CITY OF AUBURN WASHINGTON	**City Council Meeting** **August 16, 2021 - 7:00 PM** **City Hall Council Chambers and Virtual** **AGENDA** **Watch the meeting LIVE!** **Watch the meeting video** Meeting videos are not available until 72 hours after the meeting has concluded.

I. CALL TO ORDER

II. PUBLIC PARTICIPATION

1. Public Participation

   The Auburn City Council Meeting scheduled for Monday, August 16, 2021 at 7:00 p.m. will be held in person and virtually.

   Virtual Participation Link:

   To attend the meeting virtually please click one of the below links, enter the meeting ID into the Zoom app, or call into the meeting at the phone number listed below. The link to the Virtual Meeting is:

   Zoom: https://us06web.zoom.us/j/84903026775

   The public can also view the meeting on YouTube:
   https://www.youtube.com/user/watchauburn/live/?nomobile=1

   To join the meeting by phone, please use the below call-in information:

   253 215 8782
   877 853 5257 (Toll Free)

   Webinar ID: 849 0302 6775

A. **Pledge of Allegiance**

B. **Roll Call**

III. ANNOUNCEMENTS, PROCLAMATIONS, AND PRESENTATIONS

A. International Overdose Awareness Day Proclamation

   Mayor Backus to proclaim August 31, 2021 as "International Overdose Awareness Day" in the City of Auburn

IV. APPOINTMENTS

A. Urban Tree Board

City Council to confirm the following appointments to the Urban Tree Board for three year terms expiring December 31, 2023:

- Linda Bielejec
- Joyce Peloza

(RECOMMENDED ACTION: Move to approve the Urban Tree Board Appointments.)

V. AGENDA MODIFICATIONS

VI. NEW BUSINESS

VII. CITIZEN INPUT, PUBLIC HEARINGS AND CORRESPONDENCE

A. **Public Hearings - (No public hearing is scheduled for this evening.)**

B. **Audience Participation**

This is the place on the agenda where the public is invited to speak to the City Council on any issue.

1. The public can participate in-person or submit written comments in advance.

   Participants can submit written comments via mail, fax or email. All written comments must be received prior to 5:00 p.m. on the day of the scheduled meeting and must be 350 words or less.

   Please mail comments to:
   City of Auburn
   Attn: Shawn Campbell, City Clerk
   25 W Main St
   Auburn, WA 98001

   Please fax comments to:
   Attn: Shawn Campbell, City Clerk
   Fax number: 253-804-3116

   Email comments to:
   publiccomment@auburnwa.gov

C. **Correspondence - (There is no correspondence for Council review.)**

VIII. COUNCIL AD HOC COMMITTEE REPORTS

Council Ad Hoc Committee Chairs may report on the status of their ad hoc Council Committees' progress on assigned tasks and may give their recommendation to the City Council, if any.

1. Finance Ad Hoc Committee (Chair Baggett)
2. ARPA Ad Hoc Committee (Chair Baggett)

IX. CONSENT AGENDA

All matters listed on the Consent Agenda are considered by the City Council to be routine and will be enacted by one motion in the form listed.

A. Minutes of the July 12, 2021, July 26, 2021 and August 9, 2021 Study Session

B. Minutes of the August 2, 2021 Regular Council Meeting

C. Claims Vouchers (Thomas)

Claim voucher list dated July 19, 2021 which includes voucher numbers 463882 through 464109 in the amount of $4,174,834.08 and four wire transfers in the amount of $1,029,988.81

Claim voucher list dated August 16, 2021 which includes voucher numbers 464382 through 464581 in the amount of $2,758,833.13 and six wire transfers in the amount of $534,584.79

D. Payroll Vouchers (Thomas)

Payroll check numbers 539166 through 539172 in the amount of $74,621.78, and electronic deposit transmissions in the amount of $2,396,805.31, for a grand total of $2,471,427.09 for the period covering June 30, 2021 to July 14, 2021

Payroll check numbers 539177 through 539183 in the amount of $74,806.18, and electronic deposit transmissions in the amount of $2,298,958.46, for a grand total of $2,373,764.64 for the period covering July 29, 2021 to August 11, 2021

(RECOMMENDED ACTION: Move to approve the Consent Agenda.)

X. UNFINISHED BUSINESS

XI. ORDINANCES

A. Ordinance No. 6828 (Tate)

An Ordinance relating to the regulation of portable signs, and amending Sections 18.29.060, 18.29.070, 18.56.030 of the Auburn City Code and various sections of the Downtown Urban Center design standards

(RECOMMENDED ACTION: Move to adopt Ordinance No. 6828.)

XII. **RESOLUTIONS**

A. Resolution No. 5607 (Gaub)

A Resolution authorizing the Mayor to execute easement agreements between the City of Auburn (The City) and Burlington Northern Santa Fe Railway (BNSF) relating to Project CP1110, A Street SE Corridor Study (Project)

(RECOMMENDED ACTION: Move to adopt Resolution No. 5607.)

B. Resolution No. 5610 (Gaub)

A Resolution approving the submittal of the City's Limited Update of the 2015 Comprehensive Water Plan to the Washington State Department of Health

(RECOMMENDED ACTION: Move to adopt Resolution No. 5610.)

C. Resolution No. 5611 (Gaub)

A Resolution ratifying the Mayor's August 9, 2021 declaration of Stage 1 water shortage emergency

(RECOMMENDED ACTION: Move to adopt Resolution No. 5611.)

XIII. **MAYOR AND COUNCILMEMBER REPORTS**

At this time the Mayor and City Council may report on significant items associated with their appointed positions on federal, state, regional and local organizations.

A. **From the Council**

B. **From the Mayor**

XIV. **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:
Minutes of the July 12, 2021, July 26, 2021 and August 9, 2021 Study Session

Date:
August 4, 2021

Department:
City Council

Attachments:
07-12-2021 Minutes
07-26-2021 Minutes
08-09-2021 Minutes

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

Background for Motion:

Background Summary:

Reviewed by Council Committees:

Councilmember:

Staff:

Meeting Date: August 16, 2021

Item Number: CA.A

CITY OF AUBURN WASHINGTON	**City Council Study Session Muni Services SFA** **July 12, 2021 - 5:30 PM** **Virtual** **AGENDA** **Watch the meeting video** Meeting videos are not available until 72 hours after the meeting has concluded.

I. CALL TO ORDER

Deputy Mayor DaCorsi called the meeting to order at 5:48 p.m.

II. VIRTUAL PARTICIPATION LINK

A. Virtual Participation Link

The City Council Study Session was held virtually.

B. Roll Call

Councilmembers virtually present: Deputy Mayor Claude DaCorsi, Bob Baggett, Larry Brown, James Jeyaraj, Robyn Mulenga, Chris Stearns and Yolanda Trout-Manuel.

Mayor Nancy Backus, City Attorney Kendra Comeau, Innovation and Technical Support Specialist Danika Olson, Director of Innovation and Technology David Travis, Police Chief Dan O'Neil and Deputy City Clerk Teresa Mattingly were in Chambers.

The following department directors and staff members attended the meeting virtually: Senior City Staff Attorney Harry Boesche, Prosecutor Sergio Flores, Domestic Violence Paralegal Gloria Cody, Director of Public Works Ingrid Gaub, Director of Finance Jamie Thomas, Director of Community Development Jeff Tate, Director of Parks, Arts, and Recreation Daryl Faber, Director of Human Resources and Risk Management Candis Martinson, Police Commander Steve Stocker, Outreach Program Administrator Kent Hay and Assistant Director of Innovation and Technology Ashley Riggs.

III. AGENDA ITEMS FOR COUNCIL DISCUSSION

A. Axon Body Camera Presentation (O'Neil)(60 Minutes)

A presentation from Axon on Body Camera Technology and Services

Chief O'Neil introduced Commander Stocker who provided Council with a brief overview of the Police Departments partnership with Axon and their

plans to transition to a new system called the"Officer Safety Plan" and the potential benefits of their officers wearing body worn cameras.

Commander Stocker introduced Axon's Regional Manager Alan Sliper and Taser Representative James Hillary. Mr. Sliper and Mr. Hillary reviewed Axon's vision as a public safety technology company, products and services, current Body Worn Camera (BWC) customers in Washington and the purpose of Axon's products including; decreased use of force, decreased litigation, increased cost savings, streamlined evidence management and report writing. They also discussed Virtual Reality (VR) Offerings, training simulators, current VR products, products in development, Axon's support services and the Axon Body 3 camera and its capabilities.

Council discussed body worn camera technology, the retention and storage process, how and when the body worn cameras are activated, customer service support, potential impacts of using a taser on someone with medical conditions, redacting data on body worn cameras and community engagement regarding developing policies related to using body cameras. They also discussed the cost of the contract with Axon, when the new services will be implemented and the benefits of using body cameras.

B. 1st Quarter 2021 Financial Report (Thomas)(20 Minutes)

Director Thomas presented Council with an update on the 1st Quarter 2021 Financial Report and discussed the General Fund Revenue and Expenditures, Property Taxes, Retail Sales and Use Tax, Utility Tax, Building Permits, Intergovernmental Revenues, Charges for Services, Real Estate Excise Tax, Transportation Impact Fees and Water Revenues versus water sold.

Council requested a copy of the last 4 slides of the presentation and General Fund expenditures.

IV. MUNICIPAL SERVICES DISCUSSION ITEMS

A. Police Advisory Committee Update (O'Neil)(30 Minutes)

Councilmember Jeyaraj presided over this section of the meeting.

Chief O'Neil provided a brief update on the Police Advisory Committee (PAC) goals and discussed the BOLA Wrap (non-lethal tool to subdue suspects), Community Service Award, Scholarship Foundation, Legislative Reform, Auburn Police Foundation, Auburn Police Liaisons for each member of the PAC, Community Court, Lea Hill Community concerns and incorporating Public Information Officers (PIO) into the PAC.

Chief O'Neil introduced Jessica Hesse the District 6 representative with the PAC, who discussed her work on the PAC, the benefits of having a PAC and her experience working with her Auburn Police Department

liaison.

Council thanked Ms. Hesse for her work and recommendations on the PAC.

B. 2021 Legislative Updates Related to Policing (O'Neil)(45 Minutes)

Deputy Mayor DaCorsi called for a 5 minute recess at 7:00 p.m. The meeting reconvened at 7:37 p.m.

Chief O'Neil provided Council with an overview of the 2021 Legislative updates related to policing. He discussed the 13 bills that were signed into law in May of 2021 related to police reform and the impacts they will have on the way they police the community.

City Attorney Comeau and Assistant City Attorney Boesche reviewed the House and Senate bills signed into law related to policing and their potential impacts on the police department and the City of Auburn. They discussed ESHB 1054 - Tactics, E2SHB 1310 - Use of Force, ESB 5476 - Blake Decision, SSB 5066 – Duty to Intervene, SHB 1223 - Electronic Recording, ESHB 1140 - Juvenile Access to Attorneys, ESHB 1267 - Office of Independent Investigations, E2SSB 5051 - Decertification, SSB 5055 - Grievance Arbitration Panels, and E2SSB 5259 - Law Enforcement Data Collection.

Chief O'Neil reviewed the steps going forward to meet the needs of the community and the police department. He discussed the Cop Logic program and how business owners can use it to report theft and shoplifting incidents under $250.00. He reviewed how the police department will handle and/or respond to the following calls; service of court orders, involuntary committals, welfare checks, misdemeanor crimes, suspicious subjects, juvenile problems, trespass/unwanted persons, suicidal subjects, controlled substances, lost property, traffic complaints and traffic enforcement, parking complaints, RV's and transient camps, property crimes without suspect info, and noise complaints at multi-family housing complexes. He also discussed how the Auburn Police Department is developing a website of community resources to assist in solving issues that require assistance outside of law enforcement.

Council thanked Chief O'Neil for his leadership and discussed the steps going forward related to RV's and transient camps, The Blake Decision, passed legislation and related consequences, officer and leadership trainings on new legislation, crisis intervention training, tracking and reporting data and how the new legislation will impact SWAT regarding which weapons they can and cannot use.

C. Community Court Update (Comeau)(20 Minutes)

City Attorney Comeau presented Council with an update on the Community Court and reviewed the purpose of Community Court, partners in the Auburn Community Court, the location and lease, design and construction

and property updates.

Senior City Staff Attorney Boesche and Paralegal Cody discussed the eligibility criteria for Community Court participants, the number people who have been identified as eligible for Community Court, general disqualifiers and the scope of Community Court to address lower-level non-traffic offenses committed by individuals struggling with substance use, mental health, or homelessness issues.

City Attorney Comeau introduced Attorney Sergio Flores who reviewed the Community Court process and the Stipulated Order of Continuance agreement.

Council discussed work source training, the Community Court process, graduation timelines, participants follow up and services available at the Auburn Resource Center.

V. OTHER DISCUSSION ITEMS

There were no other discussion items.

VI. NEW BUSINESS

There was no new business.

VII. ADJOURNMENT

There being no further business to come before the Council, the meeting was adjourned at 9:06 p.m.

APPROVED this 2nd day of August, 2021.

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CLAUDE DACORSI, DEPUTY MAYOR Teresa Mattingly, Deputy City Clerk

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CITY OF AUBURN WASHINGTON	**City Council Study Session Community Wellness Special Focus Area** **July 26, 2021 - 5:30 PM** **Virtual** **MINUTES** **Watch the meeting LIVE!** **Watch the meeting video** Meeting videos are not available until 72 hours after the meeting has concluded.

I. CALL TO ORDER

Deputy Mayor DaCorsi called the meeting to order at 5:30 p.m.

II. VIRTUAL PARTICIPATION LINK

A. Virtual Participation Link

The City Council Study Session was held virtually.

B. Roll Call

Councilmembers virtually present: Deputy Mayor Claude DaCorsi, Bob Baggett, Larry Brown, James Jeyaraj, Robyn Mulenga, Chris Stearns and Yolanda Trout-Manuel.

Mayor Nancy Backus, Innovation and Technical Support Specialist Eric Dusoleil, Assistant Police Chief Mark Caillier, Director of Innovation and Technology David Travis and City Clerk Shawn Campbell were in Chambers.

The following department directors and staff members attended the meeting virtually: City Attorney Kendra Comeau, Director of Community Development Jeff Tate, Director of Public Works Ingrid Gaub, Director of Finance Jamie Thomas, Community Services Manager Joy Scott, Human Services Program Coordinator Kyla Wright, Utilities Engineering Manager Lisa Tobin, Water Utility Engineer Susan Fenhaus and Assistant Director of Innovation and Technology Ashley Riggs.

III. COMMUNITY WELLNESS DISCUSSION ITEMS

A. Human Services Program Update and Panel Presentation (Tate)(60 Minutes)

Staff will provide an overview of progress made towards 2021 Human Services program goals, followed by a panel presentation of staff representatives from currently funded programs serving Auburn residents

Community Services Manager Scott provided Council with the Human Service Program update. She reviewed General Fund funding verses

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CDGB Funding dollars, how the City allocates funding and manages contracts for programs that have received grant funds, how priority areas are established, the 2021 Funding Update, types of programs funded in the 2021-2022 cycle and the number of people who received services in each priority category.

Manager Scott introduced Angela Dannenbring from Domestic Violence Awareness Network (DAWN), Ryan Disch-Guzman from Mary's Place, Laura Black from Solid Ground, Adrea Kitt from Multi-Service Center (MSC), Diane Lyons and Kathy Powers from Orion Industries. Each service provider representative provided Council with an update on their agency and how they are serving the residents of Auburn.

Council discussed the work the service providers provide the residents of Auburn, using an equity lens when providing grant funds, demographic tracking, rental assistance, services for people who are undocumented and the service providers ability to managing an increased caseload.

Council thanked all the panel members for their work in the Auburn Community.

IV. AGENDA ITEMS FOR COUNCIL DISCUSSION

A. Limited Update of the 2015 Comprehensive Water Plan (Gaub)(15 Minutes)

Water Utility Engineer Fenhaus provided Council with an update on the 2015 Comprehensive Water Plan and discussed the Comprehensive Plan extension request, planning efforts and the 2021-2026 Water Use Efficiency Program and goals. She also discussed the next steps, which include; public hearings to receive comments on the Water Use Efficiency Program and the Limited Update of the 2015 Comprehensive Water Plan, approving Resolution No. 5603 Water Use Efficiency Program and Resolution No. 5604 Limited Update of the 2015 Comprehensive Water Plan, submitting both documents to the Department of Health and begin preparation of full comprehensive Water Plan along with the City's 2024 Comprehensive Plan for approval.

Council discussed watering lawns during the summer and future water projections.

B. Ordinance No. 6827 (Thomas)(30 Minutes)

An Ordinance amending Ordinance No. 6794, the 2021-2022 Biennial Operating Budget Ordinance, and Ordinance No. 6796, the 2021-2022 Biennial Capital Budget, as amended by Ordinance No. 6815, authorizing amendment to the City of Auburn 2021-2022 Budget as set forth in Schedule “A” and Schedule “B”

Director Thomas provided Council with Budget Amendment No. 2 to the 2021-2022 Biennial Operating Budget and the 2021-2022 Biennial Capital Budget. She reviewed the proposed amendments to each budget including; fund balance adjustments, revenue adjustments, Capital Fund

transfers, funding adjustments and new requests for funding.

Council discussed funding for the Auburn Resource Center.

C. Ordinance No. 6830 (O'Neil)(15 Minutes)

An Ordinance adding a new section to the Auburn City Code that authorizes the Auburn Police Department to use body worn cameras and provides a process for community input into body worn camera policy development; and authorizing the Auburn Police Department to engage in a competitive negotiation process to procure to body worn cameras and related equipment

Assistant Chief Caillier provided Council with Ordinance No. 6830 regarding authorizing the use of body worn cameras and allowing the police to engage in a competitive negotiation process to procure body worn cameras and related equipment.

Council discussed the costs associated with the ordinance, the ability to put the Request for Proposal (RFP) out to all body camera providers and the number of body worn cameras included in the RFP.

D. Resolution No. 5605 (Tate)(10 Minutes)

A Resolution authorizing the Mayor to execute an interlocal agreement between Pierce County, the Puyallup Indian Tribe and several Pierce County cities for the creation and operation of South Sound Housing Affordability Partners (SSHAP)

Director Tate provided Council with Resolution No. 5605 regarding an interlocal agreement with South Sound Housing Affordability Partners (SSHAP).

V. OTHER DISCUSSION ITEMS

There were no other discussion items.

VI. NEW BUSINESS

There was no new business.

VII. EXECUTIVE SESSION

A. Executive Session

Deputy Mayor DaCorsi recessed into Executive Session at 7:26 pm for 15 minutes pursuant to RCW 42.30.110(1)(i) to discuss potential litigation. The Mayor, Council and City Attorney were asked to attend the Executive Session.

Deputy Mayor DaCorsi reconvened the Study Session at 7:47 p.m.

VIII. ADJOURNMENT

There being no further business to come before the Council, the meeting was adjourned at 7:47 p.m.

APPROVED this 16th day of August, 2021.

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CLAUDE DACORSI, DEPUTY MAYOR Shawn Campbell, City Clerk

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.

	**City Council Study Session Finance, Technology and Economic Development Special Focus Area** **August 9, 2021 - 5:30 PM** **City Hall Council Chambers and Virtual** **MINUTES** **Watch the meeting LIVE!** **Watch the meeting video** Meeting videos are not available until 72 hours after the meeting has concluded.

I. CALL TO ORDER

Deputy Mayor DaCorsi called the meeting to order at 5:30 p.m.

II. PUBLIC PARTICIPATION

A. Public Participation

The City Council Study Session was held in person and virtually.

B. Roll Call

Councilmembers virtually present: Deputy Mayor Claude DaCorsi, Bob Baggett, James Jeyaraj, Robyn Mulenga, Chris Stearns and Yolanda Trout-Manuel. Councilmember Larry Brown was excused.

Mayor Nancy Backus, Innovation and Technical Support Specialist Danika Olson, Police Chief Dan O'Neil and City Clerk Shawn Campbell were in Chambers.

The following department directors and staff members attended the meeting virtually: Assistant City Attorney Doug Ruth, Director of Public Works Ingrid Gaub, Director of Finance Jamie Thomas, Director of Community Development Jeff Tate, Director of Human Resources and Risk Management Candis Martinson, Utility Billing and Solid Waste Services Supervisor Joan Nelson, Planner II Alexandria Teague and Assistant Director of Innovation and Technology Ashley Riggs.

III. AGENDA ITEMS FOR COUNCIL DISCUSSION

A. Waste Management Contract Implementation (Thomas)(30 Minutes)

Director Thomas introduced Waste Management Public Sector Services Manager, Laura Moser. Ms. Moser provided Council with an update on the new solid waste contract implementation. She reviewed highlights of the new contract and the public information outreach for customers.

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Council discussed the size of the cans, the billing cycles, programs for residents who need assistance, and paper or paperless billing.

B. Ordinance No. 6828 (Tate)(15 Minutes)

An Ordinance relating to the regulation of portable signs, and amending sections 18.29.060, 18.29.070, 18.56.030 of the Auburn City Code and various sections of the Downtown Urban Center design standards

Planner Teague presented Council with Ordinance No. 6828 regarding the portable sign code update. The sign code update has been forwarded to the Council from the Planning Commission. She reviewed the location and purpose of the update, she reviewed the sunset temporary sign permit authorization application, noncompliant signs, design standards for portable signs, and proposed changes to the sign code.

Council discussed political signs, sign movement and lights, portable signs outside of the Downtown Urban Center (DUC), code enforcement action for portable signs and businesses using strobe lights.

IV. FINANCE, TECHNOLOGY AND ECONOMIC DEVELOPMENT DISCUSSION ITEMS

A. There were no items for discussion under the Special Focus Area.

V. OTHER DISCUSSION ITEMS

There were no other discussion items.

VI. NEW BUSINESS

Councilmember Trout-Manuel asked if the City has any plans for the GSA building. Mayor Backus noted the Council changed the zoning a few years ago and the Federal Government owns the building. Director Tate explained the City does not have vision planning for private property.

VII. ADJOURNMENT

There being no further business to come before the Council, the meeting was adjourned at 6:31 p.m.

APPROVED this 16th day of August, 2021.

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CLAUDE DACORSI, DEPUTY MAYOR Shawn Campbell, City Clerk

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:
Minutes of the August 2, 2021 Regular Council Meeting

Date:
August 6, 2021

Department:
City Council

Attachments:
08-02-2021 Minutes

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

Background for Motion:

Background Summary:

Reviewed by Council Committees:

Councilmember:

Staff:

Meeting Date: August 16, 2021

Item Number: CA.B

CITY OF AUBURN WASHINGTON	**City Council Meeting** **August 2, 2021 - 7:00 PM** **City Hall and Virtual** **MINUTES** **Watch the meeting LIVE!** **Watch the meeting video** Meeting videos are not available until 72 hours after the meeting has concluded.

I. CALL TO ORDER

II. Public Participation

1. Public Participation

   The City Council Meeting was held in person and virtually.

A. Pledge of Allegiance

Mayor Nancy Backus called the meeting to order at 7:00 p.m. in the Council Chambers of Auburn City Hall, 25 West Main Street and led those in attendance in the Pledge of Allegiance.

B. Roll Call

Councilmembers virtually present: Deputy Mayor Claude DaCorsi, Larry Brown, Bob Baggett, James Jeyaraj, Robyn Mulenga, Chris Stearns and Yolanda Trout-Manuel.

Mayor Nancy Backus, Innovation and Technical Support Specialist Danika Olson and City Clerk Shawn Campbell were in Chambers.

The following department directors and staff members attended the meeting virtually: City Attorney Kendra Comeau, Director of Public Works Ingrid Gaub, Director of Community Development Jeff Tate, Director of Parks, Arts, and Recreation Daryl Faber, Director of Finance Jamie Thomas, Director of Human Resources and Risk Management Candis Martinson and Assistant Director of Innovation and Technology Ashley Riggs.

III. ANNOUNCEMENTS, PROCLAMATIONS, AND PRESENTATIONS

There were no announcements, proclamations or presentations.

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IV. APPOINTMENTS

A. Arts Commission

City Council to confirm the following appointments to the Arts Commission for three year terms expiring December 31, 2023:

- Kristine de Leon
- Tori Olsen

Deputy Mayor DaCorsi moved and Councilmember Jeyaraj seconded to confirm the appointments of Kristine de Leon and Tori Olsen to the Arts Commission for a three-year term to expire December 31, 2023.

MOTION CARRIED UNANIMOUSLY. 7-0

V. AGENDA MODIFICATIONS

There were no modifications to the agenda.

VI. NEW BUSINESS

There was no new business.

VII. CITIZEN INPUT, PUBLIC HEARINGS AND CORRESPONDENCE

A. Public Hearings

1. Public Hearing In Person or Virtual Participation

2. Public Hearing for Limited Update of the 2015 Comprehensive Water Plan

   City Council to hold a Public Hearing to consider the Limited Update of the 2015 Comprehensive Water Plan

   Mayor Backus opened the public hearing at 7:04 p.m. There were no public comments received, she closed the hearing.

3. Public Hearing for Water Use Efficiency Program

   City Council to hold a Public Hearing to Consider 2021-2026 Water Use Efficiency Program

   Mayor Backus opened the public hearing at 7:05 p.m. There were no public comments received, she closed the hearing.

B. **Audience Participation**

This is the place on the agenda where the public is invited to speak to the City Council on any issue.

1. The public can participate in-person, or submit written comments in advance.

Waylon Menzia, 719 R Street NE, Auburn
Mr. Menzia encouraged Council to be intentional in their actions.

C. **Correspondence**

There was no correspondence for Council to review.

VIII. COUNCIL AD HOC COMMITTEE REPORTS

Council Ad Hoc Committee Chairs may report on the status of their ad hoc Council Committees' progress on assigned tasks and may give their recommendation to the City Council, if any.

1. Finance Ad Hoc Committee (Chair Baggett)

Councilmember Baggett, Chair of the Finance ad hoc committee, reported he and Councilmember Jeyaraj have reviewed the claims and payroll vouchers described on the agenda this evening and recommended their approval.

2. ARPA Ad Hoc Committee (Chair Baggett)

Mayor Backus explained the purpose for the adhoc committee.

Councilmember Baggett, Chair of the ARPA ad hoc committee, explained the timing and expected funds from the ARPA allocation.

IX. CONSENT AGENDA

All matters listed on the Consent Agenda are considered by the City Council to be routine and will be enacted by one motion in the form listed.

A. Minutes of the June 28, 2021 Study Session

B. Minutes of the July 6, 2021 Regular Council Meeting

C. Claims Vouchers (Thomas)

Claim voucher list dated August 2, 2021 which includes voucher numbers 464110 through 464381 in the amount of $2,090,530.20 and four wire transfers in the amount of $777,574.95

D. Payroll Vouchers (Thomas)

Payroll check numbers 539173 through 539176 in the amount of $535,053.41, and electronic deposit transmissions in the amount of $2,201,303.15, for a grand total of $2,736,356.56 for the period covering July 15, 2021 to July 28, 2021 are approved for payment this 2nd, day of August, 2021

E. Public Works Project No. CP1416

City Council to approve an increase of $50,000.00 in the total maximum authorized contract amount for Public Works Contract No. 21-10; Construction of Project No. CP1416, F Street SE Non-Motorized Improvements

Deputy Mayor DaCorsi moved and Councilmember Brown seconded to approve the consent agenda.

MOTION CARRIED UNANIMOUSLY. 7-0

X. UNFINISHED BUSINESS

There was no unfinished business.

XI. ORDINANCES

A. Ordinance No. 6827 (Thomas)

An Ordinance amending Ordinance No. 6794, the 2021-2022 Biennial Operating Budget Ordinance, and Ordinance No. 6796, the 2021-2022 Biennial Capital Budget, as amended by Ordinance No. 6815, authorizing amendment to the City of Auburn 2021-2022 Budget as set forth in Schedule “A” and Schedule “B”

Deputy Mayor DaCorsi moved and Councilmember Trout-Manuel seconded to approve Ordinance No. 6827.

MOTION CARRIED UNANIMOUSLY. 7-0

B. Ordinance No. 6830 (O'Neil)

An Ordinance adding a new section to the Auburn City Code that authorizes the Auburn Police Department to use body worn cameras and provides a process for community input into body worn camera policy development; and authorizing the Auburn Police Department to engage in a competitive negotiation process to procure body worn cameras and related equipment

Councilmember Jeyaraj moved and Councilmember Brown seconded to approve Ordinance No. 6830.

Council discussed the competitive negotiation process to procure body worn cameras and related equipment.

MOTION CARRIED UNANIMOUSLY. 7-0

XII. **RESOLUTIONS**

A. Resolution No. 5600 (Gaub)

A Resolution authorizing the Mayor to accept two state grants from the Washington State Department of Transportation (WSDOT)

Councilmember Brown moved and Councilmember Mulenga seconded to adopt Resolution No. 5600.

MOTION CARRIED UNANIMOUSLY. 7-0

B. Resolution No. 5602 (Gaub)

A Resolution authorizing the Mayor to accept a grant from the Washington Traffic Safety Commission (WTSC)

Councilmember Stearns moved and Councilmember Trout-Manuel seconded to adopt Resolution No. 5602.

MOTION CARRIED UNANIMOUSLY. 7-0

C. Resolution No. 5603 (Gaub)

A Resolution authorizing submittal of the City's 2021-2026 Water Use Efficiency Program to the Washington State Department of Health

Councilmember Stearns moved and Councilmember Jeyaraj seconded to adopt Resolution No. 5603.

MOTION CARRIED UNANIMOUSLY. 7-0

D. Resolution No. 5604 (Gaub)

A Resolution authorizing submittal of the City's Limited Update of the 2015 Comprehensive Water Plan to the Washington State Department of Health

Councilmember Trout-Manuel moved and Councilmember Stearns seconded to adopt Resolution No. 5604.

MOTION CARRIED UNANIMOUSLY. 7-0

E. Resolution No. 5605 (Tate)

A Resolution authorizing an interlocal agreement between Pierce County, The Puyallup Indian Tribe and several Pierce County cities for the creation and operation of South Sound Housing Affordability Partners (SSHAP)

Councilmember Jeyaraj moved and Councilmember Stearns seconded to adopt Resolution No. 5605.

MOTION CARRIED UNANIMOUSLY. 7-0

F. Resolution No. 5608 (Thomas)

A Resolution accepting funds appropriated to the City under the American Rescue Plan Act of 2021 (ARPA); and directing the City's future expenditure of such appropriated funds pursuant to ARPA Guidelines And Restrictions

Councilmember Baggett moved and Councilmember Jeyaraj seconded to adopt Resolution No. 5608.

MOTION CARRIED UNANIMOUSLY. 7-0

G. Resolution No. 5609 (Hinman)

A Resolution declaring an emergency with respect to repairing fire-related damage sustained by the Auburn Avenue Theater

Deputy Mayor DaCorsi moved and Councilmember Mulenga seconded to adopt Resolution No. 5609.

Council discussed the timing for the repairs to the Auburn Avenue Theater.

MOTION CARRIED UNANIMOUSLY. 7-0

XIII. MAYOR AND COUNCILMEMBER REPORTS

At this time the Mayor and City Council may report on significant items associated with their appointed positions on federal, state, regional and local organizations.

A. From the Council

Councilmember Trout-Manuel reported she attended the Blue Ribbon Committee, a conference at the Muckleshoot Tribal Convention Center regarding drug on the reservation and the Regional Law and Justice Committee Meeting.

Councilmember Baggett reported he attended the Metro Regional Council Committee Meeting.

Councilmember Stearns reported he attended the National League of Cities conference and announced that he was selected to join the Puget Sound Regional Council's Equity Committee.

B. From the Mayor

Mayor Backus reported she went with Outreach Program Administrator Kent Hey to view the homeless encampments in Auburn and met with Executive Dow Constantine regarding the 'Health Through Housing' Program, to provide permanent supportive housing units for people experiencing long-term homelessness. Mayor Backus also thanked Valley Regional Fire Authority for their work on the recent fire in downtown Auburn.

XIV. **ADJOURNMENT**

There being no further business to come before the Council, the meeting was adjourned at 7:48 p.m.

APPROVED this 16th day of August, 2021.

_____ _____

NANCY BACKUS, MAYOR Shawn Campbell, City Clerk

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:
Claims Vouchers (Thomas)

Date:
August 4, 2021

Department:
Finance

Attachments:
No Attachments Available

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

Approve Claim Vouchers.

Background for Motion:

Background Summary:

Claim voucher list dated July 19, 2021 which includes voucher numbers 463882 through 464109 in the amount of $4,174,834.08 and four wire transfers in the amount of $1,029,988.81.

Claim voucher list dated August 16, 2021 which includes voucher numbers 464382 through 464581 in the amount of $2,758,833.13 and six wire transfers in the amount of $534,584.79.

Reviewed by Council Committees:

Councilmember:

Staff: Thomas

Meeting Date: August 16, 2021

Item Number: CA.C

AGENDA BILL APPROVAL FORM

Agenda Subject:
Payroll Vouchers (Thomas)

Date:
August 4, 2021

Department:
Finance

Attachments:
No Attachments Available

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

Approve Payroll Vouchers.

Background for Motion:

Background Summary:

Payroll check numbers 539166 through 539172 in the amount of $74,621.78, and electronic deposit transmissions in the amount of $2,396,805.31, for a grand total of $2,471,427.09 for the period covering June 30, 2021 to July 14, 2021.

Payroll check numbers 539177 through 539183 in the amount of $74,806.18, and electronic deposit transmissions in the amount of $2,298,958.46, for a grand total of $2,373,764.64 for the period covering July 29, 2021 to August 11, 2021.

Reviewed by Council Committees:

Councilmember:

Staff: Thomas

Meeting Date: August 16, 2021

Item Number: CA.D

AGENDA BILL APPROVAL FORM

Agenda Subject:
Ordinance No. 6828 (Tate)

Date:
August 11, 2021

Department:
Community Development

Attachments:
Ordinance No. 6828
Portable Sign Standards Text Amendment - Exhibit 1
DUC Portable Sign Design Standards Text Amendment - Exhibit 2

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

City Council to adopt Ordinance No. 6828.

Background for Motion:

Ordinance No. 6828 amends the portable sign standards within Chapter 18.29 and Chapter 18.56 of the Zoning Code, amends the "Sign Design" portion of the Downtown Urban Center Design Standards, and provides a code correction to section 18.29.070 of the Zoning Code.

Background Summary:

Previously temporary signs, which also included portable signs, were allowed throughout the City – including the Downtown Urban Center zoning district. However, the temporary sign provision that allowed portable signs throughout the City sunsetted in 2016 and portable signs are now prohibited everywhere except the DUC zone (and except for real estate signs). Prior to the sunsetting of the code, the City had a no fee sign permit for temporary signs. The purpose of the no fee sign permit was to ensure a signs compliance with City code. After the temporary sign provisions of that allowed portable signs throughout the City sunsetted, the no fee sign permit for temporary signs ended as well. Portable signs, however, are still allowed in the DUC zoning district because Chapter 18.29 ACC "DUC Downtown Urban Center", still contains provisions for portable signs. Since 2016 there has been a increase in noncompliant portable signs. This includes being noncompliant in the number, placement, and size of signs. The proposed text amendment is intended to clarify, improve, and reinforce the existing portable sign standards, provide new portable sign design standards, and address some challenges with portable signs that have occurred over the years.

MINOR CHANGE TO PROPOSED PORTABLE SIGN DESIGN STANDARDS:
Staff recommends the following minor change to proposed Portable Sign Design Standard (C)

Revision:

Signs should convey the content in a highly graphic, expressive, and individualized design.

The revision complies with Supreme Court case *Reed vs. Town of Gilbert* regarding regulating the content of signs. The current reference to “product or service” in the proposed design standard indicates that the restriction only applies to commercial signs. According to the Supreme Court case, sign restrictions cannot apply to signs containing one type of content (e.g. commercial statements) but not another type of content (e.g. religious statements). The revision changes the standard to apply to any sign content.

Reviewed by Council Committees:

Councilmember:	Stearns	**Staff:**	Tate
Meeting Date:	August 16, 2021	Item Number:	ORD.A

ORDINANCE NO. 6828

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, RELATING TO THE REGULATION OF PORTABLE SIGNS, AND AMENDING SECTIONS 18.29.060, 18.29.070, 18.56.030 OF THE AUBURN CITY CODE AND VARIOUS SECTIONS OF THE DOWNTOWN URBAN CENTER DESIGN STANDARDS

WHEREAS, temporary signs, including portable signs, are prohibited throughout the City except for certain locations including the Downtown Urban Center (DUC); and

WHEREAS, portable signs are permitted in the DUC zoning district, subject to the regulations contained in ACC 18.29.060(I)(4) and the DUC design standards; and

WHEREAS, Auburn has experienced challenges with portable signs and wishes to address these challenges by clarifying, improving, and reinforcing the portable sign standards; and

WHEREAS, until such time City Council adopts a fee, portable signs will require a sign permit for no fee; and

WHEREAS, pursuant to RCW 36.70A the proposed code language contained herein was transmitted to the Washington State Department of Commerce, which performed an expedited agency review. The state agency comment period expired on July 6, 2021 and the City did not receive any agency comments; and

WHEREAS, the code amendments were reviewed according to the process established by the Washington State Environmental Policy Act (SEPA), a Determination of Non-Significance (DNS) was issued on June 24, 2021, and the City observed a fourteen-day public comment period; and

WHEREAS, the Planning Commission reviewed the proposed amendments and considered the effect of the changes on public and private property owners at its June 8, 2021 meeting; and

WHEREAS, on July 20, 2021 the Planning Commission held a public hearing, after receiving no public comment letters regarding the proposed amendments, and afterwards forwarded a recommendation for approval to the City Council.

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

Section 1. Amendment to City Code. Sections 18.29.060, 18.29.070, and 18.56.030 of the Auburn City Code are amended to read as shown in Exhibit A.

Section 2. Amendment to City Code. Section five of the Downtown Urban Center Design Standards is amended to read as shown in Exhibit B.

Section 3. Implementation. The Mayor is authorized to implement those administrative procedures necessary to carry out the directives of this legislation.

Section 4. 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 5. **Effective date.** This Ordinance will take effect and be in force five days from and after its passage, approval, and publication as provided by law.

INTRODUCED: _____

PASSED: _____

APPROVED: _____

_____
NANCY BACKUS, MAYOR

ATTEST:

_____
Shawn Campbell, MMC, City Clerk

APPROVED AS TO FORM:

_____
Kendra Comeau, City Attorney

Published: _____

Chapter 18.29

DUC DOWNTOWN URBAN CENTER DISTRICT

18.29.060 Development standards.

I. *Signs.* The design of all signs shall be in conformance with the design standards referenced in ACC 18.29.070. Allowable types, numbers and sizes of signs shall be as follows:

1. Freestanding: not allowed, except for monument signs as described within the "Downtown Auburn Design Standards"; no more than one per street frontage; maximum size: 64 square feet, calculated at a rate of one square foot of sign area per lineal foot of site frontage; minimum entitlement shall be 32 square feet; maximum height: five feet.

