68.130 — Establishment of and requirement to obtain floodplain development permit.~~

~~15.68.135 — Floodplain development permit application.~~

~~15.68.136 — Floodplain development permit expiration.~~

~~15.68.140 — Designation of the floodplain administrator.~~

~~15.68.141 — Duties of the floodplain administrator.~~

~~15.68.150 — Duties and responsibilities of the public works department.~~

~~15.68.151 — Duties and responsibilities of the planning and development department.~~

~~Article V. — Provisions for Flood Hazard Protection~~

~~15.68.160 — Standards of the public works department.~~

~~15.68.161 — Standards of the planning and development department.~~

~~15.68.170 — Additional standards of the planning and development department.~~

~~15.68.180 — Floodways and community acknowledgement of FEMA map amendments.~~

~~15.68.190 — Developments within areas of special flood hazard.~~

~~15.68.200 — Compensatory storage requirements.~~

~~Prior legislation: Ords. 4214 and 4220.~~

~~Article I. Purpose~~

Section 1. General

15.68.010 Statutory Authorization.

15.68.020 Purpose.

15.68.030 Lands to which this Ordinance Applies.

15.68.040 Approach.

15.68.050 Penalties for Non-Compliance.

15.68.060 Interpretation.

15.68.070 Abrogation and Greater Restrictions.

15.68.080 Warning and Disclaimer of Liability.

15.68.090 Severability.

Section 2. Definitions

15.68.100 Definitions.

Section 3. Regulatory Data

15.68.110 Area to be Regulated.

15.68.120 Special Flood Hazard Area.

15.68.130 Flood Hazard Data.

15.68.140 Protected Area.

15.68.150 New Regulatory Data.

Section 4. Administration

15.68.160 Establishment of Floodplain Development Permit.

15.68.170 Floodplain Development Permit Application.

15.68.180 Floodplain Development Permit Expiration.

15.68.190 Designation of the Floodplain Administrator.

15.68.200 Duties of the Floodplain Administrator.

15.68.210 Notification to Other Entities.

15.68.220 Records.

15.68.230 Certificate of Occupancy.

15.68.240 Appeals.

15.68.250 Variance Criteria.

Section 5. General Development Standards

15.68.260 Subdivisions.

-
- 15.68.270 Site Design.
 - 15.68.280 Hazardous Materials.
 - 15.68.290 Critical Facilities.

Section 6. Standards for Protection of Structures

- 15.68.300 Applicability.
- 15.68.310 Flood Protection Standards.
- 15.68.320 Nonresidential Construction.
- 15.68.330 Manufactured Homes.
- 15.68.340 Recreation Vehicles.
- 15.68.350 Appurtenant Structures.
- 15.68.360 Utilities.

Section 7. Standards for Habitat Protection

- 15.68.370 Non-Development Activities.
- 15.68.380 Activities Allowed with a Floodplain Development Permit.
- 15.68.390 Other Activities.
- 15.68.400 Native Vegetation.
- 15.68.410 Floodway Standards.
- 15.68.420 Standards for Shallow Flooding Areas (AO Zones)
- 15.68.430 Compensatory Storage.
- 15.68.440 Habitat Impact Assessment.
- 15.68.450 Habitat Mitigation Plan.
- 15.68.460 Alteration of Watercourses and SFHA Boundaries.

Section 1. General

15.68.010 ~~Reserved~~ **Statutory Authorization.**

A. The Legislature of the State of Washington has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry.

Therefore, the City does ordain as follows:

B. Findings of Fact:

Areas of Auburn are subject to periodic inundation and channel migration which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for protection and relief from flooding and channel migration, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

When floodplains and watersheds are developed without taking appropriate care and precautions, flood heights, frequencies, and velocities increase, which may cause a greater threat to humans, damage to property, destruction of natural floodplain functions, and adverse impacts to water quality and habitat.

Rivers, streams, lakes, estuarine and marine areas and their floodplains are major elements of healthy aquatic and riparian areas and conveyance of flood waters. If watersheds, rivers, streams, lakes, estuaries, floodplains and other systems are not viewed holistically as biological and geomorphologic units, it may lead to serious degradation of habitat and increased flood hazards to people and human development.

Over the years, natural processes have evolved that manage flood waters and channel flows in the most effective and efficient manner. Disruption of these processes through alterations to land cover, stream channels, wetlands and other water bodies which may lead to increased flood hazards, loss of life and property, threats to public health, and loss of habitat.

15.68.020 — ~~Reserved~~ Purpose.

15.68.030 — ~~Statement of purpose.~~

It is the purpose of this ~~chapter~~ ordinance to promote the public health, safety, and general welfare; and to minimize public and private losses due to flood conditions in specific areas by provisions designed to manage development in order to:

A. ~~— To protect.~~ Protect human life, health; and ~~to protect~~ property from the dangers of flooding;

B. ~~— To minimize~~ Minimize the need for publicly funded and hazardous rescue efforts to save those who are isolated by floodwaters;

~~B-C.~~ Minimize expenditure of public money ~~and for~~ costly flood damage repair and flood control projects;

~~C.~~ To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

~~D.~~ To minimize prolonged business interruptions;

~~D.~~ E. ~~To minimize~~ Minimize disruption of commerce, governmental services, and government infrastructure;

~~G-E.~~ Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in ~~areas of special flood hazard;~~ the floodplain.;

~~F.~~ Minimize cost impacts to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in the special flood hazard area.;

~~D-G.~~ F. ~~To help maintain~~ Maintain a stable tax base by providing for the sound use ~~and development of~~ and development of flood hazard areas ~~of special flood hazard~~ so as to minimize ~~future flood~~ blight areas caused by flooding;

~~G.~~ To ensure that potential buyers are notified that property is in an area of special flood hazard;

~~H.~~ To ensure that Encourage those who occupy flood hazard ~~the areas of special flood hazard~~ assume responsibility for their actions;

~~H.~~ I. ~~To qualify~~ be educated about the ~~city~~ risks and challenges associated with these areas.;

~~E-I.~~ Qualify the City of Auburn for participation in the National Flood Insurance Program, thereby giving citizens and businesses the opportunity to purchase flood insurance;

~~F.J. J. To maintain~~Maintain the quality of water in rivers, streams, and lakes, and their floodplains so as to protect public water supplies, areas of the ~~public trust~~Public Trust, and wildlife habitat protected by the Endangered Species Act;

~~G.K. K. To retain~~Retain the natural channel, shoreline, and floodplain creation processes and other natural floodplain functions that protect, create, and maintain habitat for threatened and endangered species; and

~~H.L. L. To prevent~~Prevent or minimize loss of hydraulic, geomorphic, and ecological functions of floodplains and stream channels.

15.68.030 Lands to which this Ordinance Applies.

This ordinance shall apply to the Special Flood Hazard Area (SFHA) and associated protected areas within the jurisdiction of the City of Auburn as defined in Section 3 of this Ordinance.

15.68.040 ~~Methods of reducing flood losses~~ Approach.

In order to ~~accomplish its~~achieve the listed purposes, this ~~chapter includes methods and provisions for~~ordinance:

~~A. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;~~

~~A. Defines and clarifies the terms and phrases used in this ordinance in Section 2.~~

~~B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;~~

~~C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers which help accommodate or channel floodwaters;~~

~~D. Controlling filling, grading, dredging, and other development which may increase flood damage;~~

~~E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards~~identifies in other areas;

~~B. F. Identifying the regulatory floodplain, the special flood hazard area, and~~Section 3 the protected areaSpecial Flood Hazard Area, the Protected Area and the supporting technical data needed to delineate those areas;

~~C. G. Establishing~~Establishes a permit requirement in Section 4 so that all ~~human~~proposed development that may affect flood hazards, water quality, and habitat is reviewed ~~before it is constructed;~~prior to construction.

~~D. H. Setting~~Sets minimum protection standards in Section 5 for all development to ensure that the development will not increase the potential for flood damage or adversely affect natural floodplain functions;

~~E. I. Setting~~Sets minimum protection standards to protect new and substantially improved structures from flood damage;and in Section 6.

~~F. J. Specifying~~Specifies additional habitat protection criteriain Section 7. Some small projects do not need a floodplain development permit (see ACC 15.68.130(B) and (C)); ~~whereas other projects require a floodplain permit, but do not require the habitat impact assessment required in this chapter (see ACC 15.68.130(D));~~ 15.68.380). For all other development projects, the applicant must assess their impact on those

factors that contribute to increased flood hazard and degradation of habitat. If the assessment concludes that ~~there~~the project will ~~because~~ an adverse effect outside the Protected Area, the permit will be denied, unless the project ~~is redesigned to mitigate the adverse effects~~impacts are mitigated (avoided, minimized, restored or compensated for).

Article II. ~~Definitions~~

15.68.050 Penalties for Noncompliance.

No development shall be undertaken or placed in the areas regulated by this ordinance without full compliance with the terms of this ordinance and other applicable regulations of the City. Violation of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall be enforced pursuant to the provisions of Chapter 1.25 ACC.

15.68.060 Interpretation of language.

In the interpretation and application of this ordinance, all provisions shall be:

A. Considered as minimum requirements;

B. _____ Liberally construed in favor of the City; and.

~~B.C. _____~~ Deemed neither to limit nor repeal any other powers granted under state statutes;

15.68.070 Abrogation and greater restrictions Regulation Conflicts

~~This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction~~
Where this ordinance and another code, or ordinance, conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

15.68.080 Warning and Disclaimer of Liability.

The degree of property and habitat protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods and movement of channels outside of mapped channel migration areas may occur on rare occasions. Flood heights may be increased by ~~manmade~~unnatural or natural causes. This ordinance does not imply that land outside the regulated areas or development permitted within such areas will be free from flood or erosion damage. This ordinance shall not create liability on the part of the City, any officer or employee thereof, for any damage to property or habitat that results from reliance on this ordinance or any administrative decision lawfully made ~~thereunder~~.

15.68.090 Severability

The provisions and sections of this ordinance shall be deemed separable and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.

Section 2. Definitions

15.68.100 Definitions.

Unless specifically defined ~~in this article, words below, terms~~ or phrases used in this ~~chapter ordinance~~ shall be interpreted so as to give them the meaning they have in common usage and to give this ~~chapter ordinance~~ its most reasonable application.

~~A. 15.68.060 Definitions.~~

~~B. As used in this chapter:~~

~~C. 1. "Adversely affect/adverse effect" means effects that are a direct or indirect result of the proposed action or its interrelated or interdependent actions and the effect is not discountable, insignificant, or beneficial, where:~~

~~D. 1. a. Discountable effects are extremely unlikely to occur; and~~

~~E. b. Insignificant effects relate to the size of the impact and should never reach the scale where a take occurs. Based on best judgment, a person would not: 1) be able to meaningfully measure, detect, or evaluate insignificant effects, or 2) expect discountable effects to occur.~~

~~F. 2. Beneficial effects are contemporaneous positive effects without any adverse effects. In the event that the overall effect of the proposed action is beneficial, but is also likely to cause some adverse effects, then the proposed action is considered to result in an adverse effect.~~

~~B. "Alteration of watercourse" means any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.~~

~~C. "Appurtenant Structure" means a structure which is on the same parcel as the principle structure to be insured and the use of which is incidental to the use of the principal structure.~~

~~D. "Area of shallow flooding" means a designated zone AO, AH, AR/AO or AR/AH (or VO) on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. Also referred to as the sheet flow area.~~

~~E. "Area of special flood hazard" means the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). "Special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".~~

~~F. "ASCE 24" means the most recently published version of ASCE 24, Flood Resistant Design and Construction, published by the American Society of Civil Engineers.~~

~~G. "Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year. Also (also referred to as the "100-year flood"). The area subject to the base flood is the special flood hazard area (SFHA), designated on flood insurance rate maps as Zone A, including AE, AO, AH, and A1-99.~~

~~H. C. "Base flood elevation" means the elevation of the base flood above the datum of the effective FIRM.~~

~~I.H. 1. The base flood elevation for the SFHAs of the city shall be as delineated on the 100-year flood profiles in the flood insurance study to which floodwater is anticipated to rise during the base flood for the city.~~

~~J. 2. The base flood elevation for each SFHA delineated as a Zone AH or Zone AO shall be that elevation (or depth) delineated on the flood insurance rate map. Where base flood depths are not available in Zone AO, the base flood elevation shall be considered to be two feet above the highest grade adjacent to the structure.~~

~~K. 3. Where base flood elevation data are not provided on the flood insurance study for the city, base flood elevation data available from a federal, state, or other authoritative source shall be used, if available. Where base flood elevation data are not available from other authoritative sources, applicants for approval of new subdivisions and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or five acres, whichever is the lesser, shall include such data with their permit applications. This data must be approved by the floodplain administrator.~~

~~L.I. D.~~ “Basement” means any area of the structure having its floor subgrade (below ground level) on all sides.

~~J. E.~~ “Building Code” means the currently effective versions of the International Building Code and the International Residential Code adopted by the Washington State Legislature and any further amendments adopted by the City of Auburn.

~~M.K.~~ “Channel ~~migration area~~” “Migration Zone” (CMZ) means the area within the lateral extent of likely stream channel movement due to stream bank destabilization and erosion, rapid stream incision, aggradation, avulsions, and shifts in location of stream channels ~~plus 50 feet.~~

1. ~~4.~~ The channel migration area shall be the total area occupied by the river channel, the severe channel migration hazard area, and the moderate channel migration hazard area as delineated in the Green River Channel Migration Study published by King County dated December 1993 plus 50 feet.

~~2. Where more than one channel migration zone has been delineated, the floodplain administrator shall use the delineation that has been adopted for other local regulatory purposes.~~

~~2. F.~~ The channel migration area shall be the total area occupied by the river channel, the severe channel migration hazard area, and the moderate channel migration hazard area as delineated in the Channel Migration Zone Delineation for the Middle Green River, RM 31.10 to 33.25 dated December 28, 2018 plus 50-feet which supersedes the study referenced above.

3. A site specific channel migration delineation may also be performed per the Washington State Department of Ecology’s current requirements with recommended setbacks (A Framework for Delineating Channel Migration Zones) prepared by a qualified engineer. The delineation shall be prepared by a qualified consultant as that term is defined in these regulations. The city may retain a qualified consultant paid for by the applicant to review and confirm the applicant’s reports, studies and plans if the following circumstances exist:

a. The city has technical information that is unavailable to the applicant; or

b. The applicant has provided inaccurate or incomplete information on previous proposals or proposals currently under consideration.

~~N.L.~~ “Critical facility” means a facility necessary to protect the public health, safety and welfare during a flood. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency operations installations, water and wastewater treatment plants, electric power stations, and installations which produce, use, or store hazardous materials or hazardous waste (other than consumer products containing hazardous substances or hazardous waste intended for household use).

~~O.M.~~ ~~G.~~ “Development” means any ~~manmade~~human-made change to improved or unimproved real estate ~~in the regulatory floodplain~~, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard, ~~subdivision of land, removal of more than five percent of the native vegetation on the property, or alteration of natural site characteristics.~~

~~P.N.~~ ~~H.~~ “Dry floodproofing” means any combination of structural and nonstructural measures that prevent flood waters from entering a structure.

~~Q.O.~~ ~~I.~~ “Elevation ~~certificate~~Certificate” means an administrative tool of the National Flood Insurance Program (NFIP) that can be used to provide elevation information, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).~~the official form (FEMA Form 81-31) used to provide elevation information necessary to ensure compliance with provisions of this chapter and determine the proper flood insurance premium rate.~~

~~R.~~ ~~J.~~ “Equivalent elevation” means ~~having similar relationship to ordinary high water and to the best available 10-year, 50-year and 100-year water surface profiles.~~

~~P.~~ ~~K.~~ “Essential Facility” has the same meaning as “Essential Facility” defined in ASCE 24. Table 1-1 in ASCE 24-14 further identifies building occupancies that are essential facilities.

~~S.Q.~~ “FEMA” means the Federal Emergency Management Agency, the agency responsible for administering the National Flood Insurance Program.

~~T.~~ ~~L.~~ “Fish and wildlife habitat conservation area” means ~~lands needed to maintain species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created. These areas are designated by the city pursuant to the Washington State Growth Management Act (WAC 365-190-080).~~

~~U.R.~~ ~~M.~~ “Flood” or “flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. ~~—~~ ~~2.~~ The overflow of inland or tidal waters; and/or
2. ~~—~~ The unusual and rapid accumulation of runoff of surface waters from any source.
3. ~~N. 3.~~ Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph ~~(a)~~(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
4. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or

by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (1)(i) of this definition.

S. "Flood elevation study" means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of
mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).

~~V.T.~~ "Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance
Administration ~~has delineated both the areas of special flood hazard~~ Special Flood Hazard Areas and the risk
premium zones applicable to the community.

~~W.U.~~ O. "Flood insurance study (FIS)" See "Flood Elevation Study" means the official report(s) provided by
the Federal Insurance Administration that includes flood profiles, the flood insurance rate map, and the water
surface elevation of the base flood.

V. ~~P.~~ "Floodplain or flood prone area" means any land area susceptible to being inundated by water
from any source. See "Flood or flooding."

W. "Floodplain administrator" means the community official designated by title to administer and enforce
the floodplain management regulations.

X. "Flood proofing" means any combination of structural and nonstructural additions, changes, or
adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real
property, water and sanitary facilities, structures, and their contents. Flood proofed structures are those that
have the structural integrity and design to be impervious to floodwater below the Base Flood Elevation.

~~X.Y.~~ "Flood protection elevation (FPE)" means the elevation above the datum of the effective FIRM to which
new and substantially improved structures must be protected from flood damage.

~~Y.Z.~~ Q. "Floodway" means the channel of a riverstream or other watercourse and the adjacent land areas
that must be reserved in order to discharge the base flood without cumulatively increasing the water surface
elevation more than a designated height. Also referred to the "Regulatory Floodway one foot. The floodway
shall be as delineated on the flood insurance rate map. Where floodway data are not provided on the flood
insurance study for the city, floodway data available from a federal, state, or other authoritative source shall be
used, if available. Where floodway data is not available from another authoritative source, applicants for
approval of new subdivisions and other proposed developments (including proposals for manufactured home
parks and subdivisions) greater than 50 lots or five acres, whichever is the lesser, shall include such data with
their permit applications. This data must be approved by the floodplain administrator. This provision does not
apply to applications for permits for small projects on large lots, such as constructing a single family home.

AA. R. "Functionally Dependent Use" means a use which cannot perform its intended purpose unless it is
located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are
necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and
does not include long-term storage or related manufacturing facilities.

BB. "Highest adjacent grade" means the highest natural elevation of the ground surface prior to
construction next to the proposed walls of a structure.

~~Z.~~ CC. "Historic structure" means any structure that is:

1. ~~—Is listed on~~ Listed individually in the National Register of Historic Places, ~~the Washington Heritage Register, or the Washington Heritage Barn Register, or has been designated a landmark or been issued (a certificate of appropriateness under the city's historic preservation ordinance listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;~~
2. ~~—Has been certified to contribute~~ Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district, or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. ~~S.~~ —Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior, or
 - b. Directly by the Secretary of the Interior in states without approved programs.

~~AA-DD.~~ “Hyporheic zone” means a saturated layer of rock or sediment beneath and/or adjacent to a stream channel that contains some proportion of channel water or that has been altered by channel water infiltration.

~~BB-EE. T.~~ “Impervious surface” means a ~~hard~~ non-vegetated surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

~~CC-FF. U.~~ “Lowest floor” means the lowest floor of the lowest enclosed area (including basement) ~~measured at the walking surface of the floor.~~ An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage, in an area other than a basement area is not considered a building's lowest floor as long as provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter found in ACC 15.68.170(A)(7): (i.e. provided there are adequate flood ventilation openings).

~~DD-GG. V.~~ “Manufactured home” means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when ~~connected~~ attached to the required utilities. ~~For floodplain management purposes, the term “manufactured home” also includes park trailers, travel trailers, and other similar recreational vehicles placed on a site for greater than 180 consecutive days. For insurance purposes, the~~ The term “manufactured home” does not include ~~park trailers, travel trailers, and other similar a~~ “recreational vehicles. vehicle.”

~~EE-HH. W.~~ “Manufactured home park or subdivision” means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

~~II.~~ ~~X.~~ “Market value” shall mean the current assessed value as established by the most recent tax roll of the county assessor in which the property is located. An applicant may, at applicant’s expense, provide an appraisal to determine market value.

~~FF-JJ.~~ “Mean Sea Level” means for purposes of the National Flood Insurance Program, the vertical datum to which Base Flood Elevations shown on a community’s Flood Insurance Rate Map are referenced.

~~GG-KK.~~ ~~Y.~~ “Native vegetation” means plant species that are indigenous to the community’s area and that reasonably could be expected to naturally occur on the site.