2. Wall signs: maximum area of 150 square feet per building facade, calculated at a rate of one square foot of sign area for every lineal foot of facade; minimum entitlement shall be 16 square feet.

3. Suspended signs attached under a marquee or canopy: one double-faced sign, no greater than three square feet per face allowed for each building entrance; minimum clearance above grade: eight feet.

4. Portable Signs. ~~One p~~Portable signs may be allowed for each business entrance~~, not to exceed one portable sign per building frontage~~business~~~, subject to the following:

a. Signs ~~M~~may be placed within the public right-of-way, within 12 feet of a business entrance, subject to the guidelines provided by the director in consultation with the city engineer such that sign placement does not interfere with pedestrian or vehicular traffic, does not create a sight hazard, and conforms to the requirements of the Americans with Disabilities Act. Additional portable signage may be authorized in order to support downtown events that are permitted or sanctioned by the City.

b. The sign shall be in accordance with the provisions of ACC 18.56.030(L).

~~b~~c. The sign area c~~May not C~~annot exceed ~~36~~ 42 inches in height ~~and~~ , 32~~0~~ inches in width, and be limited to two faces.

d. Portable signs are not permitted to be affixed to City infrastructure located within the right-of-way (e.g. street lights, fire hydrants, public art). This includes a prohibition of chaining or otherwise securing portable signs to such infrastructure.

~~d. Must be constructed of either wood or another sturdy material to ensure stability in the wind.~~

~~e. May not move, spin, flash, or otherwise be animated.~~

~~c~~e. Signs m~~M~~ay ~~only~~ be displayed during business hours and shall not be displayed when the business is closed.

f. No landscaping may be covered, cut, damaged, or modified to accommodate a portable sign. The City may require replacement of any damaged landscaping pursuant to Chapter 18.50 ACC.

g. All portable signs shall have the permit number affixed to the back of the sign.

18.29.070 Design standards.

Adopted by reference are the "Downtown Auburn Design Standards" and the "Auburn Junction Design Standards," a copy of which shall be maintained by the city clerk. These documents contain standards for development of the built environment in the DUC zone. The director shall have the authority to apply the standards to specific development proposals. These standards may be amended upon approval by the community development director ~~city council~~. (Ord. 6532 § 29, 2014; Ord. 6419 § 2, 2012; Ord. 6287 § 2, 2010; Ord. 6190 § 1, 2008; Ord. 6071 § 6 (Exh. A), 2007.)

Chapter 18.56

SIGNS

18.56.030 General provisions, all districts.

I. *Prohibited Signs.* From and after the effective date of the ordinance codified in this chapter it shall be unlawful for any person to erect or place within the city, except as otherwise authorized:

1. A swinging projecting sign;

2. Portable signs, except as permitted by ACC 18.56.025 (Real estate signs) ~~and~~, 18.56.040(E) (C-2 Zoning District) , and ACC 18.29.060(I) (DUC);

3. Banners, pennants, ribbons, streamers, spinners, rotating or blinking lights, strings of lights, or similar devices, except as permitted by subsection B of this section (Temporary Signs);

4. Flashing signs, except as permitted in subsection D of this section (Sign Lighting Provisions);

5. Changing message center signs, except as allowed in the I, P-1, C-1, C-2, C-3, M-1 and M-2 zones;

6. Signs attached to, or placed on, a vehicle or trailer parked on private or public property that is not associated with the business advertised on said sign(s). This provision is not to be construed as prohibiting the identification of a firm or its principal products on a vehicle used in the normal course of business. This does not include automobile for sale signs or signs attached to franchised buses or taxis;

7. Private signs placed in or on a public right-of-way, except for as expressly permitted by this chapter;

8. Any sign which constitutes a traffic hazard or detriment to traffic safety by reason of its size, location, movement, coloring, or method of illumination, or by obstructing the vision of drivers, or detracting from the visibility of any official traffic control device by diverting or tending to divert the attention of drivers of moving vehicles from traffic movement on streets, roads, intersections, or access facilities. No sign shall be erected so that it obstructs the vision of pedestrians by glare or method of illumination or constitutes a hazard to traffic. No sign may use words, phrases, symbols or characters in such a manner as to interfere with, mislead, or confuse traffic;

9. Any sign or advertising structure or supporting structure that is torn, damaged, defaced or destroyed;

10. Signs attached to poles installed by governmental agencies, utility poles, trees, rocks or other natural features;

11. Signs attached to benches, garbage cans, or other street furniture located within the public right-of-way;

12. Rotating signs;

13. Billboards;

14. Any sign which does not structurally or materially conform to the requirements of the city's adopted International Building Code.

EXHIBIT B

Downtown Urban Center

City of Auburn Design Standards

ADOPTED 2/12/07;
AMENDED 4/14/08, 06/9/08, 06/16/09, 05/24/10,
2/21/17, 2/21/17;
REVISION EFFECTIVE 03/01/2017

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facilities are not damaged by other activity on the roof.

C. The applicant shall install an outdoor speaker system and AM receiver, to receive the City's Main Street radio signal, on any new commercial structure within the Downtown Urban Center zone. The property owner and/or building owner shall be responsible for the outdoor speaker system and any repairs or maintenance.

D. Utility equipment such as power and gas meters shall be painted to match the structure.

E. Private utility cabinets (e.g. Comcast, PSE) shall be screened with landscaping where feasible.

GUIDELINES APPLICABLE TO **ALL DEVELOPMENT** IN DOWNTOWN

Sign Design

1. LANDMARK SIGNS

Intent: preserve the unique character of the downtown

A. Retain existing historic signs (as determined by the City) that feature the character of the area, wherever possible.



2. INTEGRATION WITH ARCHITECTURE

Intent: ensure that signage is a part of the overall design of a project and not additive or an afterthought

A. The design plans for buildings and sites shall identify locations and sizes for future signs. As tenants install signs, such signs shall be in conformance with an overall sign program that allows for advertising which fits with the architectural character, proportions, and details of the development. The sign program shall indicate location, size, and general design.

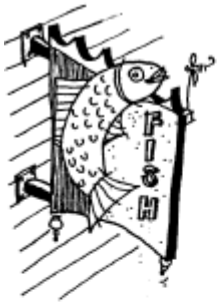
B. New signs shall not project above the roof, parapet or exterior wall unless part of an integral architectural feature. Signs mounted on a roof are not allowed.



3. CREATIVITY

Intent: encourage interesting, creative and unique approaches to the design of signage

A. Signs should be highly graphic in form, expressive and individualized. Signs should convey the product or service offered by the business in a bold, graphic form





B. If a projecting sign is designed by a graphic design professional and includes a non-verbal, three-dimensional symbol that succinctly conveys the nature of the business and constitutes a dominant proportion of the overall design, the sign may be allowed to exceed the maximum area otherwise allowed by 50%.

4. GROUND SIGNS

Intent: ensure that signs are not principally oriented to automobile traffic



A. All freestanding signs shall be ground (monument) signs no higher than five (5) feet. Pole signs are prohibited.

B. The area around the base of any ground sign shall be planted with shrubs and seasonal flowers.

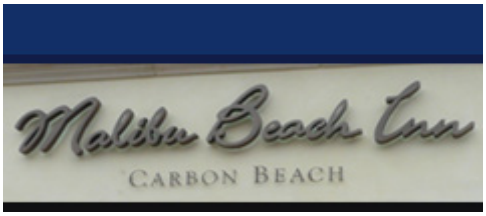
C. Backlit signs are permitted if the sign meets all other standards for signage in this document and Chapter 18.29.

D. Internally-lit signs are p permitted when located adjacent and oriented to Auburn Way North/Auburn Way South street frontages and only with electronic message center signs in accordance with Auburn City Code Chapter 18.56 Signs. If an internally lit sign is utilized, the sign shall also conform to all other applicable standards for changing message center signs as described in this same chapter.



E. Boxed cabinet signs are prohibited in the Downtown Urban Center zone.

F. Outlined cabinet signs are permitted only if the sign meets all other standards for signage in this document and Chapter 18.29.



5. PORTABLE SIGN DESIGN STANDARDS

Intent: to encourage finished appearance of portable signs





A. Portable signage in the Downtown Urban Center should contribute to the downtown's designation as a vibrant and pedestrian-oriented zone in the City. Signs should be designed with the purpose of promoting nearby services and goods and street activity, and contribute to a lively street aesthetic.





B. Signs must be professionally manufactured of durable materials. Sign copy shall be framed, board-mounted, or plastic laminated for a finished appearance. Chalkboard style A-frame signs and menu boards are permitted, provided text and graphics are tasteful.

C. Signs should convey the product or service offered with a highly graphic, expressive, and individualized design.

D. Sign may not include lighting, attachment, animations or move, spin, and/or flash.

AGENDA BILL APPROVAL FORM

Agenda Subject:
Resolution No. 5607 (Gaub)

Date:
August 4, 2021

Department:
Public Works

Attachments:
Resolution No. 5607
Exhibit A- BNSF Easement Agreements
Vicinity Map

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

City Council to adopt Resolution No. 5607.

Background for Motion:

This resolution authorizes the Mayor to execute easement agreements for land needed from BNSF by the City for future roadway improvements at the intersection of A Street SE and 37th Street SE. The improvements will include a u-turn for northbound vehicles and will be included in a future project.

Background Summary:

The City currently has a project underway to study the A Street SE corridor that is identifying current and future corridor needs. The study has identified the need for a u-turn at 37th Street SE which would lie partially on Burlington Northern Santa Fe Railway (BNSF) property. The City and BNSF have negotiated the terms of an easement to be purchased by the City from BNSF. Resolution No. 5607 authorizes the Mayor to execute easement agreements with BNSF and for the City to pay the estimated fair market value of the easement of $7,374.00 and other applicable fees. These funds are available from the A Street SE Corridor study project budget. The u-turn and other improvements will be included in a future City project.

Reviewed by Council Committees:

Councilmember: Stearns **Staff:** Gaub

Meeting Date: August 16, 2021 Item Number: RES.A

RESOLUTION NO. 5607

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, AUTHORIZING THE MAYOR TO EXECUTE EASEMENT AGREEMENTS BETWEEN THE CITY OF AUBURN (THE CITY) AND BURLINGTON NORTHERN SANTA FE RAILWAY (BNSF) RELATING TO PROJECT NO. CP1110, A STREET SE CORRIDOR STUDY (PROJECT)

WHEREAS, the City Project CP1110, A Street SE Corridor Study, is underway and has identified the need for an easement from BNSF for future roadway improvements; and

WHEREAS, the future roadway improvements will provide a u-turn at 37th Street SE for northbound vehicles on A Street SE; and

WHEREAS, the u-turn and other improvements will be incorporated into a future project; and

WHERAS, the City and BNSF have agreed upon a fair market value price of for the easement of $7,374.00 plus applicable fees which the City will pay to BNSF using budgeted Project funds.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, HEREBY RESOLVES as follows:

Section 1. The Mayor and City Clerk are authorized to execute easement agreements between the City and BNSF, in substantial conformity with the agreements attached, marked as Exhibit "A" and incorporated herein by this reference.

Section 2. The Mayor is authorized to implement such administrative procedures as may be necessary to carry out the directions of this legislation.

Section 3. That this Resolution shall take effect and be in full force upon passage and signatures.

Dated and signed this _____ day of _____, 2021.

CITY OF AUBURN

_____
NANCY BACKUS
MAYOR

ATTEST:

_____
Shawn Campbell,
City Clerk

APPROVED AS TO FORM:

_____
Kendra Comeau,
City Attorney

EASEMENT AGREEMENT
FOR ROADWAY CONSTRUCTION, MAINTENANCE AND USE

THIS EASEMENT AGREEMENT FOR ROADWAY CONSTRUCTION, MAINTENANCE AND USE ("**Easement Agreement**") is made and entered into as of the ____ day of _____ 2021 ("**Effective Date**"), by and between BNSF RAILWAY COMPANY, a Delaware corporation ("**Grantor**"), and THE CITY OF AUBURN, a municipal corporation ("**Grantee**").

A. Grantor owns or controls certain real property situated at or near the vicinity of Auburn, County of King, State of Washington, at Mile Post 23.63, as depicted on **Exhibit "A"** and described on **Exhibit "A"-1** attached hereto and made a part hereof (the "**Premises**").

B. Grantee has requested that Grantor grant to Grantee an easement over the Premises for the Easement Purpose (as defined below).

C. Grantor has agreed to grant Grantee such easement, subject to the terms and conditions set forth in this Easement Agreement.

NOW, THEREFORE, for and in consideration of the foregoing recitals which are incorporated herein, the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Section 1 Granting of Easement.

1.1 Easement Purpose. The "**Easement Purpose**" shall be the construction, maintenance and use of a [private/public] roadway and related surface improvements (collectively, "**Improvements**") to be constructed, located, configured and maintained by Grantee in strict accordance with the terms of this Easement Agreement and the Plans and Specifications (as hereinafter defined) approved as set forth in **Section 5.** Grantee expressly acknowledges and agrees that the Easement Purpose does not include, and no rights are granted hereunder, for an elevated roadway or related improvements or any subsurface rights.

1.2 Grant. Grantor does hereby grant unto Grantee a non-exclusive easement ("**Easement**") over the Premises for the Easement Purpose and for no other purpose. The Easement is granted subject to any and all restrictions, covenants, easements, licenses, permits, leases and other encumbrances of whatsoever nature whether or not of record, if any, relating to the Premises and subject to all Laws (as hereinafter defined), including without limitation zoning laws, regulations, and ordinances of municipal and other governmental authorities, if any.

1.3 Reservations by Grantor. Grantor excepts and reserves the right, to be exercised by Grantor and any other parties who may obtain written permission or authority from Grantor:

(a) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any existing pipe, power, communication, cable, or utility lines and appurtenances and other facilities or structures of like character (collectively, "**Lines**") upon, over, under or across the Premises;

(b) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; and

(c) to use the Premises in any manner as the Grantor in its sole discretion deems appropriate, provided Grantor uses all commercially reasonable efforts to avoid material interference with the use of the Premises by Grantee for the Easement Purpose.

1.4 Term of Easement. The term of the Easement, unless sooner terminated under provisions of this Easement Agreement, shall be perpetual.

Section 2 **Compensation.** Grantee shall pay Grantor, prior to the Effective Date, the sum of Four Thousand Eight Hundred Seventy Four and No/100 Dollars ($4,874.00) as compensation for the grant of this Easement.

Section 3 **No Warranty of Any Conditions of the Premises.** Grantee acknowledges that Grantor has made no representation whatsoever to Grantee concerning the state or condition of the Premises, or any personal property located thereon, or the nature or extent of Grantor's ownership interest in the Premises. Grantee has not relied on any statement or declaration of Grantor, oral or in writing, as an inducement to entering into this Easement Agreement, other than as set forth herein. GRANTOR HEREBY DISCLAIMS ANY REPRESENTATION OR WARRANTY, WHETHER EXPRESS OR IMPLIED, AS TO THE DESIGN OR CONDITION OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, ITS MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, THE QUALITY OF THE MATERIAL OR WORKMANSHIP OF ANY SUCH PROPERTY, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTOR SHALL NOT BE RESPONSIBLE TO GRANTEE OR ANY OF GRANTEE'S CONTRACTORS FOR ANY DAMAGES RELATING TO THE DESIGN, CONDITION, QUALITY, SAFETY, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTEE ACCEPTS ALL RIGHTS GRANTED UNDER THIS EASEMENT AGREEMENT IN THE PREMISES IN AN "AS IS, WHERE IS" AND "WITH ALL FAULTS" CONDITION, AND SUBJECT TO ALL LIMITATIONS ON GRANTOR'S RIGHTS, INTERESTS AND TITLE TO THE PREMISES. Grantee has inspected or will inspect the Premises, and enters upon Grantor's rail corridor and property with knowledge of its physical condition and the danger inherent in Grantor's rail operations on or near the Premises. Grantee acknowledges that this Easement Agreement does not contain any implied warranties that Grantee or Grantee's Contractors (as hereinafter defined) can successfully construct or operate the Improvements.

Section 4 **Nature of Grantor's Interest in the Premises.** GRANTOR DOES NOT WARRANT ITS TITLE TO THE PREMISES NOR UNDERTAKE TO DEFEND GRANTEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE. In case of the eviction of Grantee by anyone owning or claiming title to or any interest in the Premises, or by the abandonment by Grantor of the affected rail corridor, Grantor shall not be liable to refund Grantee any compensation paid hereunder.

Section 5 **Plans and Specifications for Improvements.** Grantee shall submit to Grantor for its review and approval detailed information concerning the design, location and configuration of the Improvements ("**Plans and Specifications**"). As soon as reasonably practicable after Grantor's receipt of the Plans and Specifications and other information required by Grantor about the proposed location of the Improvements, Grantor will notify Grantee in writing whether Grantor has approved or disapproved the design, location and configuration of the proposed Improvements or the Plans and Specifications, and shall include one or more reasons for any disapproval. Grantor may disapprove the Plans and Specifications only where, in Grantor's sole judgment, construction, maintenance, operation or removal of all or any part of the Improvements constructed in accordance with the Plans and Specifications would cause Grantee to violate any of the provisions of Section 6.3 hereof. Following any disapproval, Grantee shall have the right to modify the location, configuration or other aspects of the Plans and Specifications of the proposed Improvements and to resubmit such modified information to Grantor for its further review and approval. Grantor may approve or disapprove the Plans and Specifications in Grantor's sole discretion. Any approval or consent by Grantor of any of such plans shall in no way obligate Grantor in any manner with respect to the finished product design and/or construction. Any such consent or approval shall mean only that such Plans and Specifications meet the subjective standards of Grantor, and such consent or approval by Grantor shall not be deemed to mean that such Plans and Specifications or construction are structurally sound and appropriate or that such Plans and Specifications or construction meet the applicable construction standards or codes. Any deficiency in design or construction, notwithstanding the prior approval of Grantor, shall be solely the responsibility of Grantee.

Section 6 **Improvements.**

6.1 Construction of Improvements. Grantee, and Grantee's Contractors, at Grantee's sole cost and expense, shall locate, configure, construct and maintain the Improvements: (i) in a good and workmanlike manner and in strict accordance with the Plans and Specifications approved by Grantor pursuant to the

provisions of **Section 5** above, (ii) in conformance with applicable building uses and all applicable engineering, safety and other Laws, (iii) in accordance with the highest accepted industry standards of care, skill and diligence, and (iv) in such a manner as shall not adversely affect the structural integrity or maintenance of the Premises, any structures on or near the Premises, or any lateral support of structures adjacent to or in the proximity of the Premises. The construction of the Improvements within the Premises shall be completed by Grantee and Grantee's Contractors within one (1) year after the Effective Date. Grantee shall provide as built drawings of all Improvements to Grantor promptly upon completion of construction and shall use its best efforts to cause such as built drawings to be electronically accessible to Grantor.

6.2 Maintenance of Improvements. Grantee shall at all times during the term of this Easement Agreement, at Grantee's sole cost and expense, keep and maintain the Improvements located upon the Premises in a structurally safe and sound condition, in good repair and in compliance with the Plans and Specifications and this Easement Agreement. Grantee shall also promptly repair any damage to the Premises or the Improvements caused, either in whole or in part, by Grantee Parties (as hereinafter defined). Grantee shall not cause or permit another person to cause any damage to the Premises or the Improvements, and Grantee shall be responsible for any such damage which may occur as a result of any Grantee Party's action or inaction. Grantee shall not permit the existence of any nuisance or the accumulation of junk, debris or other unsightly materials on the Premises and shall keep the Premises in a clean and safe condition. Grantee shall, at its sole cost and expense, remove ice and snow from the Premises. Grantee shall keep the Premises free and clear from combustible materials and to cut and remove or cause to be cut and removed at its sole expense all weeds and vegetation on the Premises, said work of cutting and removal to be done at such times and with such frequency as to comply with local Laws and regulations and abate any and all hazard of fire. Grantor shall have no obligation whatsoever, monetary or non-monetary, to maintain the Improvements in the Premises.

6.3 No Interference. During the construction of, and any subsequent maintenance performed on, operation of, or removal of, all or any portion of the Improvements, Grantee, at Grantee's sole cost, shall perform all activities and work on or near Grantor's rail corridor or property and/or the Premises in such a manner as to preclude injury to persons or damage to the property of Grantor, or any party on or with property on Grantor's rail corridor or property, and shall ensure that there is no interference with the railroad operations or other activities of Grantor, or anyone present on Grantor's rail corridor or property with the authority or permission of Grantor. Grantee shall not disturb any improvements of Grantor or Grantor's existing lessees, licensees, license beneficiaries or lien holders, if any, or interfere with the use of such improvements. Grantor may direct one of its field engineers to observe or inspect the construction, maintenance, operation or removal of the Improvements, or any portion thereof, at any time to ensure such safety and noninterference, and to ensure that the Improvements comply with the Plans and Specifications. If any Grantee Party is ordered at any time to leave the Premises or to halt any activity on the Premises, then the party conducting that activity immediately shall cease such activity and leave the Premises, if the order was issued by Grantor's personnel to promote safety, such noninterference with other activities or property, or because the Improvements were not in compliance with this Easement Agreement. Notwithstanding the foregoing right of Grantor, Grantor has no duty or obligation to observe or inspect, or to halt work on, the Premises, it being solely Grantee's responsibility to ensure that the Improvements are constructed, maintained, operated and removed in strict accordance with all Laws, safety measures, such noninterference and the Plans and Specifications and in compliance with all terms hereof. Neither the exercise nor the failure by Grantor to exercise any right set forth in this **Section 6.3** shall alter the liability allocation set forth in this Easement Agreement.

6.4 No Alterations. Except as may be shown in the Plans and Specifications approved by Grantor for the Easement, Grantee may not make any alterations to the Premises, or permanently affix anything to the Premises, without Grantor's prior written consent. If Grantee desires to change either the location of any of the Improvements or any other aspect of the Plans and Specifications of any of the Improvements, Grantee shall submit such change and modified Plans and Specifications to Grantor in writing for its approval in the same manner as provided for in **Section 5**. Grantee shall have no right to commence any such change until after Grantee has received Grantor's approval of such change in writing.

6.5 Approvals; Compliance with Laws and Safety Rules.

(a) Grantee shall take, in a timely manner, all actions necessary and proper to the lawful establishment, construction, operation, and maintenance of the Improvements,

including such actions as may be necessary to obtain any required approvals or authorizations from applicable governmental authorities.

(b) Prior to entering the Premises, and at all times during the term of this Easement Agreement, Grantee shall comply, and shall cause its contractor, any subcontractor, any assignee, and any contractor or subcontractor of any assignee performing work on the Premises or entering the Premises on behalf of Grantee (collectively, "**Grantee's Contractors**"), to comply, with all applicable federal, state and local laws, regulations, ordinances, restrictions, covenants and court or administrative decisions and orders, including Environmental Laws (defined below) (collectively, "**Laws**"), and all of Grantor's applicable safety rules and regulations including those found on the website noted below in **Section 6.5(c)**.

(c) No Grantee Party may enter the Premises without first having completed Grantor's safety orientation found on the website: www.contractororientation.com.

6.6 Other Improvements. In the event any construction, repair, maintenance, work or other use of the Premises by Grantee will affect any Lines, fences, buildings, improvements or other facilities (collectively, "**Other Improvements**"), Grantee will be responsible at Grantee's sole risk to locate and make any adjustments necessary to such Other Improvements. Grantee must contact the owner(s) of the Other Improvements notifying them of any work that may damage these Other Improvements and/or interfere with their service and obtain the owner's written approval prior to so affecting the Other Improvements. Grantee must mark all Other Improvements on the Plans and Specifications and mark such Other Improvements in the field in order to verify their locations. Grantee must also use all reasonable methods when working on or near Grantor property to determine if any Other Improvements (fiber optic, cable, communication or otherwise) may exist.

6.7 Flagging and Other Costs. Grantee shall not conduct any activities on, or be present on, any portion of the Premises or Grantor's rail corridor or property that is within twenty-five (25) feet of any active railroad track, except in the presence of a flagman. In any case where a flagman or flagmen are required in connection with the presence of individuals on Grantor's rail corridor or the Premises, Grantee shall provide as much advance notice as possible prior to any entry upon the Premises. Grantor shall arrange for the presence of the flagman or flagmen as soon as practicable after receipt of such notice from Grantee. Grantee shall reimburse to Grantor, within thirty (30) days following Grantee's receipt of each bill therefor, Grantor's costs in arranging for and providing the flagman or flagmen, which shall be billed to Grantee at Grantor's then applicable standard rate. The estimated cost of one flagger as of the Effective Date is $600 for an eight hour basic day with time and one-half or double time for overtime, rest days and holidays, plus the cost of any vehicle rental costs or other out-of-pocket costs. Grantee agrees to reimburse Grantor (within thirty (30) days after receipt of a bill therefor) for all other costs and expenses incurred by Grantor in connection with Grantee's use of the Premises or the presence, construction, maintenance, and use of the Improvements situated thereon.

6.8 No Unauthorized Tests or Digging. Grantee, and Grantee's Contractors, must not conduct any tests, investigations or any other activity using mechanized equipment and/or machinery, or place or store any mechanized equipment, tools or other materials, within twenty-five (25) feet of the centerline of any railroad track on Grantor's rail corridor or property (whether or not such centerline is located within the Premises), except after Grantee has obtained written approval from Grantor, and then only in strict accordance with the terms and any conditions of such approval.

6.9 Boring. Prior to conducting any boring work on or near Grantor's rail corridor or property (which shall only be permitted within the Premises), Grantee and Grantee's Contractors shall explore the proposed location for such work with hand tools to a depth of at least three (3) feet below the surface of the ground to determine whether pipelines or other structures exist below the surface, provided, however, that in lieu of the foregoing, Grantee shall have the right to use suitable detection equipment or other generally accepted industry practice (e.g., consulting with the Underground Services Association) to determine the existence or location of pipelines and other subsurface structures prior to drilling or excavating with mechanized equipment. Upon Grantee's written request, which shall be made thirty (30) business days in advance of Grantee's proposed construction or modification of Improvements, Grantor will provide to Grantee any information that Grantor has

in the possession of its Engineering Department concerning the existence and approximate location of Grantor's underground utilities and pipelines at or near the vicinity of the proposed Improvements. Prior to conducting any boring work, Grantee, and Grantee's Contractors, shall review all such material. Grantor does not warrant the accuracy or completeness of information relating to subsurface conditions and Grantee's, and Grantee's Contractors', operations at all times shall be subject to the liability provisions set forth herein. For all bores greater than 20 inches in diameter and at a depth less than ten (10) feet below the bottom of a rail, Grantee, and Grantee's Contractors, shall perform a soil investigation which must be reviewed by Grantor prior to construction. This study is to determine if granular material is present, and to prevent subsidence during the installation process. If the investigation determines in Grantor's reasonable opinion that granular material is present, Grantor may select a new location for Grantee's use, or may require Grantee, and Grantee's Contractors, to furnish for Grantor's review and approval, in Grantor's sole discretion, a remedial plan to deal with the granular material. Once Grantor has approved any such remedial plan in writing, Grantee, and Grantee's Contractors, at Grantee's sole cost, shall carry out the approved plan in accordance with all terms thereof and hereof. Any open hole, boring or well constructed on the Premises by Grantee, or Grantee's Contractors, shall be safely covered and secured at all times when anyone who is not creating it, working in it or using it as permitted hereunder is present in the actual vicinity thereof. Following completion of that portion of the work, all holes or borings constructed on the Premises shall be promptly filled in by Grantee and Grantee's Contractors to surrounding ground level with compacted bentonite grout, or otherwise secured or retired in accordance with any applicable Laws. No excavated materials may remain on Grantor's rail corridor or property for more than ten (10) days, and must be properly disposed of by Grantee and Grantee's Contractors in accordance with applicable Laws.

6.10 Drainage of Premises and Property. Any and all cuts and fills, excavations or embankments necessary in the construction, maintenance, or future alteration of the Premises shall be made and maintained by Grantee in such manner, form and to the extent as will provide adequate drainage of and from the Premises and Grantor’s adjoining right of way; and wherever any such fill or embankment shall or may obstruct the natural and pre-existing drainage from the Property and Grantor’s adjoining right of way, Grantee shall construct and maintain such culverts or drains within the Premises as may be requisite to preserve such natural and pre-existing drainage. Grantee shall wherever necessary, construct extensions of existing drains, culverts or ditches through or along the Premises, such extensions to be of adequate sectional dimensions to preserve flowage of drainage or other waters, and/or material and workmanship equally as good as those now existing.

6.11 Taxes and Recording Fees. Grantee shall pay when due any taxes, assessments or other charges (collectively, "**Taxes**") levied or assessed upon the Improvements by any governmental or quasi-governmental body or any Taxes levied or assessed against Grantor or the Premises that are attributable to the Improvements. Grantee agrees to purchase, affix and cancel any and all documentary stamps in the amount prescribed by statute, and to pay any and all required transfer taxes, excise taxes and any and all fees incidental to recordation of the Memorandum of Easement. In the event of Grantee's failure to do so, if Grantor shall become obligated to do so, Grantee shall be liable for all costs, expenses and judgments to or against Grantor, including all of Grantor's legal fees and expenses.

6.12 Modification, Relocation or Removal of Improvements. If at any time, Grantor desires the use of its rail corridor in such a manner that, in Grantor's reasonable opinion, would be interfered with by any portion of the Improvements or the Easement, Grantee, at Grantee's sole cost, shall make such changes in the Improvements and/or Premises that, in the sole discretion of Grantor, are necessary to avoid interference with the proposed use of Grantor's property, including, without limitation, Grantee relocating or removing all or a portion of the Improvements from the Premises. Grantor acknowledges that, in some instances, Improvements will not need to be moved or removed from the Premises, but can be protected in place, subject to approval by Grantor's engineering department. Grantee hereby waives any rights that it may have to use condemnation Laws to keep Improvements in place and not relocate or remove the Improvements where relocation or removal is required by Grantor. Where it is practicable to do so, Grantor shall provide to Grantee at least one hundred twenty (120) days prior written notice that Improvements must be modified, removed or relocated, and in circumstances where one hundred twenty (120) days notice is not practicable, Grantor shall provide to Grantee as much notice as it reasonably can, and in no case less than twenty (20) days prior written notice. Grantee shall ensure that all Improvements are modified, removed or relocated as required on or before the date set forth in Grantor's written notice.

Section 7 Indemnification.

7.1 TO THE FULLEST EXTENT PERMITTED BY LAW, GRANTEE SHALL, AND SHALL CAUSE GRANTEE'S CONTRACTORS, SUBCONTRACTORS, AGENTS, INVITEES, LESSEES, LICENSEES AND PERMITTEES TO, RELEASE, INDEMNIFY, DEFEND AND HOLD HARMLESS GRANTOR AND GRANTOR'S AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS (COLLECTIVELY, "INDEMNITEES") FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS, ATTORNEYS' FEES AND COSTS OF INVESTIGATION, REMOVAL AND REMEDIATION AND GOVERNMENTAL OVERSIGHT COSTS) ENVIRONMENTAL OR OTHERWISE (COLLECTIVELY, "LIABILITIES") OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON OR ENTITY DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM OR RELATED TO (IN WHOLE OR IN PART):

(i) THIS EASEMENT AGREEMENT, INCLUDING, WITHOUT LIMITATION, ITS ENVIRONMENTAL PROVISIONS,

(ii) ANY RIGHTS OR INTERESTS GRANTED PURSUANT TO THIS EASEMENT AGREEMENT,

(iii) OCCUPATION AND USE OF THE PREMISES BY GRANTEE'S OR GRANTEE'S CONTRACTORS, SUBCONTRACTORS, AGENTS, INVITEES, LESSEES, LICENSEES AND PERMITTEES, OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER (INDIVIDUALLY, A "GRANTEE PARTY," AND COLLECTIVELY, "GRANTEE PARTIES"),

(iv) THE ENVIRONMENTAL CONDITION AND STATUS OF THE PREMISES CAUSED BY OR CONTRIBUTED TO BY GRANTEE PARTIES, OR

(v) ANY ACT OR OMISSION OF GRANTEE PARTIES,

EVEN IF SUCH LIABILITIES ARISE FROM OR ARE ATTRIBUTED TO, IN WHOLE OR IN PART, ANY NEGLIGENCE OF ANY INDEMNITEE. THE ONLY LIABILITIES WITH RESPECT TO WHICH GRANTEE'S OBLIGATION TO INDEMNIFY THE INDEMNITEES DOES NOT APPLY ARE LIABILITIES TO THE EXTENT PROXIMATELY CAUSED BY THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF AN INDEMNITEE.

7.2 TO THE FULLEST EXTENT PERMITTED BY LAW, NOTWITHSTANDING THE LIMITATION IN SECTION 7.1, GRANTEE SHALL, AND SHALL CAUSE GRANTEE'S CONTRACTORS, SUBCONTRACTORS, AGENTS, INVITEES, LESSEES, LICENSEES AND PERMITTEES TO, NOW AND FOREVER WAIVE ANY AND ALL CLAIMS, REGARDLESS WHETHER BASED ON STRICT LIABILITY, NEGLIGENCE OR OTHERWISE, THAT GRANTOR IS AN "OWNER", "OPERATOR", "ARRANGER", OR "TRANSPORTER" WITH RESPECT TO THE IMPROVEMENTS FOR THE PURPOSES OF CERCLA OR OTHER ENVIRONMENTAL LAWS. GRANTEE WILL INDEMNIFY, DEFEND AND HOLD THE INDEMNITEES HARMLESS FROM ANY AND ALL SUCH CLAIMS REGARDLESS OF THE NEGLIGENCE OF THE INDEMNITEES. GRANTEE FURTHER AGREES THAT THE USE OF THE PREMISES AS CONTEMPLATED BY THIS EASEMENT AGREEMENT SHALL NOT IN ANY WAY SUBJECT GRANTOR TO CLAIMS THAT GRANTOR IS OTHER THAN A COMMON CARRIER FOR PURPOSES OF ENVIRONMENTAL LAWS AND EXPRESSLY AGREES TO INDEMNIFY, DEFEND, AND HOLD THE INDEMNITEES HARMLESS FOR ANY AND ALL SUCH CLAIMS. IN NO EVENT SHALL GRANTOR BE RESPONSIBLE FOR THE ENVIRONMENTAL CONDITION OF THE PREMISES.

7.3 TO THE FULLEST EXTENT PERMITTED BY LAW, GRANTEE SHALL, AND SHALL CAUSE GRANTEE'S CONTRACTORS, SUBCONTRACTORS, AGENTS, INVITEES, LESSEES, LICENSEES AND PERMITTEES TO, REGARDLESS OF ANY NEGLIGENCE OR ALLEGED NEGLIGENCE OF ANY INDEMNITEE, INDEMNIFY AND HOLD HARMLESS THE INDEMNITEES AGAINST AND ASSUME THE

DEFENSE OF ANY LIABILITIES ASSERTED AGAINST OR SUFFERED BY ANY INDEMNITEE UNDER OR RELATED TO THE FEDERAL EMPLOYERS' LIABILITY ACT ("FELA") WHENEVER EMPLOYEES OF GRANTEE, OR ANY OF ITS CONTRACTORS, SUBCONTRACTORS, AGENTS, INVITEES, LESSEES, LICENSEES OR PERMITTEES, CLAIM OR ALLEGE THAT THEY ARE EMPLOYEES OF ANY INDEMNITEE OR OTHERWISE. THIS INDEMNITY SHALL ALSO EXTEND, ON THE SAME BASIS, TO FELA CLAIMS BASED ON ACTUAL OR ALLEGED VIOLATIONS OF ANY FEDERAL, STATE OR LOCAL LAWS OR REGULATIONS, INCLUDING BUT NOT LIMITED TO THE SAFETY APPLIANCE ACT, THE LOCOMOTIVE INSPECTION ACT, THE OCCUPATIONAL SAFETY AND HEALTH ACT, THE RESOURCE CONSERVATION AND RECOVERY ACT, AND ANY SIMILAR STATE OR FEDERAL STATUTE.

7.4 Upon written notice from Grantor, Grantee agrees to assume the defense of any lawsuit or other proceeding brought against any Indemnitee by any entity, relating to any matter covered by this Easement Agreement for which Grantee has an obligation to assume liability for and/or save and hold harmless any Indemnitee. Grantee shall pay all costs incident to such defense, including, but not limited to, attorneys' fees, investigators' fees, litigation and appeal expenses, settlement payments, and amounts paid in satisfaction of judgments.

Section 8 Insurance. Grantee shall, at its sole cost and expense, procure and maintain during the life of this Easement Agreement the following insurance coverage:

A. Commercial General Liability Insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of $2,000,000 each occurrence and an aggregate limit of at least $4,000,000 but in no event less than the amount otherwise carried by Grantee.. . Coverage must be purchased on a post 1998 ISO occurrence or equivalent and include coverage for, but not limited to, the following:

- Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Waiver of subrogation in favor of and acceptable to ***Railway.***
- Additional insured endorsement in favor of and acceptable to ***Railway and Jones, Lang, LaSalle Global Services RR, Inc.***
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by ***Railway***.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to ***Railway*** employees.

No other endorsements limiting coverage may be included on the policy.

B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least $1,000,000 per occurrence, and include coverage for, but not limited to the following:

- Bodily injury and property damage
- Any and all vehicles owned, used or hired

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to ***Railway.***
- Additional insured endorsement in favor or and acceptable to ***Railway.***
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by ***Railway***.

C. Workers Compensation and Employers Liability Insurance. This insurance shall include coverage for, but not limited to:

- Grantee's statutory liability under the worker's compensation Laws of the state(s) in which the work is to be performed. If optional under State Law, the insurance must cover all employees anyway.
- Employers' Liability (Part B) with limits of at least $500,000 each accident, $500,000 by disease policy limit, $500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to ***Railway.***

D. Railroad Protective Liability Insurance is required if there is any construction or demolition activities. This insurance shall name only the Railway as the Insured with coverage of at least $2,000,000 per occurrence and $6,000,000 in the aggregate. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:

- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- Endorsed to include the Limited Seepage and Pollution Endorsement.
- Endorsed to include Evacuation Expense Coverage Endorsement.
- No other endorsements restricting coverage may be added.
- The original policy must be provided to the Railway prior to performing any work or services under this Easement Agreement

If available and in lieu of providing a Railroad Protective Liability Policy, Grantee may participate in the Railway's Blanket Railroad Protective Liability Insurance Policy available to Grantee or its contractor. The limits of coverage are the same as above. The cost is $_____.

- ☐ I **elect** to participate in Grantor's Blanket Policy;
- ☐ I **elect not** to participate in Grantor's Blanket Policy.

Other Requirements:

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages and certificates of insurance shall reflect that no exclusion exists.

Grantee agrees to waive its right of recovery against Railway for all claims and suits against Railway. In addition, its insurers, through policy endorsement, waive their right of subrogation against Railway for all claims and suits. The certificate of insurance must reflect waiver of subrogation endorsement. Grantee further waives its right of recovery, and its insurers also waive their right of subrogation against Railway for loss of its owned or leased property or property under its care, custody, or control.