~~HH-LL.~~ ~~Z.~~ “Natural floodplain functions” means the contribution that a floodplain makes to support habitat, including, but not limited to, providing flood storage and conveyance, reducing flood velocities, reducing sedimentation, filtering nutrients and impurities from runoff, processing organic wastes, moderating temperature fluctuations, and providing breeding and feeding grounds, shelter, and refugia, for aquatic or riparian species.

~~II-MM.~~ ~~AA.~~ “New construction” means for the purposes of determining insurance rates, structures for which the “start of construction” commenced on or after the effective date of an initial Flood Insurance Rate Map or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, “new construction” means structures for which the “start of construction” commenced on or after the effective date of the ordinance adopted by a community and includes any subsequent improvements to such structures~~codified in this chapter.~~

~~NN.~~ ~~BB.~~ “Principal Structure” means a structure in which the principal use of the lot on which it is located is conducted.

~~JJ-OO.~~ “Protected area” means the lands that lie within the boundaries of the floodway, the riparian habitat~~buffer~~ zone, and the channel migration area. ~~In riverine areas, where a floodway has not been designated in accordance with this chapter, the protected area is comprised of those lands that lie within the boundaries~~Because of the riparian habitat zone, the channel migration area, and the SFHA impact that development can have on flood heights and velocities and habitat, special rules apply in the Protected Area.

~~PP.~~ ~~CC.~~ “Reasonably Safe from Flooding” means development that is designed and built to be safe from flooding based on consideration of current flood elevation studies, historical data, high water marks and other reliable data known to the community. In unnumbered A zones where flood elevation information is not available and cannot be obtained by practicable means, reasonably safe from flooding means that the lowest floor is at least two feet above the Highest Adjacent Grade.

~~KK-QQ.~~ “Recreational vehicle” means a vehicle:

1. ~~—~~ Built on a single chassis; and,
2. ~~—~~ Four hundred square feet or less when measured at the largest horizontal projection; and,
3. ~~—~~ Designed to be self-propelled or permanently towable by ~~a~~ an automobile or light-duty truck; and,
4. ~~—~~ Designed primarily not for use as a permanent dwelling but as temporary living quarters for ~~recreation~~ recreational, camping, travel, or seasonal use.

~~LL. DD. “Regulatory floodplain” means the area of the special flood hazard area and all protected areas within the city of Auburn. It also includes newly designated special flood hazard areas and protected areas that are delineated pursuant to city law.~~

~~MM.RR.EE.~~ “Riparian” means of, adjacent to, or living on, the bank of a stream, lake, pond, sound, or other water body.

~~SS. FF.~~ “~~Riparian habitat zone~~“Riparian buffer zone” means the land located adjacent to streams, and other bodies of water, where the natural soil, hydrology, and native flora and fauna perform important ecological functions such as protecting the water body by filtering out pollutants, preventing erosion and sedimentation, stabilizing stream banks, and providing natural shade. They are often thin lines-of-green containing native grasses, flowers, shrubs and trees that line the banks of streams and other bodies of water. The riparian buffer zone for the Puget Sound Biological Opinion applies only to areas mapped within the Special Flood Hazard Area, unless the area is undeveloped with predominately native vegetation that have benefits to endangered species, in which case the regulations for riparian habitat zones shall apply.

~~NN.TT.~~ “Riparian Habitat Zone” means the water body and adjacent land areas that are likely to support aquatic and riparian habitat ~~as detailed in this chapter. The size and location of the riparian habitat zone is dependent on the type of water body. The riparian habitat zone includes the water body and adjacent lands, measured perpendicularly from ordinary high water on both sides of the water body:.~~

~~OO. 1. Marine and lake shorelines and Type S streams that are designated “shorelines of the state”: 250 feet.~~

~~PP. 2. Type F (fish bearing) streams greater than five feet wide and marine shorelines: 200 feet.~~

~~QQ. 3. Type F streams less than five feet wide and lakes: 150 feet.~~

~~RR. 4. Type N (nonsalmonid bearing) perennial and seasonal streams with unstable slopes: 225 feet.~~

~~SS. 5. All other Type N (nonsalmonid bearing) perennial and seasonal streams: 150 feet.~~

~~TT. In addition, the riparian habitat zone may include additional land areas that the floodplain administrator determines are likely to support aquatic and riparian habitat.~~

UU. ~~GG.~~ “Special flood hazard area (SFHA)” means the land subject to inundation by the base flood. Special flood hazard areas are ~~identified by the Federal Emergency Management Agency in the scientific and engineering reports entitled “Flood Insurance Study for King County, Washington and Incorporated Areas,” dated April 19, 2005, and any revisions thereto, and “Flood Insurance Study for Pierce County, Washington and Unincorporated Areas,” dated August 19, 1987, and any revisions thereto, and designated on associated flood insurance rate maps with the letter A, including AE, AO, AH, A1—99, designated on Flood Insurance Rate Maps with the letters “A” or “V” include AE (floodway), AO, AH, A1-99 and VE. The Special Flood Hazard Area is also referred to as the area of special flood hazard or SFHA.~~

VV. ~~HH.~~ “Start of construction” includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement ~~that occurred before was within 180 days of the permit’s expiration date of the permit.~~ The “actual start” means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation.—Permanent construction does

not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the “actual start of construction” means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

WW. ~~II.~~ “Structure” means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

XX. ~~JJ.~~ “Substantial damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

YY. ~~KK.~~ “Substantial improvement” ~~or “substantially improved”~~ means any ~~repair~~, reconstruction, rehabilitation, addition, replacement or improvement of a structure, the cost of which equals or exceeds 50 percent of the ~~market value of such structure before the start of construction of the improvement. This term includes structures that have incurred substantial damage, regardless of the actual repair work done~~ market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “substantial damage,” regardless of the actual repair work performed.

The term does not, however, include either:

- ~~1.~~ Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions; or
- ~~2.~~ Any alteration of a “historic structure” provided that the alteration will not preclude the structure’s continued designation as a “historic structure.” listed on the National Register of Historic Places or a State Inventory of Historic Places.

ZZ. ~~LL.~~ “Variance” means a grant of relief from the requirements of this ~~chapter ordinance~~ which permits construction in a manner that would otherwise be prohibited by this ~~chapter ordinance~~.

~~AAA.~~ ~~MM.~~ “Violation” means the failure of a structure or other development to be constructed or implemented in conformance with the community’s applicable floodplain development regulations.

~~AAA.BBB.~~ “Water typing” means a system for classifying water bodies according to their size and fish habitat characteristics. The Washington Department of Natural Resources Forest Practices Water Typing Classification System is hereby adopted by reference. The system defines four water types:

- ~~1.~~ Type “S” – Shoreline: Streams that are designated “shorelines of the state,” including marine shorelines.
- ~~2.~~ Type “F” – Fish: Streams that are known to be used by fish or meet the physical criteria to be potentially used by fish.
- ~~3.~~ Type “NP” ~~Np~~ – Non-fish perennial streams.
- ~~4.~~ Type “NS” ~~Ns~~ – Non-fish seasonal streams.

~~BBB.CCC.~~ ~~NN.~~ “Zone” means one or more areas delineated on the FIRM. The following zones may be used on the adopted FIRM. The special flood hazard area is comprised of the A ~~Zone and V Zones.~~

1. ~~2.~~ A: SFHA where no base flood elevation is provided.
2. ~~3.~~ A#: Numbered A zones (e.g., A7 or A14), SFHA with a base flood elevation.
3. ~~4.~~ AE: SFHA with a base flood elevation.
4. ~~5.~~ AO: SFHA subject to inundation by shallow flooding usually resulting from sheet flow on sloping terrain, with average depths between one and three feet. Average flood depths are shown.
5. ~~6.~~ AH: SFHA subject to inundation by shallow flooding (usually areas of ponding) with average depths between one and three feet. Base flood elevations are shown.
6. ~~7.~~ B: The area between the SFHA and the 500-year flood of the primary source of flooding. It may also be an area with a local, shallow flooding problem or an area protected by a levee.
7. ~~8.~~ C: An area of minimal flood hazard, as above the 500-year flood level of the primary source of flooding. B and C zones may have flooding that does not meet the criteria to be mapped as a special flood hazard area, especially ponding and local drainage problems.
8. ~~9.~~ D: Area of undetermined but possible flood hazard.
9. ~~10.~~ X: The area outside the mapped SFHA with a low risk of flooding.
10. ~~11.~~ Shaded X: An area of moderate risk of flooding from the base flood, and defined as:
 - a. areas of shallow (i.e., less than 1 foot) flooding;
 - b. 0.2% chance (or 500-year) flooding;
 - c. has a drainage area less than 1 sq. mile; or
 - d. areas protected by a levee. The same as a Zone B, in subsection (NN)(6) of this section.

Article III. General Provisions

Section 3. Regulatory Data

15.68.070 Land 110 Area to which this chapter applies be Regulated.

This chapter shall apply to the regulatory floodplain. The area to be regulated is comprised of the Special Flood Hazard Area and all Protected Areas within the Special Flood Hazard Area within the jurisdiction of the city. (See the city City of Auburn regulatory floodplain map on file in the office of the city clerk.) The term also includes areas delineated pursuant to the provisions of Chapter 1.25 ACB. Section 15.68.150.

15.68.120 Special Flood Hazard Area.

Basis for Establishing the Areas of Special Flood Hazard

A. The special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for King County Washington and Incorporated Areas" dated August 19, 2020, and any revisions thereto, with accompanying Flood Insurance Rate Maps (FIRMs) dated August 19, 2020, and any revisions thereto, as well as the special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for Pierce County Washington and Incorporated Areas" dated March 7, 2017, and any revisions thereto, with accompanying Flood Insurance Rate Maps (FIRMs) dated March 7, 2017, and any revisions

thereto, are hereby adopted by reference and declared to be a part of this ordinance. The FIS and the FIRM are on file at 1 East Main St, Auburn, WA 98001.

A.B. The best available information for flood hazard area identification as outlined in Section 15.68.130(D) shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under Section 15.68.130(D).

B. ~~15.68.110 Interpretation.~~

C. ~~In~~ Upon receipt of a floodplain development permit application, the floodplain administrator or designee shall compare the elevation of the site to the base flood elevation.

C.D. The floodplain administrator or designee shall inform the applicant that the project may still be subject to the flood insurance purchase requirements unless the owner receives a Letter of Map Amendment (LOMA) from FEMA.

E. The floodplain administrator or designee shall make interpretations where needed, as to the exact locations of the boundaries of the SFHA and the Protected Area (e.g. where there appears to be a conflict between the mapped SFHA boundary and actual field conditions as determined by the base flood elevation and ground elevations) as it applies to proposed development. The applicant may appeal the floodplain administrator's or designee's interpretation and application of this chapter, of the location of the boundary to the Hearing Examiner for the City of Auburn.

15.68.130 Flood Hazard Data.

A. The base flood elevation for the SFHAs incorporated in 15.68.120(A) shall be utilized.

B. The Flood Protection Elevation (FPE) shall be the base flood elevation plus one (1) foot.

C. The floodway shall be as delineated on the Flood Insurance Rate Map.

D. Where base flood elevation and floodway data have not been provided in Special Flood Hazard Areas, the floodplain administrator or designee shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source.

15.68.140 Protected Area.

A. The Protected Area is comprised of those lands that lie within the boundaries of the floodway, the riparian ~~habitat~~ buffer zone, and the channel migration area.

B. In riverine areas, where a floodway has been designated in accordance with Sections 15.68.130(-C), 15.68.130(-D) or 15.68.150(-E), the Protected Area is comprised of those lands that lie within the boundaries of the riparian ~~habitat~~ buffer zone, the channel migration area, and the SFHA.

C. Riparian Buffer Zone: The riparian buffer zone includes those watercourses within the SFHA and adjacent land areas that are likely to support aquatic and riparian habitat.

1. The size and location of the riparian buffer zone is dependent on the type of water body. The riparian buffer zone includes the water body and adjacent lands, measured perpendicularly from ordinary high water mark on both sides of the water body:

a. Type S streams that are designated "shorelines of the State;"— 250 feet

- b. Type F streams (fish bearing) streams greater than 5 feet wide and marine shorelines:– 200 feet
- c. Type F streams less than 5 feet wide and lakes:– 150 feet
- d. Type N (nonsalmonid-bearing) perennial and seasonal streams with unstable slopes: 225 feet
- e. All other Type N (nonsalmonid-bearing) perennial and seasonal streams: -150 feet.

2. The riparian buffer zone shall be delineated on the site plan by the applicant at the time of application for subdivision approval or floodplain development permit for all development proposals within 300 feet of any stream or shoreline.

D. Channel Migration Area:

- a. The channel migration area shall be the channel migration zone as defined in Section 15.68.100(K).
- b. Where more than one channel migration zone has been delineated, the floodplain administrator or designee shall use the delineation that has been adopted for other local regulatory purposes.
- a-c. Where a channel migration zone has not yet been mapped, the provisions shall be of Section 15.68.150-(D) shall apply at the time of permit application.

15.68.150 New Regulatory Data.

A. All requests to revise or change the flood hazard data, including requests for a Letter of Map Revision and a Conditional Letter of Map Revision shall be reviewed by the floodplain administrator or designee.

- 1. The floodplain administrator or designee shall not sign the Community Acknowledgment Form for any requests based on filling or other development, unless the applicant for the letter documents that such filling or development is in compliance with this ordinance.
- 2. The floodplain administrator or designee shall not approve a request to revise or change a floodway delineation until FEMA has issued a Conditional Letter of Map Revision that approves the change.

B. If an applicant disagrees with the regulatory data prescribed by this ordinance, he/she may submit a detailed technical study needed to replace existing data with better data in accordance with FEMA mapping guidelines or *Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management under the National Flood Insurance Program and Endangered Species Act* FEMA Region X, 2010. If the data in question are shown on the published FIRM, the submittal must also include a request to FEMA for a Conditional Letter of Map Revision.

C. Where base flood elevation data are not available in accordance with Section 15.68.130, applicants for approval of new subdivisions and other proposed developments (including proposals for manufactured home parks) greater than 50 lots or 5 acres, whichever is the lesser, shall include such data with their permit applications.

D. Where channel migration zone data are not available in accordance with 15.68.140(D), the permit applicant shall either:

- 1. Designate the entire SFHA as the channel migration zone or

2. Identify the channel migration area in accordance with *Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management under the National Flood Insurance Program and Endangered Species Act* FEMA Region X, 2012.

E. All new hydrologic and hydraulic flood studies conducted pursuant to Section 15.68.150 shall be in accordance with *Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management under the National Flood Insurance Program and the Endangered Species Act*, FEMA, Region X, 2010.

F. The floodplain administrator shall use the most restrictive data available prepared specifically for the project site for the channel migration zone, floodways, future conditions, and riparian buffer zone.

Section 4. Administration

15.68.160 Establishment of Floodplain Development Permit

A floodplain development permit shall be obtained before construction or development begins within the Special Flood Hazard Area (SFHA) or Protected Area. The permit shall be for all development as set forth in

15.68.170 Floodplain Development Permit Application.

Applications for a floodplain development permit shall be made using the criteria outlined in the Floodplain Development Application Packet available for download at www.auburnwa.gov/forms. At a minimum, the following information is required.

A. Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures recorded on a current elevation certificate with Section B completed by the Floodplain Administrator.

B. Proposed elevation in relation to mean sea level to which any structure will be flood proofed;

C. Where a structure is to be flood proofed, certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet flood proofing criteria in Section 5;

D. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development;

E. Where development is proposed in a floodway, an engineering analysis indicating no rise of the Base Flood Elevation; and

F. Any other such information that may be reasonably required by the Floodplain Administrator in order to review the application.

15.68.180 Floodplain Development Permit Expiration.

If there has been no start of construction, a floodplain development permit shall expire 180 days after the date of issuance. Where the applicant documents a need for an extension beyond this period due to conditions beyond the applicant's control, the floodplain administrator ~~A.~~ or designee may authorize one or more extensions.

15.68.190 Designation of the Floodplain Administrator.

The Director of Community Development is hereby appointed to administer, interpret, implement, and enforce this ordinance by granting or denying floodplain development permit applications in accordance with its provision. The Director of Community Development may designate administration of portions or all of this ordinance to a qualified person.

15.68.200 Duties of the Floodplain Administrator.

Duties of the floodplain administrator or designee shall include, but are not limited to:

- A. Review all floodplain development permits to determine that the permit requirements of this ordinance have been satisfied.
- B. Review all floodplain development permits to determine that all necessary permits have been obtained from those Federal, State or local government agencies from which prior approval is required, including those local, State or Federal permits that may be required to assure compliance with the Endangered Species Act and/or other appropriate State or Federal laws.
- C. Review all floodplain development permits to determine if the proposed development is located in the Protected Area. If located in the Protected Area, ensure that the provisions of Section 7 are met.
- D. Ensure that all development activities within the Special Flood Hazard Area of the jurisdiction of the City meet the requirements of the ordinance.
- E. Inspect all development projects before, during and after construction to ensure compliance with all provisions of this ordinance, including proper elevation of the structure.
- F. Maintain for public inspection all records pertaining to the provisions of this ordinance.
- G. Submit reports to include the projects for which they issue floodplain development permits, including effects to flood storage, fish habitat, and all indirect effects of development and mitigation provided to FEMA as required by the National Flood Insurance Program.
- H. Notify FEMA of any proposed amendments to this ordinance and when annexations occur in the Special Flood Hazard Area.
- I. Ensure the proposed development is not located in the floodway. If located in the floodway, assure the encroachment provisions of Section 15.68.410 are met
- J. Cooperate with State and Federal agencies to improve flood and other technical data and notify FEMA of any new data that would revise the FIRM.
- K. Review all floodplain development permits to verify that proposed development will be reasonably safe from flooding.

15.68.210 Notification to Other Entities

Whenever a watercourse is to be altered or relocated:

- A. Notify adjacent communities and the Department of Ecology prior to such alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator through appropriate notification means, and
- B. Assure that the flood carrying capacity of the altered or relocated portion of said watercourse is maintained.

15.68.220 Records.

- A. Where base flood elevation data have been obtained pursuant to Section 15.68.130 and 15.68.150, the floodplain administrator or designee shall obtain, record, and maintain the actual "finished construction" elevations provided by the applicant for the locations listed in Section 15.68.170. This information shall be recorded on a current FEMA Elevation Certificate signed and sealed by a professional land surveyor, currently licensed in the State of Washington.
- B. For all new or substantially improved dry floodproofed nonresidential structures, where base flood elevation data has been obtained pursuant to Section 15.68.130 and 15.68.150, the floodplain administrator or designee shall obtain, record and maintain the elevation (in relation to the datum of the effective FIRM) to which the structure was floodproofed. This information shall be recorded on a current FEMA Floodproofing Certificate by a professional engineer currently licensed in the State of Washington.
- C. Certification required by Section 15.68.410 (floodway encroachments).
- D. Records of all variance actions, including justification for their issuance.
- E. Improvement and damage calculations.
- F. Maintain for public inspection all records pertaining to the provisions of this ordinance.

15.68.230 Certificate of Occupancy.

- A. A final grading and/or storm permit for the property, physical completion for City of Auburn Capital Improvement projects without a building, a certificate of occupancy (commercial building) or final building inspection (residential structure) for a new or substantially improved structure or an addition shall not be issued until:
1. The permit applicant provides a properly completed, signed and sealed Elevation or Floodproofing Certificate showing finished construction data as required by Section 15.68.220;
 2. If a mitigation plan is required by Sections 15.68.440 and 15.68.450, all work identified in the plan has been completed according to the plan's schedule;
 3. The applicant provides copies of all required Federal, State, and local permits noted in the permit application per Section 15.68.170;
 4. All other provisions of this ordinance and conditions placed on the floodplain development permit approval letter have been met.

15.68.240 ~~B. — Liberally construed in favor of the governing body;~~

~~C. — D. — Maps referred to in this chapter are for reference only, unless specified. If the map does not specifically indicate that it is the primary source of regulation, the text of the applicable code section shall control over any contrary information provided on a map. (Ord. 6295 § 2, 2010; Ord. 6161 § 1, 2008; Ord. 4820 § 1, 1995; Ord. 4357 § 2 (3.5), 1989.)~~

~~15.68.120 ——— Warning and disclaimer of liability.~~

~~The degree of property and habitat protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods and movement of channels outside of mapped channel migration areas can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This chapter does not imply that land outside the regulated areas or development permitted within such areas will be free from flood or erosion damage. This chapter shall not create liability on the part of the city, any officer or employee thereof, for any damage to property or habitat that results from reliance on this chapter or any administrative decision lawfully made thereunder. (Ord. 6295 § 2, 2010; Ord. 6161 § 1, 2008; Ord. 4820 § 1, 1995; Ord. 4357 § 2(3.6), 1989.)~~

~~15.68.125 ——— Appeals.~~

- A. ~~The Hearing Examiner, as established by Chapter 2.46 of the Auburn City Code,~~ shall hear and decide appeals and requests for variances from the requirements of this ~~chapter ordinance.~~
- B. The Hearing Examiner shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator or designee in the enforcement or administration of this ~~chapter ordinance.~~
- C. Those aggrieved by the decision of the Hearing Examiner may appeal ~~such the~~ decision to the superior court: of the county in which the project is located pursuant to Section 2.46.160 of the Auburn City Code.
- D. Upon consideration of the factors of ~~this chapter~~Section 15.68.250 and the purposes of this ~~chapter ordinance,~~ the ~~hearing examiner~~Hearing Examiner may attach such conditions to the granting of the variances ~~as~~ if the/she deems necessary to further the purposes of this ~~chapter ordinance.~~

~~Article IV. Administration~~

- E. The floodplain administrator or designee shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

~~15.68.130 ——— Establishment of and requirement to obtain floodplain~~**250 Variance Criteria.**

- A. In addition to the Criteria outlined in ACC 18.70.025, in reviewing applications for a variance, the Hearing Examiner shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance; and:

- 1. The relationship of the proposed use to the comprehensive plan, growth management regulations, critical area regulations, the shoreline management program and floodplain management program for the area;
- 1.2. The potential of the proposed development permit project to destroy or adversely affect a fish and wildlife habitat conservation area or create an adverse effect to federal, state or locally protected species or habitat;

-
3. A. A floodplain development permit is the minimum necessary to grant relief; and,
- B. In addition to the Criteria outlined in ACC 18.70.025, no variance shall be obtained before granted to the requirements of this ordinance unless the applicant demonstrates that:
1. The project will not adversely affect features or quality of habitat supporting local, state or federally protected fish or wildlife;
- C. Variances may be requested for new construction or development begins, substantial improvements, and other development upon showing of good and sufficient cause and is minimum necessary, considering flood hazard, to afford relief provided:
- D. Variances shall only be issued:
1. Upon a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;
 2. For the repair, rehabilitation, or restoration of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure;
 3. Upon a determination that failure to grant the variance would result in exceptional hardship to the applicant;
 4. Upon a showing that the use cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes only facilities defined in Section 2 of this ordinance in the definition of "Functionally Dependent Use."
- E. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.
- F. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the BFE, provided the procedures of Sections 4 and 5 of this ordinance have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.
- G. In considering variance applications, the City of Auburn shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:
1. The danger that materials may be swept onto other lands to the injury of others;
 2. The danger to life and property due to flooding or erosion damage;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The necessity to the facility of a waterfront location, where applicable;
 6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;
 7. The compatibility of the proposed use with existing and anticipated development;

8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 9. The safety of access to the property in time of flood for ordinary and emergency vehicles;
 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site;
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical, water system, and streets and bridges;
- H. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:
1. The issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and
 2. Such construction below the base flood elevation increases risks to life and property.
- I. The Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance.

Section 5. General Development Standards

The provisions of Section 5 shall apply in the Special Flood Hazard Area:

15.68.260 Development and Subdivision Proposals.

This section applies to all development proposals including commercial development, subdivisions, short subdivisions, preliminary subdivisions, binding site plans, and expansions to manufactured home parks as defined in Chapter 17.04 ACC.

- A. All development proposals shall be consistent with the need to minimize flood damage.
- B. All development proposals shall have utilities and facilities, such as sewer, gas, electrical, and water systems located and constructed to prevent flood damage.
- C. All development proposals shall have adequate drainage provided to avoid exposure to water damage.
- D. The proposed subdivision must have one or more new lots in the Special Flood Hazard Area set aside for open space use through deed restriction, easement, subdivision covenant, or donation to a public agency.
 1. In the Special Flood Hazard Area outside the Protected Area, zoning must maintain a low density of floodplain development.
 2. In the Special Flood Hazard Area outside the protected area in which the current zoning is less than 5 acres must maintain current zoning.
 3. The density of development in the portion of the development outside the Special Flood Hazard Area may be increased to compensate for the amount of land in the Special Flood Hazard Area preserved as open space in accordance with Chapter 17.25 ACC.
- E. If a parcel has a buildable site outside the Special Flood Hazard Area, it shall not be subdivided to create a new lot that does not have a buildable site outside of the Special Flood Hazard Area. This provision does not apply to tracts that are to be preserved as open space.

F. All development proposals shall ensure that all subdivisions have at least one access road connected to land outside the Special Flood Hazard Area with the surface of the road at or above the FPE wherever possible. -Additional access roads may be required based on the number of proposed lots per the current City of Auburn Engineering Design Standards.

G. The final recorded plat shall include a notice that part of the property is in the SFHA, riparian buffer zone and/or channel migration area, as appropriate.

H. BFE generation for all development proposals greater than 50 lots or 5 acres, whichever is the lesser.

15.68.270 Site Design.

A. Structures and other development shall be located to avoid flood damage or that adequately mitigates any identified impacts.

1. If a lot has a buildable site out of the Special Flood Hazard Area, all new structures shall be located in that area, when possible.

2. If a lot does not have a buildable site out of the Special Flood Hazard Area, all new structures, pavement, and other development must be sited in the location that has the least impact on habitat by locating the development as far from the water body as possible or by placing the structure on the highest portion of the lot.

3. A minimum setback of 15 feet from the Protected Area shall be required for all structures.

4. If the proposed project does not meet the criteria of Section 15.68.270(-A) through (B), a habitat impact assessment shall be conducted pursuant to Section 15.68.440 and, if necessary, a habitat mitigation plan shall be prepared and implemented pursuant to Section 15.68.450.

B. All new development shall be designed and located to minimize the impact on flood flows, flood storage, water quality and habitat.

1. Stormwater and drainage features shall incorporate low impact development techniques, if technically feasible, that mimic pre-development hydrologic conditions, such as stormwater infiltration, rain gardens, grass swales, filter strips, disconnected hard surface areas, permeable pavement, vegetative roof systems, etc. per the City's current SWMM per Chapter 12.04 ACC.

2. If the proposed project will create new hard surfaces so that more than 10 percent of the portion of the lot in the Special Flood Hazard Area is covered by hard surface, the applicant shall demonstrate that there will be no net increase in the rate and volume of the stormwater surface runoff per the maximum extent feasible and as required per the City's current SWMM per ACC 13.48 that leaves the site or that the adverse impact is mitigated, as provided in Sections 15.68.440 and 15.68.450.

C. The site plan required in Section 15.68.170— shall account for surface drainage to ensure that:

1. Existing and new buildings on the site will be protected from stormwater runoff; and

2. The project will not divert or increase surface water runoff onto neighboring properties.

15.68.280 Hazardous Materials.

- A. No new development shall create a threat to public health, public safety or water quality. Chemicals, explosives, gasoline, propane, buoyant materials, animal wastes, fertilizers, flammable liquids, pollutants, or other materials that are hazardous, toxic, or a threat to water quality are prohibited from the Special Flood Hazard Area. This prohibition does not apply to small quantities of these materials kept for normal household use. This prohibition does not apply to the continued operations of existing facilities and structure, reuse of existing facilities and structures, or functionally dependent facilities or structures.
- B. If the proposed project cannot meet Section 15.68.280(A) of this ordinance, then a habitat impact assessment must be conducted in accordance with Sections 15.68.440 and 15.68.450.

15.68.290 Critical Facilities.

- A. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area.
- B. Construction of new critical facilities in the Special Flood Hazard Area shall be permissible if no feasible alternative site is available, provided;
1. Critical facilities shall have the lowest floor elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher. If there is no available data on the 500-year flood, the permit applicants shall develop the needed data in accordance with FEMA mapping guidelines.
 - ~~B. A development project is not subject~~
 1. ~~Access to and from the requirements of this chapter if it is located on land that can critical facility shall be shown to be:~~
 2. ~~1. Outside the protected area; and~~
 3. ~~2. Higher than to the elevation of the 500-year floodplain.~~
- Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

Section 6. Standards for Protection of Structures

15.68.300 Applicability.

The protection requirements in this section apply to all new structures and substantial improvements, which include:

- A. Construction or placement of a new structure.
- B. Reconstruction, rehabilitation, or other improvement that will result in a substantially improved building.
- C. Repairs to an existing building that has been substantially damaged regardless of the actual repair work that is done .
- D. Placing a manufactured home on a site.
- E. Placing an occupied recreational vehicle or travel trailer on a site for more than 180 days.

15.68.310 Flood Protection Standards.

- A. All new structures and substantial improvements shall have the lowest floor, including basement, elevated to or above the FPE.

B. New construction and substantial improvement of any residential structure in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained shall be reasonably safe from flooding, but in all cases the lowest floor shall be at least two feet above the Highest Adjacent Grade.

C. The structure shall be aligned parallel with the direction of flood flows where practicable.

D. The structure shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy.

E. All manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

F. All materials below the FPE shall be resistant to flood damage and firmly anchored to prevent flotation. Materials harmful to aquatic wildlife, such as creosote, are prohibited below the FPE.

G. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage

H. Electrical, heating, ventilation, duct work, plumbing, and air-conditioning equipment and other service facilities shall be elevated to or above the FPE. Water, sewage, electrical, and other utility lines (excluding storm drainage facilities) below the FPE shall be constructed so as to minimize water from entering or accumulating within them during conditioning of flooding.

I. Fully enclosed areas below the lowest floor that are subject to flooding shall be used only for parking, limited storage, or building access and shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement shall either be certified by a registered professional engineer or licensed architect in the State of Washington and/or meet or exceed the following minimum criteria:

1. A minimum of two openings having a total net area not less than one square inch for every square foot of enclosed area subject to the flood insurance purchaseflooding shall be provided.
2. The bottom of all openings shall be no higher than one foot above grade.
3. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
4. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of flood waters.

15.68.320 Nonresidential Construction.

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall— meet the requirements of subsection A or B below:

A. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:

1. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated one foot or more above the BFE, or elevated as required by ASCE 24, whichever is greater. Mechanical equipment and

utilities shall be waterproofed or elevated least one foot above the BFE, or as required by ASCE 24, whichever is greater.

2. If located in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained, the structure shall be reasonably safe from flooding, but in all cases the lowest floor shall be at least two feet above the Highest Adjacent Grade.

3. If buildings are constructed or substantially improved with fully enclosed areas below the lowest floor, that are subject to flooding, the areas shall be used only for parking, limited storage, or building access, and shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:

a. Have a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.

b. The bottom of all openings shall be no higher than one foot above grade.

c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.

4. Alternatively, a registered engineer or architect may design and certify engineered openings.

B. If the requirements of Section 15.68.320(A) are not met, then new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:

1. Together with attendant utility and sanitary facilities, be dry floodproofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water or dry floodproofed to the elevation required by ASCE 24, whichever is greater;

2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in Section 15.68.220(B);

15.68.330 Manufactured Homes.

All manufactured homes to be placed or substantially improved on sites shall be:

A. Elevated on a permanent foundation in accordance with Section 15.68.310(A) and

B. Securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to other applicable anchoring requirements for resisting wind forces.

C. If manufactured homes are constructed or substantially improved with fully enclosed areas below the lowest floor, the areas shall be used solely for parking of vehicles, building access, or storage.

15.68.340 Recreational Vehicles.

Recreational vehicles placed on sites shall:

- A. Be on the site for fewer than 180 consecutive days, or
- B. Be fully licensed and ready for highway use, on their wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached addition; or
- C. Meet the requirements of Section 15.68.340 and the anchoring requirements for manufactured homes in Section 15.68.330.

15.68.350 Appurtenant Structures.

A structure which is on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure and is not used for human habitation may be exempt from the elevation requirements of Section 15.68.310-(A), provided:

- A. It is used only for parking or storage;
- B. It is constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters;
- C. It is anchored to prevent flotation which may result in damage to other structures;
- D. ~~C. Nondevelopment~~ All portions of the structure below the FPE must be constructed of flood-resistant materials;
- E. Service utilities such as electrical and heating equipment meet the standards of Section 15.68.310(F) and Section 15.68.360;
- F. It has openings to allow free flowage of water that meet the criteria in Section 15.68.310(I);
- G. The project meets all the other requirements of this ordinance, including Section 7 and 15.68.410.

15.68.360 Utilities.

- A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- B. New water wells shall be located outside the floodway and shall be protected to the FPE;
- C. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into the floodwaters;
- D. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. A habitat impact assessment shall be conducted in accordance with Section 15.68.440 as a condition of approval of an onsite waste disposal system to be located in the Special Flood Hazard Area.

Section 7. Standards for Habitat Protection

The provisions of this Section shall apply in the Special Flood Hazard Area and channel migration zone.

15.68.370 Non-Development Activities.

Activities that do not meet the definition of “development” ~~in this chapter~~ are allowed in the ~~regulatory floodplain~~Special Flood Hazard Area and Protected Area without the need for a floodplain development permit under this ~~chapter ordinance~~, provided all other ~~federal, state,~~Federal, State and local requirements are met. The following are examples of activities not considered development or ~~manmade~~“unnatural” changes to improved or unimproved real estate:”

- A. ~~4.~~1.—Routine maintenance of landscaping that does not involve grading, excavation, or filling;
- B. ~~2.~~2.—Removal of noxious weeds and hazard trees and replacement of ~~nonnative~~non-native vegetation with native vegetation;
- C. ~~3.~~3.—Normal maintenance of structures, such as re-roofing and replacing siding, ~~as long as provided~~ such work does not qualify as a substantial improvement;
- D. ~~4.~~4.—Normal maintenance of above ground ~~public~~ utilities and facilities, such as replacing downed power lines ~~and utility poles~~;
- E. ~~5.~~5.—Underground and above ground utility work located in previously disturbed areas, with no significant vegetation impacts, and will have no appreciable change in grade;
- E.F. ~~Normal street and road maintenance and preservation of public streets and private streets or parking lots (with approval of Floodplain Administrator), including, but not limited to filling potholes, patching, crack seal, chip seal, repaving, and installing signs and traffic signals, signs, traffic control devices, striping/channelization, pavement markings, repair/replacement of sidewalk/curb and gutter, ADA improvements, non-motorized improvements, repair of guardrails, repair of retaining walls, management of hazardous trees, fencing repair, lighting repair, but not including expansion of paved areas;~~
- G. ~~6.~~6.—Public street improvements with no significant vegetation impacts, and no appreciable change in grade;
- F.H. ~~Normal maintenance of a levee or other flood control facility prescribed in the operations and maintenance plan for the levee or flood control facility are allowed in the Special Flood Hazard Area without the need for a floodplain development permit. Normal maintenance does not include repair from flood damage, expansion of the prism, expansion of the face or the toe or addition for protection on the face or toe with rock armor; and~~
- G.I. ~~7.~~7.—Plowing and other normal ~~farm~~flood protection practices (other than structures or filling) on farms in the Special Flood Hazard Area and in existence as of the effective date of ~~the~~this ordinance ~~codified in this chapter do not require a floodplain development permit. Clearing additional land for agriculture after the date of this ordinance will require a floodplain development permit and a Habitat Assessment.~~

~~D.~~15.68.380 Activities Allowed with a Floodplain Development Permit.

The following activities are allowed in the ~~regulatory floodplain~~Special Flood Hazard Area without the analysis required in ~~ACC 15.68.160(C)~~Section 15.68.410 or the habitat impact assessment required under ~~ACC 15.68.135(J), providing~~Section 15.68.440, provided that all other requirements of this ~~chapter ordinance~~ are met, including obtaining a floodplain development permit:

- A. ~~1.~~ Repairs or remodeling of an existing structure; ~~provided,~~ that the repairs or remodeling are not a substantial improvement or a repair of substantial damage; ~~provided further, that no habitat impact assessment shall be required if the repair or remodel does not expand the existing building envelope.~~
- B. ~~2.~~ Expansion or reconstruction of an existing structure that is no greater than ~~40~~ten percent beyond its existing footprint; ~~provided,~~ that the repairs or remodeling are not a substantial improvement or ~~a~~ repair of substantial damage. ~~This measurement is counted cumulatively from the effective date of the ordinance codified in this chapter.~~ If the structure is in the floodway, there shall be no change in the structure's dimensions perpendicular to flow and a no rise analysis and certification must be provided, even if the change in dimensions is parallel to flow.
- C. ~~3.~~ Activities with the sole purpose of creating, restoring or enhancing natural functions associated with floodplains, streams, lakes, estuaries, marine areas, habitat, and riparian areas that meet ~~federal~~Federal and ~~state~~State standards, provided the activities do not include structures, grading, fill, or ~~impervious~~hard surfaces.
- D. ~~4.~~ Development of open space and recreational facilities, such as parks, trails, and hunting grounds, that do not include structures, ~~grading,~~ fill, ~~impervious~~hard surfaces or removal of more than five percent of the native vegetation on that portion of the property in the ~~regulatory floodplain~~Special Flood Hazard Area.
- E. ~~E.~~ Repairs to onsite Septic Systems provided the ground disturbance is the minimum necessary and best management practices (BMP's) to prevent stormwater runoff and soil erosion are used.

15.68.390 Other Activities.

All other activities ~~not~~ listed in ~~subsection C~~Sections 15.68.370 or D of this section are 15.68.380 that are allowed, ~~as long as by Title 18 (Zoning) of the Auburn City Code are allowed, provided~~ they meet all the other requirements of this ~~chapter ordinance~~, including the analysis required ~~in ACC 15.68.160 under Section~~ 15.68.420, 15.68.430, and the habitat impact assessment and any mitigation required under ACC 15.68.135(K) and (L) Section 15.68.440, and a floodplain development permit is issued.

15.68.400 Native Vegetation.

The site plan required in the Floodplain Development Application Packet- shall show existing native vegetation.

- A. Within the riparian buffer zone, native vegetation shall be left undisturbed, except as provided in Sections 15.68.370 and 15.68.380(C).
- B. Outside the riparian buffer zone, removal of native vegetation shall not exceed 35 percent of the surface area of the portion of the site in the Special Flood Hazard Area. Native vegetation in the riparian buffer zone portion of the property can be counted toward this requirement.
- C. If the proposed project does not meet the criteria of Sections 15.68.400(A) and (B), a habitat impact assessment shall be conducted pursuant to Section 15.68.440 and, if necessary, a habitat mitigation plan shall be prepared and implemented pursuant to Section 15.68.450.

15.68.410 Floodway Standards.

A. In addition to the other requirements of this ordinance, a project to develop in the floodway as delineated pursuant to Sections 15.68.130(C), 15.68.130(D) or 15.68.150(E) shall meet the following criteria:

1. The applicant shall provide a certification by a registered professional engineer licensed in the State of Washington demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the proposed development would not result in any increase in flood levels during the occurrence of the base flood discharge.

2. Construction or reconstruction of residential structures is prohibited within designated floodways, except for the following. The following exceptions must still meet all other requirements in the ordinance, including Section 15.68.410-(A)(-1).

a. Repairs, reconstruction, or improvements to a residential structure that do not increase the ground floor area, providing the cost of which does not exceed 50 percent of the market value of the structure either, (1) before the repair, or reconstruction is started, or (2) if the structure has been damaged, and is being restored, before the damage occurred. Any project for improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications that have been identified by a local code enforcement official, and which are the minimum necessary to assure safe living conditions, or to an historic structure, may be excluded from the 50 percent calculation;

b. Repairs, reconstruction, replacement, or improvements to existing farmhouse structures located in designated floodways and that are located on lands designated as agricultural lands of long-term commercial significance under RCW 36.70A.170 may be permitted subject to the following:

i. The new farmhouse is a replacement for an existing farmhouse on the same farm site;

ii. There is no potential building site for a replacement farmhouse on the same farm outside the designated floodway;

iii. Repairs, reconstruction, or improvements to a farmhouse shall not increase the total square footage of encroachment of the existing farmhouse;

iv. A replacement farmhouse shall not exceed the total square footage of encroachment of the farmhouse it is replacing;

v. A farmhouse being replaced shall be removed, in its entirety, including foundation, from the floodway within ninety days after occupancy of a new farmhouse;

vi. For substantial improvements and replacement farmhouses, the elevation of the lowest floor of the improvement and farmhouse respectively, including basement, is a minimum of one foot higher than the BFE;

vii. New and replacement water supply systems are designed to eliminate or minimize infiltration of floodwaters into the system;

viii. New and replacement sanitary sewerage systems are designed and located to eliminate or minimize infiltration of floodwater into the system and discharge from the system into the floodwaters; and

ix. All other utilities and connections to public utilities are designed, constructed, and located to eliminate or minimize flood damage.

c. For all substantially damaged residential structures, other than farmhouses, located in a designated floodway, the Floodplain Administrator may make a written request that the Department of Ecology assess the risk of harm to life and property posed by the specific conditions of the floodway. Based on analysis of depth, velocity, flood-related erosion, channel migration, debris load potential, and flood warning capability, the Department of Ecology may exercise best professional judgment in recommending to the local permitting authority repair, replacement, or relocation of a substantially damaged structure consistent with WAC 173-158-076. The property owner shall be responsible for submitting to the local government and the Department of Ecology any information necessary to complete the assessment. Without a favorable recommendation from the department for the repair or replacement of a substantially damaged residential structure located in the regulatory floodway, no repair or replacement is allowed per WAC 173-158-070(1).

d. Before the repair, replacement, or reconstruction is started, all requirements of the NFIP, the state requirements adopted pursuant to 86.16 RCW, and all applicable local regulations must be satisfied. In addition, the following conditions must be met:

i. There is no potential safe building location for the replacement residential structure on the same property outside the regulatory floodway.

ii. A replacement residential structure is a residential structure built as a substitute for a legally existing residential structure of equivalent use and size.

iii. Repairs, reconstruction, or replacement of a residential structure shall not increase the total square footage of floodway encroachment.

iv. The elevation of the lowest floor of the substantially damaged or replacement residential structure is a minimum of one foot higher than the BFE.

v. New and replacement water supply systems are designed to eliminate or minimize infiltration of floodwater into the system.

vi. New and replacement sanitary sewerage systems are designed and located to eliminate or minimize infiltration of floodwater into the system and discharge from the system into the floodwaters.

vii. All other utilities and connections to public utilities are designed, constructed, and located to eliminate or minimize flood damage.

e. Repairs, reconstruction, or improvements to residential structures identified as historic structures that do not increase the building's dimensions.