Grantee is not allowed to self-insure without the prior written consent of Railway. If granted by Railway, any deductible, self-insured retention or other financial responsibility for claims shall be covered directly by Grantee in lieu of insurance. Any and all Railway liabilities that would otherwise, in accordance with the provisions of this Easement Agreement, be covered by Grantee's insurance will be covered as if Grantee elected not to include a deductible, self-insured retention, or other financial responsibility for claims.

Prior to commencing work, Grantee shall furnish to Railway an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. The policy(ies) shall contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify Railway in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision shall be indicated on the certificate of insurance. Upon request from Railway, a certified duplicate original of any required policy shall be furnished.

Any insurance policy shall be written by a reputable insurance company acceptable to Railway or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.

Grantee represents that this Easement Agreement has been thoroughly reviewed by Grantee's insurance agent(s)/broker(s), who have been instructed by Grantee to procure the insurance coverage required by this Easement Agreement. Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

Not more frequently than once every five years, Railway may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by Grantee, Grantee shall require that the subcontractor shall provide and maintain insurance coverages as set forth herein, naming Railway as an additional insured, and shall require that the subcontractor shall release, defend and indemnify Railway to the same extent and under the same terms and conditions as Grantee is required to release, defend and indemnify Railway herein.

Failure to provide evidence as required by this **Section 8** shall entitle, but not require, Railway to terminate the Easement immediately. Acceptance of a certificate that does not comply with this **Section 8** shall not operate as a waiver of Grantee's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by Grantee shall not be deemed to release or diminish the liability of Grantee including, without limitation, liability under the indemnity provisions of this Easement Agreement. Damages recoverable by Railway shall not be limited by the amount of the required insurance coverage.

For purposes of this **Section 8**, Railway shall mean "Burlington Northern Santa Fe, LLC", "BNSF Railway Company" and the subsidiaries, successors, assigns and affiliates of each.

Section 9 Environmental.

9.1 Compliance with Environmental Laws. Grantee shall strictly comply with all federal, state and local environmental Laws in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Toxic Substances Control Act (collectively referred to as the "**Environmental Laws**"). Grantee shall not maintain a "treatment," "storage," "transfer" or "disposal" facility, or "underground storage tank," as those terms are defined by Environmental Laws, on the Premises. Grantee shall not handle, transport, release or suffer the release of "hazardous waste" or "hazardous substances", as "hazardous waste" and "hazardous substances" may now or in the future be defined by any Environmental Laws.

9.2 Notice of Release. Grantee shall give Grantor immediate notice to Grantor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Grantee's use of the Premises. Grantee shall use its best efforts to promptly respond to any release on or from the Premises. Grantee also shall give Grantor immediate notice of

all measures undertaken on behalf of Grantee to investigate, remediate, respond to or otherwise cure such release or violation.

9.3 Remediation of Release. In the event that Grantor has notice from Grantee or otherwise of a release or violation of Environmental Laws which occurred or may occur during the term of this Easement Agreement, Grantor may require Grantee, at Grantee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises. If during the construction or subsequent maintenance of the Improvements, soils or other materials considered to be environmentally contaminated are exposed, Grantee will remove and safely dispose of said contaminated soils. Determination of soils contamination and applicable disposal procedures thereof, will be made only by an agency having the capacity and authority to make such a determination.

9.4 Preventative Measures. Grantee shall promptly report to Grantor in writing any conditions or activities upon the Premises known to Grantee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Grantee's reporting to Grantor shall not relieve Grantee of any obligation whatsoever imposed on it by this Easement Agreement. Grantee shall promptly respond to Grantor's request for information regarding said conditions or activities.

9.5 Evidence of Compliance. Grantee agrees periodically to furnish Grantor with proof satisfactory to Grantor that Grantee is in compliance with this **Section 9**. Should Grantee not comply fully with the above-stated obligations of this **Section 9**, notwithstanding anything contained in any other provision hereof, Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice of termination upon Grantee. Upon termination, Grantee shall remove the Improvements and restore the Premises as provided in **Section 12**.

Section 10 PERSONAL PROPERTY WAIVER. ALL PERSONAL PROPERTY, INCLUDING, BUT NOT LIMITED TO, FIXTURES, EQUIPMENT, OR RELATED MATERIALS UPON THE PREMISES WILL BE AT THE RISK OF GRANTEE ONLY, AND NO INDEMNITEE WILL BE LIABLE FOR ANY DAMAGE THERETO OR THEFT THEREOF, WHETHER OR NOT DUE IN WHOLE OR IN PART TO THE NEGLIGENCE OF ANY INDEMNITEE.

Section 11 Default and Termination.

11.1 Grantor's Performance Rights. If at any time Grantee, or Grantee's Contractors, fails to properly perform its obligations under this Easement Agreement, Grantor, in its sole discretion, may: (i) seek specific performance of the unperformed obligations, or (ii) at Grantee's sole cost, may arrange for the performance of such work as Grantor deems necessary for the safety of its rail operations, activities and property, or to avoid or remove any interference with the activities or property of Grantor, or anyone or anything present on the rail corridor or property with the authority or permission of Grantor. Grantee shall promptly reimburse Grantor for all costs of work performed on Grantee's behalf upon receipt of an invoice for such costs. Grantor's failure to perform any obligations of Grantee or Grantee's Contractors shall not alter the liability allocation set forth in this Easement Agreement.

11.2 Grantor's Termination Rights. Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice in writing upon Grantee: (i) if default shall be made in any of the covenants or agreements of Grantee contained in this Easement Agreement, (ii) in case of any assignment or transfer of the Easement by operation of law, or (iii) if Grantee should abandon or cease to use the Premises for the Easement Purpose. Any waiver by Grantor of any default or defaults shall not constitute a waiver of the right to terminate this Easement Agreement for any subsequent default or defaults, nor shall any such waiver in any way affect Grantor's ability to enforce any section of this Easement Agreement.

11.3 Effect of Termination or Expiration. Neither termination nor expiration will release Grantee from any liability or obligation under this Easement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date the Premises are restored as required by **Section 12**.

11.4 Non-exclusive Remedies. The remedies set forth in this **Section 11** shall be in addition to, and not in limitation of, any other remedies that Grantor may have at law or in equity.

Section 12 Surrender of Premises.

12.1 Removal of Improvements and Restoration. Upon termination of this Easement Agreement, whether by abandonment of the Easement or by the exercise of Grantor's termination rights hereunder, Grantee shall, at its sole cost and expense, immediately perform the following:

(a) remove all or such portion of Grantee's Improvements and all appurtenances thereto from the Premises, as Grantor directs at Grantor's sole discretion;

(b) repair and restore any damage to the Premises arising from, growing out of, or connected with Grantee's use of the Premises;

(c) remedy any unsafe conditions on the Premises created or aggravated by Grantee; and

(d) leave the Premises in the condition which existed as of the Effective Date.

12.2 Limited License for Entry. If this Easement Agreement is terminated, Grantor may direct Grantee to undertake one or more of the actions set forth above, at Grantee's sole cost, in which case Grantee shall have a limited license to enter upon the Premises to the extent necessary to undertake the actions directed by Grantor. The terms of this limited license include all of Grantee's obligations under this Easement Agreement. Termination will not release Grantee from any liability or obligation under this Easement Agreement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination, or, if later, the date when Grantee's Improvements are removed and the Premises are restored to the condition that existed as of the Effective Date. If Grantee fails to surrender the Premises to Grantor upon any termination of the Easement, all liabilities and obligations of Grantee hereunder shall continue in effect until the Premises are surrendered.

Section 13 Liens. Grantee shall promptly pay and discharge any and all liens arising out of any construction, alterations or repairs done, suffered or permitted to be done by Grantee on the Premises or attributable to Taxes that are the responsibility of Grantee pursuant to **Section 6**. Grantor is hereby authorized to post any notices or take any other action upon or with respect to the Premises that is or may be permitted by Law to prevent the attachment of any such liens to any portion of the Premises; provided, however, that failure of Grantor to take any such action shall not relieve Grantee of any obligation or liability under this **Section 13** or any other section of this Easement Agreement.

Section 14 Tax Exchange. Grantor reserves the right to assign this Easement Agreement to Goldfinch Exchange Company LLC. ("**Goldfinch**"). **Goldfinch** is a qualified intermediary within the meaning of Section 1031 of the Internal Revenue Code of 1986, as amended, and Treas. Reg. § 1.1031(k)-1(g), for the purpose of completing a tax-deferred exchange under said Section 1031. Grantor shall bear all expenses associated with the use of **Goldfinch**, or necessary to qualify this transaction as a tax-deferred exchange, and, except as otherwise provided herein, shall protect, reimburse, indemnify and hold harmless Grantee from and against any and all reasonable and necessary additional costs, expenses, including, attorneys fees, and liabilities which Grantee may incur as a result of Grantor's use of **Goldfinch** or the qualification of this transaction as a tax-deferred transaction pursuant to Section 1031. Grantee shall cooperate with Grantor with respect to this tax-deferred exchange, and upon Grantor's request, shall execute such documents as may be required to effect this tax-deferred exchange.

Section 15 Notices. Any notice required or permitted to be given hereunder by one party to the other shall be in writing and the same shall be given and shall be deemed to have been served and given if (i) placed in the United States mail, certified, return receipt requested, or (ii) deposited into the custody of a nationally recognized overnight delivery service, addressed to the party to be notified at the address for such party

specified below, or to such other address as the party to be notified may designate by giving the other party no less than thirty (30) days' advance written notice of such change in address.

If to Grantor: BNSF Railway Company
2500 Lou Menk Dr. – AOB3
Fort Worth, Texas 76131
Attn: Director of Real Estate

With a copy to:
BNSF Railway Company
2500 Lou Menk Drive
Fort Worth, Texas 76131

If to Grantee: City of Auburn – Public Works Engineering
25 West Main Street
Auburn, WA 98001
Attn: Jacob Sweeting

Section 16 **Recordation**. It is understood and agreed that this Easement Agreement shall not be in recordable form and shall not be placed on public record and any such recording shall be a breach of this Easement Agreement. Grantor and Grantee shall execute a Memorandum of Easement in the form attached hereto as **Exhibit "B"** (the "**Memorandum of Easement**") subject to changes required, if any, to conform such form to local recording requirements. The Memorandum of Easement shall be recorded in the real estate records in the county where the Premises are located. If a Memorandum of Easement is not executed by the parties and recorded as described above within 30 days of the Effective Date, Grantor shall have the right to terminate this Easement Agreement upon notice to Grantee.

Section 17 **Miscellaneous**.

17.1 All questions concerning the interpretation or application of provisions of this Easement Agreement shall be decided according to the substantive Laws of the State of Texas without regard to conflicts of law provisions.

17.2 In the event that Grantee consists of two or more parties, all the covenants and agreements of Grantee herein contained shall be the joint and several covenants and agreements of such parties. This instrument and all of the terms, covenants and provisions hereof shall inure to the benefit of and be binding upon each of the parties hereto and their respective legal representatives, successors and assigns and shall run with and be binding upon the Premises.

17.3 If any action at law or in equity is necessary to enforce or interpret the terms of this Easement Agreement, the prevailing party or parties shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party or parties may be entitled.

17.4 If any provision of this Easement Agreement is held to be illegal, invalid or unenforceable under present or future Laws, such provision will be fully severable and this Easement Agreement will be construed and enforced as if such illegal, invalid or unenforceable provision is not a part hereof, and the remaining provisions hereof will remain in full force and effect. In lieu of any illegal, invalid or unenforceable provision herein, there will be added automatically as a part of this Easement Agreement a provision as similar in its terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

17.5 This Easement Agreement is the full and complete agreement between Grantor and Grantee with respect to all matters relating to Grantee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Grantee's use of the Premises as described herein. However, nothing herein is intended to terminate any surviving obligation of Grantee or Grantee's obligation to defend and hold Grantor harmless in any prior written agreement between the parties.

17.6 Time is of the essence for the performance of this Easement Agreement.

Section 18 **Administration Fee** Grantee acknowledges that a material consideration for this agreement, without which it would not be made, is the agreement between Grantee and Grantor, that the Grantee shall pay upon return of this Agreement signed by Grantee to Grantors Broker a processing fee in the amount of $**2,500.00** over and above the agreed upon Purchase Price. Said fee shall be made payable to BNSF Railway Company by a separate check.

Witness the execution of this Easement Agreement as of the date first set forth above.

GRANTOR:

BNSF RAILWAY COMPANY, a Delaware corporation

By: _____
Name: _____
Title: _____

GRANTEE:

CITY OF AUBURN, a municipal corporation

By: _____
Name: _____
Title: _____

EXHIBIT A

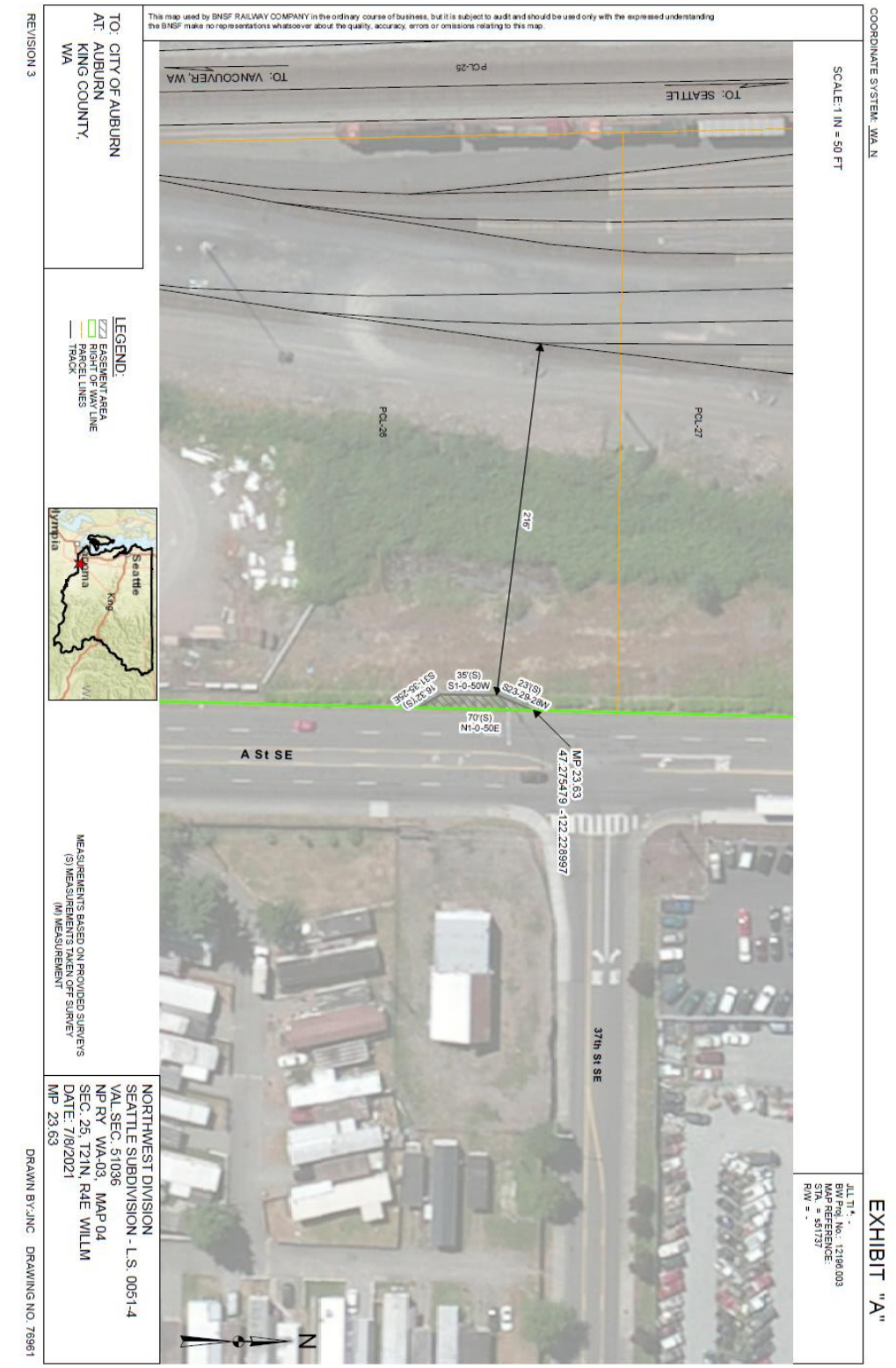

EXHIBIT "A"
COORDINATE SYSTEM: WA_N
SCALE: 1 IN = 50 FT
This map used by BNSF RAILWAY COMPANY in the ordinary course of business, but it is subject to audit and should be used only with the expressed understanding the BNSF make no representations whatsoever about the quality, accuracy, errors or omissions relating to this map.
TO: VANCOUVER, WA
TO: SEATTLE
POL-25
POL-26
POL-27
216'
35'(S) S1-0-50W
23'(S) S23-29-28W
16.32'(S) S31-30-29E
70'(S) N1-0-50E
MP 23.63 47.275479 -122.228997
A St SE
37th St SE
N
JLL TI *.*
BW Proj. No.: 12196.003
MAP REFERENCE:
DATE: 5/17/21
R/W = -
TO: CITY OF AUBURN
AT: AUBURN
KING COUNTY, WA
LEGEND:
EASEMENT AREA
RIGHT OF WAY LINE
PARCEL LINES
TRACK
Seattle
King
MEASUREMENTS BASED ON PROVIDED SURVEYS
(S) MEASUREMENTS TAKEN OFF SURVEY
(M) MEASUREMENT
NORTHWEST DIVISION
SEATTLE SUBDIVISION - L.S. 0051-4
VAL.SEC: 51036
NP RY WA-03, MAP 04
SEC: 25, T21N, R4E WILLM
DATE: 7/8/2021
MP 23.63
REVISION 3
DRAWN BY: JNC
DRAWING NO: 76961

EXHIBIT A-1
EASEMENT LEGAL DESCRIPTION

THAT PORTION OF PARCEL 1, CITY OF AUBURN LOT LINE ADJUSTMENT NUMBER LLA06-0001 RECORDED UNDER RECORDING NUMBER 20060616000926 RECORDS OF KING COUNTY, WASHINGTON LOCATED IN THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 21 NORTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

COMMENCING AT AN ENCASED MONUMENT LOCATED AT THE INTERSECTION OF 37TH STREET SOUTHEAST AND "A" STREET SOUTHEAST, THENCE NORTH 88°59'10" WEST A DISTANCE OF 23.84 FEET TO THE WEST RIGHT OF WAY MARGIN OF "A" STREET SOUTHEAST ALSO BEING THE EAST LINE OF AN EASEMENT GRANTED TO THE CITY OF AUBURN FOR HIGHWAY AND WATER RETENTION POND PURPOSES UNDER RECORDING NUMBER 8109100298;
THENCE CONTINUING NORTH 88°59'10" WEST A DISTANCE OF 12.23 FEET TO THE WEST LINE OF SAID EASEMENT;
THENCE ALONG SAID WEST LINE SOUTH 01°00'50" WEST A DISTANCE OF 40.07 FEET TO THE POINT OF BEGINNING;
THENCE LEAVING SAID WEST LINE SOUTH 23°29'28" WEST A DISTANCE OF 23.00 FEET;
THENCE PARALLEL WITH SAID WEST LINE SOUTH 01°00'50" WEST A DISTANCE OF 35.00 FEET;
THENCE SOUTH 31°35'25" EAST A DISTANCE OF 16.32 FEET TO SAID WEST LINE;
THENCE ALONG SAID WEST LINE NORTH 01°00'50" EAST A DISTANCE OF 70.00 FEET TO THE POINT OF BEGINNING.

THE EASEMENT CONTAINS AN AREA OF 462 SQUARE FEET, MORE OR LESS

THE BASIS OF BEARINGS FOR THIS DESCRIPTION IS NORTH 01°01'19" EAST AS DETERMINED FROM THE MONUMENT LOCATED AT THE INTERSECTION OF "A" STREET SOUTHEAST AND 41ST STREET SOUTHEAST TO THE MONUMENT LOCATED AT THE INTERSECTION OF "A" STREET SOUTHEAST AND 37TH STREET SOUTHEAST, CITY OF AUBURN, WASHINGTON.

EXHIBIT "B"

Memorandum of Easement

THIS MEMORANDUM OF EASEMENT is hereby executed this ___ day of _____, 2021, by and between BNSF RAILWAY COMPANY, a Delaware corporation ("**Grantor**"), whose address for purposes of this instrument is 2500 Lou Menk Drive, Fort Worth, Texas 76131, and the CITY OF AUBURN, a municipal corporation ("**Grantee**"), whose address for purposes of this instrument is 25 West Main Street, Auburn, Washington, 98001, which terms "Grantor" and "Grantee" shall include, wherever the context permits or requires, singular or plural, and the heirs, legal representatives, successors and assigns of the respective parties:

WITNESSETH:

WHEREAS, Grantor owns or controls certain real property situated in King County, Washington as described on **Exhibit "A"-1** attached hereto and incorporated herein by reference (the "**Premises**');

WHEREAS, Grantor and Grantee entered into an Easement Agreement, dated _____ (the "**Easement Agreement**") which set forth, among other things, the terms of an easement granted by Grantor to Grantee over and across a portion of the Premises (the "**Easement**"); and

WHEREAS, Grantor and Grantee desire to memorialize the terms and conditions of the Easement Agreement of record.

For valuable consideration the receipt and sufficiency of which are hereby acknowledged, Grantor does grant unto Grantee and Grantee does hereby accept from Grantor the Easement over and across the Premises.

The term of the Easement, unless sooner terminated under provisions of the Easement Agreement, shall be perpetual. Provisions regulating the use and purposes to which the Easement shall be limited, are set forth in detail in the Easement Agreement and Grantor and Grantee agree to abide by the terms of the Easement Agreement.

All the terms, conditions, provisions and covenants of the Easement Agreement are incorporated herein by this reference for all purposes as though written out at length herein, and both the Easement Agreement and this Memorandum of Easement shall be deemed to constitute a single instrument or document. This Memorandum of Easement is not intended to amend, modify, supplement, or supersede any of the provisions of the Easement Agreement and, to the extent there may be any conflict or inconsistency between the Easement Agreement or this Memorandum of Easement, the Easement Agreement shall control.

[Signature page follows]

IN WITNESS WHEREOF, Grantor and Grantee have executed this Memorandum of Easement to as of the date and year first above written.

GRANTOR:

BNSF RAILWAY COMPANY, a Delaware corporation

By: _____
Name: _____
Title: _____

GRANTEE:

CITY OF AUBURN, a municipal corporation

By: _____
Name: _____
Title: _____

STATE OF _____ §
§
COUNTY OF _____ §

This instrument was acknowledged before me on the ___ day of _____, 2021, by _____ _____(name) as _____(title) of BNSF RAILWAY COMPANY, a Delaware corporation.

_____
Notary Public

(Seal)

My appointment expires:_____

STATE OF _____ §
§
COUNTY OF _____ §

This instrument was acknowledged before me on the ___ day of _____, 2021, by _____ _____(name) as _____(title) of _____, a _____.

_____
Notary Public

(Seal)

My appointment expires:_____

Exhibit "A"-1

THAT PORTION OF PARCEL 1, CITY OF AUBURN LOT LINE ADJUSTMENT NUMBER LLA06-0001 RECORDED UNDER RECORDING NUMBER 20060616000926 RECORDS OF KING COUNTY, WASHINGTON LOCATED IN THE SOUTHEAST QUARTER OF SECTION 25, TOWNSHIP 21 NORTH, RANGE 4 EAST, WILLAMETTE MERIDIAN, KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

COMMENCING AT AN ENCASED MONUMENT LOCATED AT THE INTERSECTION OF 37TH STREET SOUTHEAST AND "A" STREET SOUTHEAST, THENCE NORTH 88°59'10" WEST A DISTANCE OF 23.84 FEET TO THE WEST RIGHT OF WAY MARGIN OF "A" STREET SOUTHEAST ALSO BEING THE EAST LINE OF AN EASEMENT GRANTED TO THE CITY OF AUBURN FOR HIGHWAY AND WATER RETENTION POND PURPOSES UNDER RECORDING NUMBER 8109100298;
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BNSF Easement at 37th and A Street SE

Printed Date: 7/23/2021
Map Created by City of Auburn eGIS
Imagery Date: May 2015



1,333.3 0 666.7 1,333.3 Feet

NAD_1983_StatePlane_Washington_North_FIPS_4601_Feet

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:
Resolution No. 5610 (Gaub)

Date:
August 10, 2021

Department:
Public Works

Attachments:
Resolution No. 5610
Exhibit A

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

City Council adopt Resolution No. 5610

Background for Motion:

The City has prepared a Limited Update of the 2015 Comprehensive Water Plan, requesting a 4-year extension approval from the Washington State Department of Health.

Background Summary:

City Council adopted Resolution 5604 at the August 2, 2021 meeting, which authorized submitting the Limited Update of the 2015 Comprehensive Water Plan to Washington State Department of Health (DOH). Prior to submitting to DOH, it was discovered one of the water rights certificates was accidentally omitted from the Water Rights Self Assessment form. Staff is requesting the City Council to re-adopt the Limited Update with the corrected Water Rights Self Assessment form. Other minor changes include the date of the Limited Update letter to DOH and the City Council's date of re-adoption on August 16, 2021.

Resolution No. 5610 authorizes the Mayor to submit the Limited Update of the 2015 Comprehensive Water Plan to Washington State Department of Health for review and approval.

Reviewed by Council Committees:

Councilmember: Stearns
Staff: Gaub
Meeting Date: August 16, 2021
Item Number: RES.B

RESOLUTION NO. 5610

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, APPROVING THE SUBMITTAL OF THE CITY'S LIMITED UPDATE OF THE 2015 COMPREHENSIVE WATER PLAN TO THE WASHINGTON STATE DEPARTMENT OF HEALTH

WHEREAS, the City of Auburn operates a municipal water utility and provides drinking water to its utility customers; and

WHEREAS, the City of Auburn is required to develop and adopt Comprehensive Plans for its municipal utility operations; and

WHEREAS, in connection with its comprehensive planning, state law provides that the City's Comprehensive Water Plan is to be reviewed and approved by the Washington State Department of Health which has regulatory authority over drinking water systems; and

WHEREAS, the City has developed a Limited Update of the 2015 Comprehensive Water Plan ("Limited Update"); and

WHEREAS, Council adopted and approved the Limited Update of the 2015 Comprehensive Water Plan through passage of Resolution 5604 on August 2, 2021; and

WHEREAS, the adopted Limited Update omitted the listing of one water right certificate and requires re-adoption.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, HEREBY RESOLVES as follows:

Section 1. The City of Auburn Limited Update of the 2015 Comprehensive Water Plan is adopted and approved as set forth in Exhibit "A" attached and incorporated by reference pending approval from the Washington State Department of Health. City staff is authorized to make minor changes to the approved Limited Update based on comments received from the Washington State Department of Health. Substantive changes, as determined by the Mayor or the Mayor's designee, shall be approved by the Auburn City Council.

Section 2. The Mayor is authorized to submit to the Washington State Department of Health the Auburn Limited Update of the 2015 Comprehensive Water Plan for the agency's review and approval.

Section 3. After the Department of Health's review and approval of the City's Limited Update of the 2015 Comprehensive Water Plan, the Limited Update shall be returned to the City Council for incorporation as an element of the City's overall 2021 Comprehensive Plan update.

Section 4. The Mayor is authorized to implement such administrative procedures as may be necessary to carry out the directives of this legislation.

Section 5. This Resolution shall be in full force and effect upon passage and signatures hereon.

DATED and SIGNED this ____ day of _____ 2021.

CITY OF AUBURN

_____
NANCY BACKUS
MAYOR

ATTEST:

_____
Shawn Campbell,
City Clerk

APPROVED AS TO FORM:

_____
Kendra Comeau,
City Attorney

CITY OF AUBURN WASHINGTON

Nancy Backus, Mayor

25 West Main Street ✶ Auburn WA 98001-4998 ✶ www.auburnwa.gov ✶ 253-931-3000

August 16, 2021

Richard Rodriguez
Regional Planner
Washington State Department of Health
Northwest Regional Office
20425 72nd Avenue South, Suite 310
Kent, WA 98032

RE: City of Auburn 2015 Water System Plan (Water System ID 03350)
Approval Extension Request

Dear Mr. Rodriguez:

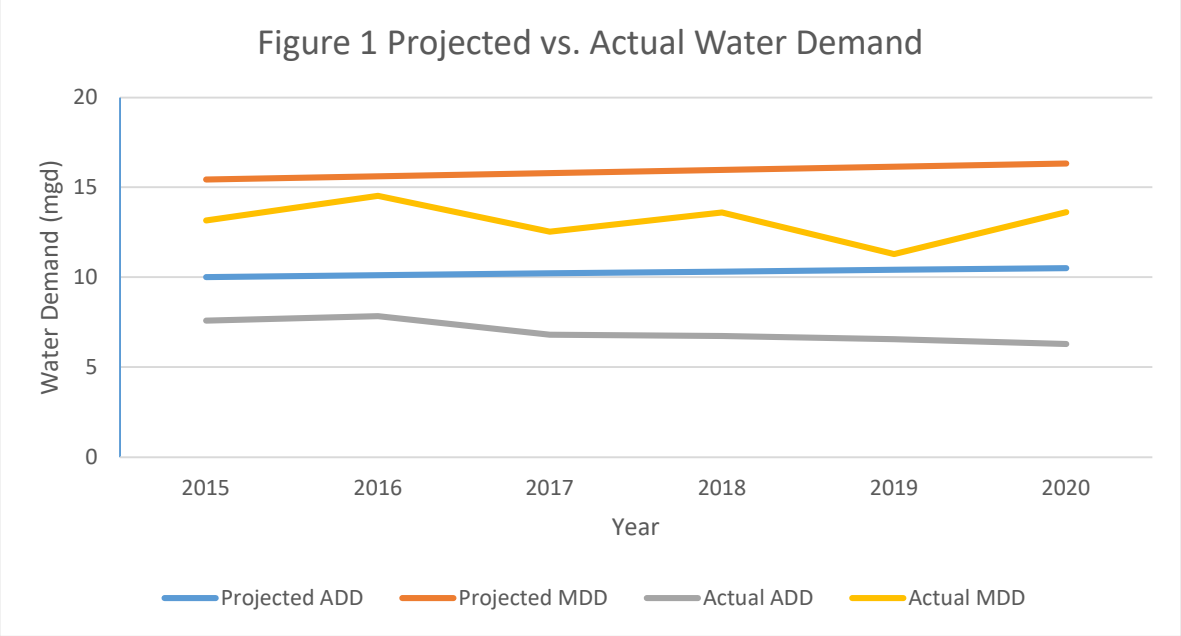
On behalf of the City of Auburn, I am requesting approval of a 4-year extension for the City of Auburn Water System Plan (WSP), entitled "City of Auburn Comprehensive Water Plan, October 2015". On May 11, 2016, the Washington State Department of Health approved the City's WSP for a 6-year term that will expire on May 11, 2022. To date, there have been no significant changes to the WSP that warrants the scheduled approval update per WAC 246-290-100. The projects, demands and growth presented in the current WSP are still valid and are accurate projections of the City's current planning efforts. Additionally, the current WSP includes projects, demands and growth projections 4 years beyond the 6-year planning period in anticipation of this extension request. Although the City is requesting a 4-year extension, a full water system plan will be prepared as part of the City-wide comprehensive plan, expected to be completed in 2024.

SYSTEM CAPACITY

Demand

The City's annual water demand between 2014 and 2020 has been less than the projected demand in the City's 2015 WSP for each corresponding year. Table 1 and Figure 1 show the difference between the projected average day demand (ADD) and maximum day demand (MDD) in the 2015 WSP, and the actual ADD and MDD for the years 2015 through 2020. With conservation, low distribution system leakage, and Lake Meridian securing an alternate wholesale source so that it has not been utilizing wholesale water from Auburn, the City expects to remain below the demands shown in 2015 WSP Table 4.17 and Figure 4.8 through 2025.

Table 1 Projected vs. Actual Water Demand				
Year	Projected Average Day Demand	Projected Maximum Day Demand	Actual Average Day Demand	Actual Maximum Day Demand
	MGD	MGD	MGD	MGD
2015	10.02	15.44	7.58	13.16
2016	10.12	15.61	7.85	14.53
2017	10.21	15.79	6.80	12.54
2018	10.31	15.97	6.73	13.61
2019	10.41	16.15	6.55	11.29
2020	10.51	16.33	6.29	13.62



Water Use Efficiency (WUE) Goal

The Previous 2014-2020 WUE goal that was adopted in the 2015 WSP Section 8.2 has been reported annually to customers and Department of Health. At the end of the 6-year cycle, a new goal was established through a public process.

The new 2021-2025 goal was adopted by the City Council on August 2, 2021. The projected demands that were calculated for the 2015 WSP update using historical water production, purchase, sales data, and the growth projection data were used to support the new goal.

> **2021-2025 WUE Goal**: Decrease the planning ERU value (gpd/ERU) 1 percent annually from the current planning ERU value of 179 gpd/ERU, which is the 75th percentile of 7 years of historical data (2014-2020). Revaluate goal when the planning ERU value reaches less than 172 gpd/ERU.

The City plans to continue to implement 14 of the 15 demand-side WUE program measures noted in the 2015 WSP Section 8.2.5 to achieve the new 2021-2025 WUE goal. The Demonstration Garden (Measure 14) is no longer maintained because the location exacerbated homeless encampment issues. However, a new program measure described below is proposed, keeping the total number of program measures at 15.

> Rainwater Harvesting: The City will evaluate implementation of a rainwater harvesting (rainwater reclamation) promotion program as a means to reduce irrigation water usage by commercial, public and residential customers. The City Stormwater Utility's requirement to use Low Impact Development (LID) measures, where feasible, strives to keep rainwater on the property, further reducing irrigation demands.

Storage

2015 WSP analysis identified storage deficiencies in the Valley and Lea Hill service areas in 2035. A combination of storage and supplies are needed to eliminate these deficiencies. Long-term capital projects to install iron and manganese treatment at Well 7 and construct a new Valley storage reservoir will eliminate the deficiencies when completed. These projects remain in the Capital Improvements Plan in the mid-term and long-term planning.

CAPITAL IMPREOVMENT PLAN

The City has made progress in completing the following capital improvements per the schedule outlined in Chapter 10 of the 2015 WSP. Listed below is a summary of the scheduled Capital Improvement Projects and/or Programs from the 2015 WSP Table 10.6 that were completed or are still in progress. Most water main replacement projects are not identified individually in the 2015 WSP. They are included in the Street Utility Improvements Program, Water Repair and Replacement Program, and Annual Distribution Improvements Program.

Status	Project Name

Completed 2015

- SCADA Upgrades
- Valley Asbestos Cement (AC) Water Main Replacement – 1,480 feet 6" and 1,280 feet 8" replaced with 12" ductile iron
- 2015 Local Street Reconstruction – 1,955 feet 6" cast iron and 1,330 feet 8" cast iron replaced with 8" ductile iron
- Auburn Way South Flooding Improvements (17th St SE) – 3,160 feet 8" cast iron replaced with 8" ductile iron

Completed 2016

- Well 1 On-Site Improvements
- Well 4 Emergency Power Improvements
- Lakeland Hills Reservoir 5 Improvements
- Muckleshoot Indian Tribe (MIT) Casino Master Meters

- 2016 Local Street Reconstruction – 1,315 feet 6” cast iron replaced with 8” ductile iron, 1,250 feet 4” cast iron replaced with 12” ductile iron
- Auburn Way South Corridor Improvements (MIT Plaza – Dogwood) – 2,080 feet 10” cast iron replaced with 12” ductile iron

Completed 2017

- West Hill Springs Flow Control Improvements
- 2017 Local Street Reconstruction – 2,440 feet 6” cast iron replaced with 8” ductile iron

Completed 2018

- Fulmer Field Improvements
- Lea Hill PRV Station Improvements
- Water Meter & Billing System Improvements (AMI)
- 2018 Local Street Reconstruction – 600 feet 6” cast iron replaced with 12” ductile iron

Completed 2019

- Reservoir 1 Seismic Control Valve
- 2019 Local Street Reconstruction – 2,115 feet 6” cast iron and 740 feet 8” cast iron replaced with 8” ductile iron
- A Street SE Improvements – 760 feet 6” cast iron and 340 feet 8” cast iron replaced with 12” ductile iron

Completed 2020

- Green River Pump Station Back-Up Power
- Meter Vault Replacement
- Pipe Asset Management Study
- 2020 Arterial Street Reconstruction – 1,155 feet 8” cast iron replaced with 16” ductile iron

In Progress

- Cascade Water Alliance Water Purchase – annual payments until 2029
- Well 4 Pump Improvements
- Academy Pump Station No. 1 Replacement
- Coal Creek Springs Transmission Main Replacement
- Street Utility Improvements Program – annual program that funds water main repair, replacement, or upgrade in conjunction with City street projects
- Water Repair and Replacements Program – annual program that funds repair and replacement of water mains
- Annual Distribution Improvements Program – annual program that funds upgrades or extensions of new water main projects

Cancelled

- Utilities Field Operations Center – This project is replaced with a more comprehensive upgrade to the City’s Operations and Maintenance Facilities

Table 2 below has an updated project list of the 2015 WSP CIP, and new projects for the requested 4-year time extension. Costs have been updated from those presented in Table 10.6 of the 2015 WSP to account for inflation. Projects with minimal costs (e.g., $10,000 in 2021 and no future year costs) are nearing completion.