B. In riverine Special Flood Hazard Areas where a floodway has not been delineated pursuant to Sections 15.68.130(C), 15.68.130(D) or 15.68.150(E), the applicant for a project to develop in the SFHA shall

provide a certification by a registered professional engineer in the State of Washington demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the proposed development and all other past or future similar developments would not cumulatively result in an increase of flood levels during the occurrence of the base flood discharge by more than one-half foot.

15.68.420 Standards for Shallow Flooding Areas (AO Zones)

Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In addition to other provisions in this code, the following additional provisions also apply in AO zones.

A. New construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement and mechanical equipment) elevated above the highest adjacent grade to the structure, one foot or more above the depth number specified in feet on the community's FIRM (at least two feet above the highest adjacent grade to the structure if no depth number is specified).

B. New construction and substantial improvements of nonresidential structures within AO zones shall either:

1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified); or

2. Together with attendant utility and sanitary facilities, be completely flood proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer, or architect as in Section 15.68.310(I).

C. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

D. Recreational vehicles placed on sites within AO zones on the community's FIRM either:

1. Be on the site for fewer than 180 consecutive days, or

2. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

3. Meet the requirements of subsections (1) and (3) above and the anchoring requirements for manufactured homes (Section 15.68.330(B)).

15.68.430 Compensatory Storage.

New development shall not reduce the effective flood storage volume of the Special Flood Hazard Area. A development proposal shall provide compensatory storage if grading or other activity eliminates any effective flood storage volume. Compensatory storage shall:

~~15.68.135 — Floodplain development permit application.~~

~~Application for a floodplain development permit shall be made on forms furnished by the floodplain administrator and shall include, but not be limited to:~~

~~A. One or more site plans, drawn to scale, showing:~~

- ~~1. The nature, location, dimensions, and Provide equivalent volumes at equivalent elevations of the property in question;~~
- ~~2. Names and location of all lakes, to that being displaced. For this purpose, "equivalent elevation" means having similar relationship to ordinary high water bodies, waterways, mark and drainage facilities within 300 feet of the site;~~
- ~~3. The elevations of the 10-, 50-, 100-, and 500-year floods, where the data are best available. Additionally, for property located within the SFHA, base flood elevations shall be included as required in ACC 15.68.060(C)(3);~~
- ~~4. The boundaries of the regulatory floodplain, SFHA, floodway, riparian habitat zone, and channel migration area, delineated in accordance with this chapter;~~
- ~~5. The proposed drainage system including, but not limited to, storm sewers, overland flow paths, detention facilities and roads;~~
- ~~6. Existing and proposed structures, fill, pavement and other impervious surfaces, and sites for storage of materials;~~
- ~~7. All wetlands;~~
- ~~8. Designated fish and wildlife habitat conservation areas; and~~
- ~~9. Existing native vegetation and proposed revegetation (see ACC 15.68.161(D)).~~
- ~~B. If the proposed project involves regrading, excavation, or filling, the site plan shall include proposed post-development terrain at one-foot contour intervals.~~
- ~~C. If the proposed project includes a new structure, substantial improvement, or repairs to a substantially damaged structure that will be elevated, the application shall include the FPE for the building site 10-year, 50-year and the proposed elevations of the following:~~
 - ~~1. The top of bottom floor (including basement, crawlspace, or enclosure floor);~~
 - ~~2. The top of the next higher floor;~~
 - ~~3. The top of the slab of an attached garage;~~
 - ~~4. The lowest elevation of machinery or equipment servicing the structure;~~
 - ~~5. The lowest adjacent (finished) grade next to structure;~~
 - ~~6. The highest adjacent (finished) grade next to structure;~~
 - ~~7. The lowest adjacent grade at the lowest elevation of a deck or stairs, including structural support.~~
- ~~D. If the proposed project includes a new structure, substantial improvement, or repairs to a substantially damaged nonresidential structure that will be dry floodproofed, the application shall include the FPE for the~~

~~building site and the elevation in relation to the datum of the effective FIRM to which the structure will be dry floodproofed and a certification by a registered professional engineer or licensed architect that the dry floodproofing methods meet the floodproofing criteria in this chapter.~~

~~A. E. The application shall include a description of the extent to which a stream, lake, or other 100-year water body, including its shoreline, will be altered or relocated as a result of the proposed developmentsurface profiles.~~

~~B. Be hydraulically connected to the source of flooding.~~

~~C. Provide compensatory storage in the same construction season as when the displacement of flood storage volume occurs and before the flood season begins.~~

~~D. The newly created storage area shall be graded and vegetated to allow fish access during flood events without creating fish stranding sites.~~

~~F. The application shall include documentation that the applicant will apply for all necessary permits required by federal, state, or local law. The application shall include acknowledgment that the applicant understands that the final certificate of occupancy will be issued only if the applicant provides copies of the required federal, state, and local permits or letters stating that a permit is not required.~~

~~G. The application shall include acknowledgment by the applicant that representatives of any federal, state or local unit of government with regulatory authority over the project are authorized to enter upon the property to inspect the development.~~

~~H. The riparian habitat zone shall be delineated on the site plan by the applicant at the time of application for subdivision approval or floodplain development permit for all development proposals within 300 feet of any stream or shoreline.~~

~~I. If the project is located in the regulatory floodplain and includes activities not listed in ACC 15.68.130(C) and (D), the application shall include a habitat impact assessment. If that assessment determines that impacts would result from the project, the application shall also include a habitat mitigation plan.~~

J. 15.68.440 Habitat Impact Assessment.

Unless allowed under ~~ACC 15.68.130(C) or (D)~~, Sections 15.68.370 and 15.68.380, a permit application to develop in the ~~regulatory floodplain~~Special Flood Hazard Area shall include an assessment of the impact of the project on federal, state or locally protected species and habitat, water quality and aquatic and riparian habitat.

The assessment shall be:

~~A. 1. A biological evaluation~~A Biological Evaluation ~~or biological assessment that has received concurrence from the U.S. Fish and Wildlife Service~~Biological Assessment developed per 50 C.F.R., Subsection 402.12 to initiate Federal Interagency consultation under Endangered Species Act Section 7.a.2;

~~or,~~

~~A.B. Documentation that the National Marine Fisheries Service, pursuant to~~activity fits within ~~Section 74.d~~ of the Endangered Species Act; ~~or,~~

~~B.C. 2. Documentation that the activity fits within a habitat conservation plan~~Habitat Conservation Plan approved pursuant to Section 10 of the Endangered Species Act, where any such assessment has been prepared or is otherwise made available; ~~or~~

~~3. Documentation that the activity fits within Section 4(d) of the Endangered Species Act; or~~
~~G.D. 4. An assessment prepared in accordance with *Regional Guidance for Floodplain Habitat Assessment and Mitigation*, FEMA Region X, ~~2010~~2013. The assessment shall determine if the project would adversely affect:~~

- ~~1. a. Species that are Federal, state or local listed as threatened or endangered.~~
- ~~4.2. The primary constituent elements identified for critical habitat when a species is listed as threatened or endangered; delineated, including but not limited to water quality, water quantity, flood volumes, flood velocities, spawning substrate, and/or floodplain refugia for listed salmonids.~~
- ~~2.3. b. Essential fish habitat Fish Habitat designated by the National Marine Fisheries Service;~~
- ~~3.4. c. Fish and wildlife habitat conservation areas;~~
- ~~d. Vegetation communities and habitat structures;~~
- ~~e. Water quality;~~
- ~~f. Water quantity, including flood and low flow depths, volumes and velocities;~~
- ~~g. The channel's natural planform pattern and migration processes;~~
- ~~h. Spawning substrate, if applicable; and/or~~
- ~~i. Floodplain refugia, if applicable.~~
- ~~5. K. Other protected areas and elements necessary for species conservation.~~

15.68.450 Habitat Mitigation Plan.

A. ~~1. A.~~ If the assessment conducted under ~~subsection J of this section~~Section 15.68.440- concludes the project is expected to have an adverse effect on water quality and/or aquatic or riparian habitat or habitat ~~functions~~function, the applicant shall provide a plan to mitigate those impacts, in accordance with *Regional Guidance for Floodplain Habitat Assessment and Mitigation*, FEMA Region X, ~~2010~~2013.

- ~~1. a. For projects or those portions of a project located within the regulatory floodplain but outside of the protected area~~~~1. If the USFWS or NMFS issues an Incidental Take Permit under Section 10 of the Endangered Species Act or a Biological Opinion under Section 7 of the Endangered Species Act; then it can be considered to qualify as a plan to mitigate those impacts.~~
- ~~2. 2. If the project is located in the Protected Area, the mitigation plan shall stipulate avoidance measures as are needed to ensure that there is no adverse effect during any phase of the project. No compensatory mitigation is allowed in the Protected Area.~~
- ~~4.3. 3. If the project is located outside the Protected Area, the mitigation plan shall include such avoidance, minimization, restoration, or compensation measures as are appropriate to mitigate the adverse effects of the project so that indirect adverse effects of development are mitigated such that equivalent or better habitat protection is provided for the following functions:~~
 - ~~b. For projects or those portions of a project located within the protected area, the project shall be revised to include such appropriate measures as are needed to ensure that there is no adverse effect due to the project. Minimization measures are not allowed in the protected area, unless they, in combination with other measures, result in no adverse effect.~~

~~a. 2. a.~~ Stormwater: Reduce flood volumes and stormwater runoff from new development by ensuring that increased volumes of stormwater reach the river at the same frequency, timing and duration as historical runoff. Low Impact Development (LID) is required to be incorporated as described in Section 15.68.270(-B).

~~b. b.~~ Riparian Vegetation: Maintain or replace riparian function by providing equivalent area, diversity, and function of riparian vegetation as currently exists on the site. Riparian retention requirements are outlined in ACC 15.68.400.

~~c. c.~~ Hyporheic Zones:— No activity is allowed that interferes with the natural exchange of flow between surface water, groundwater and hyporheic zone, however, natural hyporheic exchange may be enhanced or restored.

~~d. d.~~ Wetlands: Wetland function must be maintained or replaced by providing equivalent function.

~~e. e.~~ Large Woody Debris: Any large woody debris (LWD) removed from the floodplain must be replaced in kind, replicating or improving the quantity, size, and species of the existing LWD per Washington Department of Fish and Wildlife Aquatic Habitat Guidelines.

~~4. 4.~~ No new stream crossings are allowed outside the Protected Area unless approval has been obtained as stated in Section 15.68.460-(A).

B. ~~B.~~ The plan's habitat mitigation activities shall be incorporated into the proposed project. The floodplain development permit shall be based on the redesigned project and its mitigation components.

~~C. L. C.~~ As required in Section 15.68.230, the floodplain administrator or designee shall not issue a certificate of occupancy or final permits until all work identified in the Habitat Assessment and mitigation plan has been completed or the applicant has provided the necessary assurance that unfinished portions of the project will be completed, in accordance with Section 15.68.230(-A).

~~C-D. D.~~ Third—Party Review. For the habitat impact assessment required in ~~Subsection J15.68.440 of this section~~ or the habitat mitigation plan required in ~~subsection K of this section~~, the city may require third-party review when the professional opinions of the applicant's representative and the city's reviewers cannot be reconciled. Third-party review requires the applicant's habitat impact assessment, habitat mitigation plan, and/or additional technical studies to be reviewed by an independent third party, paid for by the applicant but hired by the city. Third-party review shall be conducted by a qualified consultant as defined in the Floodplain Habitat Assessment and Mitigation Regional Guidance, FEMA Region X, ~~2010-2013~~.

~~15.68.136~~ Floodplain **460 Alteration of Watercourses and SFHA Boundaries.**

A. ~~A.~~ In addition to the other requirements in ~~Section~~Chapter 15.68, if a project will alter or relocate boundaries of the SFHA, then the applicant shall also submit a request for a Conditional Letter of Map Revision (CLOMR), where required by FEMA with engineering documentation and analysis regarding the proposed change. The project will not be approved unless FEMA issues the CLOMR (which requires Endangered Species Act consultation) and the provisions of the letter are made part of the permit requirements. If the change to the BFE or boundaries of the SFHA would normally require a Letter of Map Change, then the project

~~proponent shall initiate, and receive approval of, a Conditional Letter of Map Revision (CLOMR) prior to approval of the development permit-expiration. The project shall be constructed in a manner consistent with the approved CLOMR.~~

~~B. — If there has been no start of construction, a floodplain development permit shall expire 180 days after the date of issuance. Where the applicant documents a need for an extension beyond this period due to conditions beyond the applicant's control, the floodplain administrator may authorize one or more extensions.~~

~~C. — 15.68.140 — Designation of the floodplain administrator.~~

~~D. — The director of the planning and development department, or the director's designee, is hereby appointed to administer and implement this chapter by granting or denying B. If a CLOMR application is made, then the project proponent shall also supply the full CLOMR documentation package to the Floodplain Administrator to be attached to the floodplain development permit-applications in accordance with its provisions.~~

~~E. — 15.68.141 — Duties of the floodplain administrator.~~

~~F. — Duties of the floodplain administrator shall include, but not be limited to:~~

~~G. — A. — Review all floodplain development permits to determine that the permit requirements of this chapter have been satisfied.~~

~~H.B. — B. — Review all floodplain development permits to determine that all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required, including those local, state or federal permits that may be all required to assure compliance with the Endangered Species Act and/or other appropriate state or federal lawsproperty owner notifications.~~

~~I. — C. — Review all. — The floodplain development permits to determine if the proposed development is located in the protected area. If located in the protected area, ensure that the applicable provisions of this chapter are met.~~

~~J. — D. — Ensure that all development activities within the regulatory floodplain of the city meet the requirements of this chapter.~~

~~K. — E. — Inspect all development projects before, during and after construction to ensure compliance with all provisions of this chapter, including proper elevation of the structure.~~

~~L. — F. — Maintain for public inspection all records pertaining to the provisions of this chapter.~~

~~M. — G. — Submit reports as required for the National Flood Insurance Program.~~

~~N. — H. — Notify FEMA of any proposed amendments to this chapter.~~

~~O. — I. — Cooperate with state and federal agencies to improve flood and other technical data and administrator or designee shall notify FEMA of any new data that would revise the FIRM.~~

~~P. J. Make interpretations, where needed, as to the exact location of the boundaries of the regulatory floodplain, the SFHA and the protected area (e.g., where there appears to be a conflict between the mapped SFHA boundary and actual field conditions as determined by the base flood elevation and ground elevations).~~

~~Q. 15.68.150 Duties and responsibilities of the public works department.~~

~~R. Duties of the public works department regarding flood hazard areas shall include, but not be limited to:~~

~~S. A. Permit Review.~~

~~T. 1. Review all development permits to determine that the permit requirements of this chapter have been satisfied;~~

~~U. 2. Review all development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required;~~

~~V. 3. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of ACC 15.68.160(C) are met.~~

~~W. B. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with ACC 15.68.060(C), the city engineer shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other sources in order to administer this chapter.~~

~~X. C. Information to Be Obtained and Maintained.~~

~~Y. 1. Where base flood elevation data has not otherwise been provided in accordance with this chapter, obtain and record the actual elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement. This information shall be recorded on a current FEMA Elevation Certificate (FEMA Form 81-31), signed and sealed by a professional land surveyor, currently licensed in the state of Washington.~~

~~Z. 2. For all new or substantially improved floodproofed structures:~~

~~AA. a. Verify and record the actual elevation (in relation to mean sea level); and~~

~~BB. b. Maintain the floodproofing certifications required in this chapter.~~

~~CC. 3. Maintain for Public Inspection All Records Pertaining to the Provisions of This Chapter. This information shall be recorded on a current FEMA Floodproofing Certificate (FEMA Form 81-65), by a professional engineer, currently licensed in the state of Washington.~~

~~DD. D. Alteration of Watercourses.~~

~~EE.C. 1. Notify adjacent communities and the Washington Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;~~

~~FF.D. 2. Require that maintenance is D. Assure that the flood-carrying capacity of the altered or relocated portion of the watercourse is maintained, provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.~~ If the maintenance program does not call for cutting of native vegetation, the system shall be oversized at the time of construction to compensate for said vegetation growth or any other natural factor that may need future maintenance.

~~E. *Interpretation of Firm Boundaries.* Make interpretations where needed as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation.~~

~~F. Appeals of determinations made pursuant to this chapter shall be filed with the city's public works director within 20 working days after the final city engineer decision is issued. The public works director shall have 15 working days to review the appeal, determine whether to uphold or modify the city engineer's decision, and notify the applicant of such determination. The decision of the public works director shall be final. The city engineer's and director's decision shall be granted consistent with the standards of Section 60.6 of the Rules and Regulations of the National Flood Insurance Program (44 CFR 59-76). (Ord. 6295 § 2, 2010; Ord. 6182 § 4, 2008; Ord. 6161 § 1, 2008; Ord. 4820 § 1, 1995; Ord. 4357 § 2(4.3), 1989.)~~

~~15.68.151 ——— Duties and responsibilities of the planning and development department.~~

~~Duties of the planning and development department shall include, but not be limited to:~~

~~A. *Permit Review.*~~

- ~~1. Review all building-related development permits to determine that the permit requirements of this chapter have been satisfied including building, addition and alteration permits;~~
- ~~2. Review all building-related development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required; and~~
- ~~3. Review all building-related projects to determine that the procedures for building projects within a special flood hazard area have been applied.~~

~~B. *Information to Be Obtained and Maintained.*~~

- ~~1. Where base flood elevation data is provided through the flood insurance study or required as in ACG 15.68.150(B), obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;~~
- ~~2. For all new or substantially improved floodproofed structures:
 - ~~a. Verify and record the actual elevation (in relation to mean sea level); and~~
 - ~~b. Maintain the floodproofing certifications required in this chapter;~~~~
- ~~3. Maintain for public inspection all building-related records pertaining to the provisions of this chapter.~~

~~Article V. Provisions for Flood Hazard Protection~~

~~15.68.160 Standards of the public works department.~~

~~A. Utilities.~~

- ~~1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.~~
- ~~2. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters.~~
- ~~3. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.~~
- ~~4. All new streets shall be designed to ensure the lowest finished surface elevation is a minimum of one foot higher than the adjacent 100-year flood elevation.~~
- ~~5. All new development shall be designed and located to minimize the impact on flood flows, flood storage, water quality, and habitat.~~
 - ~~a. Stormwater and drainage features shall incorporate low impact development techniques that mimic predevelopment hydrologic conditions, such as stormwater infiltration, rain gardens, grass swales, filter strips, disconnected impervious areas, permeable pavement, and vegetative roof systems.~~
 - ~~b. If the proposed project will create new impervious surfaces so that more than 10 percent of the portion of the lot in the regulatory floodplain is covered by impervious surface, the applicant shall demonstrate that there will be no net increase in the rate and volume of the stormwater surface runoff that leaves the site or that the adverse effect is mitigated as required in ACC 15.68.135(J) and (K).~~
- ~~6. The site plan required in this chapter shall account for surface drainage to ensure that:~~
 - ~~a. Existing and new buildings on the site will be protected from stormwater runoff; and~~
 - ~~b. The project will not divert or increase surface water runoff onto neighboring properties.~~
- ~~7. Utilities. Water wells shall be located outside the floodway and shall be protected to the FPE.~~

~~B. Subdivision Proposals.~~

- ~~1. All subdivision proposals shall be consistent with the need to minimize flood damage.~~
- ~~2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.~~
- ~~3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.~~

~~C. Floodway Standards.~~

- ~~1. In addition to the other requirements of this chapter, a project to develop in the floodway as delineated pursuant to this chapter shall meet the following criteria:~~
 - ~~a. The applicant shall provide a certification by a registered professional engineer demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering~~

~~practice that the proposed development would not result in any increase in flood levels during the occurrence of the base flood discharge.~~

~~b.—Construction or reconstruction of residential structures is prohibited within designated floodways, except for the following. The following exceptions must still meet all other requirements in this chapter:~~

~~i.—Repairs, reconstruction, or improvements to a residential structure which do not increase the ground floor area, providing the cost of which does not exceed 50 percent of the market value of the structure either (A) before the repair or reconstruction is started, or (B) if the structure has been damaged, and is being restored, before the damage occurred. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by a local code enforcement official and which are the minimum necessary to assure safe living conditions, or to an historic structure, may be excluded from the 50 percent calculations;~~

~~ii.—Repairs, replacement, reconstruction, or improvements to existing farmhouses located in designated floodways and located on designated agricultural lands that do not increase the building's total square footage of encroachment and are consistent with all requirements of WAC 173-158-075;~~

~~iii.—Repairs, replacement, reconstruction, or improvements to substantially damaged residential dwellings other than farmhouses that do not increase the building's total square footage of encroachment and are consistent with all requirements of WAC 173-158-076; or~~

~~iv.—Repairs, reconstruction, or improvements to residential structures identified as historic structures that do not increase the building's dimensions.~~

~~2.—In riverine special flood hazard areas where a floodway has not been delineated pursuant to this chapter, the applicant for a project to develop in the SFHA shall provide a certification by a registered professional engineer demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed development and all other past or future similar developments would not cumulatively result in an increase of flood levels during the occurrence of the base flood discharge by more than one foot.~~

~~15.68.161————Standards of the planning and development department.~~

~~In all areas of special flood hazard the following standards are required:~~

~~A.—Anchoring.~~

~~1.—All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.~~

~~2.—All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over the top or frame ties to ground anchors. This requirement is in~~

addition to other anchoring requirements for resisting wind forces. (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques.)

~~B.—Construction Materials and Methods.~~

- ~~1.—All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.~~
- ~~2.—All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.~~
- ~~3.—Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.~~

~~C.—Review of Building Permits.~~ Where elevation data is not available either through the flood insurance study or from another authoritative source, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

~~D.—Native Vegetation.~~ The site plan required for development in the regulatory floodplain shall show existing native vegetation.

- ~~1.—In the riparian habitat zone, native vegetation shall be left undisturbed, except if in connection with an activity allowed in the regulatory floodplain without a permit, and except for activities with the sole purpose of creating, restoring or enhancing natural functions associated with floodplains, streams, lakes, estuaries, marine areas, habitat, and riparian areas that meet federal and state standards, provided the activities do not include structures, grading, fill, or impervious surfaces.~~
- ~~2.—Outside the riparian habitat zone, removal of native vegetation shall not exceed 35 percent of the surface area of the portion of the site in the regulatory floodplain. Native vegetation in the riparian habitat zone portion of the property can be counted toward this requirement.~~
- ~~3.—If the proposed project does not meet the criteria of this chapter, a habitat impact assessment shall be conducted pursuant to ACC 15.68.135(J) and, if indicated by that assessment, a habitat mitigation plan shall be prepared and implemented pursuant to ACC 15.68.135(K).~~

~~15.68.170 ——— Additional standards of the planning and development department.~~

In all areas of special flood hazard where base flood elevation data is provided as set forth in this chapter, the following provisions are required:

~~A.—Residential Construction.~~

- ~~1.—New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above base flood elevation. Enclosed crawl space areas no taller than three feet, measured from the lowest ground within the crawl space to the bottom of the structural system directly supporting the floor slab or sheathing above, shall not be considered as a basement.~~

~~2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic and hydrodynamic flood forces on exterior walls by allowing for the entry and exit of floodwaters.~~

~~Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:~~

- ~~a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;~~
- ~~b. The bottom of all openings shall be no higher than one foot above grade;~~
- ~~c. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.~~

~~3. The structure shall be aligned parallel with the direction of flood flows.~~

~~4. The structure shall be anchored to prevent flotation, collapse, or lateral movement of the structure.~~

~~5. All materials below the FFE shall be resistant to flood damage and firmly anchored to prevent flotation.~~

~~Materials harmful to aquatic wildlife, such as creosote, are prohibited below the FFE.~~

~~6. Electrical, heating, ventilation, duct work, plumbing, and air conditioning equipment and other service facilities shall be elevated above the FFE. Water, sewage, electrical, and other utility lines below the FFE shall be constructed so as to prevent water from entering or accumulating within them during conditions of flooding.~~

~~7. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited; provided, that those areas may be used only for parking, storage, or building access and only if they are designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement shall either be certified by a registered professional engineer or licensed architect or meet or exceed the following minimum criteria:~~

- ~~a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.~~
- ~~i. b. The bottom of all openings shall be no higher than one foot above grade.~~
- ~~c. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters.~~

~~B. Nonresidential Construction. New construction and substantial improvement to any commercial, industrial or other nonresidential structure shall have the lowest floor, including basement, elevated one foot or more above the level of the base flood elevation. As an alternative to elevation, a new or substantial improvement to a nonresidential structure, and its attendant utility and sanitary facilities, may be dry floodproofed in A zones.~~

~~The project shall meet the following requirements:~~

~~1. Be floodproofed so that below one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;~~

~~2.1.2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;~~

~~3. Be certified by a registered professional engineer or a registered professional architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions~~

of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in ACC 15.68.150(C)(2);

4. ~~Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in subsection (A)(2) of this section;~~

5. ~~Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a building constructed to one foot above the base flood level will be rated as one foot below that level).~~

~~C. *Manufactured Homes.* All manufactured homes to be placed or substantially improved within Zones A1—30, AH, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is one foot or more above the base flood elevation and be securely anchored to an adequately anchored foundation system.~~

~~D. *Recreational Vehicles.* Recreational vehicles placed on sites are required to either:~~

~~1. Be on the site for fewer than 180 consecutive days; or~~

~~2. Be fully licensed and ready for highway use, on wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or~~

~~3. Meet the requirements of subsection C of this section and the elevation and anchoring requirements for manufactured homes.~~

~~E. *Hazardous Materials.* No new development shall create a threat to public health, public safety, or water quality. Chemicals, explosives, gasoline, propane, buoyant materials, animal wastes, fertilizers, flammable liquids, pollutants, or other materials that are hazardous, toxic, or a threat to water quality are prohibited from the regulatory floodplain. This prohibition does not apply to small quantities of these materials kept for normal household use or to materials kept in approved containers above the FPE or in a dry floodproofed nonresidential building.~~

~~F. *Small Structures.* A low cost building such as a detached garage, boathouse, pole barn, or storage shed that is no larger than 500 square feet and is not used for human habitation may be exempt from the elevation requirement of this chapter, provided:~~

~~1. It is used only for parking or storage;~~

~~A. 2. It is constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters;~~

~~B. A. 3. It is anchored to prevent flotation which may result in damage to other structures;~~

~~4. All portions of the structure below the FPE must be constructed of flood resistant materials;~~

~~5. Service utilities such as electrical and heating equipment meet the standards of this chapter;~~

~~6. It has openings to allow free flowage of water that meet the criteria of this chapter;~~

~~7. The project meets all the other requirements of this chapter.~~

~~G. *Location of Structures.* Structures and other development shall be located to avoid flood damage.~~

~~1. If a lot has a buildable site out of the regulatory floodplain, all new structures shall be located in that area.~~

~~2.—If a lot does not have a buildable site out of the regulatory floodplain, all new structures, pavement, and other development must be sited in the location that has the least impact on habitat by locating the structures as far from the water body as possible or placing the structures on the highest land on the lot.~~

~~H.—Critical Facilities.~~

~~1.—Construction of new critical facilities shall be, to the extent possible, located outside the limits of the regulatory floodplain.~~

~~2.—Construction of new critical facilities shall be permissible if no feasible alternative site is available, provided:~~

~~a.—Critical facilities shall have the lowest floor elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher. If there is no available data on the 500-year flood, the permit applicants shall develop the needed data in accordance with FEMA mapping guidelines.~~

~~b.—Access to and from the critical facility shall be protected to the elevation of the 500-year flood.~~

~~15.68.180 — Floodways and community acknowledgement of FEMA map amendments.~~

~~A.—Notwithstanding any other provision of this chapter, the city may permit encroachments within the adopted regulatory floodway upon receipt of approval of the Federal Insurance Administrator and completion of the conditions of this section.~~

~~1.—Prior to a developer being authorized to encroach upon the adopted regulatory floodway to an extent which will cause base flood elevation increases in excess of those permitted in subsection A of this section, the developer shall provide, for city review and submission to the Federal Insurance Administrator, the following:~~

~~a.—A request for conditional approval of map change and the appropriate initial fee as specified by Section 72.3 of 44 CFR Chapter I Federal Emergency Management Agency or a request for exemption from fees as specified by Section 72.5 of 44 CFR Chapter I Federal Emergency Management Agency. Sections 72.3 and 72.5 of 44 CFR Chapter I Federal Emergency Management Agency are herein adopted by reference in their entirety including any future amendments thereto;~~

~~b.—An evaluation of alternatives which would not result in a base flood elevation increase above that permitted under subsection A of this section demonstrating why these alternatives are not feasible;~~

~~c.—Documentation of individual legal notice to all impacted property owners within and outside of the community, explaining the impact of the proposed action on their property;~~

~~d.—Written concurrence of the chief executive officer of any other communities impacted by the proposed actions;~~

~~e.—Written certification that no structures are located in areas which would be impacted by the increased base flood elevation;~~

~~f.—A request for revision of base flood elevation determination according to the provisions of Section 65.6 of 44 CFR Chapter I Federal Emergency Management Agency. Section 65.6 of 44 CFR Chapter I Federal Emergency Management Agency is herein adopted by reference in its entirety;~~

~~g. A request for floodway revision in accordance with the provisions of Section 65.7 of 44 CFR Chapter I Federal Emergency Management Agency. Section 65.7 of 44 CFR Chapter I Federal Emergency Management Agency is herein adopted by reference in its entirety.~~

~~B. City Review of Changes to Flood Hazard Data.~~

~~1. All requests to revise or change the flood hazard data, including requests for a letter of map revision and a conditional letter of map revision, shall be reviewed by the floodplain administrator.~~

~~a. The floodplain administrator shall not sign the community acknowledgement form for any requests based on filling or other development, unless the applicant for the letter documents that such filling or development is in compliance with this chapter.~~

~~b. The floodplain administrator shall not approve a request to revise or change a floodway delineation until FEMA has issued a conditional letter of map revision that approves the change.~~

~~c. Upon receipt of the Federal Insurance Administrator's conditional approval of map change and prior to the approval of the proposed encroachments, the developer shall compensate the city for all costs incurred by the city which are associated with:~~

~~i. The city's adoption of floodplain management ordinances incorporating the increased base flood elevations and/or revised floodway reflecting the post-project condition;~~

~~ii. The city's submittal of evidence to the Federal Insurance Administrator of the city's adoption of said revised floodplain management ordinances;~~

~~iii. Within three months of completion of the proposed encroachments, the developer shall be responsible for providing certified record drawings and/or technical or scientific data to the city for submittal to the Federal Insurance Administrator.~~

~~2. If an applicant disagrees with the regulatory data prescribed by this chapter, he/she may submit a detailed technical study needed to replace existing data with better data in accordance with FEMA mapping guidelines or Regional Guidance for Hydrologic and Hydraulic Studies FEMA Region X, 2010. If the data in question are shown on the published FIRM, the submittal must also include a request to FEMA for a conditional letter of map revision.~~

~~3. All new hydrologic and hydraulic flood studies conducted pursuant to this chapter shall consider future conditions and the cumulative effects from anticipated future land use changes in accordance with Regional Guidance for Hydrologic and Hydraulic Studies, FEMA Region X, 2010. If there is a study in existence on the date this provision becomes effective that meets the rest of this chapter's criteria, it may be used, even if it does not account for future conditions.~~

~~15.68.190 ——— Developments within areas of special flood hazard.~~

~~Notwithstanding any other provision of this chapter, the city may permit developments within special flood hazard areas. Prior to approval for a development which will increase the water surface elevation of the base flood by more than one foot, a developer must comply with the requirements set forth in ACC 15.68.180(A).~~

~~15.68.200 — Compensatory storage requirements.~~

~~A. Development proposals shall not reduce the effective flood storage volume at base flood elevation. Where fill, grading or other activities that may displace the effective base flood storage volume are proposed, compensatory storage shall be required. Compensatory storage shall:~~

- ~~1. Provide equivalent volume at equivalent elevations to that being displaced.~~
- ~~2. Hydraulically connect to the source of the flooding.~~
- ~~3. Provide compensatory storage in the same construction season as when the displacement of flood storage volume occurs. Allowances may be granted on a case-by-case basis to allow sequential construction if the timing of the work cannot meet wintertime/flood construction schedules.~~
- ~~4. Occur on site or, if approved by the city engineer, at a hydraulically connected off-site location.~~
- ~~5. Provide documentation of a restrictive easement acceptable to the engineering division to ensure continued existence of the compensatory flood storage.~~

~~B.A. 6. The newly created storage area shall be graded and vegetated to allow fish access during flood events without creating fish stranding sites.~~

~~B. Certification by a registered professional engineer may be required as documentation that the compensatory storage requirement shall be met by the development proposal.~~

Ord. 6791 Exhibit B

ACC Chapter 15.68

Clean Version

Chapter 15.68
FLOODPLAIN DEVELOPMENT MANAGEMENT

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Section 1. General

15.68.010 Statutory Authorization.

A. The Legislature of the State of Washington has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry.

Therefore, the City does ordain as follows:

B. Findings of Fact:

Areas of Auburn are subject to periodic inundation and channel migration which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for protection and relief from flooding and channel migration, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

When floodplains and watersheds are developed without taking appropriate care and precautions, flood heights, frequencies, and velocities increase, which may cause a greater threat to humans, damage to property, destruction of natural floodplain functions, and adverse impacts to water quality and habitat. Rivers, streams, lakes, estuarine and marine areas and their floodplains are major elements of healthy aquatic and riparian areas and conveyance of flood waters. If watersheds, rivers, streams, lakes, estuaries, floodplains and other systems are not viewed holistically as biological and geomorphologic units, it may lead to serious degradation of habitat and increased flood hazards to people and human development. Over the years, natural processes have evolved that manage flood waters and channel flows in the most effective and efficient manner. Disruption of these processes through alterations to land cover, stream channels, wetlands and other water bodies which may lead to increased flood hazards, loss of life and property, threats to public health, and loss of habitat.

15.68.020 Purpose.

It is the purpose of this ordinance to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to manage development in order to:

- A. Protect human life, health and property from the dangers of flooding;
- B. Minimize the need for publicly funded and hazardous rescue efforts to save those who are isolated by floodwaters;
- C. Minimize expenditure of public money for costly flood damage repair and flood control projects;
- D. Minimize disruption of commerce, governmental services, and government infrastructure;
- E. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in the floodplain.;
- F. Minimize cost impacts to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in the special flood hazard area.;
- G. Maintain a stable tax base by providing for the sound use of and development of flood hazard areas so as to minimize blight areas caused by flooding;
- H. Encourage those who occupy flood hazard areas be educated about the risks and challenges associated with these areas.;
- I. Qualify the City of Auburn for participation in the National Flood Insurance Program, thereby giving citizens and businesses the opportunity to purchase flood insurance;
- J. Maintain the quality of water in rivers, streams, and lakes, and their floodplains so as to protect public water supplies, areas of the Public Trust, and wildlife habitat protected by the Endangered Species Act;
- K. Retain the natural channel, shoreline, and floodplain creation processes and other natural floodplain functions that protect, create, and maintain habitat for threatened and endangered species; and
- L. Prevent or minimize loss of hydraulic, geomorphic, and ecological functions of floodplains and stream channels.

15.68.030 Lands to which this Ordinance Applies.

This ordinance shall apply to the Special Flood Hazard Area (SFHA) and associated protected areas within the jurisdiction of the City of Auburn as defined in Section 3 of this Ordinance.

15.68.040 Approach.

In order to achieve the listed purposes, this ordinance:

- A. Defines and clarifies the terms and phrases used in this ordinance in Section 2.
- B. Identifies in Section 3 the Special Flood Hazard Area, the Protected Area and the supporting technical data needed to delineate those areas.
- C. Establishes a permit requirement in Section 4 so that all proposed development that may affect flood hazards, water quality and habitat is reviewed prior to construction.
- D. Sets minimum protection standards in Section 5 for all development to ensure that the development will not increase the potential for flood damage or adversely affect natural floodplain functions.
- E. Sets minimum protection standards to protect new and substantially improved structures from flood damage in Section 6.
- F. Specifies additional habitat protection criteria in Section 7. Some small projects do not need a floodplain development permit (see ACC 15.68.380). For all other development projects, the applicant must assess their impact on those factors that contribute to increased flood hazard and degradation of habitat. If the assessment concludes that the project will cause an adverse effect outside the Protected Area, the permit will be denied, unless the project impacts are mitigated (avoided, minimized, restored or compensated for).

15.68.050 Penalties for Noncompliance.

No development shall be undertaken or placed in the areas regulated by this ordinance without full compliance with the terms of this ordinance and other applicable regulations of the City. Violation of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall be enforced pursuant to the provisions of Chapter 1.25 ACC.

15.68.060 Interpretation.

In the interpretation and application of this ordinance, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the City; and,
- C. Deemed neither to limit nor repeal any other powers granted under state statutes;

15.68.070 Abrogation and Regulation Conflicts

Where this ordinance and another code, or ordinance, conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

15.68.080 Warning and Disclaimer of Liability.

The degree of property and habitat protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods and movement of channels outside of mapped channel migration areas may occur on rare occasions. Flood heights may be increased by unnatural or natural causes. This ordinance does not imply that land outside the regulated areas

or development permitted within such areas will be free from flood or erosion damage. This ordinance shall not create liability on the part of the City, any officer or employee thereof, for any damage to property or habitat that results from reliance on this ordinance or any administrative decision lawfully made hereunder.

15.68.090 Severability

The provisions and sections of this ordinance shall be deemed separable and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.

Section 2. Definitions

15.68.100 Definitions.

Unless specifically defined below, terms or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

- A. "Adversely affect/adverse effect" means effects that are a direct or indirect result of the proposed action or its interrelated or interdependent actions and the effect is not discountable, insignificant, or beneficial. Discountable effects are extremely unlikely to occur. Insignificant effects relate to the size of the impact and should never reach the scale where a take occurs. Based on best judgment, a person would not: 1) be able to meaningfully measure, detect, or evaluate insignificant effects, or 2) expect discountable effects to occur. Beneficial effects are contemporaneous positive effects without any adverse effects. In the event that the overall effect of the proposed action is beneficial, but is also likely to cause some adverse effects, then the proposed action is considered to result in an adverse effect.
- B. "Alteration of watercourse" means any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.
- C. "Appurtenant Structure" means a structure which is on the same parcel as the principle structure to be insured and the use of which is incidental to the use of the principal structure.
- D. "Area of shallow flooding" means a designated zone AO, AH, AR/AO or AR/AH (or VO) on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. Also referred to as the sheet flow area.
- E. "Area of special flood hazard" means the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). "Special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".
- F. "ASCE 24" means the most recently published version of ASCE 24, Flood Resistant Design and Construction, published by the American Society of Civil Engineers.
- G. "Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year (also referred to as the "100-year flood").
- H. "Base flood elevation" means the elevation to which floodwater is anticipated to rise during the base flood.