Table 2 2021-2026 Capital Improvement Projects and Programs (x $1,000)							
2015 WSP ID	Project Name	2021	2022	2023	2024	2025	2026
S-04	**Cascade Water Alliance Water Purchase**	$ 935	$ 935	$ 935	$ 935	$ 935	$ 935
S-06	**Well 5/5A Upgrades**	$ -	$ -	$ -	$ -	$ 947	$ 112
S-07	**Well Inspection and Redevelopment**	$ -	$ 185	$ -	$ -	$ 200	$ -
S-08	**Water Resources Protection Program**	$ 27	$ 28	$ 29	$ 29	$ 30	$ 31
S-09	**Coal Creek Springs Rehabilitation**	$ -	$ -	$ -	$ -	$ -	$ 1,126
S-12	**West Hill Springs Water Quality Improvements**	$ -	$ -	$ -	$ 100	$ 480	$ -
S-13	**Algona Well 1 Decommissioning**	$ -	$ -	$ 50	$ -	$ -	$ -
S-18	**Howard Road CCTF Expansion**	$ -	$ -	$ -	$ -	$ -	$ 349
S-22	**Well 4 Facility Improvements**	$ 147	$ 830	$ -	$ -	$ -	$ -
R-03	**Reservoir Repair and Replacements**	$ 50	$ 62	$ 64	$ 66	$ 68	$ 70
R-04	**Valley Service Area Reservoir No. 3**	$ -	$ 50	$ -	$ -	$ -	$ 700
R-05	**Reservoir Painting**	$ -	$ -	$ -	$ -	$ -	$ 1,747
R-06	**Reservoir Seismic Rehabilitation**	$ -	$ -	$ -	$ 262	$ -	$ 298
R-06	**Reservoir 2 Valves**	$ -	$ 240	$ 760	$ -	$ -	$ -
PS-04	**Intertie Booster Pump Station Improvements**	$ -	$ -	$ -	$ -	$ -	$ 250
PS-07	**Academy PS #1 Pump Replacement**	$ 3,000	$ 610	$ -	$ -	$ -	$ -
PS-09, D-16	**Station/Distribution System Improvements**	$ -	$ -	$ -	$ -	$ -	$ 70
PS-10	**Lea Hill PS Replacement**	$ -	$ -	$ -	$ -	$ 491	$ 746
D-02	**Annual Distribution System Improvements Program**	$ -	$ -	$ 300	$ 1,000	$ 300	$ 1,000
D-02	**104th Park Development (104th to 102nd Water Main Loop)**	$ 250	$ -	$ -	$ -	$ -	$ -
D-06	**Street Utility Improvements Program**		$ 2,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000
D-06	**F Street SE Non-Motorized Improvements**	$ 10	$ -	$ -	$ -	$ -	$ -
D-06	**M Street NE Widening**	$ -	$ 37	$ -	$ 320	$ -	$ -
D-06	**Auburn Way South - Hemlock Street SE to Poplar Street SE**	$ -	$ -	$ 2,176	$ 256	$ -	$ -
D-06	**2021 Local Streets Reconstruction**	$ 2,520	$ -				$ -
D-06	**Water Trench Patches Program**	$ 150	$ 155	$ 160	$ 165	$ 170	$ -
D-06	**4th Street SE Reconstruction**	$ 50	$ 800	$ -	$ -	$ -	$ -
D-06	**Garden Avenue Realignment**	$ 55	$ 440	$ -	$ -	$ -	$ -
D-09	**Water Repair & Replacements Program**	$ -	$ 100	$ 1,000	$ 300	$ 1,000	$ 300
D-11	**Coal Creek Springs Transmission Main**	$ 10	$ 2,425	$ -	$ -	$ -	$ -
G-08	**Comprehensive Water Plan**	$ -	$ 263	$ 271	$ 20	$ -	$ -
New	**Deduct Meter Replacement Program**	$ 515	$ 485	$ -	$ -	$ -	$ -
New	**Lea Hill AC Main Replacement**	$ 10	$ -	$ -	$ -	$ -	$ -
New	**Lead Service Line Replacement**	$ 2,900	$ 1,600	$ -	$ -	$ -	$ -

LAND USE AND GROWTH

The Auburn water service area is smaller than the entire area of the City. For purposes of projecting growth over the next 5-year period, the service area represents approximately 75% of the City's corporate boundaries, taking into account areas are not developed or are served by private wells that are not expected to connect to the water system within the next 5 years. The 2015 WSP Table 4.8 projected a total service area population of 57,213 for 2015 and 62,581 for 2021. The State Office of Financial Management (OFM) population estimates are presented in Table 3. The total population of the City is the sum of the parts in King and Pierce Counties, with calculated water service area population 75% of the total.

Table 3 City of Auburn Population

County	Jurisdiction	2010 Population Census	2015 Population Estimate	2016 Population Estimate	2017 Population Estimate	2018 Population Estimate	2019 Population Estimate	2020 Population Estimate
King	Auburn (part)	62,761	65,950	67,340	69,060	70,650	71,740	71,960
Pierce	Auburn (part)	7,419	9,595	9,720	9,900	9,965	9,980	9,980
	Auburn Total	70,180	75,545	77,060	78,960	80,615	81,720	81,940
Water Service Area Population		52,635	56,659	57,795	59,220	60,461	61,290	61,455
2015 WSP Table 4.8 Projections			57,213	58,108	59,002	59,897	60,792	61,686

As Table 3 shows, the OFM estimated population of 61,455 and the 2015 WSP projection of 61,686 are fairly close. It is anticipated the actual growth in demand over the requested 4-year extension period will not exceed the demand projections stated in the 2015 WSP.

POLICIES AND DESIGN CRITERIA

The City's water service policies as presented in Section 3 of the 2015 WSP have remained the same for operating and constructing new facilities. The Design and Construction Standards provided in Appendix Q of the 2015 WSP have had minor modifications to provide clearer information or revised materials specifications. The water sections of the City of Auburn Design and Construction Standards are attached.

FINANCING AND IMPLEMENTATION

The financial analysis in Section 11 of the 2015 WSP identified the capital improvement plan (CIP) that the City is currently still pursuing. The City continues to fund the water operations and CIP programs while still maintain positive reserves as indicated in Table 4. The City obtained bond funding in 2020 for approximately $13.7 million for some of the planned projects. This funding was anticipated and discussed in the 2015 WSP Chapter 11. The City has adequate reserves to fund its debt service.

Table 4 Statement of Revenues, Expenses, and Changes in Fund Net Position							
	2014	2015	2016	2017	2018	2019
Operating Revenues						
Charges for service	$ 13,123,260	$ 14,225,395	$ 14,603,413	$ 14,781,310	$ 15,293,485	$ 15,057,517
Other Operating Revenue	-	-	-	-	600	835
Total Operating Revenues	13,123,260	14,225,395	14,603,413	14,781,310	15,294,085	15,058,352
Operating Expenses						
Operations and Maintenance	4,542,882	5,724,361	4,708,531	3,753,573	3,692,419	3,789,093
Administration	2,927,033	2,773,952	2,876,688	4,672,569	4,702,259	4,727,971
Depreciation/Amortization	2,410,604	2,934,694	3,014,425	3,269,581	3,407,933	3,848,016
Other Operating Expenses	1,528,313	1,650,719	1,812,788	8,964	-	-
Total Operating Expenses	11,408,832	13,083,726	12,412,432	11,704,687	11,802,611	12,365,080
Operating Income (Loss)	1,714,428	1,141,669	2,190,981	3,076,623	3,491,474	2,693,272
Non-Operating Revenue (Expenses)						
Interest Revenue	13,972	19,431	44,045	104,564	178,271	261,654
Other Non-Operating Revenue	347,225	241,238	218,927	269,264	324,228	589,809
Gain on Sale of Capital Assets	-	-	-	-	-	-
Interest Expense	(546,255)	(606,837)	(687,081)	(703,321)	(697,363)	(658,808)
Other Non-Operating Expenses	(37,857)	(966)	(8,116)	-	-	-
Total Non-Operating Revenue (Expenses)	(222,915)	(347,134)	(432,225)	(329,493)	(194,864)	192,655
Income (Loss) Before Contributions and Transfers	1,491,513	794,535	1,758,756	2,747,130	3,296,610	2,885,927
Capital Contributions	1,283,277	1,999,057	3,299,828	1,176,756	1,271,234	3,246,853
Transfers In	-	-	-	2,500,000	2,686,332	39,258
Transfers Out	(110,271)	(203,642)	(88,921)	(2,693,946)	(2,800,400)	(147,002)
Changes in Net Position	2,664,519	2,589,950	4,969,663	3,729,940	4,453,776	6,025,036
Net Position, January 1, as Previously Reported	68,655,975	71,320,494	70,782,042	75,751,705	79,481,645	83,935,421
Change in Accounting Principle		(3,128,402)				
Net Position, January 1 as Restated		68,192,092				
Net Position, December 31	$ 71,320,494	$ 70,782,042	$ 75,751,705	$ 79,481,645	$ 83,935,421	$ 89,960,457

SEPA COMPLIANCE

Since the 2015 WSP, no changes have occurred that would require a new Determination of Non-significance to be issued. Some planned capital improvements may require project-specific SEPA documents, which will be developed as part of those projects.

ADJACENT WATER SYSTEMS AND WHOLESALE CUSTOMERS

The following adjacent water systems and wholesale customers have been notified of the City's 2015 WSP extension request. The draft letter was emailed on June 28, 2021 for agency review. Response deadline was July 9, 2021. All received comments and responses are documented.

Agency	Agency Comments	Auburn Responses
City of Algona	Comment 6/28/2021 inquiring about the $50,000 on line S-13 of the Capital Program.	Algona transferred ownership of their well to Auburn. The cost is to decommission the Algona well after the water right is transferred to an Auburn well location.
City of Bonney Lake	No response	N/A
City of Kent	No comments (6/30/2021)	N/A
City of Pacific	No response	N/A
City of Sumner	No response	N/A
Covington Water District	No response	N/A
Highline Water District	No response	N/A
Lakehaven Water and Sewer District	Comment 6/30/2021 stating there was no mention of the requirements of the 2018 American Water Infrastructure Act (AWIA), asking if Auburn is exempt from this planning requirement.	Auburn is not exempt from the requirements of AWIA and has met the AWIA requirements for assessment and emergency planning.
Lake Meridian Water District	No response	N/A
Muckleshoot Indian Tribe	No response	N/A

The City Council is anticipated to approve of the adoption process for this Extension Request letter at its August 16, 2021 meeting.

The City requests that the 2015 WSP's existing approval be extended by 4 years as the analyses and recommendations contained in the 2015 WSP are still valid, and the WSP currently meets the Department of Health's water system planning requirements.

If you have any questions, please contact me at 253-804-5061 or sfenhaus@auburnwa.gov

Sincerely,

Susan Fenhaus, PE
Water Utility Engineer
Public Works Department

SF/XX

File: WTR 2.2.1

Enclosure(s)

- 2021 Water Rights Self-Assessment Form
- Population Estimates Washington State Office of Financial Management
- Water Use Efficiency Program
- 2021 Design and Construction Standards

CITY OF AUBURN
LIMITED COMPREHENSIVE WATER PLAN UPDATE

ATTACHMENTS

- **2021 Water Rights Self-Assessment Form**
- **Population Estimates from Washington State Office of Financial Management**
- **2021 – 2025 Water Use Efficiency Program**
- **2021 Design and Construction Standards**

Water Right Self-Assessment Form for Water System Plans

331-372 • 1/13/2017

All water right permits, claims, and certificates must be evaluated in a water right self-assessment for all sources used to supply the water system. The self-assessment compares the parameters and other limitations of existing water rights against current and forecasted water production, as described in your water system plan, to determine whether the rights are adequate to serve your system's current and future water needs.

You must account for all sources of supply and total quantities of water withdrawn from the source. If you purchase water from another purveyor through a non-emergency intertie, you must complete the INTERTIES section of the self-assessment.

A Note on Exempt Wells

If you're seeking DOH approval of a new Group A or Group B water system using an exempt well, you must complete the self-assessment, although certain fields will not apply. Talk to your DOH regional planner about using the Water Right Self-Assessment form for a Small Water System Management Program instead of this version.

Local governments must ensure that an adequate potable water supply is available from the exempt well before issuing a building permit. Before developing a permit exempt well, check with your local authorities on their criteria for establishing an adequate potable water supply for your planned public water system.

Water Right Parameters

Below is a brief description of the parameters associated with a typical water right. For the self-assessment, you only need to describe the last two bulleted items if they apply to your water rights.

Source Type – this refers to whether the source is surface water, groundwater or a spring.

Source Location – this refers to the location of points of groundwater withdrawal or surface water diversion for each right.

Purpose of Use – this refers to the type of use, such as municipal water supply, community domestic, industrial or agricultural purposes.

Place of Use – this describes where water can be put to beneficial use under the right. Under the 2003 Municipal Water Law, RCW 90.03.386, the place of use for a water right held for municipal water supply purposes may be the system's service area as identified in an approved water system plan or small water system management program. See Ecology Policy 2030 for information on how Ecology administers the Municipal Water Law.

Period of Use – this refers to time-of-year limitations in which the water right may be put to use. If any water right has a time-of-year limitation, please include this information in the INTERRUPTIBLE WATER RIGHTS section.

Provisions or Limiting Conditions – this refers to any provisions or conditions placed on the water right. If a water right has a limiting condition or other provision, such as a collection and reporting requirement, other than a time-of year limitation, include this information in the ADDITIONAL COMMENTS section at the bottom of the self-assessment and in the water system plan narrative.

See Ecology Policy 1040 for more information on water right terminology. If you have questions about your water rights, please contact the Ecology regional office in your area.

Completing the Water Right Self-Assessment Form

The self-assessment is a Word document to allow users to make changes or to expand the document. You may use another format, if preferred, as long as all required information is included. Below is a description of all fields and how to complete them. This form is divided into four different sections. Each section is described in the headings below.

See the column identifiers (A, B, C, etc) at the bottom of each column for guidance in completing the necessary calculations.

Water Right Permit, Certificate, or Claim Number: This number is assigned by Ecology when a permit application is filed. It's listed at the top of the permit or certificate. For water right claims, this is the registration number stamped in the lower left hand corner of the claim form.

WFI Source #: Identify the individual sources (e.g. well #1, well #2) as defined on the DOH Water Facilities Inventory form. If a water right is associated with multiple sources, list all sources in the same row in this column. If a source is associated with multiple water rights, identify each water right on a separate row.

If you have any source(s) that is not currently being used (categorized as standby, back-up, or emergency), and the source has an associated water right that is not listed in column #1, please include the source and water right information in the ADDITIONAL COMMENTS section. This will identify that the source is still intended for a beneficial use under RCW 90.03.015(4). See Ecology Policy 1040.

EXISTING WATER RIGHTS SECTION *(olive green color, top section)*

This section refers to existing water rights. It does not include any water right applications that have been submitted to Ecology.

Primary Qi (Instantaneous Quantity): This is also known as instantaneous flow rate. It's the amount of water allowed to be taken under the right from the source during a period of peak operation. For surface water, this is generally expressed in terms of cubic feet per

second (cfs). For groundwater, this is generally expressed in terms of gallons per minute (gpm). One cfs equals 448.8 gpm. Please indicate the units of measurement you are using for each source. If there are situations where the flow rate will be limited (e.g. limitations established on the source when other sources are utilized), please note them in the ADDITIONAL COMMENTS section in the form and in the WSP narrative.

Non-Additive Qi: This term was formally known as "supplemental." Your water rights may use the old terminology. See Ecology Policy 1040 for more information. Not all water rights have non-additive quantities. If a water right has non-additive Qi quantities, include the non-additive quantity in this field. This is generally listed in the "quantity, type of use, period of use" section on both permits and certificates. *Non-additive quantities should not be included in the primary Qi totals.*

Primary Qa (Annual Quantity): This is the amount of water that can be taken from the source under the right on an annual basis. It's usually expressed in terms of acre-feet. An acre-foot is the amount of water necessary to submerge an acre of land to a depth of one foot. One acre-foot equals 43,560 cubic feet or 325,851 gallons of water.

Non-Additive Qa: This term was formerly known as "supplemental." Your water rights may use the old terminology. See Ecology Policy 1040 for more information. Not all water rights have non-additive quantities. If a water right has non-additive Qa quantities, include the non-additive quantity in this field. This is generally listed in the "quantity, type of use, period of use" section on both permits and certificates. *Non-additive quantities should not be included in the primary Qa totals.*

CURRENT SOURCE PRODUCTION SECTION *(light green color, top section)*

This section refers to how much water is withdrawn from the source under each water right for the most recent full calendar year. You will need to determine any excess or deficiency for each water right after calculating how much water was withdrawn compared to how much water is allowed under each water right. If demand has decreased over past years, you may wish to include historic maximum production information in the ADDITIONAL COMMENTS section. This will provide a more complete picture of the use of your water rights.

Use the water use data and demand projections from your water system plan to define current and projected water needs. You can determine if you'll need additional water rights based on the comparison of existing water rights, current water production, and projected 10- and 20-year needs.

Total Qi (Instantaneous Quantity): This refers to the total maximum instantaneous flow rate withdrawn from the source under each water right during the most recent calendar year. For surface water, this is expressed in terms of cubic feet per second (cfs). For groundwater, this is expressed in terms of gallons per minute (gpm). One cfs equals 448.8 gpm.

Current Excess or Deficiency (Qi): Please calculate the excess or deficiency for each water right after comparing the total amount withdrawn against each water right. Please use parentheses for deficient amounts.

Total Qa (Annual Quantity): This refers to the total volume of water withdrawn from each source under each water right during the most recent calendar year. It's usually expressed in acre-feet.

Current Excess or Deficiency (Qa): Please calculate the excess or deficiency for each water right after comparing the total amount withdrawn against each water right. Please use parentheses for deficient amounts.

10-YEAR FORECASTED SOURCE PRODUCTION SECTION *(light blue color, top section)*

This section refers to how much water you project to withdraw from each source in ten years as determined in your water system plan. Please complete this section in the same manner (using the same units of measurement) as the current source production section using your 10-year forecasted amounts.

20-YEAR FORECASTED SOURCE PRODUCTION SECTION *(darker blue color, top section)*

This section refers to how much water you project to withdraw from each source in twenty years as determined in your water system plan. Please complete this section in the same manner (using the same units of measurement) as the current source production section using your 20-year forecasted amounts. If you are unable to provide 20-year forecasts for each source, you may choose to include the combined 20-year total at the bottom.

PENDING WATER RIGHTS SECTION *(second section of form)*

Please complete this section for any water right applications that have been submitted to Ecology. Please include the application number, whether it's a new or a change application, the date submitted, and the total quantities requested.

INTERTIES SECTION *(third section of form)*

This section must be completed by purveyors who purchase any amount of wholesale water. If your system sells water to another public water system, include the quantity sold in the CURRENT SOURCE PRODUCTION section.

Purchasers of wholesale water must account for all water obtained through the intertie for non-emergency supply purposes. This is to ensure that all sources of supply are considered when evaluating whether new water rights are needed within 20 years.

Please identify the maximum quantity of water, expressed in the same manner as the above sections, allowed under each intertie contract. If there are limiting conditions or temporary

agreements that effect the long-term use of the intertie, you must account for such limiting conditions when evaluating the current and forecasted water supply needs in your water system plan.

Finally, purchasers of wholesale water are responsible for ensuring that the underlying water right (held by the purveyor selling water) are adequate for such use. You should confirm that the selling system has accounted for the wholesale area in their water system plan to ensure that the water right authorizes the distribution of water through the intertie.

INTERRUPTIBLE WATER RIGHTS SECTION *(bottom section of form)*

This section refers to water rights that have an annual time-of-year interruption. Please complete this section for any water right listed in the above fields that has a time-of-year interruption. Please include the water right number, describe the limitation, and the time period of interruption. Purveyors with interruptible rights should develop a water shortage response plan as part of their water system plan to describe how demand will be met during periods of interruption through aggressive demand-side conservation, fixing leaks or other means.

ADDITIONAL COMMENTS SECTION *(bottom section of form)*

If the system has any source that is not currently being used on a regular basis (such a source may be categorized as stand-by, back-up, emergency), you should identify the source in this section if the source has an associated water right that is not listed in the above sections. The purpose is to identify that such water rights are still intended for a future beneficial use as required under RCW 90.03.015(4). See Page 2, Item 9 (b) in ECY Policy 2030. For these water rights, please briefly describe the future intended use of the source and when you expect to utilize the water right. This does not refer to sources categorized as seasonal sources.

You should also include any other comments in this section that will explain aspects of your water right portfolio that are not identified above.

Water Right Self-Assessment Form for Water System Plan

Mouse-over any link for more information. Click on any link for more detailed instructions.

Water Right Permit, Certificate, or Claim # *If water right is interruptible, identify limitation in yellow section below	WFI Source # If a source has multiple water rights, list each water right on separate line	Existing Water Rights Qi= Instantaneous Flow Rate Allowed (GPM) Qa= Annual Volume Allowed (Acre-Feet/Year) This includes wholesale water sold				Current Source Production – Most Recent Calendar Year Qi = Max Instantaneous Flow Rate Withdrawn (GPM) Qa = Annual Volume Withdrawn (Acre-Feet/Year) This includes wholesale water sold				10-Year Forecasted Source Production (determined from WSP) This includes wholesale water sold				20-Year Forecasted Source Production (determined from WSP) This includes wholesale water sold			
		Primary Qi Maximum Rate Allowed	Non-Additive Qi Maximum Rate Allowed	Primary Qa Maximum Volume Allowed	Non-Additive Qa Maximum Volume Allowed	Total Qi Maximum Instantaneous Flow Rate Withdrawn	Current Excess or (Deficiency) Qi	Total Qa Maximum Annual Volume Withdrawn	Current Excess or (Deficiency) Qa	Total Qi Maximum Instantaneous Flow Rate in 10 Years	10-Year Forecasted Excess or (Deficiency) Qi	Total Qa Maximum Annual Volume in 10 Years	10-Year Forecasted Excess or (Deficiency) Qa	Total Qi Maximum Instantaneous Flow Rate in 20 Years	20-Year Forecasted Excess or (Deficiency) Qi	Total Qa Maximum Annual Volume in 20 Years	20-Year Forecasted Excess or (Deficiency) Qa
857	Coal Creek Springs	6,730		9,410		4,550	2,180	3,887	5,523	6,000	730	9,410	0	6,730	0	9,410	0
3560-A	Wells 1, 6, &7	2,200		1,120		2,185	15	657	463	2,200		1,120	0	2,200	0	1,120	0
G1-00277C	Wells 2, 6, &7	2,400		1,360	2,480	1,925	475	1,360	0	2,400		1,360	0	2,400	0	1,360	0
G1-23629C	Wells 3A, 3B, 6, &7	2,800		3,600		0	2,800	0	3,600	0	2,800	0	3,600	2,800	0	500	3,100
G1-20391C	Wells 4, 6, &7	2,800		3,600		2,505	295	477	3,123	2,600	200	2,500	1,200	2,600	0	2,460	1,140
G1-23633C	Wells 5, 5A, 5B, &5C	1,000		720		770	230	232	488	800	200	600	120	950	50	720	0
G1-25518C	Well 5A	167		0	187	167	0	0	0	167	0	0	0	167	0	0	0
G1-22769C	Algona Well 1	500		175		0	500	0	175	0	500	0	175	500	0	175	0
G1-25173C	Braunwood well	20		6.5		17	3	5	2	17	3	6.5	0	20	0	7	0
S1-049354CL	West Hill Springs	625		1,010		600	25	413	597	600	25	960	50	600	25	1,010	0
	TOTALS =	19,242		21,002		12,719	6,523	7,031	13,971	14,784	4,458	15,957	5,045	19,167	75	16,762	4,240
Column Identifiers for Calculations:		A		B		C	=A-C	D	=B-D	E	= A-E	F	=B-F	G	=A-G	H	=B-H

PENDING WATER RIGHT APPLICATIONS: Identify any water right applications that have been submitted to Ecology.

Application Number	New or Change Application?	Date Submitted	Quantities Requested			
			Primary Qi	Non-Additive Qi	Primary Qa	Non-Additive Qa
G1-28404	New	01/05/06	12,500		13,433	

INTERTIES: Systems receiving wholesale water complete this section. Wholesaling systems must include water sold through intertie in the current and forecasted source production columns above.

Name of Wholesaling System Providing Water	Quantities Allowed In Contract		Expiration Date of Contract	Currently Purchased Current quantity purchased through intertie				10-Year Forecasted Purchase Forecasted quantity purchased through intertie				20-Year Forecasted Purchase Forecasted quantity purchased through intertie			
	Maximum Qi Instantaneous Flow Rate	Maximum Qa Annual Volume		Maximum Qi Instantaneous Flow Rate	Current Excess or (Deficiency) Qi	Maximum Qa Annual Volume	Current Excess or (Deficiency) Qa	Maximum Qi 10-Year Forecast	Future Excess or (Deficiency) Qi	Maximum Qa 10-Year Forecast	Future Excess or (Deficiency) Qa	Maximum Qi 20-Year Forecast	Future Excess or (Deficiency) Qi	Maximum Qa 20-Year Forecast	Future Excess or (Deficiency) Qa
Tacoma Public Utilities	**3,560**	**3,920**	**N/A**	**0**	**3,560**	**0**	**3,920**	**0**	**3,560**	**0**	**3,920**	**0**	**3,560**	**0**	**3,920**
TOTALS =	3,560	3,920		0	3,560	0	3,920	0	3,560	0	3,920	0	3,560	0	3,920
Column Identifiers for Calculations:	A	B		C	=A-C	D	=B-D	E	=A-E	F	=B-F	G	=A-G	H	=B-H

INTERRUPTIBLE WATER RIGHTS: Identify limitations on any water rights listed above that are interruptible.

Water Right #	Conditions of Interruption	Time Period of Interruption
1		
2		
3		

ADDITIONAL COMMENTS:

Current and proposed Qa quantities for Well 5A, G1-25518C are included with G1-23663C.
Current Well 6 Qa = 1074 AF. This was allocated 219 AF to 3560-A, 637 AF to G1-00277C, and 218 AF to G1-20391C.
10-year and 20-year forecasted Qa include providing annual average of 2.5 MGD from Coal Creek Springs (857) to Muckleshoot Indian Tribe (MIT) for hatchery.

April 1, 2020 Population of
Cities, Towns and Counties
Used for Allocation of Selected State Revenues
State of Washington

County Municipality	Census 2010	Estimate 2011	Estimate 2012	Estimate 2013	Estimate 2014	Estimate 2015	Estimate 2016	Estimate 2017	Estimate 2018	Estimate 2019	Estimate 2020
Douglas *continued*											
Rock Island	788	790	790	790	790	865	965	1,005	1,040	1,130	1,220
Waterville	1,138	1,140	1,145	1,145	1,155	1,160	1,165	1,175	1,175	1,185	1,195
Ferry	**7,551**	**7,600**	**7,650**	**7,650**	**7,660**	**7,710**	**7,700**	**7,740**	**7,780**	**7,830**	**7,910**
Unincorporated	6,478	6,520	6,565	6,555	6,560	6,620	6,610	6,645	6,680	6,730	6,805
Incorporated	1,073	1,080	1,085	1,095	1,100	1,090	1,090	1,095	1,100	1,100	1,105
Republic	1,073	1,080	1,085	1,095	1,100	1,090	1,090	1,095	1,100	1,100	1,105
Franklin	**78,163**	**80,500**	**82,500**	**84,800**	**86,600**	**87,150**	**88,670**	**90,330**	**92,540**	**94,680**	**96,760**
Unincorporated	13,491	13,665	13,820	13,160	12,820	12,825	12,065	12,540	12,830	13,230	13,500
Incorporated	64,672	66,835	68,680	71,640	73,780	74,325	76,605	77,790	79,710	81,450	83,260
Connell	4,209	5,150	5,320	5,350	5,330	5,405	5,365	5,450	5,460	5,500	5,500
Kahlotus	193	190	195	195	185	185	185	165	165	165	165
Mesa	489	495	495	495	495	495	495	495	495	495	495
Pasco	59,781	61,000	62,670	65,600	67,770	68,240	70,560	71,680	73,590	75,290	77,100
Garfield	**2,266**	**2,250**	**2,250**	**2,250**	**2,240**	**2,260**	**2,200**	**2,200**	**2,210**	**2,220**	**2,225**
Unincorporated	841	835	840	850	845	855	805	805	815	820	820
Incorporated	1,425	1,415	1,410	1,400	1,395	1,405	1,395	1,395	1,395	1,400	1,405
Pomeroy	1,425	1,415	1,410	1,400	1,395	1,405	1,395	1,395	1,395	1,400	1,405
Grant	**89,120**	**90,100**	**91,000**	**91,800**	**92,900**	**93,930**	**94,610**	**95,630**	**97,350**	**98,740**	**100,130**
Unincorporated	40,134	40,395	40,790	40,956	41,470	41,840	42,130	42,422	42,765	43,255	43,625
Incorporated	48,986	49,705	50,210	50,844	51,430	52,090	52,480	53,208	54,585	55,485	56,505
Coulee City	562	565	560	570	565	560	560	565	570	570	575
Coulee Dam *part*	0	0	0	0	0	0	0	0	0	0	0
Electric City	968	1,065	995	1,010	1,010	1,010	1,010	1,020	1,030	1,030	1,030
Ephrata	7,664	7,690	7,750	7,870	7,930	7,985	8,020	8,005	8,130	8,180	8,210
George	501	690	700	720	720	720	720	720	720	725	730
Grand Coulee	988	1,020	1,035	1,045	1,050	1,050	1,045	1,055	1,055	1,055	1,055
Hartline	151	150	150	155	155	160	155	155	155	155	155
Krupp	48	50	50	50	50	50	50	50	50	50	50
Mattawa	4,437	4,460	4,495	4,540	4,460	4,535	4,625	4,805	4,900	4,920	4,955
Moses Lake	20,366	20,640	20,950	21,250	21,600	22,080	22,250	22,720	23,660	24,220	24,620
Quincy	6,750	6,815	6,945	7,000	7,235	7,270	7,345	7,370	7,510	7,720	7,930
Royal City	2,140	2,150	2,160	2,190	2,210	2,235	2,240	2,245	2,275	2,295	2,605
Soap Lake	1,514	1,515	1,520	1,530	1,530	1,520	1,535	1,550	1,575	1,585	1,575
Warden	2,692	2,690	2,695	2,705	2,710	2,710	2,720	2,730	2,745	2,765	2,800
Wilson Creek	205	205	205	209 +	205	205	205	218 +	210	215	215
Grays Harbor	**72,797**	**72,900**	**73,150**	**73,200**	**73,300**	**73,110**	**72,820**	**72,970**	**73,610**	**74,160**	**74,720**
Unincorporated	28,438	28,555	28,610	28,615	28,635	28,475	28,110	28,190	28,320	28,410	28,675
Incorporated	44,359	44,345	44,540	44,585	44,665	44,635	44,710	44,780	45,290	45,750	46,045
Aberdeen	16,896	16,870	16,890	16,860	16,850	16,780	16,780	16,740	16,760	16,880	16,890
Cosmopolis	1,649	1,645	1,640	1,650	1,645	1,640	1,650	1,660	1,665	1,680	1,695
Elma	3,107	3,115	3,110	3,115	3,130	3,135	3,145	3,145	3,360	3,375	3,410
Hoquiam	8,726	8,650	8,655	8,620	8,625	8,575	8,580	8,560	8,560	8,540	8,540
McCleary	1,653	1,655	1,655	1,655	1,660	1,680	1,685	1,695	1,760	1,790	1,815
Montesano	3,976	4,010	4,050	4,070	4,075	4,095	4,105	4,120	4,155	4,175	4,175
Oakville	684	685	690	690	690	685	695	690	690	695	695
Ocean Shores	5,569	5,615	5,745	5,815	5,880	5,935	5,955	6,055	6,220	6,490	6,690
Westport	2,099	2,100	2,105	2,110	2,110	2,110	2,115	2,115	2,120	2,125	2,135
Island	**78,506**	**78,800**	**79,350**	**79,700**	**80,000**	**80,600**	**82,910**	**82,790**	**83,860**	**84,820**	**85,530**
Unincorporated	53,565	53,700	54,215	54,665	55,090	55,600	57,460	56,880	58,000	58,730	59,500
Incorporated	24,941	25,100	25,135	25,035	24,910	25,000	25,450	25,910	25,860	26,090	26,030
Coupeville	1,831	1,855	1,880	1,890	1,895	1,900	1,905	1,905	1,905	1,925	1,925
Langley	1,035	1,045	1,055	1,065	1,075	1,100	1,135	1,165	1,175	1,195	1,195
Oak Harbor	22,075	22,200	22,200	22,080	21,940	22,000	22,410	22,840	22,780	22,970	22,910
Jefferson	**29,872**	**30,050**	**30,175**	**30,275**	**30,700**	**30,880**	**31,090**	**31,360**	**31,590**	**31,900**	**32,190**
Unincorporated	20,759	20,870	20,990	21,050	21,345	21,500	21,605	21,860	22,045	22,290	22,525
Incorporated	9,113	9,180	9,185	9,225	9,355	9,380	9,485	9,500	9,545	9,610	9,665
Port Townsend	9,113	9,180	9,185	9,225	9,355	9,380	9,485	9,500	9,545	9,610	9,665
King	**1,931,249**	**1,942,600**	**1,957,000**	**1,981,900**	**2,017,250**	**2,052,800**	**2,105,100**	**2,153,700**	**2,190,200**	**2,226,300**	**2,260,800**
Unincorporated	325,000	285,265	255,720	253,100	252,050	253,280	245,920	247,060	247,240	248,275	249,100
Incorporated	1,606,249	1,657,335	1,701,280	1,728,800	1,765,200	1,799,520	1,859,180	1,906,640	1,942,960	1,978,025	2,011,700
Algona	3,014	3,055	3,070	3,075	3,090	3,105	3,175	3,180	3,180	3,190	3,210
Auburn *part*	62,761	63,050	63,390	64,320	65,350	65,950	67,340	69,060	70,650	71,740	71,960
Beaux Arts Village	299	300	300	290	295	300	300	300	300	300	300
Bellevue	122,363	123,400	124,600	132,100	134,400	135,000	139,400	140,700	142,400	145,300	148,100
Black Diamond	4,153 $	4,160	4,170	4,170	4,180	4,200	4,305	4,335	4,360	4,525	5,205

April 1, 2020 Population of
Cities, Towns and Counties
Used for Allocation of Selected State Revenues
State of Washington

County Municipality	Census 2010	Estimate 2011	Estimate 2012	Estimate 2013	Estimate 2014	Estimate 2015	Estimate 2016	Estimate 2017	Estimate 2018	Estimate 2019	Estimate 2020
Lincoln	**10,570**	**10,600**	**10,675**	**10,675**	**10,700**	**10,720**	**10,640**	**10,700**	**10,810**	**10,960**	**11,050**
Unincorporated	5,081	5,110	5,185	5,230	5,305	5,305	5,240	5,280	5,370	5,495	5,580
Incorporated	5,489	5,490	5,490	5,445	5,395	5,415	5,400	5,420	5,440	5,465	5,470
Almira	284	285	285	285	280	280	275	275	275	275	275
Creston	236	235	235	235	230	230	225	225	225	225	225
Davenport	1,734	1,735	1,730	1,700	1,685	1,685	1,690	1,700	1,715	1,730	1,740
Harrington	424	420	420	420	415	420	415	415	415	415	415
Odessa	910	910	915	905	900	905	900	905	905	910	905
Reardan	571	575	575	575	570	570	575	570	575	580	580
Sprague	446	445	445	445	440	445	440	440	440	440	440
Wilbur	884	885	885	880	875	880	880	890	890	890	890
Mason	**60,699**	**61,100**	**61,450**	**61,800**	**62,000**	**62,200**	**62,320**	**63,190**	**64,020**	**64,980**	**65,650**
Unincorporated	50,865	51,245	51,580	51,825	52,005	52,130	52,250	53,070	53,880	54,760	55,260
Incorporated	9,834	9,855	9,870	9,975	9,995	10,070	10,070	10,120	10,140	10,220	10,390
Shelton	9,834	9,855	9,870	9,975	9,995	10,070	10,070	10,120	10,140	10,220	10,390
Okanogan	**41,120**	**41,200**	**41,425**	**41,500**	**41,700**	**41,860**	**41,730**	**42,110**	**42,490**	**42,730**	**43,130**
Unincorporated	24,780	24,805	25,085	25,110	25,120	25,320	25,090	25,400	25,720	25,920	26,220
Incorporated	16,340	16,395	16,340	16,390	16,580	16,540	16,640	16,710	16,770	16,810	16,910
Brewster	2,370	2,365	2,355	2,370	2,380	2,395	2,395	2,400	2,405	2,405	2,420
Conconully	210	220	215	220	230	230	230	230	235	235	235
Coulee Dam *part*	911	910	915	915	915	910	915	915	915	915	915
Elmer City	238	240	235	235	240	285 *	290	290	290	290	290
Nespelem	236	235	235	235	235	245	245	245	245	245	245
Okanogan	2,552	2,585	2,535	2,560	2,595	2,580	2,595	2,610	2,620	2,640	2,665
Omak	4,845	4,845	4,835	4,830	4,840	4,900	4,925	4,925	4,935	4,940	4,955
Oroville	1,686	1,690	1,715	1,715	1,700	1,695	1,710	1,705	1,705	1,700	1,700
Pateros	667	665	665	665	665	525	560	580	585	585	595
Riverside	280	280	280	280	290	285	285	285	285	285	290
Tonasket	1,032	1,025	1,020	1,020	1,110	1,110	1,110	1,110	1,110	1,110	1,115
Twisp	919	925	930	940	945	945	950	970	975	980	985
Winthrop	394	410	405	405	435	435	430	445	465	480	500
Pacific	**20,920**	**20,900**	**20,970**	**21,000**	**21,100**	**21,210**	**21,180**	**21,250**	**21,420**	**21,640**	**21,840**
Unincorporated	14,073	14,070	14,115	14,125	14,225	14,320	14,285	14,360	14,500	14,710	14,770
Incorporated	6,847	6,830	6,855	6,875	6,875	6,890	6,895	6,890	6,920	6,930	7,070
Ilwaco	936	935	940	940	945	945	945	945	965	965	965
Long Beach	1,392	1,390	1,400	1,410	1,410	1,420	1,430	1,440	1,445	1,455	1,550
Raymond	2,882	2,870	2,890	2,895	2,890	2,905	2,900	2,885	2,885	2,885	2,910
South Bend	1,637	1,635	1,625	1,630	1,630	1,620	1,620	1,620	1,625	1,625	1,645
Pend Oreille	**13,001**	**13,000**	**13,100**	**13,150**	**13,210**	**13,240**	**13,290**	**13,370**	**13,540**	**13,740**	**13,850**
Unincorporated	9,810	9,790	9,890	9,945	9,985	10,030	10,085	10,140	10,310	10,485	10,550
Incorporated	3,191	3,210	3,210	3,205	3,225	3,210	3,205	3,230	3,230	3,255	3,300
Cusick	207	210	210	205	205	200	200	205	205	205	220
Ione	447	445	445	445	445	440	440	445	445	450	450
Metaline	173	175	175	175	185	175	180	170	170	170	170
Metaline Falls	238	240	240	240	240	235	235	240	240	240	245
Newport	2,126	2,140	2,140	2,140	2,150	2,160	2,150	2,170	2,170	2,190	2,215
Pierce	**795,225**	**802,150**	**808,200**	**814,500**	**821,300**	**830,120**	**844,490**	**859,400**	**872,220**	**888,300**	**900,700**
Unincorporated	366,738	372,110	375,955	378,495	381,970	386,050	392,260	400,480	409,020	420,000	426,200
Incorporated	428,487	430,040	432,245	436,005	439,330	444,070	452,230	458,920	463,200	468,300	474,500
Auburn *part*	7,419	7,655	7,850	8,915	9,280	9,595	9,720	9,900	9,965	9,980	9,980
Bonney Lake	17,374	17,500	17,730	18,010	18,520	19,490	20,000	20,500	20,940	21,060	21,390
Buckley	4,354	4,345	4,365	4,370	4,430	4,440	4,550	4,670	4,765	4,885	5,080
Carbonado	610	610	610	610	610	615	635	665	665	665	685
DuPont	8,199	8,430	8,640	8,855	9,175	9,250	9,330	9,385	9,385	9,425	9,525
Eatonville	2,758	2,775	2,785	2,815	2,840	2,880	2,925	2,950	2,955	2,970	3,010
Edgewood	9,387	9,405	9,425	9,460	9,525	9,615	9,735	10,420	10,990	11,390	12,070
Enumclaw *part*	0	0	0	0	0	0	0	0	0	0	0
Fife	9,173	9,220	9,235	9,290	9,405	9,545	9,910	10,100	10,100	10,140	10,200
Fircrest	6,497	6,500	6,525	6,540	6,555	6,575	6,625	6,640	6,710	6,770	6,790
Gig Harbor	7,126	7,200	7,340	7,670	7,985	8,555	9,065	9,560	10,320	10,770	11,240
Lakewood	58,163	58,190	58,260	58,310	58,360	58,400	58,800	59,280	59,350	59,670	60,030
Milton *part*	6,137	6,140	6,150	6,345	6,350	6,375	6,625	6,705	6,705	6,735	6,805
Orting	6,746	6,770	6,790	6,930	7,065	7,290	7,535	7,835	8,105	8,380	8,635
Pacific *part*	92	85	85	85	80	70	55	55	40	35	30
Puyallup	37,022	37,240	37,620	37,980	38,670	38,950	39,850	40,500	41,100	41,570	42,700
Roy	793	795	805	805	805	805	805	815	815	820	820
Ruston	749	750	755	795	830	905	935	975	990	1,005	1,040
South Prairie	434	435	435	435	435	435	435	435	435	480	500
Steilacoom	5,985	6,000	6,015	6,040	6,060	6,115	6,170	6,410	6,425	6,450	6,505

CITY OF AUBURN

2021 – 2025 WATER USE EFFICIENCY PROGRAM



WATER USE EFFICIENCY

As populations continue to climb, demand for limited water supplies is steadily increasing in the Pacific Northwest. Efficient water use is critical for water systems to support growth in their communities and support the environment and recreation. The efficient use of water helps ensure reliable water supplies are available for the City of Auburn (City) well into the future. It is important to the City to not only conserve water, which reduces use, but also promote efficient use, which both conserves water and reduces wasteful uses. The purpose of this document is to provide an analysis of the City's historic water conservation program and to evaluate the existing and proposed conservation and water use efficiency measures.