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- I. "Basement" means any area of the structure having its floor subgrade (below ground level) on all sides.
- J. "Building Code" means the currently effective versions of the International Building Code and the International Residential Code adopted by the Washington State Legislature and any further amendments adopted by the City of Auburn.
- K. "Channel Migration Zone" (CMZ) means the area within the lateral extent of likely stream channel movement due to stream bank destabilization and erosion, rapid stream incision, aggradation, avulsions, and shifts in location of stream channels.
1. The channel migration area shall be the total area occupied by the river channel, the severe channel migration hazard area, and the moderate channel migration hazard area as delineated in the Green River Channel Migration Study published by King County dated December 1993 plus 50 feet.
 2. The channel migration area shall be the total area occupied by the river channel, the severe channel migration hazard area, and the moderate channel migration hazard area as delineated in the Channel Migration Zone Delineation for the Middle Green River, RM 31.10 to 33.25 dated December 28, 2018 plus 50-feet which supersedes the study referenced above.
 3. A site specific channel migration delineation may also be performed per the Washington State Department of Ecology's current requirements with recommended setbacks (A Framework for Delineating Channel Migration Zones) prepared by a qualified engineer. The delineation shall be prepared by a qualified consultant as that term is defined in these regulations. The city may retain a qualified consultant paid for by the applicant to review and confirm the applicant's reports, studies and plans if the following circumstances exist:
 - a. The city has technical information that is unavailable to the applicant; or
 - b. The applicant has provided inaccurate or incomplete information on previous proposals or proposals currently under consideration.
- L. "Critical facility" means a facility necessary to protect the public health, safety and welfare during a flood. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency operations installations, water and wastewater treatment plants, electric power stations, and installations which produce, use, or store hazardous materials or hazardous waste (other than consumer products containing hazardous substances or hazardous waste intended for household use).
- M. "Development" means any human-made change to improved or unimproved real estate including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard.
- N. "Dry floodproofing" means any combination of structural and nonstructural measures that prevent flood waters from entering a structure.
- O. "Elevation Certificate" means an administrative tool of the National Flood Insurance Program (NFIP) that can be used to provide elevation information, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).
- P. "Essential Facility" has the same meaning as "Essential Facility" defined in ASCE 24. Table 1-1 in ASCE 24-14 further identifies building occupancies that are essential facilities.

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- Q. "FEMA" means the Federal Emergency Management Agency, the agency responsible for administering the National Flood Insurance Program.
- R. "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:
1. The overflow of inland or tidal waters; and/or
 2. The unusual and rapid accumulation of runoff of surface waters from any source.
 3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
 4. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (1) of this definition.
- S. "Flood elevation study" means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).
- T. "Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance Administrator has delineated both the Special Flood Hazard Areas and the risk premium zones applicable to the community.
- U. "Flood insurance study (FIS)" See "Flood Elevation Study"
- V. "Floodplain or flood prone area" means any land area susceptible to being inundated by water from any source. See "Flood or flooding."
- W. "Floodplain administrator" means the community official designated by title to administer and enforce the floodplain management regulations.
- X. "Flood proofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents. Flood proofed structures are those that have the structural integrity and design to be impervious to floodwater below the Base Flood Elevation.
- Y. "Flood protection elevation (FPE)" means the elevation above the datum of the effective FIRM to which new and substantially improved structures must be protected from flood damage.
- Z. "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to the "Regulatory Floodway.
- AA. "Functionally Dependent Use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities.

BB. "Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

CC. "Historic structure" means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior, or
 - b. Directly by the Secretary of the Interior in states without approved programs.

DD. "Hyporheic zone" means a saturated layer of rock or sediment beneath and/or adjacent to a stream channel that contains some proportion of channel water or that has been altered by channel water infiltration.

EE. "Impervious surface" means a non-vegetated surface area which either prevents or retards the entry of water into the soil mantle as under natural conditions prior to development. A non-vegetated surface area which causes water to run off the surface in greater quantities or at an increased rate of flow from the flow present under natural conditions prior to development. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled, macadam or other surfaces which similarly impede the natural infiltration of stormwater.

FF. "Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter found in ACC 15.68.170(A)(7) (i.e. provided there are adequate flood ventilation openings).

GG. "Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

HH. "Manufactured home park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

II. "Market value" shall mean the current assessed value as established by the most recent tax roll of the county assessor in which the property is located. An applicant may, at applicant's expense, provide an appraisal to determine market value.

JJ. "Mean Sea Level" means for purposes of the National Flood Insurance Program, the vertical datum to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

KK. “Native vegetation” means plant species that are indigenous to the community’s area and that reasonably could be expected to naturally occur on the site.

LL. “Natural floodplain functions” means the contribution that a floodplain makes to support habitat, including, but not limited to, providing flood storage and conveyance, reducing flood velocities, reducing sedimentation, filtering nutrients and impurities from runoff, processing organic wastes, moderating temperature fluctuations, and providing breeding and feeding grounds, shelter, and refugia, for aquatic or riparian species.

MM. “New construction” means for the purposes of determining insurance rates, structures for which the “start of construction” commenced on or after the effective date of an initial Flood Insurance Rate Map or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, “new construction” means structures for which the “start of construction” commenced on or after the effective date of the ordinance adopted by a community and includes any subsequent improvements to such structures.

NN. “Principal Structure” means a structure in which the principal use of the lot on which it is located is conducted.

OO. “Protected area” means the lands that lie within the boundaries of the floodway, the riparian buffer zone, and the channel migration area. Because of the impact that development can have on flood heights and velocities and habitat, special rules apply in the Protected Area.

PP. “Reasonably Safe from Flooding” means development that is designed and built to be safe from flooding based on consideration of current flood elevation studies, historical data, high water marks and other reliable data known to the community. In unnumbered A zones where flood elevation information is not available and cannot be obtained by practicable means, reasonably safe from flooding means that the lowest floor is at least two feet above the Highest Adjacent Grade.

QQ. “Recreational vehicle” means a vehicle:

1. Built on a single chassis; and,
2. Four hundred square feet or less when measured at the largest horizontal projection; and,
3. Designed to be self-propelled or permanently towable by an automobile or light-duty truck; and,
4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

RR. “Riparian” means of, adjacent to, or living on, the bank of a stream, lake, pond, sound, or other water body.

SS. “Riparian buffer zone” means the land located adjacent to streams, and other bodies of water, where the natural soil, hydrology, and native flora and fauna perform important ecological functions such as protecting the water body by filtering out pollutants, preventing erosion and sedimentation, stabilizing stream banks, and providing natural shade. They are often thin lines-of-green containing native grasses, flowers, shrubs and trees that line the banks of streams and other bodies of water. The riparian buffer zone for the Puget Sound Biological Opinion applies only to areas mapped within the Special Flood Hazard Area, unless the area is

undeveloped with predominately native vegetation that have benefits to endangered species, in which case the regulations for riparian habitat zones shall apply.

TT. "Riparian Habitat Zone" means the water body and adjacent land areas that are likely to support aquatic and riparian habitat.

UU. "Special flood hazard area (SFHA)" means the land subject to inundation by the base flood. Special flood hazard areas are designated on Flood Insurance Rate Maps with the letters "A" or "V" include AE (floodway), AO, AH, A1-99 and VE. The Special Flood Hazard Area is also referred to as the area of special flood hazard or SFHA.

VV. "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within 180 days of the date of the permit. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual "start of construction" means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

WW. "Structure" means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

XX. "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred

YY. "Substantial improvement" means any reconstruction, rehabilitation, addition, replacement or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed.

The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions; or
2. Any alteration of a "historic structure" provided that the alteration will not preclude the structure's continued designation as a "historic structure".

ZZ. "Variance" means a grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

AAA. "Violation" means the failure of a structure or other development to be constructed or implemented in conformance with the community's applicable floodplain development regulations.

BBB. “Water typing” means a system for classifying water bodies according to their size and fish habitat characteristics. The Washington Department of Natural Resources Forest Practices Water Typing Classification System is hereby adopted by reference. The system defines four water types:

1. Type “S” – Shoreline: Streams that are designated “shorelines of the state,” including marine shorelines.
2. Type “F” – Fish: Streams that are known to be used by fish or meet the physical criteria to be potentially used by fish.
3. Type “Np” – Non-fish perennial streams.
4. Type “Ns” – Non-fish seasonal streams.

CCC. “Zone” means one or more areas delineated on the FIRM. The following zones may be used on the adopted FIRM. The special flood hazard area is comprised of the A and V Zones.

1. A: SFHA where no base flood elevation is provided.
2. AE: SFHA with a base flood elevation.
3. AO: SFHA subject to inundation by shallow flooding usually resulting from sheet flow on sloping terrain, with average depths between one and three feet. Average flood depths are shown.
4. AH: SFHA subject to inundation by shallow flooding (usually areas of ponding) with average depths between one and three feet. Base flood elevations are shown.
5. D: Area of undetermined but possible flood hazard.
6. X: The area outside the mapped SFHA with a low risk of flooding.
7. Shaded X: An area of moderate risk of flooding from the base flood, and defined as:
 - a. areas of shallow (i.e., less than 1 foot) flooding;
 - b. 0.2% chance (or 500-year) flooding;
 - c. has a drainage area less than 1 sq. mile; or
 - d. areas protected by a levee.

Section 3. Regulatory Data

15.68.110 Area to be Regulated.

The area to be regulated is comprised of the Special Flood Hazard Area and all Protected Areas within the Special Flood Hazard Area within the jurisdiction of the City of Auburn. The term also includes areas delineated pursuant to Section 15.68.150.

15.68.120 Special Flood Hazard Area.

Basis for Establishing the Areas of Special Flood Hazard

A. The special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report entitled “The Flood Insurance Study (FIS) for King County Washington and Incorporated Areas” dated August 19, 2020, and any revisions thereto, with accompanying Flood Insurance Rate Maps (FIRMs) dated August 19, 2020, and any revisions thereto, as well as the special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report entitled “The Flood Insurance Study (FIS) for Pierce County Washington and Incorporated Areas” dated March 7, 2017, and any revisions

thereto, with accompanying Flood Insurance Rate Maps (FIRMs) dated March 7, 2017, and any revisions thereto, are hereby adopted by reference and declared to be a part of this ordinance. The FIS and the FIRM are on file at 1 East Main St, Auburn, WA 98001.

B. The best available information for flood hazard area identification as outlined in Section 15.68.130(D) shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under Section 15.68.130(D).

C. Upon receipt of a floodplain development permit application, the floodplain administrator or designee shall compare the elevation of the site to the base flood elevation.

D. The floodplain administrator or designee shall inform the applicant that the project may still be subject to the flood insurance purchase requirements unless the owner receives a Letter of Map Amendment (LOMA) from FEMA.

E. The floodplain administrator or designee shall make interpretations where needed, as to the exact locations of the boundaries of the SFHA and the Protected Area (e.g. where there appears to be a conflict between the mapped SFHA boundary and actual field conditions as determined by the base flood elevation and ground elevations) as it applies to proposed development. The applicant may appeal the floodplain administrator's or designee's interpretation of the location of the boundary to the Hearing Examiner for the City of Auburn.

15.68.130 Flood Hazard Data.

A. The base flood elevation for the SFHAs incorporated in 15.68.120(A) shall be utilized.

B. The Flood Protection Elevation (FPE) shall be the base flood elevation plus one (1) foot.

C. The floodway shall be as delineated on the Flood Insurance Rate Map.

D. Where base flood elevation and floodway data have not been provided in Special Flood Hazard Areas, the floodplain administrator or designee shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source.

15.68.140 Protected Area.

A. The Protected Area is comprised of those lands that lie within the boundaries of the floodway, the riparian buffer zone, and the channel migration area.

B. In riverine areas, where a floodway has been designated in accordance with Sections 15.68.130(C), 15.68.130(D) or 15.68.150(E), the Protected Area is comprised of those lands that lie within the boundaries of the riparian buffer zone, the channel migration area, and the SFHA.

C. Riparian Buffer Zone: The riparian buffer zone includes those watercourses within the SFHA and adjacent land areas that are likely to support aquatic and riparian habitat.

1. The size and location of the riparian buffer zone is dependent on the type of water body. The riparian buffer zone includes the water body and adjacent lands, measured perpendicularly from ordinary high water mark on both sides of the water body:

a. Type S streams that are designated "shorelines of the State:" 250 feet

b. Type F streams (fish bearing) streams greater than 5 feet wide and marine shorelines: 200 feet

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- c. Type F streams less than 5 feet wide and lakes: 150 feet
 - d. Type N (nonsalmonid-bearing) perennial and seasonal streams with unstable slopes: 225 feet
 - e. All other Type N (nonsalmonid-bearing) perennial and seasonal streams: 150 feet.
 - 2. The riparian buffer zone shall be delineated on the site plan by the applicant at the time of application for subdivision approval or floodplain development permit for all development proposals within 300 feet of any stream or shoreline.
- D. Channel Migration Area:
- a. The channel migration area shall be the channel migration zone as defined in Section 15.68.100(K).
 - b. Where more than one channel migration zone has been delineated, the floodplain administrator or designee shall use the delineation that has been adopted for other local regulatory purposes.
 - c. Where a channel migration zone has not yet been mapped, the provisions of Section 15.68.150(D) shall apply at the time of permit application.

15.68.150 New Regulatory Data.

- A. All requests to revise or change the flood hazard data, including requests for a Letter of Map Revision and a Conditional Letter of Map Revision shall be reviewed by the floodplain administrator or designee.
- 1. The floodplain administrator or designee shall not sign the Community Acknowledgment Form for any requests based on filling or other development, unless the applicant for the letter documents that such filling or development is in compliance with this ordinance.
 - 2. The floodplain administrator or designee shall not approve a request to revise or change a floodway delineation until FEMA has issued a Conditional Letter of Map Revision that approves the change.
- B. If an applicant disagrees with the regulatory data prescribed by this ordinance, he/she may submit a detailed technical study needed to replace existing data with better data in accordance with FEMA mapping guidelines or *Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management under the National Flood Insurance Program and Endangered Species Act* FEMA Region X, 2010. If the data in question are shown on the published FIRM, the submittal must also include a request to FEMA for a Conditional Letter of Map Revision.
- C. Where base flood elevation data are not available in accordance with Section 15.68.130, applicants for approval of new subdivisions and other proposed developments (including proposals for manufactured home parks) greater than 50 lots or 5 acres, whichever is the lesser, shall include such data with their permit applications.
- D. Where channel migration zone data are not available in accordance with 15.68.140(D), the permit applicant shall either:
- 1. Designate the entire SFHA as the channel migration zone or

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2. Identify the channel migration area in accordance with *Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management under the National Flood Insurance Program and Endangered Species Act* FEMA Region X, 2012.
- E. All new hydrologic and hydraulic flood studies conducted pursuant to Section 15.68.150 shall be in accordance with *Regional Guidance for Hydrologic and Hydraulic Studies in Support of the Model Ordinance for Floodplain Management under the National Flood Insurance Program and the Endangered Species Act*, FEMA, Region X, 2010.
- F. The floodplain administrator shall use the most restrictive data available prepared specifically for the project site for the channel migration zone, floodways, future conditions, and riparian buffer zone.

Section 4. Administration

15.68.160 Establishment of Floodplain Development Permit

A floodplain development permit shall be obtained before construction or development begins within the Special Flood Hazard Area (SFHA) or Protected Area. The permit shall be for all development as set forth in

15.68.170 Floodplain Development Permit Application.

Applications for a floodplain development permit shall be made using the criteria outlined in the Floodplain Development Application Packet available for download at www.auburnwa.gov/forms. At a minimum, the following information is required.

- A. Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures recorded on a current elevation certificate with Section B completed by the Floodplain Administrator.
- B. Proposed elevation in relation to mean sea level to which any structure will be flood proofed;
- C. Where a structure is to be flood proofed, certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet flood proofing criteria in Section 5;
- D. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development;
- E. Where development is proposed in a floodway, an engineering analysis indicating no rise of the Base Flood Elevation; and
- F. Any other such information that may be reasonably required by the Floodplain Administrator in order to review the application.

15.68.180 Floodplain Development Permit Expiration.

If there has been no start of construction, a floodplain development permit shall expire 180 days after the date of issuance. Where the applicant documents a need for an extension beyond this period due to conditions beyond the applicant's control, the floodplain administrator or designee may authorize one or more extensions.

15.68.190 Designation of the Floodplain Administrator.

The Director of Community Development is hereby appointed to administer, interpret, implement, and enforce this ordinance by granting or denying floodplain development permit applications in accordance with its

provision. The Director of Community Development may designate administration of portions or all of this ordinance to a qualified person.

15.68.200 Duties of the Floodplain Administrator.

Duties of the floodplain administrator or designee shall include, but are not limited to:

- A. Review all floodplain development permits to determine that the permit requirements of this ordinance have been satisfied.
- B. Review all floodplain development permits to determine that all necessary permits have been obtained from those Federal, State or local government agencies from which prior approval is required, including those local, State or Federal permits that may be required to assure compliance with the Endangered Species Act and/or other appropriate State or Federal laws.
- C. Review all floodplain development permits to determine if the proposed development is located in the Protected Area. If located in the Protected Area, ensure that the provisions of Section 7 are met.
- D. Ensure that all development activities within the Special Flood Hazard Area of the jurisdiction of the City meet the requirements of the ordinance.
- E. Inspect all development projects before, during and after construction to ensure compliance with all provisions of this ordinance, including proper elevation of the structure.
- F. Maintain for public inspection all records pertaining to the provisions of this ordinance.
- G. Submit reports to include the projects for which they issue floodplain development permits, including effects to flood storage, fish habitat, and all indirect effects of development and mitigation provided to FEMA as required by the National Flood Insurance Program.
- H. Notify FEMA of any proposed amendments to this ordinance and when annexations occur in the Special Flood Hazard Area.
- I. Ensure the proposed development is not located in the floodway. If located in the floodway, assure the encroachment provisions of Section 15.68.410 are met
- J. Cooperate with State and Federal agencies to improve flood and other technical data and notify FEMA of any new data that would revise the FIRM.
- K. Review all floodplain development permits to verify that proposed development will be reasonably safe from flooding.

15.68.210 Notification to Other Entities

Whenever a watercourse is to be altered or relocated:

- A. Notify adjacent communities and the Department of Ecology prior to such alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator through appropriate notification means, and
- B. Assure that the flood carrying capacity of the altered or relocated portion of said watercourse is maintained.

15.68.220 Records.

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- A. Where base flood elevation data have been obtained pursuant to Section 15.68.130 and 15.68.150, the floodplain administrator or designee shall obtain, record, and maintain the actual “finished construction” elevations provided by the applicant for the locations listed in Section 15.68.170. This information shall be recorded on a current FEMA Elevation Certificate signed and sealed by a professional land surveyor, currently licensed in the State of Washington.
 - B. For all new or substantially improved dry floodproofed nonresidential structures, where base flood elevation data has been obtained pursuant to Section 15.68.130 and 15.68.150, the floodplain administrator or designee shall obtain, record and maintain the elevation (in relation to the datum of the effective FIRM) to which the structure was floodproofed. This information shall be recorded on a current FEMA Floodproofing Certificate by a professional engineer currently licensed in the State of Washington.
 - C. Certification required by Section 15.68.410 (floodway encroachments).
 - D. Records of all variance actions, including justification for their issuance.
 - E. Improvement and damage calculations.
 - F. Maintain for public inspection all records pertaining to the provisions of this ordinance.

15.68.230 Certificate of Occupancy.

- A. A final grading and/or storm permit for the property, physical completion for City of Auburn Capital Improvement projects without a building, a certificate of occupancy (commercial building) or final building inspection (residential structure) for a new or substantially improved structure or an addition shall not be issued until:
 - 1. The permit applicant provides a properly completed, signed and sealed Elevation or Floodproofing Certificate showing finished construction data as required by Section 15.68.220;
 - 2. If a mitigation plan is required by Sections 15.68.440 and 15.68.450, all work identified in the plan has been completed according to the plan’s schedule;
 - 3. The applicant provides copies of all required Federal, State, and local permits noted in the permit application per Section 15.68.170;
 - 4. All other provisions of this ordinance and conditions placed on the floodplain development permit approval letter have been met.

15.68.240 Appeals.

- A. The Hearing Examiner, as established by Chapter 2.46 of the Auburn City Code, shall hear and decide appeals and requests for variances from the requirements of this ordinance.
- B. The Hearing Examiner shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator or designee in the enforcement or administration of this ordinance.
- C. Those aggrieved by the decision of the Hearing Examiner may appeal the decision to the superior court of the county in which the project is located pursuant to Section 2.46.160 of the Auburn City Code.

D. Upon consideration of the factors of Section 15.68.250 and the purposes of this ordinance, the Hearing Examiner may attach such conditions to the granting of the variance as he/she deems necessary to further the purposes of this ordinance.

E. The floodplain administrator or designee shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

15.68.250 Variance Criteria.

A. In addition to the Criteria outlined in ACC 18.70.025, in reviewing applications for a variance, the Hearing Examiner shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance; and:

1. The relationship of the proposed use to the comprehensive plan, growth management regulations, critical area regulations, the shoreline management program and floodplain management program for the area;
2. The potential of the proposed development project to destroy or adversely affect a fish and wildlife habitat conservation area or create an adverse effect to federal, state or locally protected species or habitat;
3. Is the minimum necessary to grant relief; and,

B. In addition to the Criteria outlined in ACC 18.70.025, no variance shall be granted to the requirements of this ordinance unless the applicant demonstrates that:

1. The project will not adversely affect features or quality of habitat supporting local, state or federally protected fish or wildlife;

C. Variances may be requested for new construction, substantial improvements, and other development upon showing of good and sufficient cause and is minimum necessary, considering flood hazard, to afford relief provided:

D. Variances shall only be issued:

1. Upon a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances;
2. For the repair, rehabilitation, or restoration of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure;
3. Upon a determination that failure to grant the variance would result in exceptional hardship to the applicant;
4. Upon a showing that the use cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes only facilities defined in Section 2 of this ordinance in the definition of "Functionally Dependent Use."

E. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.

F. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the BFE, provided the procedures of Sections 4 and 5 of this ordinance have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

G. In considering variance applications, the City of Auburn shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
9. The safety of access to the property in time of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site;
11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical, water system, and streets and bridges;

H. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:

1. The issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and
2. Such construction below the base flood elevation increases risks to life and property.

I. The Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance.

Section 5. General Development Standards

The provisions of Section 5 shall apply in the Special Flood Hazard Area:

15.68.260 Development and Subdivision Proposals.

This section applies to all development proposals including commercial development, subdivisions, short subdivisions, preliminary subdivisions, binding site plans, and expansions to manufactured home parks as defined in Chapter 17.04 ACC.

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- A. All development proposals shall be consistent with the need to minimize flood damage.
 - B. All development proposals shall have utilities and facilities, such as sewer, gas, electrical, and water systems located and constructed to prevent flood damage.
 - C. All development proposals shall have adequate drainage provided to avoid exposure to water damage.
 - D. The proposed subdivision must have one or more new lots in the Special Flood Hazard Area set aside for open space use through deed restriction, easement, subdivision covenant, or donation to a public agency.
 - 1. In the Special Flood Hazard Area outside the Protected Area, zoning must maintain a low density of floodplain development.
 - 2. In the Special Flood Hazard Area outside the protected area in which the current zoning is less than 5 acres must maintain current zoning.
 - 3. The density of development in the portion of the development outside the Special Flood Hazard Area may be increased to compensate for the amount of land in the Special Flood Hazard Area preserved as open space in accordance with Chapter 17.25 ACC.
 - E. If a parcel has a buildable site outside the Special Flood Hazard Area, it shall not be subdivided to create a new lot that does not have a buildable site outside of the Special Flood Hazard Area. This provision does not apply to tracts that are to be preserved as open space.
 - F. All development proposals shall ensure that all subdivisions have at least one access road connected to land outside the Special Flood Hazard Area with the surface of the road at or above the FPE wherever possible. Additional access roads may be required based on the number of proposed lots per the current City of Auburn Engineering Design Standards.
 - G. The final recorded plat shall include a notice that part of the property is in the SFHA, riparian buffer zone and/or channel migration area, as appropriate.
 - H. BFE generation for all development proposals greater than 50 lots or 5 acres, whichever is the lesser.

15.68.270 Site Design.

- A. Structures and other development shall be located to avoid flood damage or that adequately mitigates any identified impacts.
 - 1. If a lot has a buildable site out of the Special Flood Hazard Area, all new structures shall be located in that area, when possible.
 - 2. If a lot does not have a buildable site out of the Special Flood Hazard Area, all new structures, pavement, and other development must be sited in the location that has the least impact on habitat by locating the development as far from the water body as possible or by placing the structure on the highest portion of the lot.
 - 3. A minimum setback of 15 feet from the Protected Area shall be required for all structures.
 - 4. If the proposed project does not meet the criteria of Section 15.68.270(A) through (B), a habitat impact assessment shall be conducted pursuant to Section 15.68.440 and, if necessary, a habitat mitigation plan shall be prepared and implemented pursuant to Section 15.68.450.
- B. All new development shall be designed and located to minimize the impact on flood flows, flood storage, water quality and habitat.

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1. Stormwater and drainage features shall incorporate low impact development techniques, if technically feasible, that mimic pre-development hydrologic conditions, such as stormwater infiltration, rain gardens, grass swales, filter strips, disconnected hard surface areas, permeable pavement, vegetative roof systems, etc. per the City's current SWMM per Chapter 12.04 ACC.
 2. If the proposed project will create new hard surfaces so that more than 10 percent of the portion of the lot in the Special Flood Hazard Area is covered by hard surface, the applicant shall demonstrate that there will be no net increase in the rate and volume of the stormwater surface runoff per the maximum extent feasible and as required per the City's current SWMM per ACC 13.48 that leaves the site or that the adverse impact is mitigated, as provided in Sections 15.68.440 and 15.68.450.
- C. The site plan required in Section 15.68.170 shall account for surface drainage to ensure that:
1. Existing and new buildings on the site will be protected from stormwater runoff; and
 2. The project will not divert or increase surface water runoff onto neighboring properties.

15.68.280 Hazardous Materials.

- A. No new development shall create a threat to public health, public safety or water quality. Chemicals, explosives, gasoline, propane, buoyant materials, animal wastes, fertilizers, flammable liquids, pollutants, or other materials that are hazardous, toxic, or a threat to water quality are prohibited from the Special Flood Hazard Area. This prohibition does not apply to small quantities of these materials kept for normal household use. This prohibition does not apply to the continued operations of existing facilities and structure, reuse of existing facilities and structures, or functionally dependent facilities or structures.
- B. If the proposed project cannot meet Section 15.68.280(A) of this ordinance, then a habitat impact assessment must be conducted in accordance with Sections 15.68.440 and 15.68.450.

15.68.290 Critical Facilities.

- A. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area.
- B. Construction of new critical facilities in the Special Flood Hazard Area shall be permissible if no feasible alternative site is available, provided;
1. Critical facilities shall have the lowest floor elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher. If there is no available data on the 500-year flood, the permit applicants shall develop the needed data in accordance with FEMA mapping guidelines.
 2. Access to and from the critical facility shall be protected to the elevation of the 500-year floodplain. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

Section 6. Standards for Protection of Structures

15.68.300 Applicability.

The protection requirements in this section apply to all new structures and substantial improvements, which include:

- A. Construction or placement of a new structure.
- B. Reconstruction, rehabilitation, or other improvement that will result in a substantially improved building.
- C. Repairs to an existing building that has been substantially damaged regardless of the actual repair work that is done .
- D. Placing a manufactured home on a site.
- E. Placing an occupied recreational vehicle or travel trailer on a site for more than 180 days.

15.68.310 Flood Protection Standards.

- A. All new structures and substantial improvements shall have the lowest floor, including basement, elevated to or above the FPE.
- B. New construction and substantial improvement of any residential structure in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained shall be reasonably safe from flooding, but in all cases the lowest floor shall be at least two feet above the Highest Adjacent Grade.
- C. The structure shall be aligned parallel with the direction of flood flows where practicable.
- D. The structure shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy.
- E. All manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.
- F. All materials below the FPE shall be resistant to flood damage and firmly anchored to prevent flotation. Materials harmful to aquatic wildlife, such as creosote, are prohibited below the FPE.
- G. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage
- H. Electrical, heating, ventilation, duct work, plumbing, and air-conditioning equipment and other service facilities shall be elevated to or above the FPE. Water, sewage, electrical, and other utility lines (excluding storm drainage facilities) below the FPE shall be constructed so as to minimize water from entering or accumulating within them during conditioning of flooding.
- I. Fully enclosed areas below the lowest floor that are subject to flooding shall be used only for parking, limited storage, or building access and shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement shall either be certified by a registered professional engineer or licensed architect in the State of Washington and/or meet or exceed the following minimum criteria:
 - 1. A minimum of two openings having a total net area not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - 2. The bottom of all openings shall be no higher than one foot above grade.
 - 3. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

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4. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of flood waters.

15.68.320 Nonresidential Construction.

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall meet the requirements of subsection A or B below:

A. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:

1. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated one foot or more above the BFE, or elevated as required by ASCE 24, whichever is greater. Mechanical equipment and utilities shall be waterproofed or elevated least one foot above the BFE, or as required by ASCE 24, whichever is greater.
2. If located in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained, the structure shall be reasonably safe from flooding, but in all cases the lowest floor shall be at least two feet above the Highest Adjacent Grade.
3. If buildings are constructed or substantially improved with fully enclosed areas below the lowest floor, that are subject to flooding, the areas shall be used only for parking, limited storage, or building access, and shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - a. Have a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.
4. Alternatively, a registered engineer or architect may design and certify engineered openings.

B. If the requirements of Section 15.68.320(A) are not met, then new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:

1. Together with attendant utility and sanitary facilities, be dry floodproofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water or dry floodproofed to the elevation required by ASCE 24, whichever is greater;
2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
3. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this

subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in Section 15.68.220(B);

15.68.330 Manufactured Homes.

All manufactured homes to be placed or substantially improved on sites shall be:

- A. Elevated on a permanent foundation in accordance with Section 15.68.310(A) and
- B. Securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to other applicable anchoring requirements for resisting wind forces.
- C. If manufactured homes are constructed or substantially improved with fully enclosed areas below the lowest floor, the areas shall be used solely for parking of vehicles, building access, or storage.

15.68.340 Recreational Vehicles.

Recreational vehicles placed on sites shall:

- A. Be on the site for fewer than 180 consecutive days, or
- B. Be fully licensed and ready for highway use, on their wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached addition; or
- C. Meet the requirements of Section 15.68.340 and the anchoring requirements for manufactured homes in Section 15.68.330.

15.68.350 Appurtenant Structures.

A structure which is on the same parcel of property as the principle structure and the use of which is incidental to the use of the principle structure and is not used for human habitation may be exempt from the elevation requirements of Section 15.68.310(A), provided:

- A. It is used only for parking or storage;
- B. It is constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters;
- C. It is anchored to prevent flotation which may result in damage to other structures;
- D. All portions of the structure below the FPE must be constructed of flood-resistant materials;
- E. Service utilities such as electrical and heating equipment meet the standards of Section 15.68.310(F) and Section 15.68.360;
- F. It has openings to allow free flowage of water that meet the criteria in Section 15.68.310(I);
- G. The project meets all the other requirements of this ordinance, including Section 7 and 15.68.410.

15.68.360 Utilities.

- A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- B. New water wells shall be located outside the floodway and shall be protected to the FPE;

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- C. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into the floodwaters;
 - D. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. A habitat impact assessment shall be conducted in accordance with Section 15.68.440 as a condition of approval of an onsite waste disposal system to be located in the Special Flood Hazard Area.

Section 7. Standards for Habitat Protection

The provisions of this Section shall apply in the Special Flood Hazard Area and channel migration zone.

15.68.370 Non-Development Activities.

Activities that do not meet the definition of “development” are allowed in the Special Flood Hazard Area and Protected Area without the need for a floodplain development permit under this ordinance, provided all other Federal, State and local requirements are met. The following are examples of activities not considered development or “unnatural changes to improved or unimproved real estate”.

- A. Routine maintenance of landscaping that does not involve grading, excavation or filling;
- B. Removal of noxious weeds and hazard trees and replacement of non-native vegetation with native vegetation;
- C. Normal maintenance of structures, such as re-roofing and replacing siding, provided such work does not qualify as a substantial improvement;
- D. Normal maintenance of above ground utilities and facilities, such as replacing downed power lines and utility poles;
- E. Underground and above ground utility work located in previously disturbed areas, with no significant vegetation impacts, and will have no appreciable change in grade;
- F. Normal maintenance and preservation of public streets and private streets or parking lots (with approval of Floodplain Administrator) , including, but not limited to filling potholes, patching, crack seal, chip seal, repaving and installing signs and traffic signs, traffic control devices, striping/channelization, pavement markings, repair/replacement of sidewalk/curb and gutter, ADA improvements, non-motorized improvements, repair of guardrails, repair of retaining walls, management of hazardous trees, fencing repair, lighting repair, but not including expansion of paved areas;
- G. Public street improvements with no significant vegetation impacts, and no appreciable change in grade;
- H. Normal maintenance of a levee or other flood control facility prescribed in the operations and maintenance plan for the levee or flood control facility are allowed in the Special Flood Hazard Area without the need for a floodplain development permit. Normal maintenance does not include repair from flood damage, expansion of the prism, expansion of the face or the toe or addition for protection on the face or toe with rock armor; and
- I. Plowing and other normal flood protection practices (other than structures or filling) on farms in the Special Flood Hazard Area and in existence as of the effective date of this ordinance do not require a floodplain development permit. Clearing additional land for agriculture after the date of this ordinance will require a floodplain development permit and a Habitat Assessment.

15.68.380 Activities Allowed with a Floodplain Development Permit.

The following activities are allowed in the Special Flood Hazard Area without the analysis required in Section 15.68.410 or the habitat impact assessment required under Section 15.68.440, provided that all other requirements of this ordinance are met, including obtaining a floodplain development permit:

- A. Repairs or remodeling of an existing structure, provided that the repairs or remodeling are not a substantial improvement or a repair of substantial damage.
- B. Expansion or reconstruction of an existing structure that is no greater than ten percent beyond its existing footprint, provided that the repairs or remodeling are not a substantial improvement or repair of substantial damage. If the structure is in the floodway, there shall be no change in the structure's dimensions perpendicular to flow and a no rise analysis and certification must be provided, even if the change in dimensions is parallel to flow.
- C. Activities with the sole purpose of creating, restoring or enhancing natural functions associated with floodplains, streams, lakes, estuaries, marine areas, habitat and riparian areas that meet Federal and State standards, provided the activities do not include structures, grading, fill, or hard surfaces.
- D. Development of open space and recreational facilities such as parks, trails and hunting grounds, that do not include structures, fill, hard surfaces or removal of more than five percent of the native vegetation on that portion of the property in the Special Flood Hazard Area.
- E. Repairs to onsite Septic Systems provided the ground disturbance is the minimum necessary and best management practices (BMP's) to prevent stormwater runoff and soil erosion are used.

15.68.390 Other Activities.

All other activities listed in Sections 15.68.370 or 15.68.380 that are allowed by Title 18 (Zoning) of the Auburn City Code are allowed, provided they meet all the other requirements of this ordinance, including the analysis required under Section 15.68.420, 15.68.430, and the habitat impact assessment required under Section 15.68.440, and a floodplain development permit is issued.

15.68.400 Native Vegetation.

The site plan required in the Floodplain Development Application Packet shall show existing native vegetation.

- A. Within the riparian buffer zone, native vegetation shall be left undisturbed, except as provided in Sections 15.68.370 and 15.68.380(C).
- B. Outside the riparian buffer zone, removal of native vegetation shall not exceed 35 percent of the surface area of the portion of the site in the Special Flood Hazard Area. Native vegetation in the riparian buffer zone portion of the property can be counted toward this requirement.
- C. If the proposed project does not meet the criteria of Sections 15.68.400(A) and (B), a habitat impact assessment shall be conducted pursuant to Section 15.68.440 and, if necessary, a habitat mitigation plan shall be prepared and implemented pursuant to Section 15.68.450.

15.68.410 Floodway Standards.

A. In addition to the other requirements of this ordinance, a project to develop in the floodway as delineated pursuant to Sections 15.68.130(C), 15.68.130(D) or 15.68.150(E) shall meet the following criteria:

1. The applicant shall provide a certification by a registered professional engineer licensed in the State of Washington demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the proposed development would not result in any increase in flood levels during the occurrence of the base flood discharge.
2. Construction or reconstruction of residential structures is prohibited within designated floodways, except for the following. The following exceptions must still meet all other requirements in the ordinance, including Section 15.68.410(A)(1).

- a. Repairs, reconstruction, or improvements to a residential structure that do not increase the ground floor area, providing the cost of which does not exceed 50 percent of the market value of the structure either, (1) before the repair, or reconstruction is started, or (2) if the structure has been damaged, and is being restored, before the damage occurred. Any project for improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications that have been identified by a local code enforcement official, and which are the minimum necessary to assure safe living conditions, or to an historic structure, may be excluded from the 50 percent calculation;

- b. Repairs, reconstruction, replacement, or improvements to existing farmhouse structures located in designated floodways and that are located on lands designated as agricultural lands of long-term commercial significance under RCW 36.70A.170 may be permitted subject to the following:

- i. The new farmhouse is a replacement for an existing farmhouse on the same farm site;
- ii. There is no potential building site for a replacement farmhouse on the same farm outside the designated floodway;
- iii. Repairs, reconstruction, or improvements to a farmhouse shall not increase the total square footage of encroachment of the existing farmhouse;
- iv. A replacement farmhouse shall not exceed the total square footage of encroachment of the farmhouse it is replacing;
- v. A farmhouse being replaced shall be removed, in its entirety, including foundation, from the floodway within ninety days after occupancy of a new farmhouse;
- vi. For substantial improvements and replacement farmhouses, the elevation of the lowest floor of the improvement and farmhouse respectively, including basement, is a minimum of one foot higher than the BFE;
- vii. New and replacement water supply systems are designed to eliminate or minimize infiltration of floodwaters into the system;
- viii. New and replacement sanitary sewerage systems are designed and located to eliminate or minimize infiltration of floodwater into the system and discharge from the system into the floodwaters; and

ix. All other utilities and connections to public utilities are designed, constructed, and located to eliminate or minimize flood damage.

c. For all substantially damaged residential structures, other than farmhouses, located in a designated floodway, the Floodplain Administrator may make a written request that the Department of Ecology assess the risk of harm to life and property posed by the specific conditions of the floodway. Based on analysis of depth, velocity, flood-related erosion, channel migration, debris load potential, and flood warning capability, the Department of Ecology may exercise best professional judgment in recommending to the local permitting authority repair, replacement, or relocation of a substantially damaged structure consistent with WAC 173-158-076. The property owner shall be responsible for submitting to the local government and the Department of Ecology any information necessary to complete the assessment. Without a favorable recommendation from the department for the repair or replacement of a substantially damaged residential structure located in the regulatory floodway, no repair or replacement is allowed per WAC 173-158-070(1).

d. Before the repair, replacement, or reconstruction is started, all requirements of the NFIP, the state requirements adopted pursuant to 86.16 RCW, and all applicable local regulations must be satisfied. In addition, the following conditions must be met:

i. There is no potential safe building location for the replacement residential structure on the same property outside the regulatory floodway.

ii. A replacement residential structure is a residential structure built as a substitute for a legally existing residential structure of equivalent use and size.

iii. Repairs, reconstruction, or replacement of a residential structure shall not increase the total square footage of floodway encroachment.

iv. The elevation of the lowest floor of the substantially damaged or replacement residential structure is a minimum of one foot higher than the BFE.

v. New and replacement water supply systems are designed to eliminate or minimize infiltration of floodwater into the system.

vi. New and replacement sanitary sewerage systems are designed and located to eliminate or minimize infiltration of floodwater into the system and discharge from the system into the floodwaters.

vii. All other utilities and connections to public utilities are designed, constructed, and located to eliminate or minimize flood damage.

e. Repairs, reconstruction, or improvements to residential structures identified as historic structures that do not increase the building's dimensions.

B. In riverine Special Flood Hazard Areas where a floodway has not been delineated pursuant to Sections 15.68.130(C), 15.68.130(D) or 15.68.150(E), the applicant for a project to develop in the SFHA shall provide a certification by a registered professional engineer in the State of Washington demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the

proposed development and all other past or future similar developments would not cumulatively result in an increase of flood levels during the occurrence of the base flood discharge by more than one-half foot.

15.68.420 Standards for Shallow Flooding Areas (AO Zones)

Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In addition to other provisions in this code, the following additional provisions also apply in AO zones.

- A. New construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement and mechanical equipment) elevated above the highest adjacent grade to the structure, one foot or more above the depth number specified in feet on the community's FIRM (at least two feet above the highest adjacent grade to the structure if no depth number is specified).
- B. New construction and substantial improvements of nonresidential structures within AO zones shall either:
 - 1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified); or
 - 2. Together with attendant utility and sanitary facilities, be completely flood proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer, or architect as in Section 15.68.310(I).
- C. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
- D. Recreational vehicles placed on sites within AO zones on the community's FIRM either:
 - 1. Be on the site for fewer than 180 consecutive days, or
 - 2. Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
 - 3. Meet the requirements of subsections (1) and (3) above and the anchoring requirements for manufactured homes (Section 15.68.330(B)).