This document is formatted into two sections. The first section analyzes the previous conservation programs by examining how it was formed, it's program and goals, and analyzes the savings. The second section presents the City's new 2021 Water Use Efficiency (WUE) Program, and includes the new requirements, measures, and demand savings anticipated from the program.

1 PRIOR CONSERVATION PROGRAMS

1.1 History

The first formal water conservation program was developed by the City in 1995, one year after the Washington Department of Health (DOH) jointly published conservation guidelines, as described below. The City's program included several conservation activities such as school outreach, program promotion, leak detection, meter repair/replacement, and conservation pricing. The City enhanced the program in 2001, 2009, and in 2015. The 2015 program will provide the basis of the historical review in this chapter.

The City's 2021 WUE Program follows DOH's 2017 *Water Use Efficiency Guidebook*, while building off previous plans. Therefore, it is worth noting that in preparing previous plans the City reviewed the 1990 South King County Coordinated Water System Plan (CWSP), and Washington Department of Ecology's 1994 *Conservation Planning Requirements (CPR) - Guidelines and Requirements for Public Water Systems Regarding Water Use Reporting, Demand Forecasting Methodology, and Conservation Programs,* and the *Water Conservation Bibliography for Public Water Systems* by the US Army Corps of Engineers.

1.2 Regulatory Requirements

The Washington Water Utilities Council, DOH, and Department of Ecology jointly developed the CPR. Interim guidelines were first established in 1990, and subsequently finalized and approved in 1994. The DOH published the CPR in 1994, which was the basis of the City's 1995 and 2001 conservation programs.

In 2003, the Washington State Legislature passed Engrossed Second Substitute House Bill 1338, better known as the Municipal Water Law, to address the increasing demand on our state's water resources. The law established that all municipal water suppliers must use water more efficiently in exchange for water rights certainty and flexibility to help water municipal suppliers meet future demand. The Legislature directed the DOH to adopt an enforceable WUE Program, which became effective on January 22, 2007. The WUE Program replaced the CPR, and emphasizes the importance of measuring water usage and evaluating the effectiveness of the water supplier's WUE Program.

1.3 Previous Program Goals and Historical Water Usage

The City's 2015-2020 WUE Program was a continuation of the 2009-2014 Program, with specific enhancements to the program to comply with WUE regulations and create an emphasis on efficient water usage rather than only conservation. The program goals were set per the WAC 246-290-830(4)(a) through a public process and posted to the City's website in October 2014. The goals for the 2015-2020 Program targeted a 1 percent reduction per year in Equivalent Residential Unit (ERU) values. The City also wanted to raise the visibility and performance of the Conservation Program by becoming a community leader in water conservation through example and public education. As part of that leadership, the City supported and participated in applicable regional plans in order to maintain a reliable and adequate supply of water for the region.

In 2013, the planning ERU value was 195 gpd per ERU, based on the 75th percentile of the previous six years of data. The 2020 (current) planning ERU value is 179 gpd per ERU, which was also based on the 75th percentile of the previous seven years of data. This equates to a 1.1 percent annual decrease in the planning ERU value.

The annual water use per Single Family account from 2014 through 2020 used to calculate the planning ERU value is shown in Table 1.

Table 1 Historical Annual Water Use Per Account (gpd/account)

Year	Single Family/Duplex
2014	174
2015	179
2016	170
2017	176
2018	193
2019	169
2020	179
Average	177
75th percentile	179
ERUs per Account	1.0

Seasonal water use can have a huge impact on the system's ability to deliver water during peak demands. The winter months generally show a steady monthly usage, while summer months typically show an increase, peak, and decrease in water usage. Historically, single-family residential customer class has produced a large peak in the summer months. This peaking is quantified in the MDD to ADD peaking factor presented in Table 2. The 75th percentile of the MDD to ADD peaking factor for the period between 2012 and 2020 is 1.85, which is slightly above the previous plan of 1.82. The City would like to decrease peak use and has included it as a new goal in the 2021-2025 WUE Program.

Table 2 Historical Annual ADD, MDD, Peak Day and Peaking Factor

Year	Annual Production (MG/year)	Average Day Demand (mgd)	Maximum Day Demand (mgd)	Date of Maximum Day Demand	Max Day/ Avg Day Peaking Factor
2012	2,728	7.64	12.08	8/16/2012	1.58
2013	2,710	7.43	12.07	8/21/2013	1.62
2014	2,764	7.30	12.97	8/6/2014	1.78
2015	2,763	7.58	13.16	6/16/2015	1.74
2016	2,871	7.85	14.53	8/16/2016	1.85
2017	2,484	6.80	12.54	7/26/2017	1.84
2018	2,458	6.73	13.61	7/11/2018	2.02
2019	2,392	6.55	11.29	8/1/2019	1.72
2020	2,291	6.26	13.62	8/27/2020	2.18
Average	2,607	7.13	12.87		1.82
75^{th} Percentile	2,763	7.58	13.61		1.85

1.4 Historical Distribution System Leakage

Distribution system leakage (DSL) is a significant element of the WUE requirements. It is calculated as the difference between the total amount of water produced and the sum of water sold and authorized unmetered water usage. It may include inaccurate master and service connection meters, unaccounted-for non-revenue water use, pipeline leakage, and unauthorized use. DSL does not include authorized water usage such as water used for fire protection, flushing, construction, and other maintenance and operations practices. However, to be credited, this must be accounted for by metering or by estimating water use with credible means. All water that is not authorized is considered distribution system leakage. The DOH requires the 3-year average DSL to be under 10 percent to minimize water waste. The historical 3-year rolling average DSL ranged between 3.4 percent and 9.7 percent for the period from 2013 to 2020.

2 2021-2025 WATER USE EFFICIENCY PROGRAM

The 2021-2025 WUE Program will be a continuation of the City's current WUE Program. Program measures have been expanded, reflecting the City's increased service population of over 50,000 people. The program has also been updated to leverage the City's investments in improved SCADA, leak detection, and Advanced Metering Infrastructure (AMI). The 2021 Plan complies with regulations as set forth in WAC 246-290-830 and DOH's 2017 *Water Use Efficiency Guidebook*. This section summarizes the program's goals, demand and supply side measures, reclaimed water, and DSL. The projected demand with the conservation goals, program budget, and cost savings are also presented.

2.1 Program Goals

Per the WAC 246-290-830(4)(a), all water purveyors with 1,000 or more connections were required to set efficiency goals through a public process. The City has chosen to focus on implementing voluntary measures to decrease both the average and peak water usage. The 2021 program has established the following goals:

- Water Use per ERU: Decrease the planning ERU value (gpd/ERU) 1 percent annually from the current planning ERU value of 179 gpd/ERU, which is the 75th percentile of 7 years of historical data (2014-2020). Revaluate goal when the planning ERU value reaches less than 172 gpd/ERU.
- MDD/ADD Peaking Factor: Decrease the planning peaking factor from the current 1.85, which is equal to the 75th percentile of 7 years of historical data (2014-2020), to a planning peaking factor of less than 1.72.
- Distribution System Leakage: Maintain 3-year average DSL under 10 percent to minimize water waste.
- Customer Support: To provide the service and support necessary to those water customers expressing a desire to conserve water as a part of their environmental ethic and as a means of minimizing water bills.
- Regional Support: To support and participate in the *South King County CWSP* and other applicable regional plans in order to maintain a reliable and adequate supply of water for the region.

The WUE Program measures, as summarized below, are designed to help meet these established goals.

2.2 Program Requirements

The WUE requirements emphasize the importance of measuring water usage and evaluating the effectiveness of the City's program. There are three fundamental requirements of a WUE Program that the City follows:

- **Planning Requirements** – Municipal water suppliers are required to:
  - Collect data.
  - Forecast demand.
  - Evaluate WUE measures.
  - Calculate DSL.
  - Implement a WUE Program to meet their goals.
- **Distribution Leakage Standard** – Municipal water suppliers are required to meet a distribution system leakage standard to minimize water loss from their distribution system.
- **Goal setting and performance reporting** – Municipal water suppliers are required to set WUE goals through a public process and report annually to their customers and DOH.

2.3 Mandatory Measures

The WUE Program includes supply side measures that the City implements to understand and control leakage including new meters, leak detection surveys, and water audits. Per the WUE requirements, the following measures shall be continued for the 2021-2025 WUE program:

- Install production (source) meters.
- Install consumption (service) meters.
- Perform meter calibration.
- Implement a water loss control action plan to control leakage if the 3 year rolling average exceeds 10 percent.
- Educate customers about water use efficiency practices.
- Establish rates that encourage water demand efficiency. See Chapter 11 of 2015 Comprehensive Water Plan for discussion on water rates.
- Evaluate reclamation opportunities.

2.4 Distribution System Leakage

DSL is a significant element in the City's WUE Program. In the past, distribution leakage was referred to as "unaccounted-for-water". To limit DSL, the City has ongoing leak detection, meter calibration, and an active repair and replacement program for water system infrastructure. Additionally, the City has recently increased its efforts to reduce non-payment of bills and water theft.

Further, the City has updated its SCADA and implemented AMI during the 2015-2020 period. These investments significantly increase the City's ability to measure DSL both

temporally and geographically. The resulting information allows the City to better target its WUE activities to reduce DSL.

2.4.1 Increasing Effectiveness of the WUE Program with AMI

The City implemented AMI throughout the system during the 2015-2020 program period. AMI provides a new tool to improve the effectiveness of the WUE Program measures. AMI provides detailed water use data for each customer that allows the City to better understand water use patterns and target WUE Program measures to specific customers. Data is sent 6 times each day and is stored in 15-minute intervals indefinitely. Below is a summary of how the City uses AMI.

- Run continuous consumption reports daily to identify customer leaks.
- Detect service leaks sooner resulting in reduced costs for Service Replacement program and Leak Detection program.
- Use meter tamper and other daily alarms to reduce water theft.
- Compare production and customer water use to calculate DSL on a monthly basis.
- Implement a customer portal to provide additional reporting options to educate customers, such as their peak water use.

2.5 2015-2020 Demand-Side Program Measures

The City has incorporated program measures that target reductions in customer usage, saving the customers money without reducing the quality of service. Under the WUE requirements, a program measure may include water efficient devices, actions, business practices, or policies that promote efficient water use. With 15 measures as part of the 2021 Program, the City exceeds the minimum DOH requirement of 12 measures. WUE measures can target specific customer classes or a combination of customer classes. The City's demand-side program measures are summarized below.

1. School Outreach: School programs will continue to be arranged to educate students on efficient water usage. The City has partnered with Nature Vision to provide classroom education for grades K through 12. This program provides hands-on activities to teach water conservation, water supply, groundwater and surface water protection, and the water cycle. The City will conduct alternative or additional outreach if requested by schools.
2. Speakers' Bureau: The City will seek speaking opportunities to discuss water use efficiency with a wide-audience spectrum. Topics could include water efficient fixtures and appliances, curbing seasonal peak demands, lawn watering practices, etc.
3. Program Promotion: The City will seek opportunities for public service announcements for water use efficiency, and submit news articles to local papers

and Auburn City Magazine on efficient water usage especially during the spring and summer months. Additional information is published on the City's website

4. Theme Shows/Fairs: The City hosts an annual Kids Day fair. The fair includes a wide range of activities for all ages of kids. As part of the fair, the City has fun water related activities and provides water efficiency brochures and other materials. The City will conduct outreach at other Theme Shows/Fairs if requested.

5. Water Audits: The City will conduct a water audit upon the request of a customer, including industrial, commercial, and institutional customers. The audits will review items such as: recirculation of cooling water, reuse of cooling and process water, reuse of treated wastewater, efficient landscape irrigation, low water using fixtures, fixing leaks, and process modifications.

6. Customer Leak Detection: The City identifies potential leaks through investigation of the water meter upon request of customers. The City's AMI system identifies smaller leaks and allows the City to notify customers of a potential leak within a couple days of the leak starting.

7. Bills Showing Consumption History: The City will continue to provide customer bills showing the previous year's water usage. The City is evaluating AMI customer portal options that will educate customers on their water use, alert them to leaks in real time, and identify opportunities to reduce their peak water use to help the City meet its goal of reducing the MDD:ADD ratio.

8. Water Saving Device Kits: The City will participate in distribution of water use efficiency kits through education events such as speakers' bureaus, theme shows, fairs, and through bill insert request forms.

9. WUE Pricing: The City has an inverted block rate structure for single-family residential customers to encourage WUE. The City will consider WUE in future cost of service/rate studies. Studies will determine the most appropriate water structures and rate levels to achieve the City's WUE goals, while generating sufficient revenues for utility operations. The studies consider uniform rates by class, inverted block rates, seasonal rates, and excess use rates.

10. Water Efficient Toilet Rebate Program: The City will continue to provide rebates to customers that replace old toilets with new high-efficiency toilets through their EPA WaterSense Toilet Rebate program.

11. Low-Flow Shower Heads Giveaways: The City gives away free low-flow shower heads at the Utility Billing Counter.

12. School Outdoor Water Use Reduction: The City will target schools in an effort to reduce their outdoor water consumption. Water audits and education on benefits of replacing inefficient irrigation systems or landscaping (including turf) will be conducted.

13. City Water Use Reduction: The City will audit the water use of City accounts in an effort to identify both indoor and outdoor water saving opportunities. The Water Utility staff will help educate City account holders on WUE; however, no water budget has been allocated to implement water saving devices at City facilities.

14. Landscape Workshops: The City will seek opportunities to educate homeowners on water saving landscaping.

15. Rainwater Harvesting: The City will evaluate implementation of a rainwater harvesting (rainwater reclamation) promotion program as a means to reduce irrigation water usage by commercial, public and residential customers. The City Stormwater Utility's requirement to use Low Impact Development (LID) measures, where feasible, strives to keep rainwater on the property, further reducing irrigation demands.

WUE measures can result in savings in energy and cost, both for the City and its customers, as described below:

- Reduced water use can result in significant customer energy savings because water heaters are the second largest energy users in the home. Hot water use can be reduced almost one-third by cost-effective WUE measures, such as water efficient fixtures and appliances. Significant energy savings can also occur for industrial processes requiring water heating and other power uses.
- Efficient landscaping and irrigation techniques save on maintenance costs.
- Reductions in water production decrease the energy costs incurred to treat and distribute water and to collect and treat wastewater. Chemical costs are also reduced in water and wastewater operations.
- Actions that result in water production cost savings include:
  - Identification of non-revenue water could result in recovery of unbilled revenue from inaccurate meters and reduced unauthorized water usage (theft).
  - Leak detection helps prevent major main breaks, which could result in significant repair costs as well as lost water for sale.
  - Leak detection reduces the City's liability by preventing potential property damage.
  - Repair and/or replacement of service and source meters allows the City to recover unbilled water revenues.

2.6 Reclaimed Water

According to WAC 246-290-100 and the WUE requirements, water systems with over 1,000 connections must collect and evaluate information on reclaimed water opportunities. The City is committed to wastewater reuse and rainwater reclamation. The City monitors opportunities for use of King County's reclaimed water through the City's involvement in the Metropolitan Water Pollution Abatement and Advisory Committee (MWPAAC) and Regional Water Quality Committee. Additionally, the City has completed the King County Water Reclamation Evaluation Checklist (see Appendix J in the 2015 Comprehensive Water Plan). Currently, there are no reclaimed water users in the City. The City considers the most likely users of reclaimed water to be the irrigation customer class. Total irrigation use

just from dedicated irrigation meters for 2020 was 0.40 million gallons per day. Irrigation from residential customers was significantly more. The City has also identified that it may be possible for three large users to use reclaimed water (Boeing, Emerald Downs, and Supermall/Walmart); however, these users have not confirmed an interest in using reclaimed water and there is not currently a reclaimed water source in the area.

The City will implement reclaimed water as a conservation measure and include this savings in the demand projections when specific opportunities arise. The City, in conjunction with King County, may develop projects or consider participation in water reuse projects and programs developed by adjacent jurisdictions and others as appropriate. The efforts may include demonstration or pilot projects developed in accordance with applicable federal, state, and local laws and regulations.

2.7 Budget

The City has established a budget for outside expenditures for applicable program measures from 2021-2025, shown in Table 3. Program Measure budgets coincide with the biannual budget. Budgets increase by three to four percent on average over the period.

Table 3 2021-2025 Budget for Each Program Measure

Measure	2021	2022	2023	2024	2025
1.School Outreach	$20,000	$20,000	$22,000	$22,000	$24,000
2.Speakers' Bureau*	$1,500	$1,500	$1,550	$1,550	$1,600
3.Program Promotion*	$2,000	$2,000	$2,200	$2,200	$2,400
4.Theme Shows/Fairs, 14.Landscape Workshops	$6,350	$6,350	$6,400	$6,400	$6,450
5.Water Audits, 6.Customer Leak Detection, 12.School Outdoor Water Use Reduction, 13.City Water Use Reduction, and 15.Rainwater Harvesting*	$15,000	$15,000	$16,000	$16,000	$17,000
7.Bills Showing Consumption History*	$2,000	$2,000	$2,200	$2,200	$2,400
8.Water Saving Device Kits	$6,000	$6,000	$6,500	$6,500	$7,000
9.Conservation Pricing*	$9,000	$9,000	$9,200	$9,200	$9,400
10.Toilet Rebates and 11.Low-flow Shower Heads	$5,000	$5,000	$5,500	$5,500	$6,000
Totals	$66,850	$66,850	$71,550	$71,550	$78,250

*City labor costs only

Table 4 shows the City's budget for required WUE measures through the planning period.

Table 4 2021-2025 Budget for System Required WUE Measures

Measure	2021	2022	2023	2024	2025
Leak Detection & Repair	$8,000	$8,000	$8,500	$8,500	$9,000
Large Meter Test/Repair/Replace	$20,000	$20,000	$22,500	$22,500	$25,000
Service Line and Meter Replacement*	$150,000	$150,000	$175,000	$175,000	$200,000
Totals	$178,000	$178,000	$206,000	$206,000	$234,000

*primarily City labor costs

2.8 Public Participation

The City publishes its Water Use Efficiency Annual Performance Report on the Water Utility webpage and summarizes it in the Annual Water Quality Report. The report, which is also submitted to DOH, provides the City's DSL, date of most recent public forum, WUE goals, description of progress in reaching goals, and additional information on WUE efforts. The City website provides the last three years of Efficiency Reports allowing customers to compare performance between several years. The City's website also prominently displays its Conservation Promotions, including frequently asked questions and rebate forms, that are also available at the Utility Billing counter.

The City has conducted a public process to establish its 2021-2025 WUE Program Effectiveness goals, which are outlined in the next section. A public meeting will be held on August 2, 2021 at 7:00 PM. Public comments were incorporated into the WUE goals, and are in the Appendix.

2.9 2015-2020 WUE Program Effectiveness

The City's water use, both on average and peak demand days, has declined. An aggressive WUE Program is likely a major reason for this decline; however, it is difficult to estimate the actual water savings directly resulting from the City's WUE Program because the measures are not directly quantifiable. Measures such as rebates for high-efficiency toilets and low-flow showerheads, do have a direct water savings per device, but the water savings from installation of water saving devices without requests for rebates is impossible to measure. The impacts on customer water use as a result of public education, which is the main focus of the City's WUE Program, is challenging to measure, as the response of each participant varies greatly.

2.9.1 Future Methods for Measuring Program Effectiveness

The existing program effectiveness was evaluated using system-wide historical water use data. Future program effectiveness may measure the effectiveness of the City's WUE

Program based on targeted public education programs to customers in a particular area. This area could be limited to a particular pressure zone, group of neighborhoods, etc., but should be an area for which the City can track water use before and after participation in WUE activities or events. Winter months would provide an estimate on indoor water use, since outdoor water uses, such as irrigation, are kept to a minimum during the winter. Summer months could provide an estimate on total indoor and outdoor water use.

The first step would be to establish a baseline from historical information. The second step would be to evaluate the resulting water use after promoting WUE through targeted activities and events to customers in the defined area. AMI wouldprovide additional capabilities to more easily perform these studies. The water use would be tracked for an additional year to identify seasonal trends. Some consideration would need to be given to variations in weather and economic conditions. Another method would be to perform the same before/after water use analysis for WUE Program participants who volunteer and provide their address. The resulting information would be valuable for the City to correlate its WUE Program efforts with direct water savings for its customers.

2.9.2 Cost Savings

The WUE Program primarily provides cost savings in two ways. Reducing demand may reduce or delay capital projects for additional supply and expanded distribution infrastructure. Additionally, reducing DSL can provide additional revenue, as well as increase the efficiency of supplying existing water uses.

The City has completed a cost analysis of their proposed WUE Program using historical data and projected annual water savings. The City has exceeded its WUE Program goal of five percent water use reduction from 2014 through 2020; the actual reduction was nine percent. However, significant portions of the water use savings may be attributed to the factors other than the WUE Program, such as the economy. To avoid over-estimating cost savings, it was assumed that the WUE Program only achieved its goal of five percent, rather than the 9 percent reduction; this corresponds to savings of 0.4 mgd of ADD from 2014 to 2020.

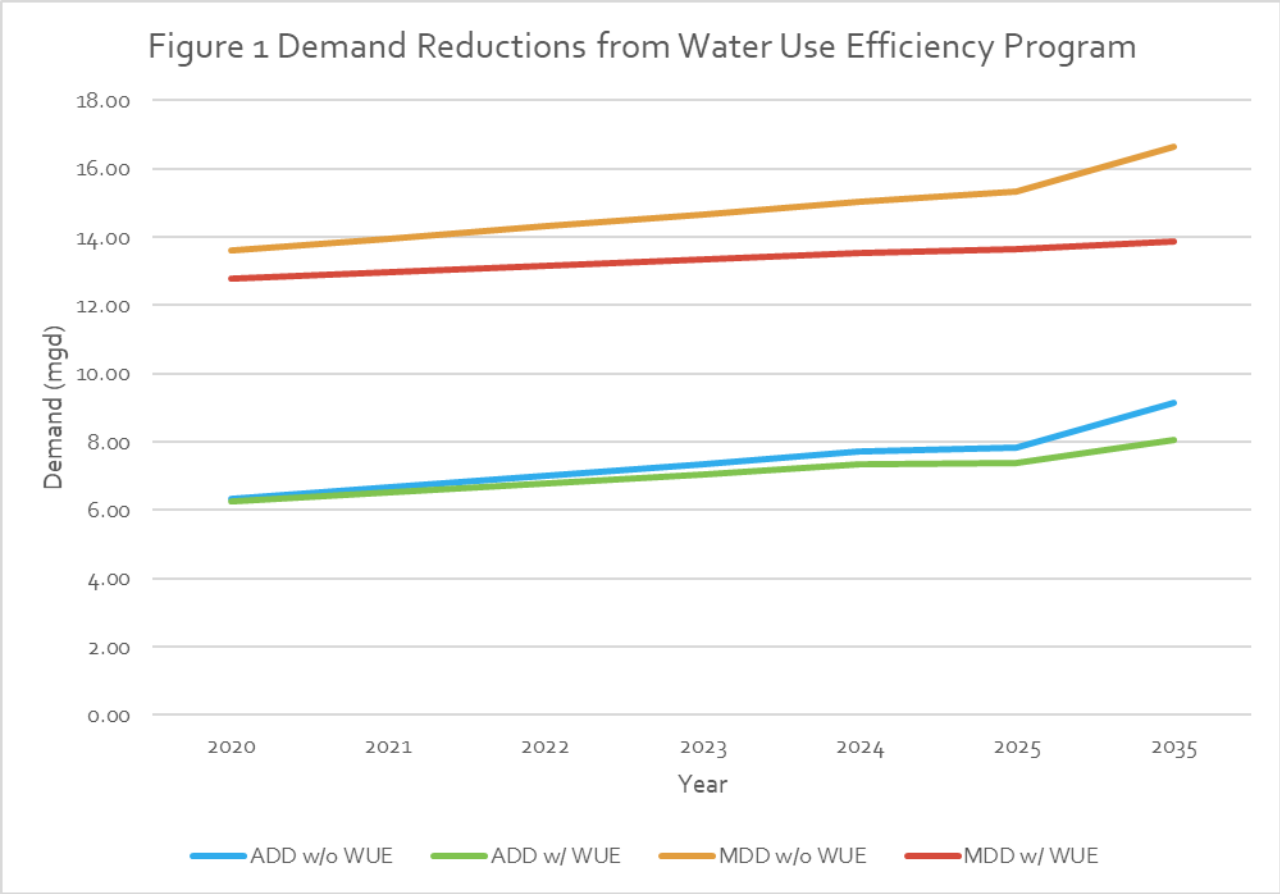
The City will budget approximately $244,850.00 for the WUE Program in 2021. This budget includes both the WUE Program measures ($66,850.00), and the required measures, ($178,000.00). This annual expenditure is budgeted and expended through the City's operation and maintenance budget. Based on the projected 2021 budget and the estimated annual water savings of 0.06 mgd, projected unit cost of water from the City's program for 2021 is estimated to be $0.0112 per gallon on average. It is important to consider the majority of the WUE budget is for service line and meter replacements, which is a key Utility business practice to maintain accurate billing and payment. Without these costs, the estimated cost for each gallon of water saved by the WUE Program is only $0.0031 per gallon on average. Additionally, WUE plays an important role in reducing the need for new supplies and delaying costly distribution system upgrades.

2.10 Projected Water Demand

The WUE Program is only applicable to retail customers. Wholesale customer demand is not included in projections. The projected water demand for the Retail Water Service Area with and without WUE for the ADD and the MDD are presented in Table 5. Demands are presented for the 15-year planning period, as well as the Ultimate demand. The planning ERU value of 172 gpd/ERU is expected to be achieved in 2025 based on an annual one percent decrease. No further reductions in demand are projected beyond 2025. Figure 1 is a graphical representation of the data in Table 5.

Table 5 Retail ADD & MDD with and without WUE

Demand	2020	2021	2022	2023	2024	2025	2035	Ultimate
ADD w/o WUE	6.35	6.67	7.00	7.35	7.72	7.84	9.15	11.65
ADD w/ WUE	6.26	6.53	6.79	7.06	7.33	7.37	8.07	10.26
Savings	0.09	0.13	0.21	0.29	0.38	0.47	1.08	1.39
% Savings	1%	2%	3%	4%	5%	6%	12%	12%
MDD w/o WUE	13.62	13.96	14.31	14.67	15.03	15.32	16.66	21.20
MDD w/ WUE	12.80	12.98	13.16	13.35	13.53	13.63	13.88	17.67
Savings	0.82	0.98	1.14	1.32	1.50	1.69	2.78	3.53
% Savings	6%	7%	8%	9%	10%	11%	17%	17%



As shown in the table, WUE measures are projected to result in an average day reduction in retail demand of 1.08 mgd by 2035, representing a reduction of approximately 12 percent. A reduction of 0.47 mgd (6percent) is projected by 2025. As shown in the table, WUE measures are projected to result in a reduction in retail MDD of 1.69 mgd (11 percent) by 2025, and approximately 2.78 mgd (17 percent) by the year 2035.

2.11 Summary of Water Use Efficiency Program

The City's WUE Program provides for efficient water use and supports continued growth. This program fulfills all the necessary requirements of DOH. The selected program measures will allow the City to meet its WUE goals, resulting in decreased water demand. Measures are interrelated and will help the City achieve its goals to both reduce average water use and peak water use per customer. Public education measures (showing water use in bills, workshops, school outreach, fairs/trade shows, etc.) will continue to be a main focus of the WUE Program to increase customer awareness and knowledge of WUE opportunities. Public education is needed to support the City's other WUE measures and to support reductions in both average and peak water use. Continued appliance rebates and

shower head give-away help customers implement what is learned in the public education campaign. With the implementation of AMI, it is expected that the City and customers will be able to identify substantially more water loss reduction opportunities than previously possible. Therefore, customer and City leak detection and water audits may have a prominent role in the 2021-2025 WUE Program. The increased water loss reduction activities are expected to support reducing average water use. The program will also continue to provide financial disincentives for excessive water use through metering and WUE pricing. This aspect of the program is likely to help reduce peak water usage further. These measures will result in the City being able to achieve its WUE goals, which results in reduced demand.

In conclusion, the City will maintain the target water use efficiency goal of one percent reduction per year in the planning ERU value from 179 gpd per ERU to 172 gpd per ERU by 2025. Additionally, it is the City's goal to reduce the MDD/ADD peaking factor from 1.85 to 1.72. The goals will be reached through implementation of the proposed program measures.

ENGINEERING DESIGN STANDARDS

January 6, 2021

City of Auburn
Community Development & Public Works Departments
25 West Main Street
Auburn, WA 98001-4998

Approved By:

Jacob Sweeting

Jacob Sweeting, P.E.
Assistant Director of Engineering Services/City Engineer

01/12/2021
Date

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7 Water Facilities

7.00 Preface

The design and construction of Public Water Facilities shall conform to the State of Washington Department of Health (DOH) Design Standards for Group A Public Water Systems, the Standard Specifications of the American Water Works Association (AWWA), and the most recent published and adopted edition of the Uniform Plumbing Code (UPC), unless modified herein.

Compliance with these standards does not alleviate the design engineer from using sound professional engineering practices. The design criteria contained herein are the minimum acceptable under standard conditions. Special conditions may require more stringent requirements that will be addressed during the plan review process. Contact the City of Auburn Engineering Services for specific requirements for the design of pump stations, wells, reservoirs, treatment systems, and other special facilities.

The design criteria used to estimate future line capacities are established in the City's Comprehensive Water Plan. Anyone proposing to extend or modify the City's water system should contact the Public Works Department for information. Applicants needing to construct public water improvements shall enter into a Developer Public Facility Extension Agreement (FAC) with the City. The City's Permit Center can provide information on this agreement as well as applicable permit and connection fee estimates.

7.01 Water Mains

Unless otherwise approved by the City Engineer, all water mains shall be constructed using Special Class 52 Cement Lined Ductile Iron Pipe having standard asphaltic coating on the exterior and cement–mortar lining on the interior. The list of acceptable valves, fittings, and other appurtenances for water facility construction is subject to change as new and improved components become available. Refer to the City of Auburn's Construction Standards manual (latest edition) for the most current information on these requirements.

The design of water mains shall meet the requirements in the following subsections:

7.01.01 Water Main Sizing

Public water mains shall be sized using the following criteria:

A. New water mains shall be sized, as indicated in the City's current Comprehensive Water Plan. For lines not specified in the plan, the mains shall be sized as described in this subsection.

B. Water mains in single-family residential areas shall be a minimum of 8 inches in diameter.

C. Water mains in multi-family residential and non-residential areas shall be a minimum of 12 inches in diameter. Onsite water main loops, with no possibility of future extension as determined by the City Engineer, serving two or less fire hydrants with no fire line connection may be reduced to a minimum diameter of 8 inches.

D. Water mains shall be looped to provide a minimum of two separate connection points to the existing water system, with sufficient valves so that water can be

delivered through either connection point independent of the other, except where determined to be not feasible by the City Engineer. Such looping will provide more reliable service and water movement through the distribution system.

E. Water mains shall be sized under fire flow conditions, so that flow velocity shall not exceed 8 feet per second in distribution mains or 5 feet per second in transmission mains.

F. Exceptions to the minimum diameter allowed may be made in small cul-de-sacs and in areas where looping of a main is determined to be not feasible. In these cases, the main may be a minimum of 4 inches in diameter after the last fire hydrant connection.

If a conflict arises between two or more of these criteria, the water main shall be designed using the largest pipe diameter required.

7.01.02 Water Main Location

A. Water mains shall be installed with no less than 42 inches and no more than 72 inches of finished cover.

B. Water mains shall be located in the public right-of-way or within a public water utility easement. Water mains located in the public right-of-way shall meet the requirements of **Section 9.03**.

C. Water mains shall be located a minimum horizontal distance of 10 feet from buildings and sanitary sewer mains and a minimum horizontal distance of 5 feet from all other utilities. The minimum separation distance is measured from the outside wall of each pipe.

D. At crossings between utilities, water mains shall be located a minimum vertical distance of 18 inches above sanitary sewer mains and a minimum vertical distance of 12 inches from all other underground utilities, and shall be in conformance with the applicable sections of the State of Washington Department of Ecology's "Criteria for Sewage Works Design" manual (DOE Manual) unless modified herein.

E. Water mains shall be extended through the full width of the property to be served. Where deemed appropriate by the City Engineer, provisions shall be made for looping all existing and new dead-end mains associated with the project. If, at the time of project approval this is not feasible, an easement shall be provided and the main extended to the adjacent property line or right-of-way for future looping of the dead-end main.

F. When the potential exists to serve adjacent properties, water mains shall extend through the property being served, through the shared driveway or access tract serving the property(s), or across the entire length of the lot frontage as necessary to serve the adjacent properties, as determined by the City.

7.01.03 Water Main Fittings

A. Blowoffs (**See** City of Auburn **Standard Detail W-03 or W-04**) are required on dead-end water mains with a diameter of 6 inches or less; hydrants are required for dead-end mains over 6 inches in diameter. Blowoffs shall also be installed at the low point of a depressed "sag" section of a water main, except where a fire hydrant is installed within 50 feet of said area or on a short segment (20 feet

or less) where the water main dips under other utilities. Blowoffs shall be placed in a level clear area within the right-of-way or easement, be located as close to the main as possible, and be easily accessible to the City.

B. Combination air/vacuum release valves (**See** City of Auburn **Standard Detail W-02**) are required at high points in water mains when an abrupt vertical change in pipe elevation exceeds one pipe diameter, except where fire hydrants are installed within 50 feet of said area. Combination air release valves shall be placed within a level clear area within the right-of-way or easement and be easily accessible to the City.

C. All bends shall have mechanical or flanged joints and concrete thrust blocking (**See** City of Auburn **Standard Detail W-01**). The City may require restrained joints in lieu of thrust blocking in special conditions.

D. Tees shall have flanged joints unless there is no valve against the Tee, in which case the Tee may be flanged or mechanical. Tees shall include concrete thrust blocking (**See** City of Auburn **Standard Detail W-01**). When connecting to an existing public water main, a tapping tee and valve may be used, if only a single valve is needed at the tee, or unless otherwise approved or required by the City.

E. Tapping tees are not allowed on commercial fire lines or other water taps needing uninterruptible service; a cut-in tee or installed tee is required.

F. Size-on-size taps are not allowed unless authorized in writing by the City Engineer or designee.

G. The maximum allowable deflection per joint for ductile iron water mains shall be half of the maximum joint deflection specified by the pipe manufacturer or 4 degrees, whichever is less.

7.02 Water Services

See City of Auburn **Standard Details W-06, W-13 through W-16a, and W-20.**

The City owns and shall maintain the water service line from the main to the meter, the meter and setter, the meter radio, the meter tailpiece, and the meter box. The property owner owns and shall maintain the tailpiece connection fitting, shut-off valve, service line after the shut-off valve, and other facilities such as pressure reducing valves, pumps, or backflow prevention assemblies behind the meter.

For fire sprinkler connections, City ownership and maintenance responsibilities include and cease at the valve installed at the point of connection between the main and the fire service line.

7.02.01 Domestic Services

Domestic Water Services are defined as any service that connects directly to plumbing within a structure and is used for drinking, cooking, washing, and other standard uses of potable water. Domestic water services shall meet the following requirements:

A. Each parcel receiving water service shall have its own meter. Non-single family developments with multiple buildings on a single parcel shall have a meter for each building unless otherwise authorized in writing by the City Engineer or designee.

B. Installation of corporation stops, water services, and meters shall be per City of Auburn Standard Details. The City may, at the City's option, install services from public water mains to the meter in existing rights-of-way and easements. The

developer/contractor will install and/or replace all applicable services when installing new water mains required for the project. The City will furnish and install the meter for services of 2 inches and smaller.

C. Water meters of 3 inches and larger will be purchased from the City and installed by the developer/contractor under City observation. Where vaults are required, the vault roof shall contain a 2-inch port for remote read device.

D. Water meters shall be located in a level unobstructed area not subject to vehicular parking or travel, and as close to the City main as possible with the distance not to exceed 50 feet.

E. Residential sites shall have water meters placed in landscape strips within the right-of-way, set 2 inches above the finished grade including landscaping and mulch. If no areas are available in the right-of-way that are not subject to vehicle parking or traffic, water meters may be placed outside the right-of-way in public water utility easements.

F. Commercial and industrial sites shall have meters located near driveway entrances within the right-of-way or within public water utility easements in landscape islands located near access driveways when placement in right-of-way is not practical.