15.68.430 Compensatory Storage.

New development shall not reduce the effective flood storage volume of the Special Flood Hazard Area. A development proposal shall provide compensatory storage if grading or other activity eliminates any effective flood storage volume. Compensatory storage shall:

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- A. Provide equivalent volumes at equivalent elevations to that being displaced. For this purpose, “equivalent elevation” means having similar relationship to ordinary high water mark and to the best available 10-year, 50-year and 100-year water surface profiles.
 - B. Be hydraulically connected to the source of flooding.
 - C. Provide compensatory storage in the same construction season as when the displacement of flood storage volume occurs and before the flood season begins.
 - D. The newly created storage area shall be graded and vegetated to allow fish access during flood events without creating fish stranding sites.

15.68.440 Habitat Impact Assessment.

Unless allowed under Sections 15.68.370 and 15.68.380, a permit application to develop in the Special Flood Hazard Area shall include an assessment of the impact of the project on federal, state or locally protected species and habitat, water quality and aquatic and riparian habitat. The assessment shall be:

- A. A Biological Evaluation or Biological Assessment developed per 50 C.F.R., Subsection 402.12 to initiate Federal Interagency consultation under Endangered Species Act Section 7.a.2; or,
- B. Documentation that the activity fits within Section 4.d of the Endangered Species Act; or,
- C. Documentation that the activity fits within a Habitat Conservation Plan approved pursuant to Section 10 of the Endangered Species Act, where any such assessment has been prepared or is otherwise made available; or
- D. An assessment prepared in accordance with *Regional Guidance for Floodplain Habitat Assessment and Mitigation*, FEMA Region X, 2013. The assessment shall determine if the project would adversely affect:
 - 1. Species that are Federal, state or local listed as threatened or endangered.
 - 2. The primary constituent elements for critical habitat when delineated, including but not limited to water quality, water quantity, flood volumes, flood velocities, spawning substrate, and/or floodplain refugia for listed salmonids.
 - 3. Essential Fish Habitat designated by the National Marine Fisheries Service.
 - 4. Fish and wildlife habitat conservation areas.
 - 5. Other protected areas and elements necessary for species conservation.

15.68.450 Habitat Mitigation Plan.

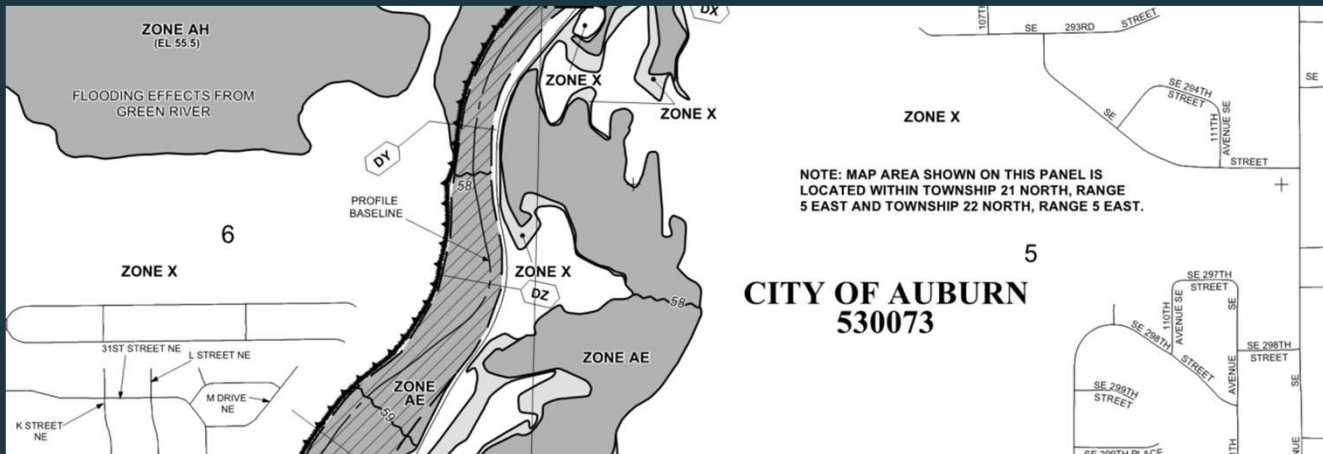
- A. If the assessment conducted under Section 15.68.440 concludes the project is expected to have an adverse effect on water quality and/or aquatic or riparian habitat or habitat function, the applicant shall provide a plan to mitigate those impacts, in accordance with *Regional Guidance for Floodplain Habitat Assessment and Mitigation*, FEMA Region X, 2013.
 - 1. If the USFWS or NMFS issues an Incidental Take Permit under Section 10 of the Endangered Species Act or a Biological Opinion under Section 7 of the Endangered Species Act; then it can be considered to qualify as a plan to mitigate those impacts.

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2. If the project is located in the Protected Area, the mitigation plan shall stipulate avoidance measures as are needed to ensure that there is no adverse effect during any phase of the project. No compensatory mitigation is allowed in the Protected Area.
 3. If the project is located outside the Protected Area, the mitigation plan shall include such avoidance, minimization, restoration, or compensation measures so that indirect adverse effects of development are mitigated such that equivalent or better habitat protection is provided for the following functions:
 - a. Stormwater: Reduce flood volumes and stormwater runoff from new development by ensuring that increased volumes of stormwater reach the river at the same frequency, timing and duration as historical runoff. Low Impact Development (LID) is required to be incorporated as described in Section 15.68.270(B).
 - b. Riparian Vegetation: Maintain or replace riparian function by providing equivalent area, diversity, and function of riparian vegetation as currently exists on the site. Riparian retention requirements are outlined in ACC 15.68.400.
 - c. Hyporheic Zones: No activity is allowed that interferes with the natural exchange of flow between surface water, groundwater and hyporheic zone, however, natural hyporheic exchange may be enhanced or restored.
 - d. Wetlands: Wetland function must be maintained or replaced by providing equivalent function.
 - e. Large Woody Debris: Any large woody debris (LWD) removed from the floodplain must be replaced in kind, replicating or improving the quantity, size, and species of the existing LWD per Washington Department of Fish and Wildlife Aquatic Habitat Guidelines.
 4. No new stream crossings are allowed outside the Protected Area unless approval has been obtained as stated in Section 15.68.460(A).
- B. The plan's habitat mitigation activities shall be incorporated into the proposed project. The floodplain development permit shall be based on the redesigned project and its mitigation components.
- C. As required in Section 15.68.230, the floodplain administrator or designee shall not issue a certificate of occupancy or final permits until all work identified in the Habitat Assessment and mitigation plan has been completed or the applicant has provided the necessary assurance that unfinished portions of the project will be completed, in accordance with Section 15.68.230(A).
- D. Third-Party Review. For the habitat impact assessment required in Subsection 15.68.440 or the habitat mitigation plan required in this section, the city may require third-party review when the professional opinions of the applicant's representative and the city's reviewers cannot be reconciled. Third-party review requires the applicant's habitat impact assessment, habitat mitigation plan, and/or additional technical studies to be reviewed by an independent third party, paid for by the applicant but hired by the city. Third-party review shall be conducted by a qualified consultant as defined in the Floodplain Habitat Assessment and Mitigation Regional Guidance, FEMA Region X, 2013.

15.68.460 Alteration of Watercourses and SFHA Boundaries.

-
- A. In addition to the other requirements in Chapter 15.68, if a project will alter or relocate boundaries of the SFHA, then the applicant shall also submit a request for a Conditional Letter of Map Revision (CLOMR), where required by FEMA with engineering documentation and analysis regarding the proposed change. The project will not be approved unless FEMA issues the CLOMR (which requires Endangered Species Act consultation) and the provisions of the letter are made part of the permit requirements. If the change to the BFE or boundaries of the SFHA would normally require a Letter of Map Change, then the project proponent shall initiate, and receive approval of, a Conditional Letter of Map Revision (CLOMR) prior to approval of the development permit. The project shall be constructed in a manner consistent with the approved CLOMR.
- B. If a CLOMR application is made, then the project proponent shall also supply the full CLOMR documentation package to the Floodplain Administrator to be attached to the floodplain development permit, including all required property owner notifications.
- C. The floodplain administrator or designee shall notify adjacent communities and the Washington Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator;
- D. Assure that the flood-carrying capacity of the altered or relocated portion of the watercourse is maintained. If the maintenance program does not call for cutting of native vegetation, the system shall be oversized at the time of construction to compensate for said vegetation growth or any other natural factor that may need future maintenance.

COMMUNITY DEVELOPMENT DEVELOPMENT ENGINEERING FLOODPLAIN DEVELOPMENT CODE UPDATE



**STEVEN STURZA
STUDY SESSION
MAY 26, 2020**

Department of Community Development
Planning • Building • Development Engineering • Permit Center
Sustainability • Community Services • Code Enforcement

AUBURN
VALUES

SERVICE
ENVIRONMENT
ECONOMY
CHARACTER
SUSTAINABILITY
WELLNESS
CELEBRATION

FEMA'S LETTER OF DETERMINATION



Federal Emergency Management Agency Washington, D.C. 20472

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
115-I

February 19, 2020

The Honorable Nancy Backus
Mayor, City of Auburn
25 West Main Street
Auburn, Washington 98001

Community: City of Auburn,
King County,
Washington
Community No.: 530073
Map Panels Affected: See FIRM Index

Dear Mayor Backus:

In December 2007, you were notified of proposed Base Flood Elevations (BFEs) affecting the Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report for the City of Auburn, King County, Washington and on April 3, 2018 you were notified of proposed flood hazard determinations (FHDs). The statutory 90-day appeal periods that were initiated on December 18, 2007 and April 17, 2018, when the Department of Homeland Security's Federal Emergency Management Agency (FEMA) published a notice of proposed BFEs and FHDs for your community in the *Seattle Times*, have elapsed.

FEMA received no valid requests for changes in the BFEs and FHDs. Therefore, the determination of the Agency as to the BFEs and FHDs for your community is considered final. The final BFEs and FHDs will be published in the *Federal Register* as soon as possible. The modified BFEs, FHDs and revised map panels, as referenced above, will be effective as of August 19, 2020, and revise the FIRM that was in effect prior to that date. For insurance rating purposes, the community number and new suffix code for the panels being revised are indicated above and on the map and must be used for all new policies and renewals.

The modifications are pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) and are in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, Public Law 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Because of the modifications to the FIRM and FIS report for your community made by this map revision, certain additional requirements must be met under Section 1361 of the 1968 Act, as amended, within 6 months from the date of this letter. Prior to August 19, 2020, your community is required, as a condition of continued eligibility in the National Flood Insurance Program (NFIP), to adopt or show evidence of adoption of floodplain management regulations that meet the standards of Paragraph 60.3(d) of the NFIP regulations. These standards are the minimum requirements and do not supersede any State or local requirements of a more stringent nature.

It must be emphasized that all the standards specified in Paragraph 60.3(d) of the NFIP regulations must be enacted in a legally enforceable document. This includes the adoption of the effective FIRM and FIS report to which the regulations, apply and the modifications made by this map revision. Some of the standards should already have been enacted by your community. Any additional requirements can be met by taking one of the following actions:

1. Amending existing regulations to incorporate any additional requirements of Paragraph 60.3(d);
2. Adopting all the standards of Paragraph 60.3(d) into one new, comprehensive set of regulations; or
3. Showing evidence that regulations have previously been adopted that meet or exceed the minimum requirements of Paragraph 60.3(d).

Communities that fail to enact the necessary floodplain management regulations will be suspended from participation in the NFIP and subject to the prohibitions contained in Section 202(a) of the 1973 Act as amended.

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ORDINANCE NON-COMPLIANCE

- Suspension of NFIP eligibility
- No mortgages or home equity loans in floodplain areas
- No renewals of existing flood insurance policies
- Loss of most forms of Disaster Assistance
- No federal grants or loans
- Loss of subsidized insurance for Pre-FIRM structures
- Potential impacts to Endangered Species
- Failure of communities to properly regulate flood hazard areas may bring lawsuits



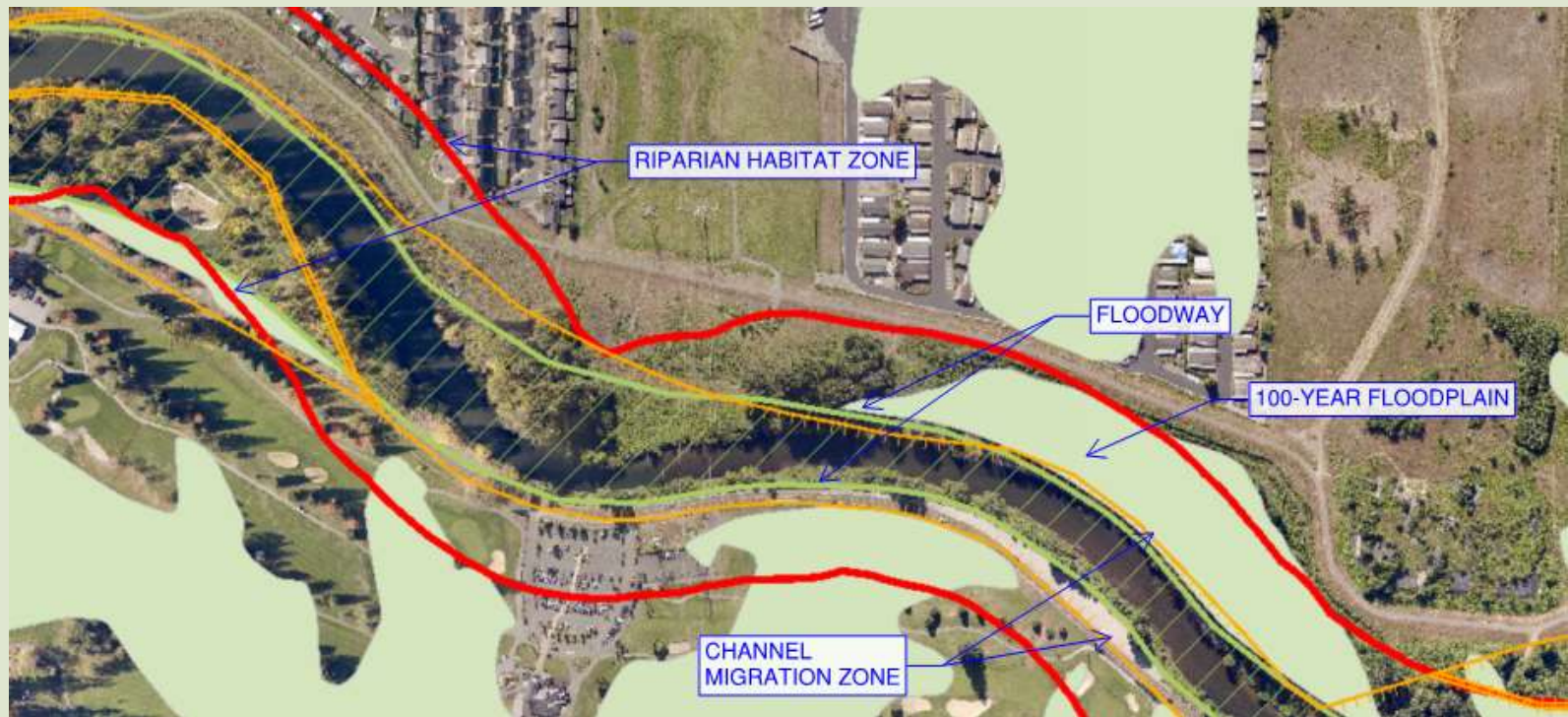
STAFF PROPOSED UPDATES TO ACC 15.68

MODEL ORDINANCE UPDATES

- Planning Commission recommendation received April 21st, 2020
- Reorganize ACC, Chapter 15.68 to correspond to the layout of the Model Ordinance
- Update the definitions section to have the latest definitions per NFIP, NMFS, FEMA, DOE and City of Auburn.
- Remove most of the permit application submittal criteria from ACC, Chapter 15.68
- Information already provided in ACC 18.70.025 for variances is removed to avoid redundancy
- Additional variance criteria added
- Minimum 15-foot setback from the protected area
- Remove a date for assessing cumulative improvements
- Increasing the requirements for what is to be addressed in Habitat Mitigation Plans

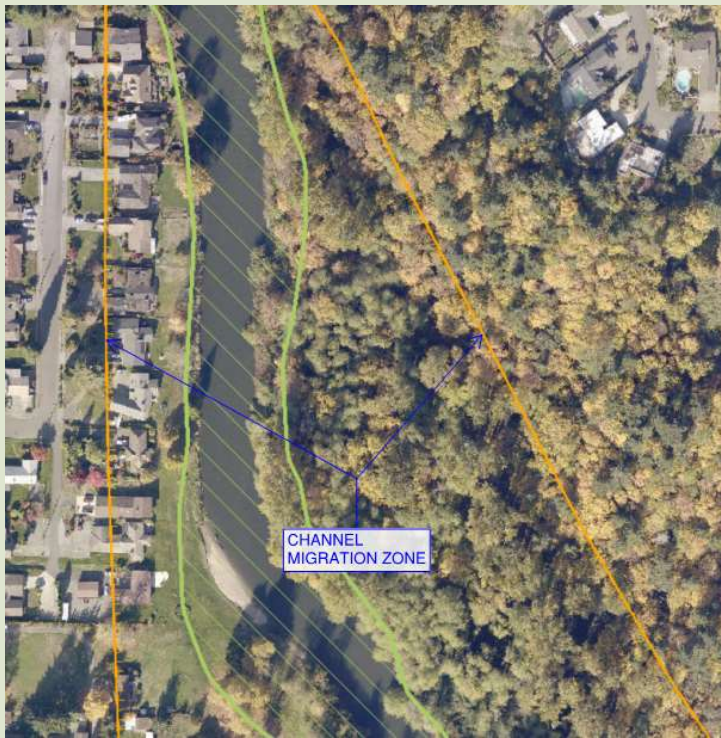
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STAFF PROPOSED UPDATES TO ACC 15.68 RIPAIRIAN BUFFER ZONE



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STAFF PROPOSED UPDATES TO ACC 15.68 CHANNEL MIGRATION ZONE



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STAFF PROPOSED UPDATES TO ACC 15.68 CURRENT EFFECTIVE FIRM (MAY 1995)

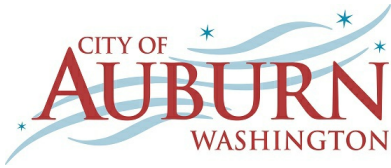


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STAFF PROPOSED UPDATES TO ACC 15.68 PRELIMINARY FIRM (8/19/2020)



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AGENDA BILL APPROVAL FORM

Agenda Subject:

COVID-19 Local Business Support Update (Hinman)(20 Minutes)

Date:

May 20, 2020

Department:

Administration

Attachments:

[City of Auburn Pandemic Response - Economic Development Briefing](#)

Budget Impact:

Current Budget: \$0
Proposed Revision: \$0
Revised Budget: \$0

Administrative Recommendation:

For discussion only.

Background Summary:

This item is brought forward to City Council while under various orders of the Governor of the State of Washington because it pertains to COVID-19 and the City's response efforts. The briefing will be an update on The City of Auburn's Pandemic Economic Development Response.

Reviewed by Council Committees:**Councilmember:****Staff:**

Hinman

Meeting Date: May 26, 2020

Item Number:



City of Auburn Pandemic Response

City Council Briefing
Study Session
5-26-20

Department of Administration
Office of Economic Development

Five Parts to our Support Program

- Comprehensive Financial Assistance & Resource information for businesses
- Financial Assistance Programs: CARES ACT, WA State and KC funding
- Business Assistance Webinars
- Promote the use of BuyLocalAburn.com
- Safe Start Auburn Advisory Committee

RESOURCES & FINANCIAL ASSISTANCE PROGRAM

- Local fees, Permits and Licensing
- State of Washington Grants
- Cares Act & King County Funding
- [Financial Assistance programs](#)

BUSINESS ASSISTANCE & WEBINARS

- Daily business assistance intake
- Ever Thursday the City co-hosts with the Auburn Chamber of Commerce & Green River College SBDC a Business Assistance program on current information. [Covid-19 Webinars](#)
- Starting soon we will deliver a 4 part class on “Developing your Emergency Business Plan”. Presented by Green River College faculty, funded in part by the Port of Seattle Economic Development grant.
- We are in discussions with Business Impact NW to do panel presentations with local sector experts to present best practices as part of an ongoing business recovery plan.

BuyLocalAuburn.com

- Redesign BuyLocalAuburn website
- Promote local Essential Services
- Public Works is allowing for short term parking for food pickup



SAFE START AUBURN ADVISORY COMMITTEE

The City of Auburn in partnership with the Auburn Area Chamber of Commerce and the Auburn Downtown Cooperative announced the creation of the Mayor's Safe Start Advisory Committee

- Committee has 14 members appointed by the Mayor
- A forum for the community and sector leaders to provide input
- Committee will focus on two main goals
 - Help develop guidelines for safely reopening the Auburn economy
 - Identify what the City of Auburn business community needs