G. Meters may not be placed within sidewalks or pedestrian travel pathways except in cases where obstructions prevent the meter box from being placed behind the sidewalk or in a landscape strip (where a landscape strip is present). In such conditions, the meter box shall be placed in the sidewalk such that the edge of the meter box closest to the roadway is no closer than 6-inches to the adjacent edge of sidewalk. A minimum of 2 inches shall be maintained between meters boxes.

H. The water service diameter and meter size shall be sized per Tables 610.3 and 610.4 of the current Uniform Plumbing Code and, upon request by the City, supporting documentation of the meter size selection provided to the City. The length of the service between the meter and the structure shall not exceed 300 feet.

I. When installing multiple services to a public main, a minimum spacing of 2 feet shall be used between corporation stops, a minimum spacing of 5 feet shall be used between corporation stops and tapping tees, and a minimum spacing of 5 feet shall be used between tapping tees on existing ductile iron mains and 10 feet on all other types of existing water main materials.

J. Domestic water services shall be connected to a looped distribution main unless otherwise approved by the City.

7.02.02 Other Services

Irrigation and other non-domestic water services shall meet all the above requirements as well as the following:

A. An Irrigation meter shall be installed in cases where water is used for landscape purposes by non-single family customers and does not enter the sanitary sewer system.

B. For fire sprinkler service line requirements, see **Section 7.06.02**.

C. Cross connection control devices shall be installed per **Section 7.04**.

7.02.03 Service Abandonment

Services shall be abandoned when properties are redeveloped and existing meters will no longer be used. The following actions are required after removal of the meter:

A. Obtain the necessary permits (e.g., for work in the right-of-way, for meter abandonment)
B. Shut off the corporation stop at the main.
C. Disconnect the service line from the corporation stop.
D. Remove the meter box.
E. Restore the roadway or other surface(s) disturbed by construction activities (e.g., trench patch/overlay)

7.03 Water Valves

Water valves shall be as specified in the Construction Standards and meet the following additional requirements:

See City of Auburn **Standard Details W-17 through W-19 for valve box and extensions**

7.03.01 Water Valve Sizing

Water valves shall be of the resilient wedge gate variety. Butterfly valves shall be placed on water mains 14" or larger in diameter. Valves larger than 12 inches require the valve to be turned with a gear to maintain minimum cover.

7.03.02 Water Valve Location

A. Water valves shall be installed along the water mains at a maximum spacing of 400 feet and at the intersection of lateral lines. A maximum of 20 service connections between valves shall be maintained except on dead end residential streets where up to 30 service connections between valves are allowed.

B. Water valves shall be located in clusters at tees and crosses when possible and shall be located so that each leg of the main line system can be isolated separately.

C. When extending public water mains, a water valve may be required near the end of lines where future extensions are projected.

D. Water valves shall not be placed within the wheel path of vehicle traffic.

E. A gravel or paved road surface may be required within the public water utility easement as needed to allow access to valves and other appurtenances.

F. Valves shall be adjusted to final grade in accordance with City of Auburn **Standard Detail T-05.**

7.04 Cross Connection Control

See City of Auburn **Standard Details W-22 through W25.**

Water Systems shall be designed to protect the City water system from contamination via cross connection control in accordance with Washington State Law (WAC 246-290-490), Auburn City Code (ACC), the City's Cross Connection Control Program manual, and these design standards. Premises isolation shall be provided on service connections and proposed building tenant improvements in accordance with these standards.

7.04.01 Domestic Services

A. Backflow protection assemblies shall be installed on all new non-single family service connections. Backflow protection assemblies shall be installed on existing non-single family service connections as directed by the City Cross Connection Specialist. The type of backflow protection assembly shall be as determined by the City Cross Connection Specialists.

1) A Reduced Pressure Backflow Assembly (RPBA) shall be installed adjacent to the meter or at an alternate location where the service line enters the building. RPBA assemblies installed at an alternate location, require the approval of the City, shall have no connections between the meter and the assembly, and shall be installed with adequate drainage to accommodate discharges from the RPBA.

2) A Double Check Valve Assembly (DCVA) for domestic service shall be installed adjacent to the meter, unless installed at an alternate location approved by the City Cross Connection Specialists.

7.04.02 Irrigation Services

A. A backflow prevention assembly shall be installed on all irrigation service connections. The layout of the backflow prevention assembly shall be per City of Auburn **Standard Detail W-06** for single family residential services up to 2 inches and per City of Auburn **Standard Detail W-20** for non-single family residential services. The minimum level of backflow prevention required shall be provided by a Double Check Valve Assembly (DCVA) per City of Auburn **Standard Detail W-24**. A higher degree of protection may be required if deemed necessary by the City Engineer, which may include a Reduced Pressure Backflow Assembly (RPBA) per City of Auburn **Standard Detail W-22**.

B. The backflow prevention assembly shall be installed adjacent to the meter.

7.04.03 Fire Line Connections

A. A backflow prevention assembly shall be installed on all fire service connections. The layout of the backflow prevention assembly shall be per City of Auburn City of Auburn **Standard Detail W-09** for single family residential services up to 2-inches and per City of Auburn **Standard Detail W-20** for non-single family residential services. The minimum level of backflow prevention required shall be provided by a Double Check Valve Assembly (DCVA) per City of Auburn **Standard Detail W-24**. A higher degree of protection may be required if deemed necessary by the City, which may include a Reduced Pressure Backflow Assembly (RPBA) per City of Auburn **Standard Detail W-22**.

B. The backflow prevention assembly shall be located in the building riser room.

7.04.04 General

A. A DCVA shall be installed to provide adequate access for inspection, testing and maintenance.

B. A DCVA located outside the building shall be installed in a vault, as described on City of Auburn **Standard Detail W-24.**

C. A DCVA located inside the building shall be installed per City of Auburn **Standard Detail W-25**.

D. An RPBA shall be installed in an above ground enclosure or at alternate location with no connections between the meter and assembly (**see** City of Auburn **Standard Detail W-23**). An RPBA is required for all services utilizing chemicals.

E. Prior to installation, 2 sets of backflow prevention assembly plans, including the connection point to the City main, shall be submitted for review and approval by the City.

F. Only assemblies listed on the current list of Backflow Prevention Assemblies Approved for Installation in Washington State shall be allowed. This list is maintained by the State of Washington and is available from the City.

G. When multiple buildings are proposed on a parcel the building backflow prevention devices shall all be located outside the buildings or all be located inside the buildings per City of Auburn Standards.

7.05 Pressure Reducing Stations

A Pressure Reducing Station shall be installed as required between pressure zones to maintain adequate pressure in the water system. Isolation valves are required upstream and downstream of the station. Contact the City Water Utility Engineer for specific requirements, when applicable. Water system design shall be done so as to minimize the number of pressure reducing stations necessary.

7.06 Fire Systems

7.06.01 Fire Hydrant Assemblies

See City of Auburn **Standard Details W-07 & W-08.**

Fire Hydrant Assemblies shall meet the following requirements:

A. Fire hydrant assemblies shall conform to the standard details listed above.

B. Fire hydrant service lines shall be installed at right angles to 8 inch minimum diameter supply mains.

C. Fire hydrants shall stand plumb, be set to meet manufacturer's specification for ground bury line, and have a clear, level area around the hydrant with a radius of no less than 60 inches.

D. Fire hydrants shall be located no closer than 50 feet to the surrounding structures, or at a distance as determined by the Fire Marshal and approved by the City Engineer. Fire hydrants shall be located such that no portion of the fire hydrant is within 5 feet of any portion of a driveway (including throat, apron, and wings).

E. Fire hydrants shall be provided with two 2½ inch National Standard Thread (NST) hose ports and one 4½ inch NST by 5 inch hose port with a Storz adapter and cap.

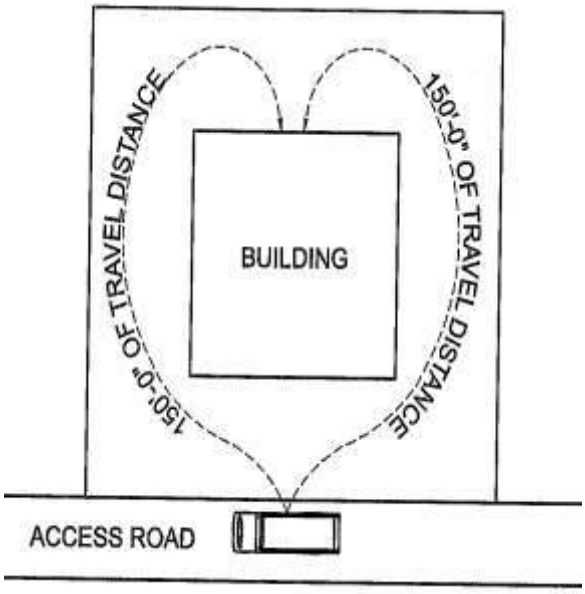
F. The pumper port shall face the street or fire access road and be readily accessible to any fire vehicle for firefighting and pumping operations. There shall be at least 18 inches clear from the face of the pumper port to the edge of pedestrian or traveled ways.

G. The service line from the supply main to the fire hydrant shall be 6 inches in diameter unless the service line extends over 50 feet in length, in which case the service line shall be 8 inches in diameter.

H. Fire hydrants shall be installed with a maximum spacing of 600 feet along streets in single-family zones and 300 feet in all other zones.

I. The maximum distance allowed from any part of a single-family residential structure to the closest fire hydrant is 450 feet.

J. Buildings, other than single-family residences, located with portions of the building more than 150 feet in vehicular travel (see figure below) from a fire hydrant assembly or with building fire flow over 2500 gpm, shall require on-site fire hydrant assemblies. These hydrants shall be served by a public water main that loops around the building, or complex of buildings, and reconnects back to a distribution supply main.



7.06.02 Fire Sprinkler Systems

Fire Sprinkler Systems shall meet the following requirements:

A. Any contractor offering to design, install, test, and/or provide maintenance of fire sprinkler systems in Washington must be licensed with the State Fire Marshal's Office, Licensing Section.

B. Fire sprinkler systems shall be required in commercial/industrial and multifamily buildings according to the adopted fire code regulations. Sprinkler systems may be required in single-family residences when determined by the City and the Fire Authority.

C. Fire sprinkler supply lines for commercial buildings, unless designed by a Fire Protection Engineer, shall be a minimum of 8 inches in diameter.

D. Fire sprinkler supply lines for non-single family buildings shall be connected to a looped water main.

E. Fire sprinkler supply lines shall be separated from the public water main by a valve located at the point of connection. The fire sprinkler supply line shall be installed with a cut-in tee and shall have a 3 valve cluster unless otherwise approved by the City Engineer.

F. The design of fire sprinkler supply lines for single-family/duplex shall be in accordance with City of Auburn **Standard Detail No. W-09.**

G. A Washington State Certified Level "U" contractor shall install underground fire sprinkler supply lines in accordance with WAC 212-80-010. Prior to installation, 3 sets of underground fire sprinkler supply line plans shall be submitted to the City for approval by the Fire Marshal. Both a State Certified Level "U" contractor and a Fire Protection Engineer shall stamp these plans. A letter from a state certified sprinkler system designer stating "FOR DESIGN PURPOSES ONLY" may be attached in lieu of a stamp from the Fire Protection Engineer.

H. A post indicator valve (PIV) shall be installed on the fire sprinkler supply line between the public water main and the building. PIV's shall be located in such a manner as to be easily visible to Fire Department personnel. A wall-mounted PIV may be installed when the exterior wall of the building is of non-combustible construction. A detail containing this information shall be included with the submitted plans.

I. Fire Department Connections (FDC's) shall be placed within 50 feet of a fire hydrant or as directed by the Fire Marshal. FDC's must be identified and approved by the Fire Marshal.

J. New water mains shall be constructed with valves on each side of fire line taps.

K. Fire sprinkler systems shall have backflow prevention in accordance with **Section 7.04**.

L. Fire sprinkler service lines shall not be connected to fire hydrant service lines.

M. Flow-through fire sprinkler systems may be installed for single family residential only. Design shall be according to NFPA 13D. Backflow prevention is not required for flow-through systems.

7.06.03 Fire Flows

New developments, redevelopment of existing sites, or changes in land use are required to meet the minimum City fire flow requirements listed below. The developer shall provide information to the City to define the building specific fire flow requirements. If the building specific fire flow requirements are greater than the minimums listed below, facilities shall be designed to meet the greater requirement.

The minimum fire flow requirements within Auburn Water Service areas are:

1) Single Family Residential: 1,500 GPM @ 2 Hours
2) Industrial/Commercial/Multi-Family: 2,500 GPM @ 3 Hours
3) Additional fire flow may be required per ACC 15.36A.

Minimum fire flows outside Auburn Water Service areas shall be determined by the water service provider and the Fire Marshal.

If off-site water system improvements are necessary to meet these requirements, the Developer shall be responsible for said improvements.

7.06.04 Fire Authority and Hydrant Access

Fire Authority and hydrant access shall meet the following requirements:

A. Access shall be a minimum of 20 feet wide with a minimum vertical clearance of 13½ feet and capable of supporting 75,000 lbs gross vehicle weight.

B. For 20 feet wide roadways, turns in the access shall be designed using a minimum inside radius of 28 feet and a minimum outside radius of 48 feet. The City can provide a turning template for any situation beyond this.

C. Except as noted otherwise in these standards, access that exceeds 150 feet in length from the face of curb or edge of the existing asphalt of the public road and does not return to a public road shall provide a turnaround within 150 feet of the dead-end. If a hammerhead configuration is utilized for the turnaround, it shall be designed per Figure D103.1 and Table D103.4 in Appendix D of the International Fire Code. If a cul-de-sac is utilized for the turnaround, it shall be designed per the City of Auburn Design Standards.

D. Single family residential driveways greater than 150 feet in length from the face of curb or the edge of the existing asphalt to a location where a single family home has all portions of the building no more than 150 feet, as measured by an unobstructed route around the exterior of the building, shall have an 18 foot wide driveway apron and a minimum 20 foot wide paved surface.

7.07 Public Water Utility Easements

Public Water Utility Easements are required for the placement, operation, and maintenance of water facilities upon private property.

Public Water Utility Easements shall meet the following requirements:

A. Public Water Utility Easements shall extend a minimum of 7½ feet to each side of the centerline of the main and all water appurtenances. Easements shall extend a minimum of 7½ feet either side of the vault walls of pressure reducing stations. Additional easement area may be required for facilities constructed in areas of steep terrain or at greater depths.

B. Public Water Utility Easements shall be provided on the City's standard easement form. Legal description of the easement and the property that the easement encumbers, along with a sketch showing both, shall be stamped and signed by a licensed land surveyor and incorporated into the easement form as exhibits. The legal descriptions and sketch shall be on plain bond paper with margins acceptable to the County of recording.

C. Public Water Utility Easements shall be reviewed by the City and then recorded in the appropriate County prior to acceptance of the public water main.

ENGINEERING CONSTRUCTION STANDARDS

COMPRISED OF
PART 1: SPECIAL PROVISIONS
&
PART 2: STANDARD DETAILS

January 6, 2021

City of Auburn
Engineering Services
Community Development & Public Works Departments
25 West Main Street
Auburn, WA 98001-4998

Approved By:

Jacob Sweeting

Jacob Sweeting, P.E.
Assistant Director of Engineering Services/City Engineer

01/04/2021
Date

PREFACE FOR THE

CITY OF AUBURN

ENGINEERING CONSTRUCTION STANDARDS

Grading, Utility, Street and other civil construction work within the City of Auburn shall utilize the 2021 WSDOT Standard Specifications for Road, Bridge, and Municipal Construction (English Version) as supplemented and amended by the City of Auburn Special Provisions contained within Part 1 of this document and the applicable and most current published version of City of Auburn Standard Details and Washington State Department of Transportation (WSDOT) Standard Plans for Road and Bridge Construction as included or referenced in Part 2 of this document.

Contractors are required to have the City of Auburn Engineering Construction Standards (Parts 1 and 2) and the WSDOT Standard Specifications for Road, Bridge, and Municipal Construction available at the job site during construction. Contractors must also have a copy of all City of Auburn Standard Details and WSDOT Standard Plans that are referenced in the Plans available at the job site during construction.

WSDOT Standard Plans and Specifications are available at a nominal charge from the Washington State Department of Transportation at Engineering Publications: Washington State Department of Transportation, Engineering Publications, PO Box 47304, Olympia, WA 98504, or at (360)705-7431, or at http://www.wsdot.wa.gov/Publications/Manuals/PriceList.htm.

The City of Auburn Engineering Construction Standards are available online at: http://www.auburnwa.gov/doing_business/public_works/publications_forms.htm

It is the responsibility of the user to obtain the most current version and any associated revisions from the City of Auburn.

All references within the Engineering Construction Standards to measurement, payment or contractual obligations between the city and the contractor are in reference to a public contract and are not applicable to development projects

In case of conflict between the various elements of the Engineering Construction Standards, refer to Section 1-04.2 (Coordination of Contract Documents, Plans, Special Provisions Specifications, and Addenda) of this document for order of precedence.

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DIVISION 7 Drainage Structures, Storm Sewers, Sanitary Sewers, Water Mains and Conduits

7-01 Drains

7-01.2 Materials

(August 2016, City of Auburn GSP)

Replace the first two paragraphs after the list of materials with the following:

Non-perforated drainpipe shall be manufactured of polyvinyl chloride (PVC) and shall meet the requirements of Section 9-05.12 and perforated drain pipe shall be manufactured of PVC and meet the requirements of Section 9-05.2(6). Trench drains shall be Polydrain Part No. 420 with stainless steel grates Polydrain Part No. 440 or approved equivalent placed on cement concrete Class 4000 per Section 6-02 (Concrete Structures).

7-01.3 Construction Requirements

(January 2018, City of Auburn GSP)

Supplement this section with the following:

PVC drain pipe shall be used to connect existing roof drains and downspouts to the roadway drainage system. The amount of pipe shown in the proposal is approximate and provided for bidding purposes only.

The trench drain shall be installed per the manufacturer's recommendations and shall be flush with the cement concrete surface to provide the proper surface drainage control. The trench drain shall be connected to the nearest catch basin with drain pipe as shown on the Plans.

7-04 Storm Sewers

7-04.2 Materials

(July 2019, City of Auburn GSP)

Replace the first paragraph and list of materials with the following:

Only the pipe materials listed below are approved for use on City storm sewer systems. Materials shall be in accordance with all provisions of the following sections:

Solid Wall Polyvinyl Chloride (PVC) Pipe, SDR-35	9-05.12(1) (Solid Wall PVC Culvert Pipe, Solid Wall PVC Storm Sewer Pipe, and Solid Wall PVC Sanitary Sewer Pipe)
Solid Wall Polyvinyl Chloride (PVC) Pipe, SDR-21	9-05.12(1) (Solid Wall PVC Culvert Pipe, Solid Wall PVC Storm Sewer Pipe, and Solid Wall PVC Sanitary Sewer Pipe)
Solid Wall Polyvinyl Chloride (PVC) Pipe, C900	9-05.12(1) (Solid Wall PVC Culvert Pipe, Solid Wall PVC Storm Sewer Pipe, and Solid Wall PVC Sanitary Sewer Pipe)
Ductile Iron Pipe, Special Class 52, Storm Pipe	9-05.13 (Ductile Iron Sewer Pipe)
High Density Polyethylene Pipe (HDPE)	9-05.21 (High Density Polyethylene Pipe (HDPE))

The laying length for PVC (SDR-35) shall not exceed 14 feet.

7-04.3 Construction Requirements

7-04.3(1)F Low Pressure Air Test for Storm Sewers Constructed of Non Air-Permeable Materials

(January 2017, City of Auburn GSP)

Supplement this section with the following:

If the test shows zero leakage after a five-minute test time, the Engineer has the authority to accept and end the test immediately.

(January 2017, City of Auburn GSP)

Add the following new section:

7-04.3(1)G Television Inspection

All of the provisions of 7-17.3(2)H (Television Inspection) shall apply.

7-05 Manholes, Inlets, Catch Basins, and Drywells

7-05.2 Materials

(November 2020, City of Auburn GSP)

Supplement this section with the following:

Manholes shall be complete with frames and covers. All manhole frames and covers shall be bolt-down and from East Jordan Iron Works: EJ product #00370781 (Eon #3715ZPT Frame and #3705CPT Cover) for Sanitary Sewer and EJ product #00370782 (Eon #3717ZPT Frame and #3705CPT Cover) for Storm Drainage, or approved equivalent. Catch Basins shall be complete with frames and grates unless otherwise specified on the Plans to be provided with solid metal covers or manhole frames and covers. Castings for manhole frames shall be gray iron or ductile iron and covers and grates shall be ductile iron. All storm sewer grates shall have the words “OUTFALL TO STREAMS, DUMP NO POLLUTANTS” cast in place. Manhole and catch basin steps and handholds shall be steel-reinforced copolymer polypropylene (ASTM D4101) with ½ inch steel reinforcing bar (ASTM A615 Grade 60) and in conformance with ASTM C478.

The fabricator of all precast sanitary manholes shall seal them with Tamoseal Cement Based Waterproof Finish or approved equivalent applied to all interior and exterior surfaces in accordance with the manufacturer’s recommendations. The Contractor shall have adequate product on hand to seal any field modifications to sanitary sewer manholes.

(August 2016, City of Auburn GSP)

Add the following new section:

7-05.2(1) Trash Racks

Trash racks shall be constructed in accordance with Section 6-02 (Concrete Structures), 6-03 (Steel Structures), and as detailed in the Plans.

7-05.3 Construction Requirements

(January 2017, City of Auburn GSP)

Supplement this section with the following:

All pipes entering or leaving new or existing manholes, catch basins or inlets shall be placed on firmly compacted bedding, particularly within the area of the manhole excavation, which normally is deeper than that of the pipe trench. Special care shall be taken to see that the openings through which pipes or adapters penetrate the manhole are completely and firmly rammed full of non-shrink grout to ensure water tightness.

Manhole adapters shall be provided when connecting PVC or Polyethylene pipes to any new or existing manholes, catch basins or inlets. All manhole adapters for PVC and Polyethylene pipe shall be of a style as required and manufactured for the specific application with sufficient tangent at the ends to allow for proper joint connections. Field fabricated manhole adapters will not be permitted. All manhole adapters must have approval from the Engineer in writing before being installed.

See Section 2-09.3(3)D (Shoring and Cofferdams) for "Shoring or Extra Excavation Class B" and Section 7-08 (General Pipe Installation Requirements) for foundation material and imported bedding and backfill materials.

7-05.3(1) Adjusting Manholes & Catch Basins to Grade

(November 2020, City of Auburn GSP)

Supplement this section with the following:

Manholes or catch basins shall not be adjusted to finish grade until the asphalt paving is completed, at which time the center of each structure shall be carefully relocated from references previously established by the Contractor. The pavement shall be cut in a restricted area and the base material removed to permit removal of the frame or ring. The structure shall be adjusted to finish grade. Temporary access to manholes and catch basins shall be provided as soon as practical after paving.

The frame or ring shall be placed on concrete blocks and/or wedged up to the desired grade. When the Contract Plans call for rubberized adjustment risers, they shall be the Infra-Riser manufactured by EJCO, or approved equivalent. The asphalt concrete pavement shall be cut and removed, the dimensions of which shall be equal to the inside dimensions of the opening plus 2 feet. The base materials and crushed rock shall be removed and Class 3000 cement concrete shall be placed so that the entire volume of the excavation is replaced to within, but not to exceed 6 inches of the finished pavement surface. A quick setting admixture shall be added to the cement concrete backfill. Once manholes or catch basins have been adjusted to finished grade and the cement concrete backfill has cured (the day following placing the cement concrete), HMA Class ½-inch shall be placed and compacted with hand tampers and a patching roller within 48 hours.

7-05.3(3) Connections to Existing Manholes

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Where shown in the Plans, new storm drain lines shall be extended to connect to an existing manhole. The pipe extension shall be the same diameter as the existing pipe.

Dissimilar pipes shall be joined per Section 7-08.3(2)G (Jointing of Dissimilar Pipe) of these Special Provisions.

(August 2016, City of Auburn GSP)

Add the following new section:

7-05.3(5) Channels for Manholes

Channels for manholes shall be made to conform accurately to the sewer grade, and shall be brought together smoothly with well-rounded junctions. Channel sides shall be carried up vertically to the crown elevation of the various pipes, and the concrete shelf between channels shall be smoothly finished and warped evenly with slopes to drain towards the manhole outflow.

Channels for manholes shall be constructed with non-shrinking mortar. Mortar shall be composed of approximately one part Type II Portland Cement, 1½ to 2 parts sand, and 2 to 3 fluid ounces of water-reducing retarder per sack of cement. Sand, cement, and water shall be as specified for concrete. Water-reducing retarder shall meet ASTM C494 specification for chemical admixture for concrete.

(August 2016, City of Auburn GSP)

Add the following new section:

7-05.3(6) New Castings

Where new castings are indicated to be installed on existing structures in the Plans, the Contractor shall furnish and install new castings of the type specified. Casting shall include frame and grate, or ring and cover and new adjustment section(s) as necessary to set the casting to final grade. Install to the finished grade as shown.

Salvaged castings shall be cleaned and delivered to the City of Auburn as specified in Section 2-02.3(5) (Salvage).

7-08 General Pipe Installation Requirements

7-08.1 Description

(January 2017, City of Auburn GSP)

Delete this section and replace it with the following:

This information shall cover the general requirements for installing culverts, storm sewers, sanitary sewers, and water mains. The Contractor shall also follow all provisions of Sections 7-02 (Culverts), 7-04 (Storm Sewers), 7-09 (Water Mains), 7-17 (Sanitary Sewers), and 1-07.23 (Public Convenience and Safety) as it applies to the specific kind of work. In case of conflicting specifications between Section 7-08 and 7-09, the specifications of Section 7-09 shall take precedence for the installation of water mains and appurtenances.

7-08.2 Materials

(January 2018, City of Auburn GSP)

Delete this section and replace it with the following:

Imported bedding, backfill and foundation material shall meet the requirements of the following sections:

Pipe Zone Bedding and Select Trench Backfill	9-03.9(3) (Crushed Surfacing)
Pipe Foundation Material	9-03.10 (Aggregate for Gravel base)
Imported Pipe Trench Backfill	9-03.14(1) (Gravel Borrow)
Controlled Density Fill for Trench Backfill	2-09.3(1)E (Backfilling)

7-08.3 Construction Requirements

7-08.3(1) Excavation and Preparation of Trench

7-08.3(1)A Trenches

(April 2017, City of Auburn GSP)

The second sentence of the third paragraph is deleted.

(January 2018, City of Auburn GSP)

The first sentence of the eighth paragraph is deleted and replaced with the following:

If any of the excavated (also referred to as native) material meets the specifications of material listed in Section 7-08.2 (Materials), the Engineer may require that native material, in the quantity required, be selectively removed, stockpiled separately, and used as pipe zone bedding, foundation material, or trench backfill instead of the quantities of pipe zone bedding, foundation material, or trench backfill respectively.

7-08.3(1)B Shoring

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Shoring shall meet the requirements of Section 2-09.3(3)D (Shoring and Cofferdams), the Occupational Safety and Health Act (OSHA), and the Washington Industrial Safety and Health Act of 1973 (WISHA), Chapter 296-155 WAC, and RCW Chapter 49.17, shall apply to all excavation, trenching and ditching operations on this project. All trenches four (4) feet and over in depth shall be shored in compliance with applicable Federal and State regulations. Extra Excavation Class B will be allowed only with the approval of the Engineer.

7-08.3(2)B Pipe Laying – General

(January 2017, City of Auburn GSP)

Supplement this section with the following:

The Contractor shall use neat, vertical full-depth saw cuts for trenching through existing asphalt or cement concrete pavement surfaced areas.

All pipe shall be neatly cut using an approved mechanical cutter without causing damage to the pipe.

7-08.3(2)G Jointing of Dissimilar Pipe

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Where new pipe is connected to existing pipe, the Contractor shall verify the type of existing pipe and join pipes with a pipe adapter specifically manufactured for joining the pipes involved.

(August 2016, City of Auburn GSP)

Add the following new section:

7-08.3(2)J Joining High Density Polyethylene Pipe (HDPE) Pipe

Sections of HDPE shall be joined into continuous lengths on the job site above ground. The joining shall be the butt fusion method and shall be performed in strict accordance with the pipe manufacturer's recommendations. The butt fusion equipment used in the joining procedures shall be capable of meeting all conditions recommended by the pipe manufacturer, including but not limited to, temperature requirements of 400 degrees F, alignment, and 75 psi interfacial fusion pressure.

(August 2016, City of Auburn GSP)

Add the following new section:

7-08.3(2)K Packaging, Handling, Storage High Density Polyethylene Pipe (HDPE) Pipe

The manufacturer shall package the pipe in a manner designed to deliver the pipe to the project neatly, intact, and without physical damage. The transportation carrier shall use appropriate methods and intermittent checks to insure the pipe is properly supported, stacked, and restrained during transport such that the pipe is not nicked, gouged, or physically damaged. Pipe shall be stored on clean, level ground to prevent undue scratching or gouging of the pipe. If the pipe must be stacked for storage, such stacking shall be done in accordance with the pipe manufacturer's recommendations. The handling of the pipe shall be done in such a manner that it is not damaged by dragging over sharp objects or cut by chokers or lifting equipment.

Sections of pipe having been discovered with cuts or gouges in excess of 10% of the wall thickness of the pipe shall be cut out and removed. The undamaged portions of the pipe shall be rejoined using butt fusion joining method.

Fused segments of pipe shall be handled so as to avoid damage to the pipe. When lifting fused sections of pipe, chains or cable type chokers must be avoided. Nylon slings are preferred. Spreader bars are recommended when lifting long fused sections. Care must be exercised to avoid cutting or gouging the pipe.

(August 2016, City of Auburn GSP)

Add the following new section:

7-08.3(2)L Dewatering Trenches

Where water is encountered in the trench, it shall be removed during pipe-laying operations and the trench so maintained until the ends of the pipe are sealed and provisions are made to prevent floating of the pipe. Trench water or other deleterious materials shall not be allowed to enter the pipe at any time.

"Normal Trench Dewatering" is defined as dewatering methods occurring in, or directly adjacent to, the trench, including trash pumps, sump pumps, or other methods in the excavated areas. "Normal Trench Dewatering" does not include a dewatering system such as well points, well screens, or deep wells. All "Normal Trench Dewatering" work associated with maintaining a trench suitable for pipeline construction will be included in the cost of the pipes or other facilities being installed.

Where groundwater cannot be removed using "Normal Trench Dewatering" methods, the Contractor shall provide a dewatering system that will be used to lower the water table 2 feet below the depth of excavation. See Section 8-05 (Dewatering System) for dewatering system requirements. The dewatering plan must be received 10 calendar days prior to dewatering operations and approved by the Engineer before underground utility installation begins.

7-08.3(3) Backfilling

(January 2017, City of Auburn GSP)

Supplement this section with the following:

The Engineer may require "Controlled Density Fill" where uniform compaction around other utilities, foundations or other fixed objects is not possible.

7-08.3(4) Plugging Existing Pipe

(January 2018, City of Auburn GSP)

Delete this section and replace it with the following:

All existing sanitary sewer, storm, and drain pipes shown on the Plans to be abandoned and plugged, shall be plugged on the inlet and outlet ends for a distance of three times the diameter with Class 3000 cement concrete. Care shall be used in placing the concrete in the pipe to ensure that the openings are completely filled and thoroughly plugged.

All existing water pipes shown on the Plans to be abandoned and plugged, shall be plugged on the ends with Mechanical Joint plugs.

All existing sanitary sewer, storm, and water pipes shown on the Plans to be abandoned and filled, shall be filled with concrete that has a compressive strength of 1,500 psi or less for the entire length of pipe specified.

The Contractor shall seal abandoned or filled pipe connections at manholes or catch basins with Class 3000 cement concrete and grout to provide a smooth, watertight seal.

(November 2019, City of Auburn GSP)

Add the following new section:

7-08.3(5) Pipe Trench Restoration

Trenches excavated as part of a new street construction shall be completed to subgrade before placing surfacing materials and sidewalks. Final restoration will be completed with the street surfacing.

In existing streets, sidewalks and other native or landscaped areas, the restoration shall be to a minimum of the existing adjacent surfaces. Asphalt and cement concrete pavement, sidewalks, etc., shall be replaced upon a firm unyielding base to match existing surface thickness. Unless otherwise shown on the plans, the minimum asphalt concrete pavement replacement section shall be 2 inches thick.

7-09 Water Mains

7-09.1 Description

(January 2017, City of Auburn GSP)

Supplement this section with the following:

The Contractor shall also follow the requirements of Section 7-08 (General Pipe Installation Requirements). In case of conflicting specifications between Section 7-08 and 7-09, the specifications of Section 7-09 shall take precedence for the installation of water mains and appurtenances.

7-09.2 Materials

(January 2018, City of Auburn GSP)

Delete 'Aggregates' and the reference sections pertaining to Foundation Material, Gravel Backfill for Pipe Zone Bedding, Pipe Zone Bedding, and Trench backfill, from the list in the first paragraph.

Supplement this section with the following:

Ductile Iron Pipe per Section 9-30.1(1) with Ductile Iron Fittings per Section 9-30.2(1) shall be the only pipe and fitting materials allowed for water systems owned by the City of Auburn.

7-09.3(10) Backfilling Trenches

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Water mains shall be installed with 42-inch minimum finished pipe cover, unless the Engineer determines less cover is adequate where existing facilities, not to be relocated, might interfere with the pipe laying operation.

7-09.3(13) Handling of Pipe

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Strict adherence to the requirements preventing debris from entering the pipe will be required, including plugging of pipe during transport, storage, and placement. If, in the opinion of the Engineer, any pipe or fitting has been installed with dirt, foreign material, or diesel residue in it, it shall be removed, cleaned, and re-laid at Contractor expense.

7-09.3(19) Connections

7-09.3(19)A Connections to Existing Mains

(January 2017, City of Auburn GSP)

Supplement this section with the following:

The Contractor shall field verify all existing piping, dimensions, and elevations to ensure proper fit prior to any connections being made to existing mains.

7-09.3(19)B Maintaining Service

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Water main shut-offs shall be in accordance with Section 1-07.17(1) (Disruption to City Water Services).

7-09.3(21) Concrete Thrust Blocking

(January 2018, City of Auburn GSP)

Supplement this section with the following:

Where trench conditions are such that thrust restraint is not accomplishable with concrete, the Contractor shall provide restrained joints in accordance with Section 9-30.2(6) (Restrained Joints) to replace or supplement concrete blocking or anchors. Supplement and replacement restrained joints shall be provided as recommended by the manufacturer and approved by the Engineer.

7-09.3(23) Hydrostatic Pressure Test

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Add the following sentence at the beginning of the first paragraph:

Hydrostatic tests shall be made on all new pipeline in accordance with the applicable portions of this Standard Specification and ANSI/AWWA C600, except as modified in this document.

Add the following sentence between the first and second sentence of the first paragraph:

Test pressures shall not exceed the rated pressure of the valves when the pressure boundary of the test section includes closed, resilient-seated gate valves or butterfly valves.

Add the following sentence at the end of the second paragraph:

Sections of pipe between valves shall be pressure tested immediately upon completion of each section. Each section shall be immediately backfilled upon the Engineer approving the hydrostatic pressure test results.

7-09.3(24) Disinfection of Water Mains

(November 2019, City of Auburn GSP)

Supplement this section with the following:

The City will take bacteriological test samples. The Contractor shall insert corporation stops in the main at all locations required to take bacteriological test samples. If original test samples prove unsatisfactory, a charge of $100.00 will be made for processing each additional sample.

7-09.3(24)J Preventing Reverse Flow

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Prior to beginning the water main installation, the Contractor shall prepare a Prevention of Reverse Flow Plan per Section 1-06 (Control of Material), showing the intended method, in detail, which will be incorporated to insure the prevention of reverse flows from entering the existing distribution system. The plan shall meet the requirement of WAC 246-902-490.

The Contractor shall consider this plan as a submittal, and submit it per the specifications in Section 9-38 (Submittal Approval). The Engineer must approve this plan prior to the Contractor starting work on the water main.

7-09.3(24)N Final Flushing and Testing

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Accomplish line flushing in accordance with the latest provisions of AWWA C601. Flush all dead end mains with a temporary blow off. The Contractor is responsible for disposal of water flushed from the line. An approved bacteriological test is required before connection to the existing system. The City will measure water consumed for flushing.

The Contractor shall submit a de-chlorination plan per Section 1-06 (Control of Material) indicating how chlorine concentration and pH adjustment will be achieved per this Section. All costs to submit the plan shall be included in the unit contract price per linear foot of pipe.

7-12 Valves for Water Mains

7-12.3 Construction Requirements

(January 2018, City of Auburn GSP)

Add the following new section:

7-12.3(2) Adjust Valve Boxes

The Contractor shall adjust water valve boxes to finish grade as specified in the Plans and in accordance with the applicable City of Auburn Standard Details. Water valve boxes shall be accessible at all times.

Valve boxes shall not be adjusted to finish grade until the asphalt paving is completed, at which time, each valve box shall be carefully relocated from references previously

established by the Contractor. The pavement shall be cut in a restricted area and the base material removed to permit adjustment.

The base materials and crushed rock shall be removed and Class 3000 cement concrete shall be placed so that the entire volume of the excavation is replaced to within, but not to exceed 6 inches of the finished pavement surface. A quick setting admixture shall be added to the cement concrete backfill. Once the valve boxes have been adjusted to finished grade and the cement concrete backfill has cured (the day following placing the cement concrete), HMA Class ½-inch shall be placed and compacted with hand tampers and a patching roller within 48 hours.

(August 2016, City of Auburn GSP)

Add the following new section:

7-12.3(3) Combination Air Release/Air Vacuum Valve Assembly

"Combination Air Release/Air Vacuum Valve Assembly" shall be constructed at locations shown on the Plans and shall be a minimum of 1 inch diameter in accordance with the applicable City of Auburn Standard Detail(s).

(August 2016, City of Auburn GSP)

Add the following new section:

7-12.3(4) Valve Wrench Extension Box

The Contractor shall furnish and install valve wrench extension boxes where the valve nut will exceed 48 inches below the top of the finished valve box and finish grade, where shown on the Plans, in accordance with the applicable City of Auburn Standard Detail(s) for deep buried valves.

7-14 Hydrants

7-14.3 Construction Requirements

(January 2017, City of Auburn GSP)

Supplement this section with the following:

A type 2BB Blue Raised Pavement Marker(s) is required at each hydrant location. Location of the blue marker shall be 1-foot offset of centerline in the direction of the hydrant at each hydrant location. Hydrants located within 50-feet of the curb face of an intersection shall be marked on both streets. The reflective surfaces of the raised pavement markers shall be perpendicular to the flow of traffic. The Raised Pavement Markers shall be installed in accordance with Section 8-09 (Raised Pavement Markers).

7-14.3(1) Setting Hydrants

(January 2017, City of Auburn GSP)

Delete this section and replace it with the following:

Where shown in the Plans, the "Hydrant Assembly" shall be installed perpendicular to the supply main. A 6-inch resilient-wedge gate valve with valve box in accordance with Section 7-12 (Valves for Water Mains) shall be installed on each hydrant supply line.

All hydrants shall be inspected upon delivery in the field to ensure proper working order. After installation, fire hydrants, auxiliary gate valves, and other appurtenances thereto shall be subjected to a hydrostatic test and disinfection procedures as specified in Section 7-09 (Water Mains).

After installation each hydrant shall receive 2 field-coats of paint. The first coat shall be Formula B-1-57 iron oxide, and the second coat shall be Safety Yellow Enamel conforming to Federal Specification TT-E-489C Enamel, Alkyd, Gloss, Federal Color No. 1063. The outside surface below the ground shall be coated with asphalt varnish.

During the chlorination process for the newly laid pipe, all valves associated with each hydrant assembly shall be operated while the pipeline is filled with the chlorinating agent and under normal operating pressure.

Any hydrant not in service shall be identified by covering with a burlap or plastic bag properly secured.

7-14.3(4) Moving Existing Hydrants

(January 2018, City of Auburn GSP)

Supplement this section with the following:

Existing hydrants shall be moved where shown in the Plans. Moving existing hydrants shall include removal of all component parts from the water main to the hydrant.

The Contractor shall provide and install the following new components at the new hydrant location shown on the Plans:

- Special Class 52 Ductile Iron pipe;
- 6 inch tee or tapping tee and gate valve with box;
- Restraint system;
- Blocking.

7-15 Service Connections

7-15.2 Materials

(November 2019 City of Auburn GSP)

Replace the reference to Service pipe from the list of materials and replace with the following:

Service Pipe & Tail Piece	9-30.6(3)B (Service Pipes)

All water service materials shall be low lead brass CDA89833 or CDA89520, and shall meet ANSI/AWWA C800 and NSF 61 Annex G maximum lead requirements.

7-15.3 Construction Requirements

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Water service connections shall be installed where shown on the drawings in accordance with these documents and the applicable Standard Details. Multiple service connections to the same main must be made with a 2 foot minimum separation at the main and be staggered horizontally, so that adjacent services are at differing elevations along the pipe. Meter box and water meters shall not be placed in locations which are subjected to vehicular traffic (including driveways, etc.) unless approved by the Engineer and a traffic bearing meter box is provided. Tail pieces (that portion of the service line between the meter and the property line) shall be furnished and installed and shall be of the same material and size as the service line. Connection of the tail piece to the service line from the building shall be made with compression couplings or capped as appropriate. Service pipes shall be installed without joints from the water main to the curb valve near or within the meter box. Tailpieces shall also be installed without joints from the water meter outlet to its termination (18 inches minimum beyond the meter but not beyond the right-of-way line). The existing ¾-inch water meter shall be reinstalled to the new meter setter once the new 1-inch service line, meter setter, and tailpiece, have been installed and the new meter box has been adjusted to grade.

All new materials (service line, meter setter, tailpiece, and meter box) shall be used for water meter relocations. Materials shall match existing size unless otherwise shown on the Plans.

When removing existing meters, the Contractor shall protect all automated meter reading equipment including radios, receivers/transmitters, and other equipment. The removed meters/equipment will be stored in such a manner to prevent damage to the equipment. The Contractor will request and complete training from City staff on proper measures and techniques required to protect the equipment prior to removing any equipped meters.

7-17 Sanitary Sewers

7-17.2 Materials

(December 2018, City of Auburn GSP)

Delete this section and replace it with the following:

Materials shall be in accordance with following Sections:

Solid Wall Polyvinyl Chloride (PVC) Sanitary Sewer Pipe, SDR-35	9-05.12(1) (Solid Wall PVC Culvert Pipe, Solid Wall PVC Storm Sewer Pipe, and Solid Wall PVC Sanitary Sewer Pipe)
Polyvinyl Chloride (PVC) Sanitary Sewer Pipe, SDR-21	9-05.12(1) (Solid Wall PVC Culvert Pipe, Solid Wall PVC Storm Sewer Pipe, and Solid Wall PVC Sanitary Sewer Pipe)
Ductile Iron, Special Class 50 Sanitary Sewer Pipe	9-05.13 (Ductile Iron Sewer Pipe)
High Density Polyethylene Sanitary Sewer Pipe (HDPE)	9-05.23 (High Density Polyethylene Pipe (HDPE))

The laying length for PVC (SDR-35) shall not exceed 14 feet.

7-17.3 Construction Requirements

7-17.3(1) Protection of Existing Sewage Facilities

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Connections to the existing system shall be plugged during the entire period of sewer construction to prevent dirt, water, and debris from entering the existing system

7-17.3(2) Cleaning and Testing

7-17.3(2)A General

(August 2016, City of Auburn GSP)

Delete the first paragraph and replace with the following:

Sewers and appurtenances, where required in the Plans, shall be cleaned and tested after backfilling by the low pressure air method except if the Engineer approves hydrostatic testing of short sections of small diameter pipe.

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Before final acceptance, the Contractor shall have all sewer lines inspected by the use of a television camera per Section 7-17.3(2)H (Television Inspection). Manholes and other structures shall be cleaned and tested per Section 7-07 (Cleaning Existing Drainage Structures).

Special sealants shall not be used to seal leaks and the use of any such materials will be cause for rejection of the sewer lines.

7-17.3(2)C Infiltration Test

(January 2017, City of Auburn GSP)

Revise the second sentence of the second paragraph to read:

$$\text{“Maximum leakage (in gallons per hour)”} = 0.16 \times \frac{\sqrt{H}}{\sqrt{6}} \times D \times \frac{L}{100}$$

7-17.3(2)F Low Pressure Air Test for Sanitary Sewers Constructed of Non Air-Permeable Materials

(January 2017, City of Auburn GSP)

Supplement this section with the following:

If the test shows zero leakage after a five minute test time, the Engineer has the authority to accept and end the test immediately.

Cleaning and testing of pipes and structures shall be included in the unit contract prices for those items installed.

7-17.3(2)H Television Inspection

(May 2019 City of Auburn GSP)

Delete this section and replace it with the following:

The Contractor shall be responsible for having all sewer lines installed by the Contractor inspected by City approved private inspection services that includes the use of a television camera. An approved list of inspection services may be obtained from the Engineer.

After completion of the following, authorization from the City shall be required before the Contractor can perform the initial television camera work:

1. The acceptable placement of applicable pipe, ballast, bedding, and backfill material.

2. The acceptable completion of all applicable channels and grout work.

3. The acceptable debris removal, cleaning, and flushing of all applicable pipes and structures.

The television inspection requirements shall include the provisions of:

1. The television camera shall be a pan and tilt camera system specifically designed and constructed for sewer environments.

2. A dye solution to be introduced in sufficient quantity to travel from the structure that is the highest point of inspection to the downstream terminus of the inspection limits. Red or purple dye shall be used for PVC pipe and green dye for ductile iron and concrete pipe.

3. A one-inch reference ball to be mounted to the camera in order to drag along the bottom of the pipe during the entire inspection procedure.

4. Linear measure references to be measured from the center of the beginning structure to the center of the next inline structure and include the direction of flow. The locations of lateral pipes and all distinctive pipe conditions shall be referenced to the centerline of the beginning structure. All structure references shall utilize the designated structure reference numbers shown on the Plans.

The following television inspection information shall be provided to the City:

1. A clear color DVD or USB Flash Drive which encompasses the limits of the inspection area and including all reference data as described herein. The recorded reference time and date for the start of each run shall also be indicated.

2. A written report shall be provided corresponding to the recorded inspection and including all reference data as described herein. The report shall consist of a written narrative of all distinctive pipe conditions including ponding areas in excess of ¼ inch.

7-18 Side Sewers

7-18.3 Construction Requirements

7-18.3(1) General

(January 2017, City of Auburn GSP)

Supplement this section with the following:

All joints shall be approved rubber-gasket joints except the joint between the new and existing pipe that shall be made with approved flexible transition couplings. Side sewers shall be installed to a minimum slope of two percent or as shown on the Plans unless otherwise directed by the Engineer and shall be 6-inches diameter from the street sewer to the private property line.

Existing side sewers to be connected shall be trimmed to the limit of the right-of-way except where otherwise shown on the Plans and connected to the new sewer with PVC SDR-35 with a diameter to match the existing side sewer or 6 inches, whichever is greater.

(August 2016, City of Auburn GSP).
The third paragraph is replaced with the following:

No joint deflections shall be allowed on side sewers. No horizontal bends shall be allowed in the right-of-way. Vertical bends require Engineer approval.

7-18.3(2) Fittings

(January 2017, City of Auburn GSP)

Delete this section and replace it with the following:

Side sewers shall be connected (where shown on the Plans), using approved sewer saddle tees. Quantities of tees will vary depending upon conditions encountered.

7-18.3(3) Testing

(January 2017, City of Auburn GSP)

Supplement this section with the following:

During construction in areas with more than one side sewer per structure, the Contractor shall test each connected structure to verify which side sewer is used by that structure. The test shall involve flushing every toilet or running every sink or tub on each floor of each structure and directly observing which side sewer the effluent discharges from. Only these side sewers shall be connected. All others are to be abandoned in place per Section 7-08.3(4) (Plugging Existing Pipe).

The Contractor shall be responsible for verifying all City customers originally connected to the sanitary sewer conveyance line are connected to the new sanitary sewer conveyance line. Prior to project completion the Contractor shall document to the City that all City customers have had their services re-established.

All pipes for side sewer and sewer stubs (pipes not ending in a manhole) shall be adequately plugged or capped.

7-19 Sewer Cleanouts

7-19.3 Construction Requirements

(January 2018, City of Auburn GSP)

Delete this section and replace it with the following:

Sewer cleanouts shall be installed as indicated in the applicable Standard Details.

END OF DIVISION 7

shall retrieve message MULTI strings, a map of defective pixels, the time and date, the event schedule, and configuration parameters.

Message Library
The control software shall store messages and transfer messages to a sign for storage and/or display. When a user desires to send a message to a sign, the control software shall offer as choices only those messages compatible with the sign in question. The control software shall allow message names of up to 25 characters in length. If the selected name already exists, the software shall notify the user and give the option of replacing the existing message or selecting another name.

The control software shall display all character fonts supported by the Variable Message Sign System. Messages shall be displayed on the computer monitor in exactly the same format (font, text centering and justification) as on the Variable Message Sign.

Software Duplication Rights
The City of Auburn shall have the right to duplicate the Variable Message Sign Control Software as needed for use in controlling signs under its jurisdiction.

Documentation
The Contractor shall furnish 1 copy of the Control Software user manuals to the Engineer. In addition, 2 sets of the software, installation program, instructions and user manual shall be furnished on CD ROM or diskettes to the Engineer.

9-30 Water Distribution Materials

9-30.1 Pipe

9-30.1(1) Ductile Iron Pipe

(February 2018, City of Auburn GSP)

The third sentence of the first paragraph in the list is revised to read:

All other ductile iron pipe shall be Special Thickness Class 52.

9-30.2 Fittings

9-30.2(1) Ductile Iron Pipe

(September 2020, City of Auburn GSP)

Supplement this section with the following:

All pipe fittings, adapters and joints for ductile iron pipe shall be ductile iron designed to AWWA Specification (unless otherwise approved in writing by the Engineer) with sufficient tangent at the ends to allow for proper joint connections and shall be coated to give them protection equal to that of the pipe. Field fabricated fittings will not be permitted. Flexible couplings shall be of the style as required for specific application.

9-30.2(6) Restrained Joints

(September 2020, City of Auburn GSP)

Delete this section and replace it with the following:

Bolted restrained joint (R.J.) fittings shall be Megalug RomaGrip, Star, or approved alternate. All welding associated with the restraint system shall be performed in the pipe manufacturer's shop. No field welding will be permitted.

Mechanical joint restrain systems shall meet the following requirements:

Restrainers shall be manufactured of ductile iron and shall meet or exceed all the requirements of ANSI A21.11 (AWWA C111) and ASTM A536. The restrainer system shall provide anchoring ductile iron pipe and fittings, valves and PVC pipe to mechanical joint pipe or fittings, or bell to spigot PVC pipe joints. The restrainer shall accommodate the full working pressure rating of the pipe plus surge allowance. In the assembly of the restrain device, the contractor shall tighten the bolts to the correct torque range as recommended by the restraint manufacturer. The restrainers shall be painted black for ductile iron pipe and painted red for PVC pipe applications. The restraining device shall not damage or lower the working pressure of the pipe installed. Restrainers shall be properly stored to minimize sand and debris build-up. Specifically, the twist-off-screws and associated threads shall be clean (free of sand) prior to installation.

Restrainer specifically for ductile iron pipe may be restrained by utilizing a joint restraint gasket which includes a stainless steel locking segment vulcanized into the rubber gasket. The gasket shall be rated for operating pressures up to 250 psi based on the performance requirements of ANSI/ AWWA C111/ A21.11.

9-30.3 Valves

9-30.3(1) Gate Valves (3-inches to 16-inches)

(December 2020, City of Auburn GSP)

Delete this section and replace it with the following:

Resilient wedge gate valves shall be used on all 12 inch and smaller water lines and shall be manufactured by Clow, Kennedy, American Flow Control, Waterous, M&H or Mueller with epoxy-coated valve interiors. The valves shall conform to ANSI/AWWA Specifications C509 or C515 with a 200 psi working pressure rating (minimum). They shall be iron bodied, bronze-mounted, non-rising stem and counterclockwise opening with a 2 inch square operating nut. All valves on the fire hydrant line(s) shall be 6 inch diameter mechanical joint by flange. All other valves shall be either mechanical joint by flange or Mechanical joint shackled to tees or crosses. Valve stems shall be provided with O-ring seals.

9-30.3(3) Butterfly Valves

(December 2020, City of Auburn)
Supplement this section with the following:

Butterfly valves conforming to AWWA Specification C504, Class 150B shall have Mechanical joint ends and be rated at 150 psi or higher working pressure and shall be manufactured by Mueller, Clow, M&H, or Kennedy. Operator shall have standard AWWA 2 inch square nut.

9-30.3(4) Valve Boxes

(February 2018, City of Auburn GSP)

Supplement this section with the following:

Valve boxes shall be two-piece, adjustable, cast-iron (with additional extension pieces, if necessary), as manufactured by the Olympic Foundry Company, East Jordan Iron Works, or approved equivalent, with a minimum inside diameter of 5 inch. The word "WATER" shall be cast in relief on the top of all valve box covers. In addition, the letters "NC" shall be cast in place on valve box covers for those valves that are normally closed. Valve box covers shall have a deep skirt.

9-30.3(8) Tapping Sleeve and Valve Assembly

(January 2017, City of Auburn GSP)

Supplement this section with the following:

Tapping sleeves and valves shall conform to the following:

1. For wet taps on mains 12 inch diameter and larger or size-on-size, the tapping sleeve shall be the full M.J. type, cast-iron, twin seal as manufactured by Mueller, Tyler, Taylor, M&H, or epoxy-coated fabricated-steel, as manufactured by JCM, Rockwell or approved equivalent;

2. For wet taps on mains 10 inch diameter and smaller, or at least 2 inch diameter smaller than the main size, the tapping sleeve shall be the wraparound style, stainless steel or epoxy-coated fabricated-steel, or cast-iron M.J. as manufactured by Romac, Ford, M&H, Rockwell, Smith Blair, or approved equivalent.

9-30.5 Hydrants

(September 2020, City of Auburn GSP)

Supplement this section with the following:

Fire hydrants shall have two 2½ inch hose ports (National Standard Thread) and one 4½ inch pumper port (National Standard Thread) with caps and no chains, 1¼ inch pentagonal operating nut (counterclockwise) opening, O-ring-type stuffing box, automatic barrel drain, and 5¼ inch valve opening. Hydrants shall be equipped with a 5 inch Storz adapter with blind cap, or approved equivalent. Hydrants shall conform to the latest revision of AWWA Specification C502 for dry-barrel fire hydrants for ordinary water service.

Hydrants shall be Mueller "Super Centurion 250" or M&H Style 129.

(August 2016, City of Auburn GSP)

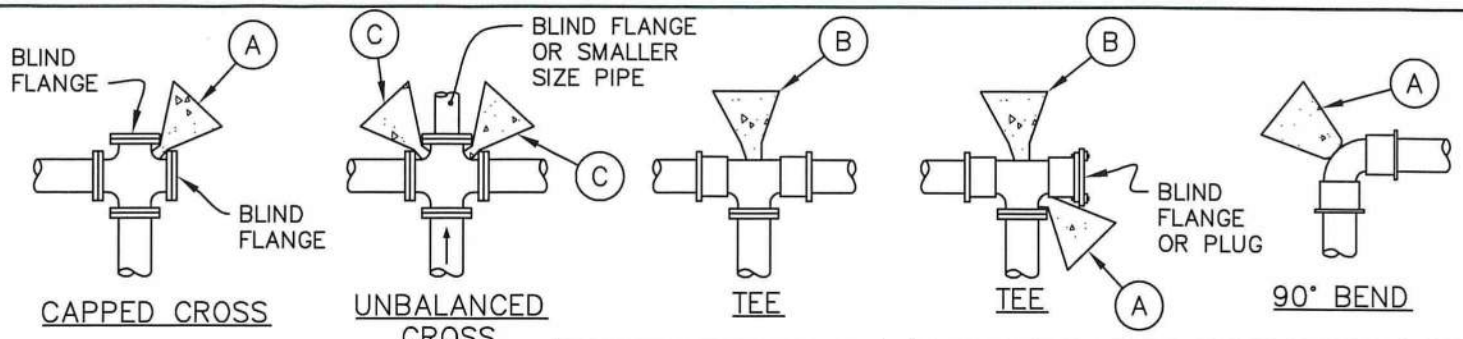
Supplement Division 9 with the following new section including subsections:

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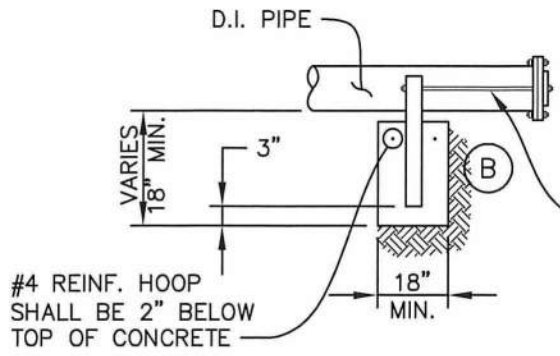
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CAPPED CROSS | UNBALANCED CROSS | TEE | TEE | 90° BEND

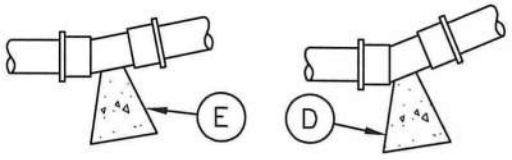


TIE BACK BLOCK DETAIL

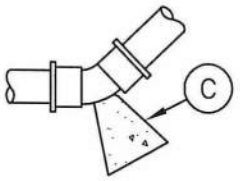
NOTE:
SEE STD. DETAIL W-03 FOR TYPICAL BLOW OFF ASSEMBLY. MAINTAIN 2" CLEARANCE BETWEEN CONCRETE AND PIPE

FOR PIPE SIZES UNDER 12" USE 2 3/4" ø HOT DIPPED GALV. THREADED RODS FOR 12" & 14" USE 4 3/4" ø HOT DIPPED GALV. RODS

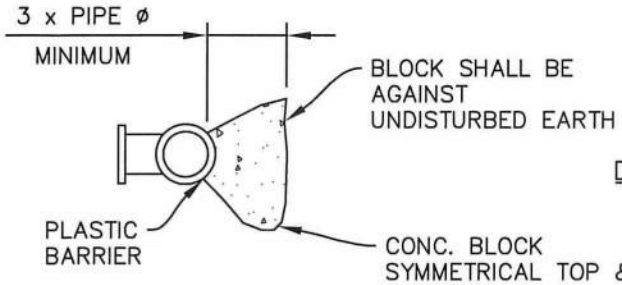
HORIZ OR UPWARD VERT. BENDS

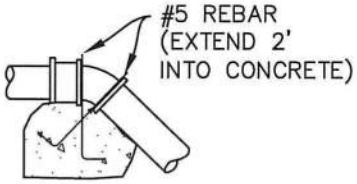


11 1/4° BEND | 22 1/2° BEND



45° BEND





DOWNWARD VERTICAL BEND

NOTES:

1. BEARING AREA OF CONC. THRUST BLOCK IS BASED ON 200 PSI PRESSURE AND SAFE SOIL BEARING LOAD OF 2000 PSF.
2. AREAS MUST BE ADJUSTED FOR OTHER PIPE SIZES, PRESSURES, AND SOIL CONDITIONS.
3. CONCRETE BLOCKING SHALL BE CAST IN PLACE AND HAVE A MINIMUM OF 1/4 SQUARE FOOT BEARING AGAINST THE FITTING.
4. THE BLOCK SHALL BEAR AGAINST THE FITTINGS ONLY AND SHALL BE CLEAR OF JOINTS TO PERMIT TAKING UP AND DISMANTLING OF JOINT.
5. THE CONTRACTOR SHALL INSTALL BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATING PRESSURE UNDER ALL CONDITIONS OF SERVICE.
6. USE 2" THICK STYROFOAM TO FORM THE CONCRETE BLOCKING. PLASTIC SHALL BE INSTALLED BETWEEN ALL CONCRETE BLOCKING AND FITTINGS.
7. RESTRAINED JOINTS ARE REQUIRED WHERE BEARING SOILS OR FILL MATERIAL ARE DETERMINED BY THE ENGINEER TO BE UNSUITABLE TO PROVIDE ADEQUATE BEARING LOAD, OR THIS SOIL HAS BEEN DISTURBED.

THRUST BLOCK TABLE
MIN. BEARING AGAINST UNDISTURBED SOIL

PIPE SIZE	(A) SQ. FT.	(B) SQ. FT.	(C) SQ. FT.	(D) SQ. FT.	(E) SQ. FT.
4"	3	3	2	2	2
6"	4	3	2	2	2
8"	7	5	4	2	2
10"	11	8	6	3	2
12"	16	11	9	5	3
14"	22	15	12	6	3
16"	29	20	16	8	4
18"	36	25	20	10	5
20"	45	32	24	13	6
22"	54	38	29	15	8
24"	64	45	35	18	9
28"	87	62	48	24	12
30"	101	71	55	28	14
36"	145	102	78	40	20
42"	197	139	107	55	27
48"	257	181	140	71	36

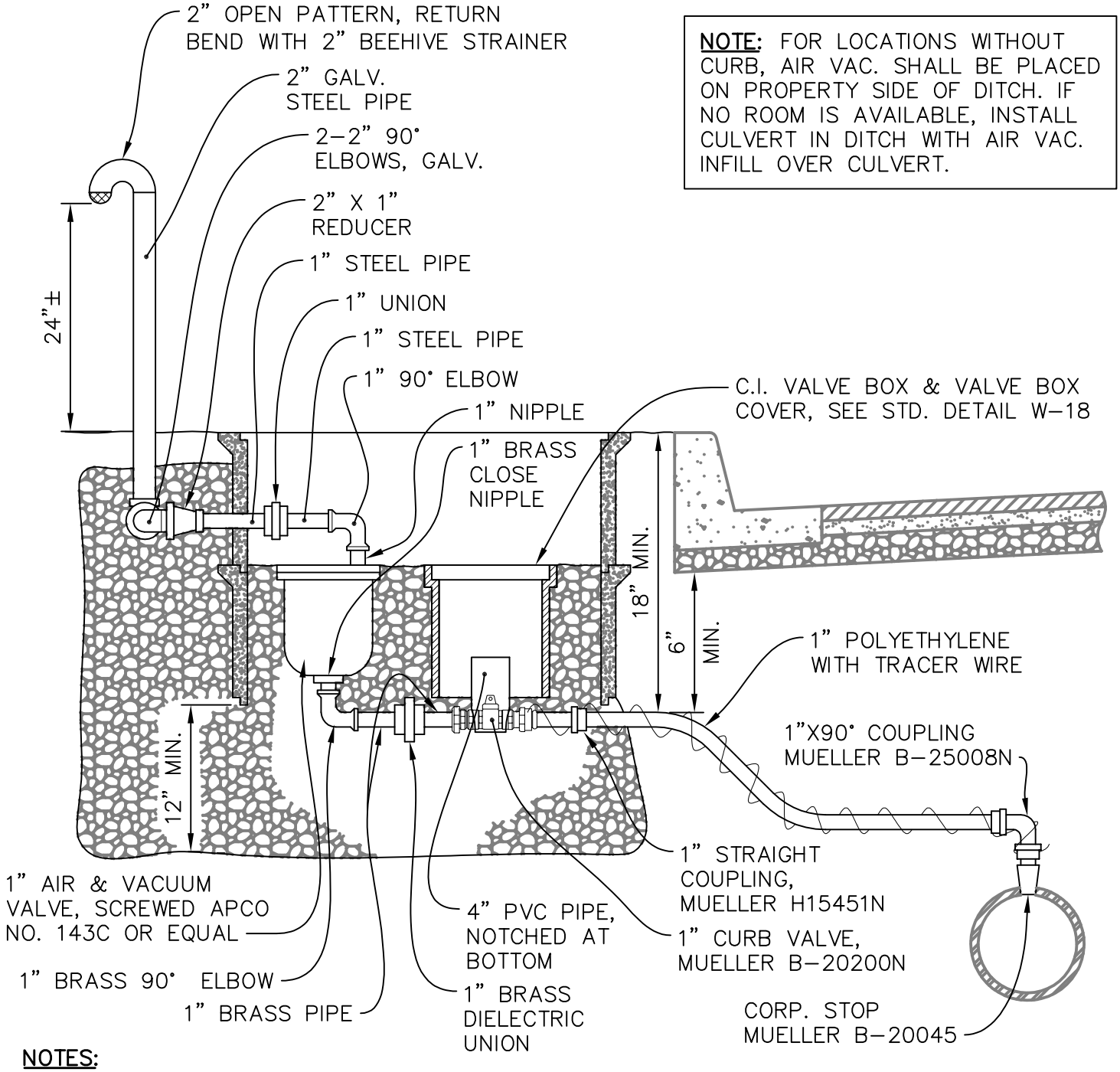
APPROVED BY CITY ENGINEER: DATE: 9/8/2016

CITY OF AUBURN WASHINGTON

WATER MAIN BLOCKING

COMMUNITY DEVELOPMENT & PUBLIC WORKS DEPT. STANDARD DETAIL: W-01.1

Plotted by: Craig Dobyns on 8/10/2016 File location: M:\Construction Standard Details\Approved Drawing Files (dwg)\Water\STDETL-W-01.1



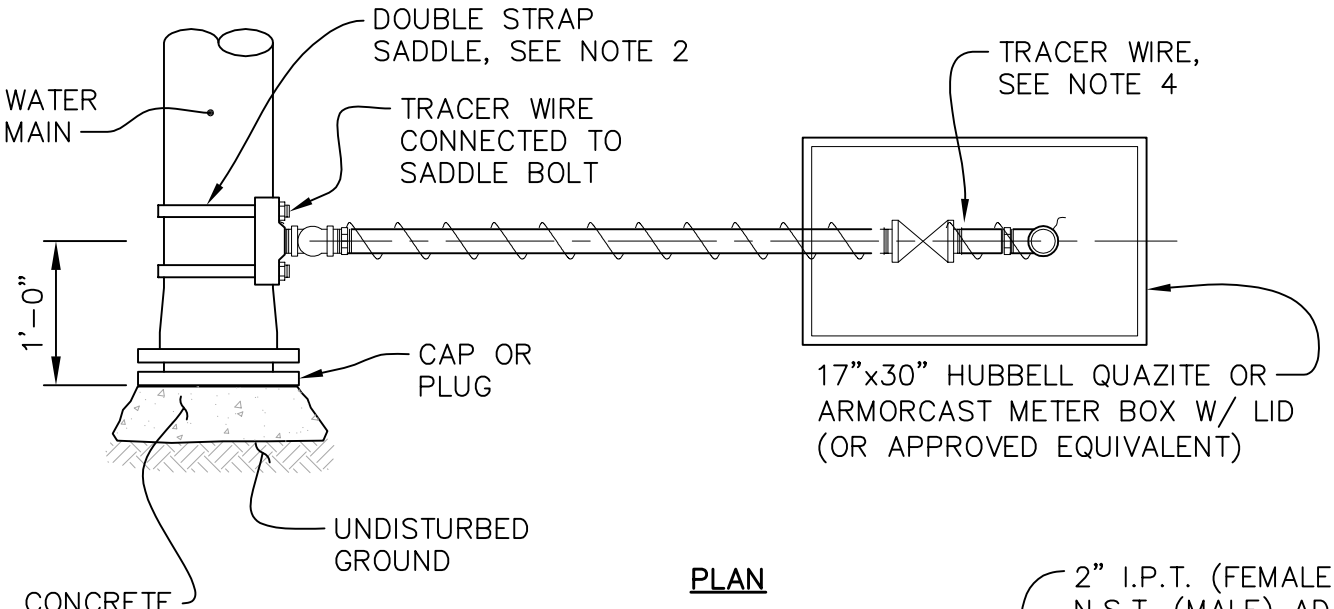
NOTE: FOR LOCATIONS WITHOUT CURB, AIR VAC. SHALL BE PLACED ON PROPERTY SIDE OF DITCH. IF NO ROOM IS AVAILABLE, INSTALL CULVERT IN DITCH WITH AIR VAC. INFILL OVER CULVERT.

NOTES:

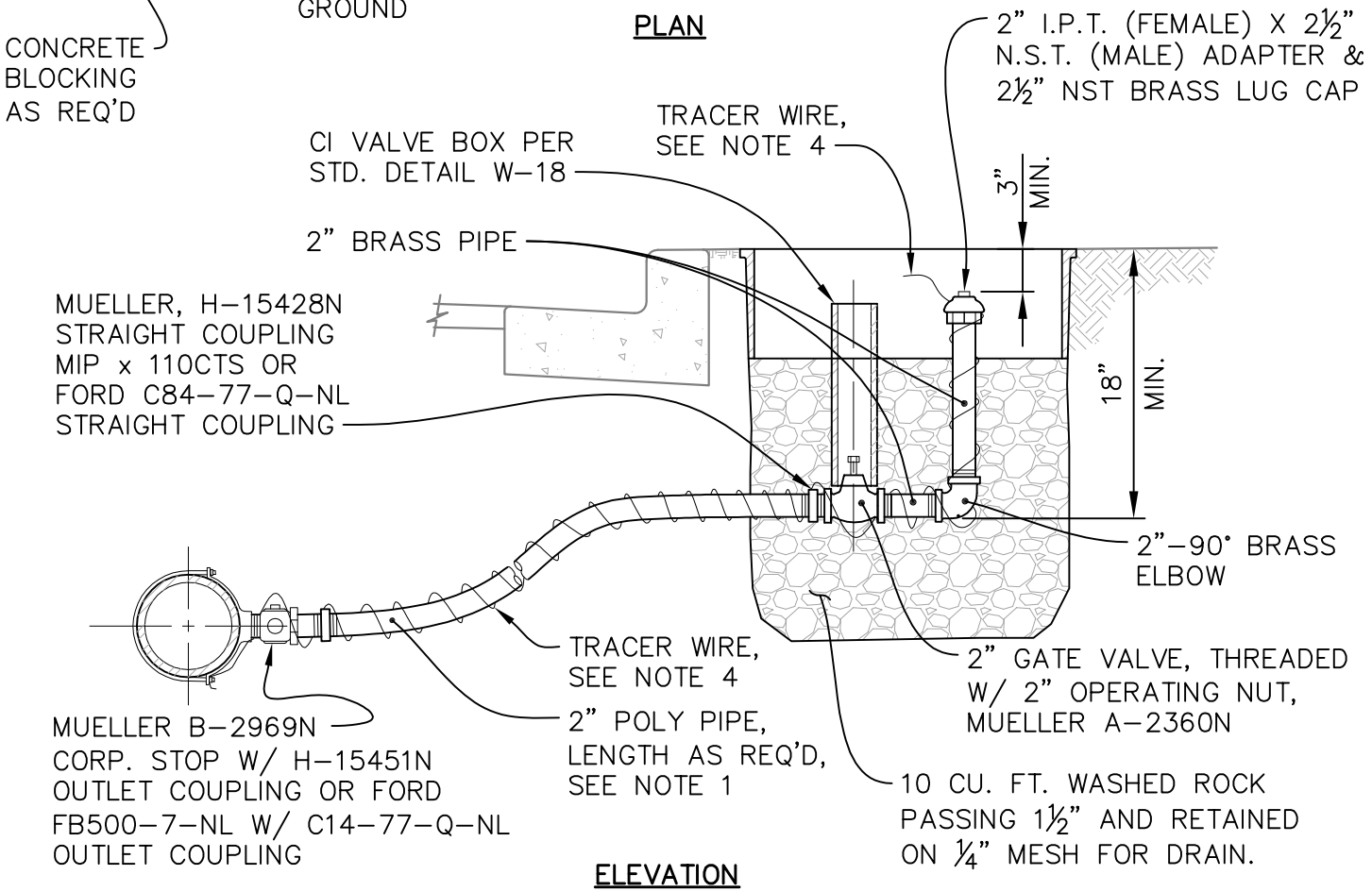
1. AIR VALVE TO BE INSTALLED IN 17" X 30" HUBBELL QUAZITE OR ARMORCAST METER BOX W/ DUCTILE COVER, EAST JORDAN IRON WORKS (OR APPROVED EQUIVALENT).
2. BED WITH ¾" WASHED ROCK, PASSING 1½" AND RETAINED ON ¼" MESH FOR DRAIN.
3. POLYETHYLENE PIPE SHALL BE AS SPECIFIED IN SECTION 9–30.6(3) OF THE CONSTRUCTION STANDARDS AND THE CONTRACT PROVISIONS.
4. DIELECTRIC UNIONS ARE REQUIRED FOR JOINING DISSIMILAR MATERIAL TYPES.
5. MAINTAIN POSITIVE GRADE FROM MAIN TO VALVE.
6. IN LIEU OF 2" BEEHIVE STRAINER, CONTACT CITY WATER DEPT. FOR LIST OF DOH APPROVED STRAINERS.

APPROVED BY CITY ENGINEER:	DATE:	CITY OF AUBURN WASHINGTON	TYPICAL AIR AND VACUUM RELIEF VALVE DETAIL
Jacob Sweeting	01/05/2021		
PUBLIC WORKS DEPARTMENT			STANDARD DETAIL: W–02.3

Plotted by: Craig Dobyns on 12/10/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL–W–02.3



PLAN



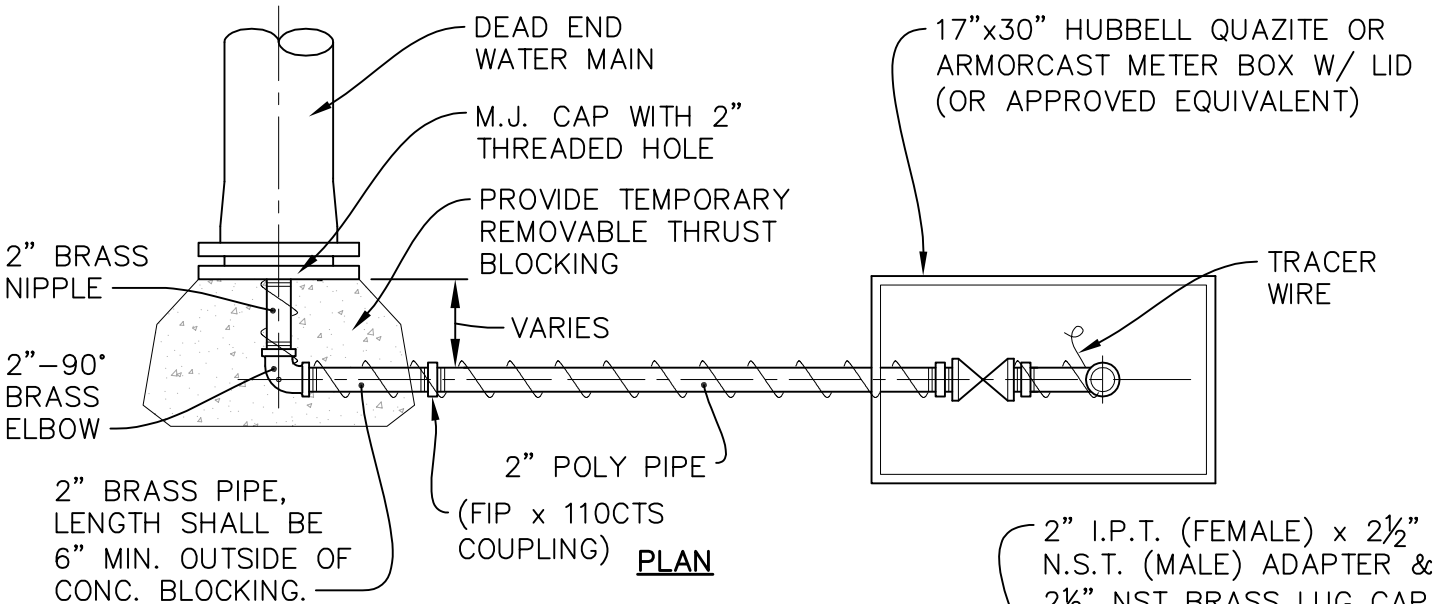
ELEVATION

NOTES:

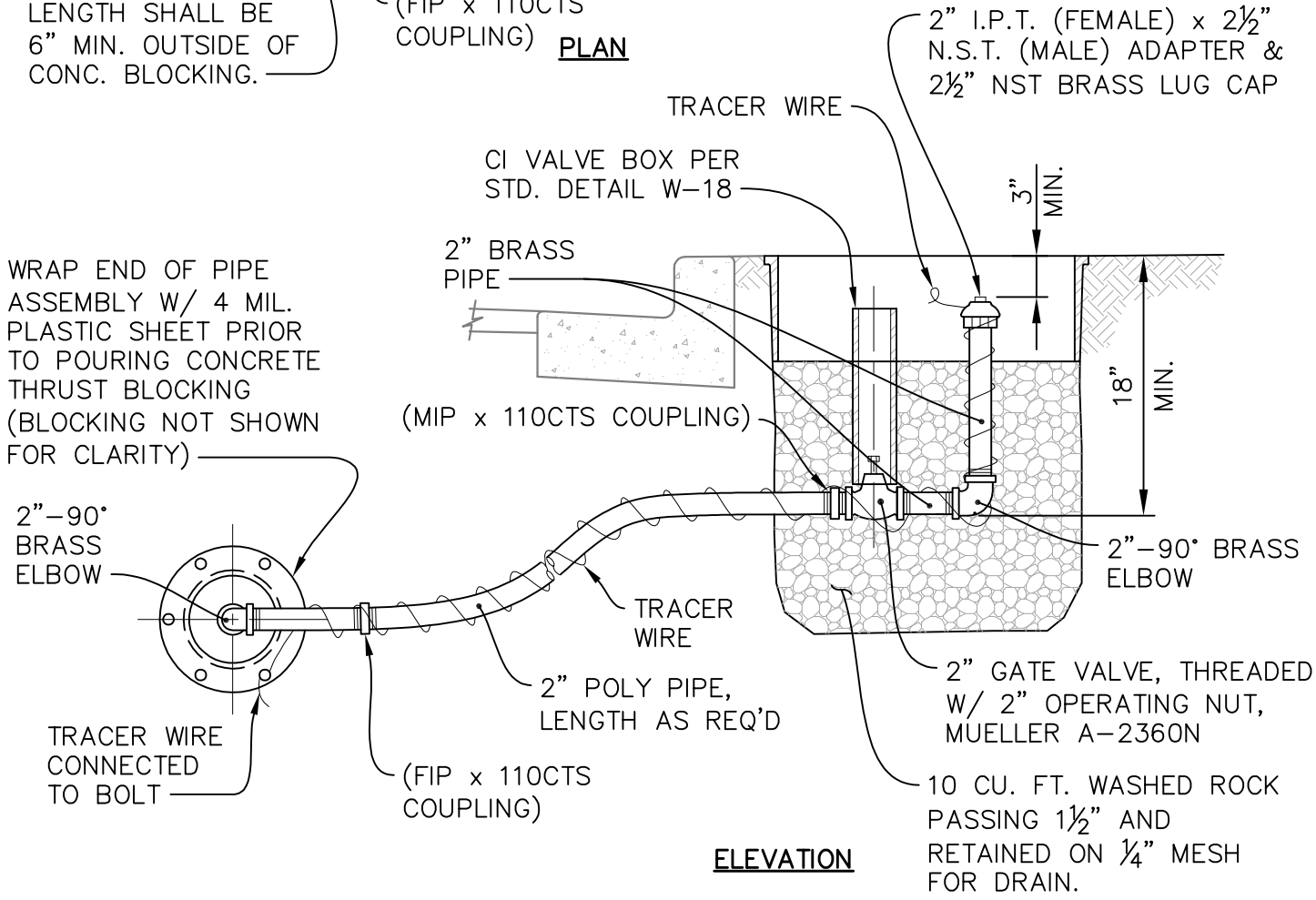
1. 2" POLY PIPE SHALL BE AS SPECIFIED IN SECTION 9-30.6(3) OF THE CONSTRUCTION STANDARDS AND THE CONTRACT PROVISIONS.
2. SADDLE SHALL BE AS SPECIFIED IN SECTION 9-30.6(1) OF THE CONSTRUCTION STANDARDS AND THE CONTRACT PROVISIONS.
3. FOR LOCATIONS WITHOUT CURB, BLOWOFF SHALL BE PLACED ON PROPERTY SIDE OF THE DITCH. IF NO ROOM IS AVAILABLE, INSTALL CULVERT IN DITCH W/ BLOWOFF INFILL OVER CULVERT.
4. TRACER WIRE SHALL BE INSULATED #10 COPPER WIRE, BARED AT ENDS.

APPROVED BY CITY ENGINEER:	DATE:		2" PERMANENT BLOW OFF ASSEMBLY
Jacob Sweeting	01/05/2021	CITY OF AUBURN WASHINGTON	
PUBLIC WORKS DEPARTMENT			STANDARD DETAIL: W-03.3

Plotted by: Craig Dobyns on 12/10/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL-W-03.3



PLAN



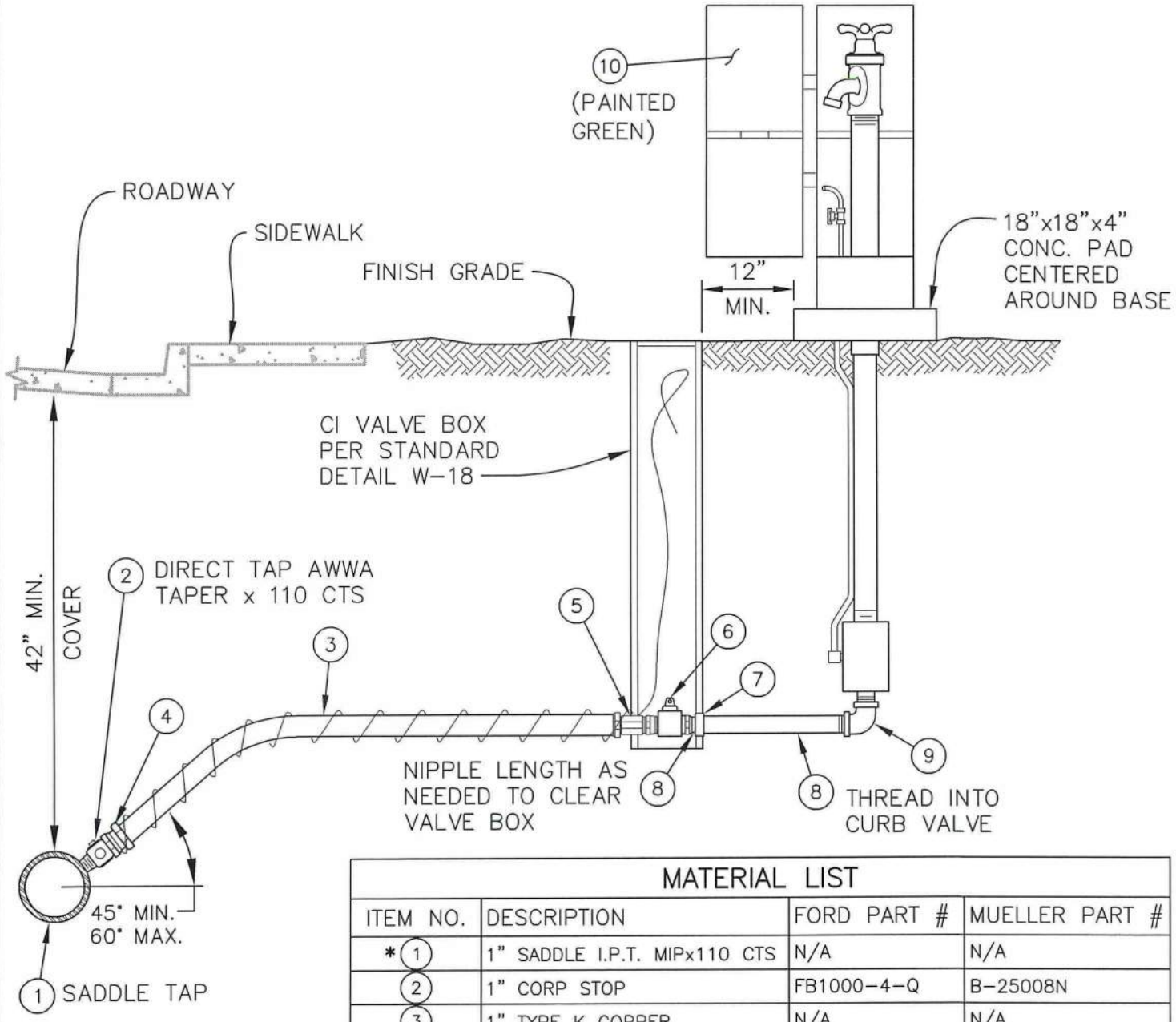
ELEVATION

NOTES:

1. 2" POLY PIPE SHALL BE AS SPECIFIED IN SECTION 9–30.6(3) OF THE CONSTRUCTION STANDARDS AND THE CONTRACT PROVISIONS.
2. TEMPORARY BLOWOFFS SHALL BE USED ON ALL DEAD END WATERLINES WITH LOCATION OF BLOWOFF BOX AS SHOWN ON THE PLAN OR WHERE DIRECTED BY THE ENGINEER.
3. TRACER WIRE SHALL BE INSULATED #10 COPPER WIRE, BARED AT ENDS.
4. GATE VALVE SHALL BE AS SPECIFIED IN SECTION 9–30.3(1) OF THE CONSTRUCTION STANDARDS AND THE CONTRACT PROVISIONS.

APPROVED BY CITY ENGINEER:	DATE:		TEMPORARY BLOW OFF
Jacob Sweeting	01/05/2021	CITY OF AUBURN WASHINGTON	
PUBLIC WORKS DEPARTMENT			STANDARD DETAIL: W–04.3

Plotted by: Craig Dobyns on 12/31/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL–W–04.3



* SADDLES FOR 1½" OR 2" PIPE TAPS SHALL BE EPOXY COATED OR E-COATED DUCTILE IRON W/ DOUBLE STAINLESS STEEL STRAPS & NEOPRENE GASKETS. SADDLES SHALL HAVE I.P.S. FEMALE THREADS

MATERIAL LIST			
ITEM NO.	DESCRIPTION	FORD PART #	MUELLER PART #
* 1	1" SADDLE I.P.T. MIPx110 CTS	N/A	N/A
2	1" CORP STOP	FB1000-4-Q	B-25008N
3	1" TYPE K COPPER	N/A	N/A
4	1" FIP COMPRESSION ADAPTOR	C14-44-Q-NL	H-15451N
5	1" COMPRESSION x 1" MIP	C84-44-Q-NL	H-15428N
6	1" BALL CURB FIP x FIP	B11-444W-NL	B-20200N
7	1" BRASS UNION	N/A	N/A
8	1" BRASS NIPPLE	N/A	N/A
9	1" 90° BRASS STREET ELL	N/A	N/A
10	KUPFERLE ECLIPSE #88-SS	N/A	N/A

NOTES:

1. ALL PIPE AND FITTINGS TO BE ASSEMBLED W/ TEFLON AND PIPE DOPE UNLESS OTHERWISE NOTED.
2. SERVICE LINES SHALL BE INSTALLED PERPENDICULAR TO THE WATER MAIN.
3. THE SERVICE LINE SHALL BE INSTALLED TO ALLOW FOR THE FAR SIDE OF THE SAMPLE STATION TO BE INSTALLED IN THE ROW OR EASEMENT LINE, UNLESS OTHERWISE DIRECTED BY THE CITY.

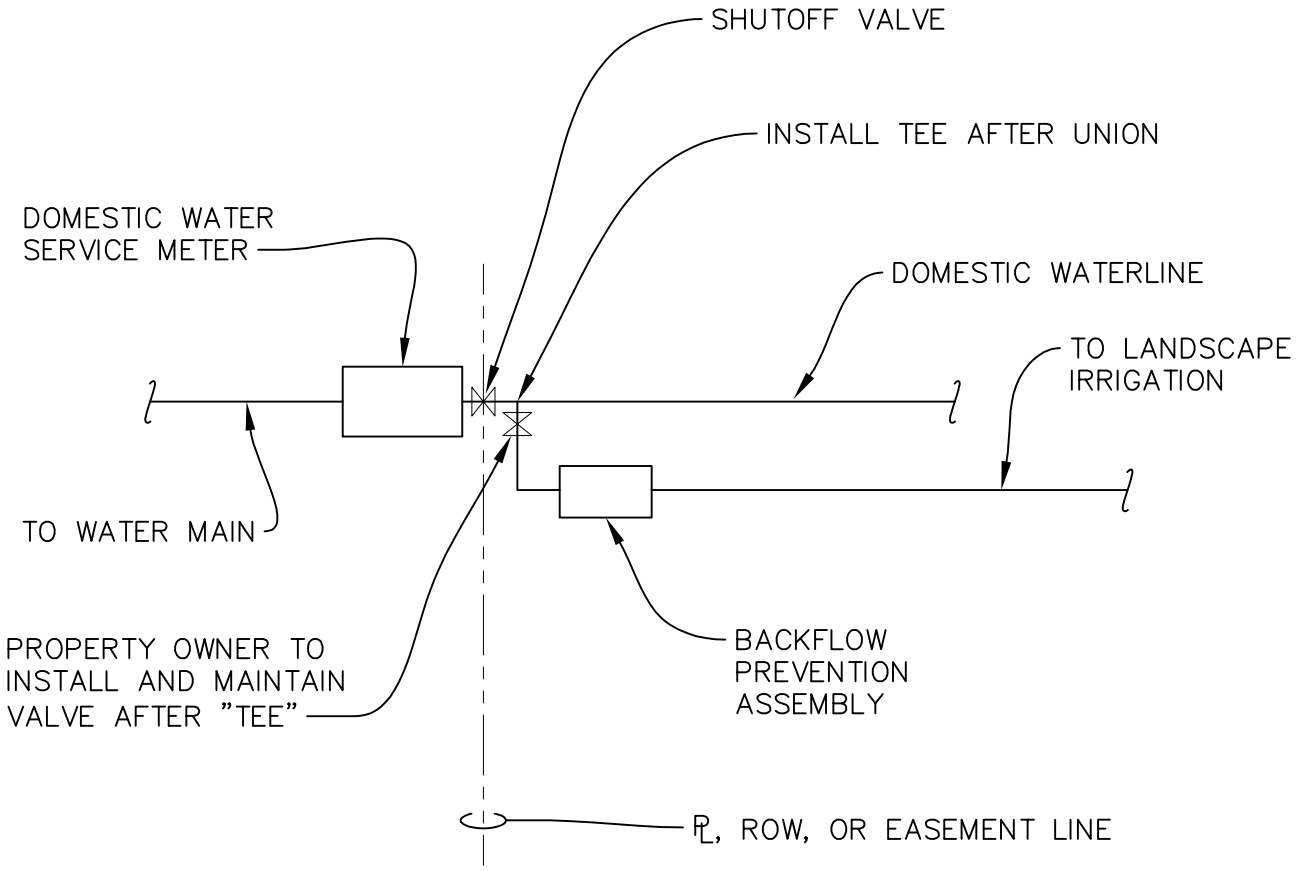
APPROVED BY CITY ENGINEER: Jacob Sreeting DATE: 12/26/19

CITY OF AUBURN WASHINGTON

WATER SAMPLING STATIONING DETAIL

PUBLIC WORKS DEPARTMENT

STANDARD DETAIL: W-05.2



PLAN
NTS

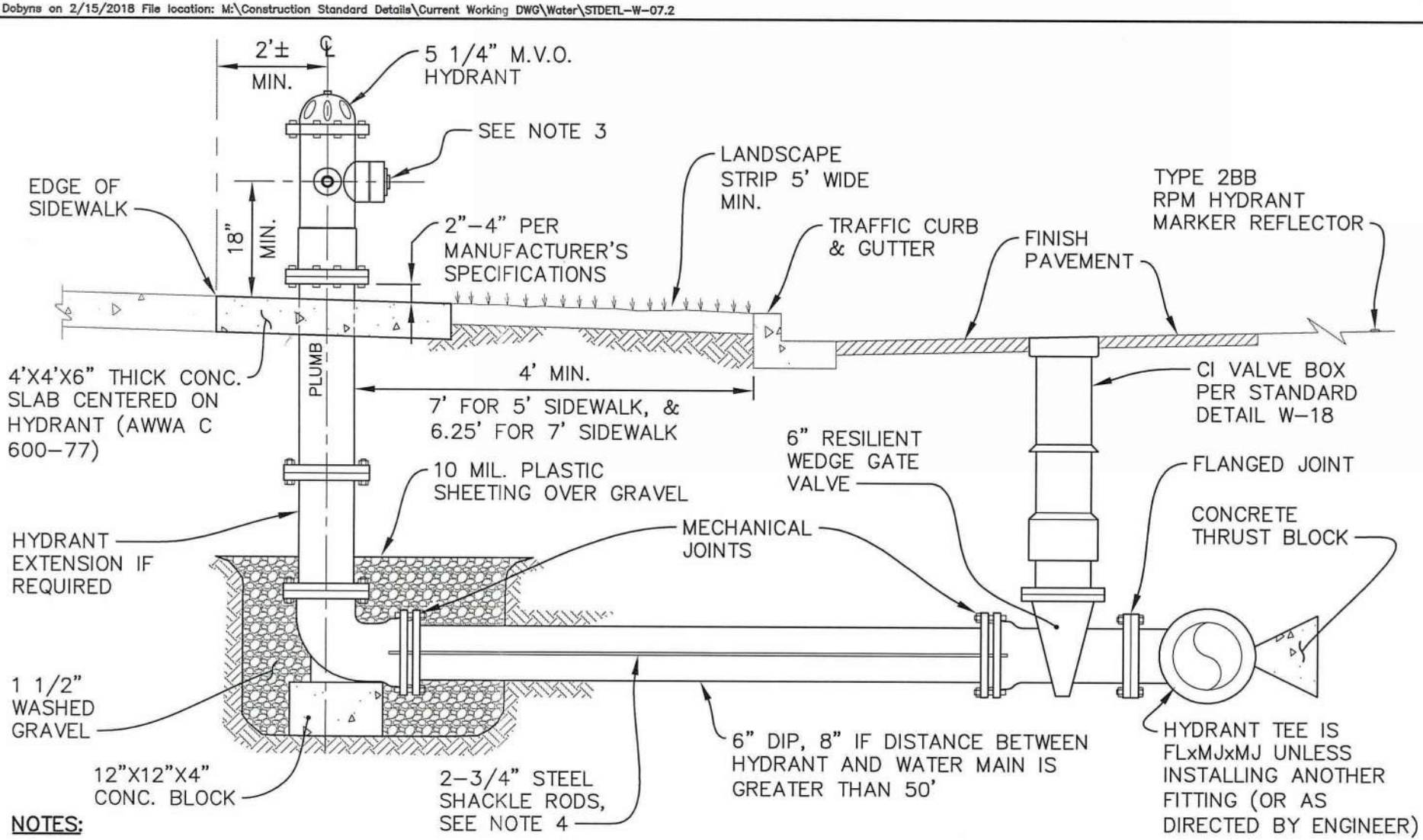
NOTES:

1. BACKFLOW ASSEMBLY SHALL BE PER DESIGN STANDARDS.
2. THIS DETAIL IS APPLICABLE TO SINGLE FAMILY RESIDENCE ONLY.

APPROVED BY CITY ENGINEER:	DATE:		3/4" TO 2" IRRIGATION FROM DOMESTIC SERVICE LINE (SINGLE FAMILY)
Jacob Sweeting	01/05/2021	CITY OF AUBURN WASHINGTON	
PUBLIC WORKS DEPARTMENT			STANDARD DETAIL: W-06.3

Plotted by: Craig Dobyns on 12/30/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL-W-06.3

Plotted by: Craig Dobyns on 2/15/2018 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL-W-07.2



NOTES:

1. HYDRANT SHALL BE LOCATED WITHIN THE LANDSCAPE STRIP. WHERE LANDSCAPE STRIP IS NOT PRESENT OR IS LESS THAN 5' WIDE, HYDRANT AND PAD SHALL BE PLACED BEHIND THE SIDEWALK IN R.O.W. OR EASEMENT.
2. WHERE NO CURB & GUTTER IS INSTALLED, FIRE HYDRANT SHALL BE LOCATED (IN RELATION TO STREET CENTER LINE) AS INDICATED ON THE DRAWINGS.
3. HYDRANTS SHALL HAVE 2–2 1/2" NATIONAL STANDARD THREAD (NST) HOSE PORTS & 1–4 1/2" NST WITH 5" STORZ ADAPTER AND CAP.
4. MEGA–LUGS OR PUSH–ON JOINT RESTRAINTS MAY BE USED IN PLACE OF SHACKLE RODS WITH PRIOR ENGINEER APPROVAL.
5. ENSURE 5' MINIMUM CLEARANCE TO OBSTACLES FROM CENTERLINE OF HYDRANT.
6. REMOVE CHAINS.

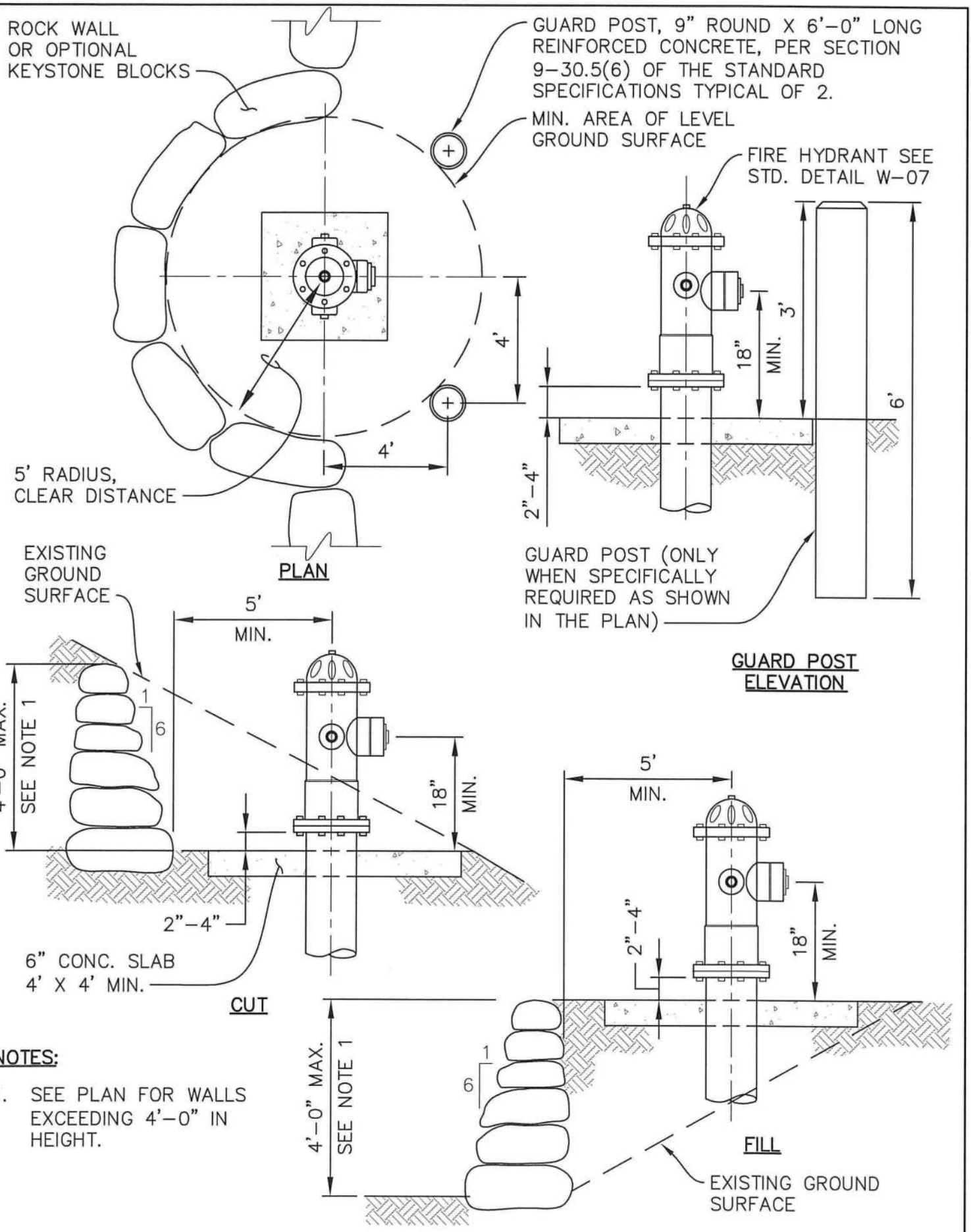
APPROVED BY CITY ENGINEER: [signature] DATE: 2/20/2018

CITY OF AUBURN WASHINGTON

COMMUNITY DEVELOPMENT & PUBLIC WORKS DEPT.

5 1/4" M.V.O. HYDRANT SETTING DETAIL

STANDARD DETAIL: W–07.2

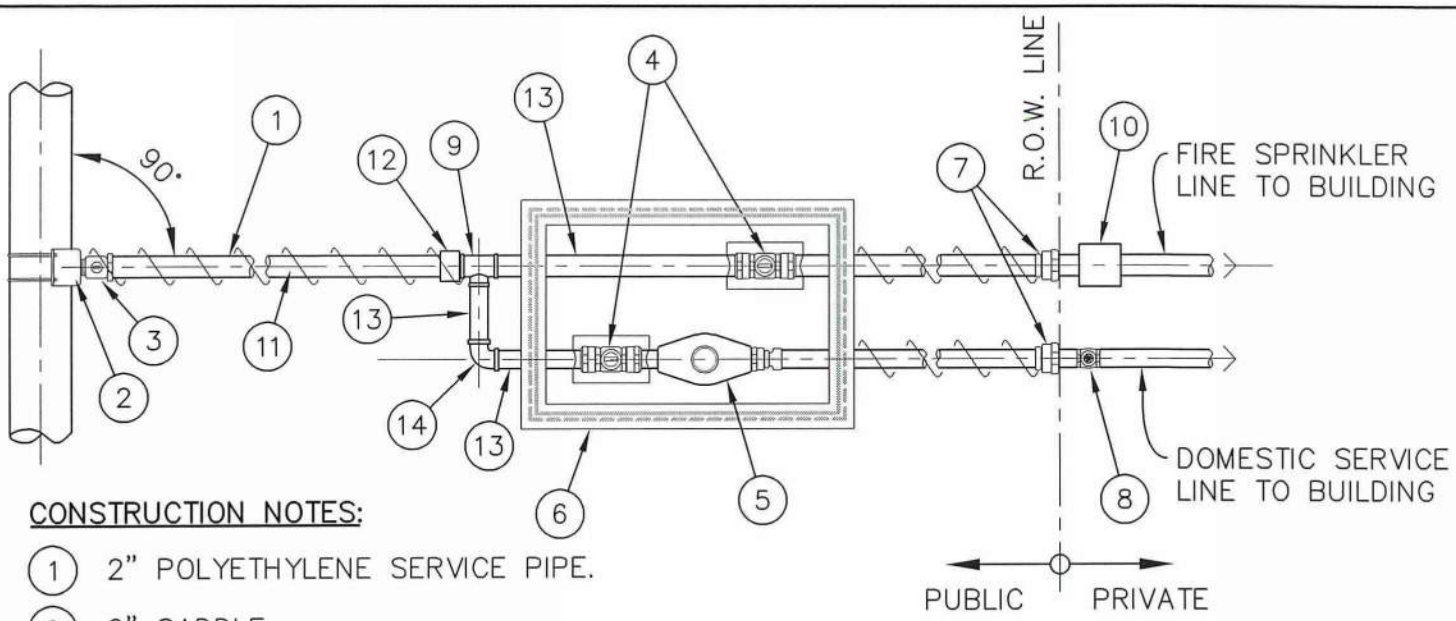


NOTES:

1. SEE PLAN FOR WALLS EXCEEDING 4'-0" IN HEIGHT.

APPROVED BY: CITY ENGINEER:	DATE: 8/5/2016	CITY OF AUBURN WASHINGTON	FIRE HYDRANT LOCATION IN CUT OR FILL W/ GUARD POSTS
COMMUNITY DEVELOPMENT & PUBLIC WORKS DEPT.			STANDARD DETAIL: W-08.1

Plotted by: Craig Dobyns on 7/13/2016 File location: M:\Construction Standard Details\Approved Drawing Files (dwg)\Water\STDETL-W-08.1



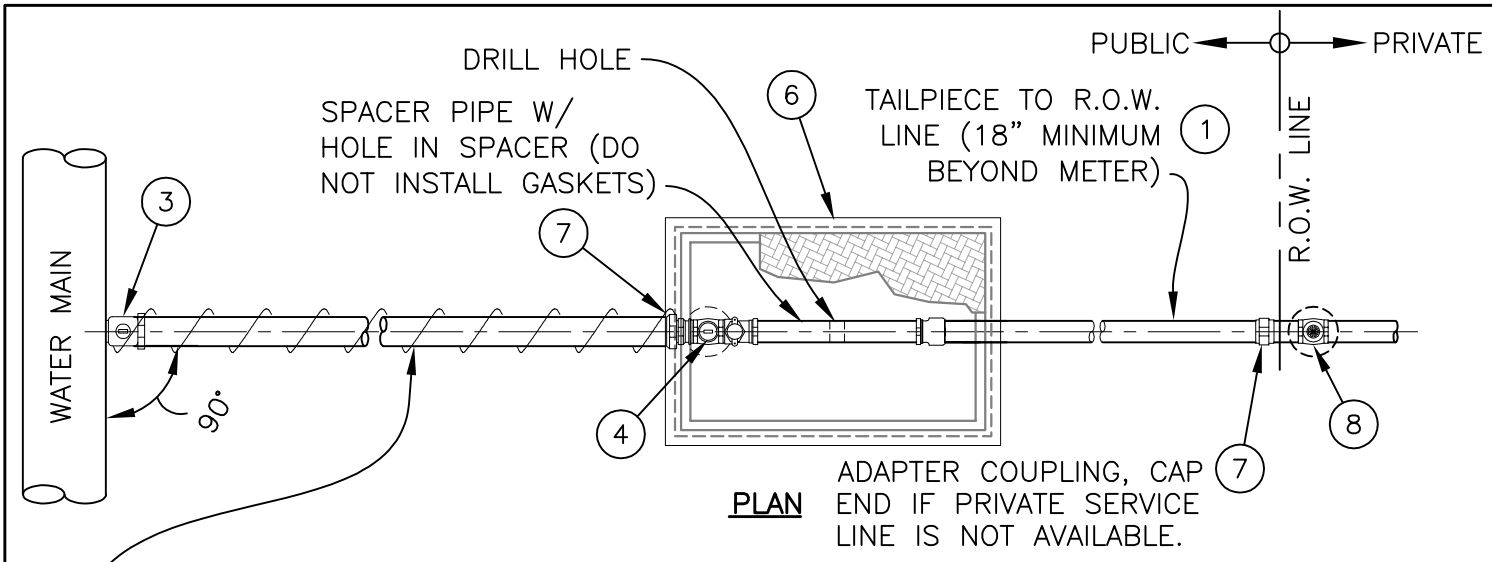
CONSTRUCTION NOTES:

1. 2" POLYETHYLENE SERVICE PIPE.
2. 2" SADDLE.
3. 2" CORPORATION STOP.
4. CURB VALVE WITH COUPLINGS AND LOCK WING EARS, ENCASED VERTICALLY BY 3" DIA. SCH. 40 PVC PIPE, NOTCHED AT BOTTOM TO FIT OVER COUPLINGS. FIRE LINE PVC PIPE SHALL BE PAINTED RED TO IDENTIFY AS A FIRE LINE.
5. METER YOLK WITH SPACER PIPE W/ HOLE IN SPACER. DO NOT INSTALL GASKETS.
6. 17"x30" METER BOX.
7. ADAPTER COUPLING, TEMPORARILY CAP IF PRIVATE SIDE CONNECTION IS NOT READY.
8. SHUT OFF VALVE ON DOMESTIC LINE (CUSTOMER TO INSTALL AND MAINTAIN).
9. 2"x2"x*" TEE, WHERE *" IS METER SIZE IN INCHES (1" MINIMUM) FOR DOMESTIC LINE.
10. BACKFLOW PREVENTION ASSEMBLY ON FIRE SPRINKLER LINE (CUSTOMER TO INSTALL AND MAINTAIN).
11. #10 INSULATED COPPER TRACER WIRE.
12. 2" ADAPTER (MIPxCOMP)
13. *" BRASS NIPPLE, LENGTH AS NEEDED.
14. *" BRASS ELBOW

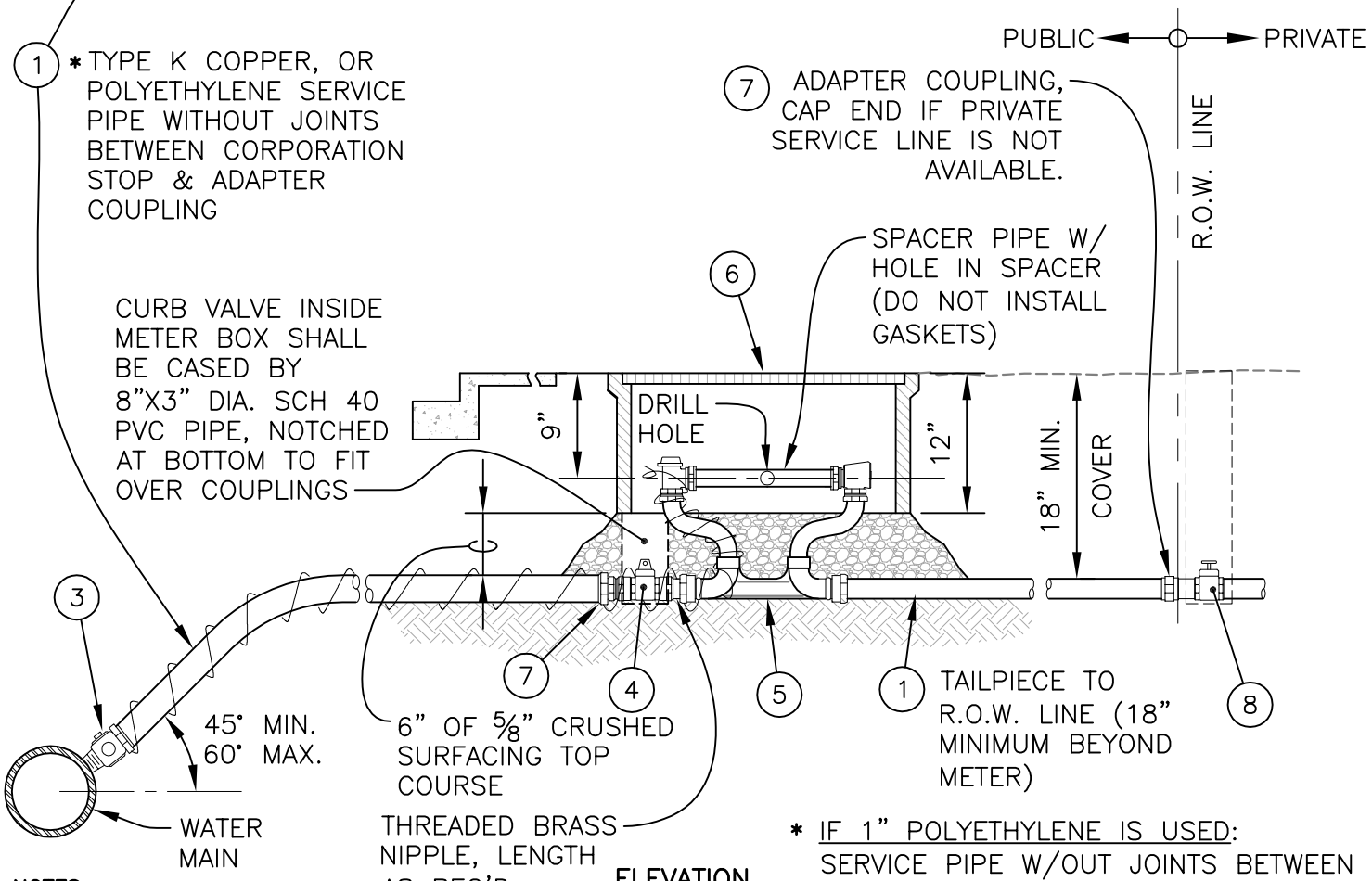
NOTES:

1. THIS DETAIL IS APPLICABLE TO SINGLE FAMILY RESIDENCES ONLY.
2. CONNECTION TO CITY WATER MAIN PER CITY OF AUBURN REQUIREMENTS.
3. BACKFLOW PREVENTION ASSEMBLY SHALL BE PER DESIGN STANDARDS.
4. PLANS FOR SEPARATE FIRE SPRINKLER LINE MUST BE SUBMITTED AND APPROVED BY THE FIRE MARSHAL PRIOR TO INSTALLATION.
5. NO DETAIL IS REQUIRED FOR FLOW-THROUGH FIRE SPRINKLER SYSTEMS.
6. SEE STANDARD DETAIL W-15 FOR MATERIAL SCHEDULE.

APPROVED BY CITY ENGINEER: Jacob Sreeby DATE: 12/26/19	CITY OF AUBURN WASHINGTON	2" FIRE SPRINKLER LINES WITH 3/4" to 2" DOMESTIC SERVICE LINE
PUBLIC WORKS DEPARTMENT		STANDARD DETAIL: W-09.3



PLAN



ELEVATION

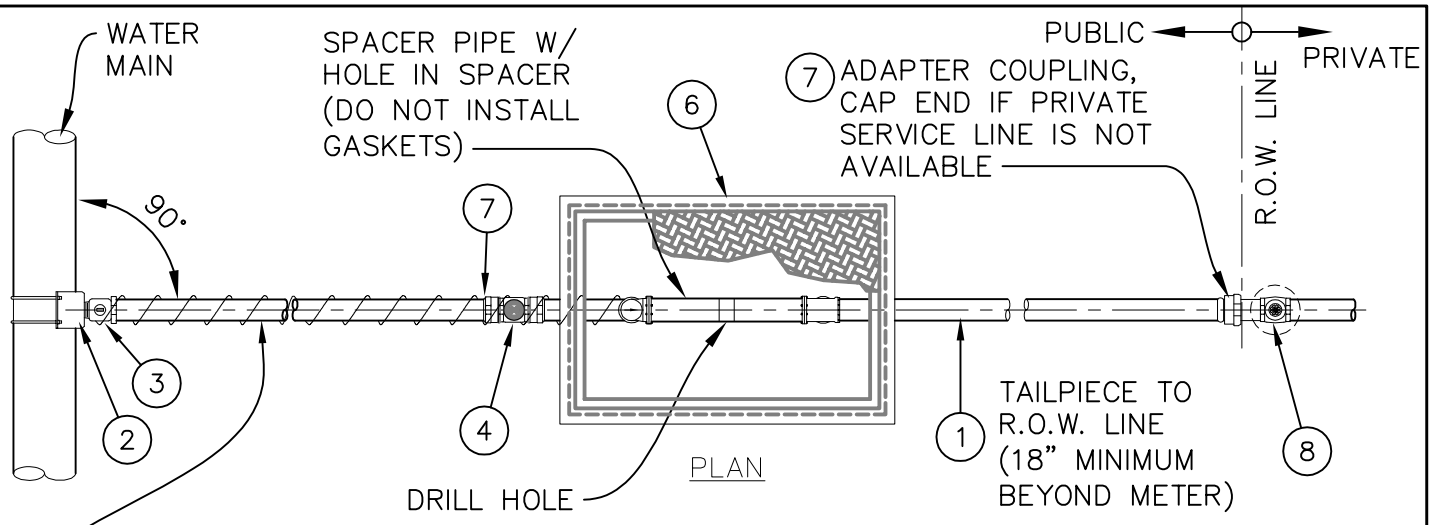
NOTES:

1. SEE STANDARD DETAIL W–15 FOR MATERIAL SCHEDULE.
2. ALL DOMESTIC SERVICE LINES FROM THE WATER MAIN, INCLUDING THE METER YOLK, SHALL BE A MINIMUM OF 1" IN DIAMETER.
3. METER PROVIDED BY CITY, CONNECTIONS MADE FROM EXISTING WATER MAIN SHALL BE INSTALLED BY THE CITY OF AUBURN AND PAID FOR BY THE APPLICANT OR CONTRACTOR.
4. METER LAY LENGTH 1" METER = 10–3/4"

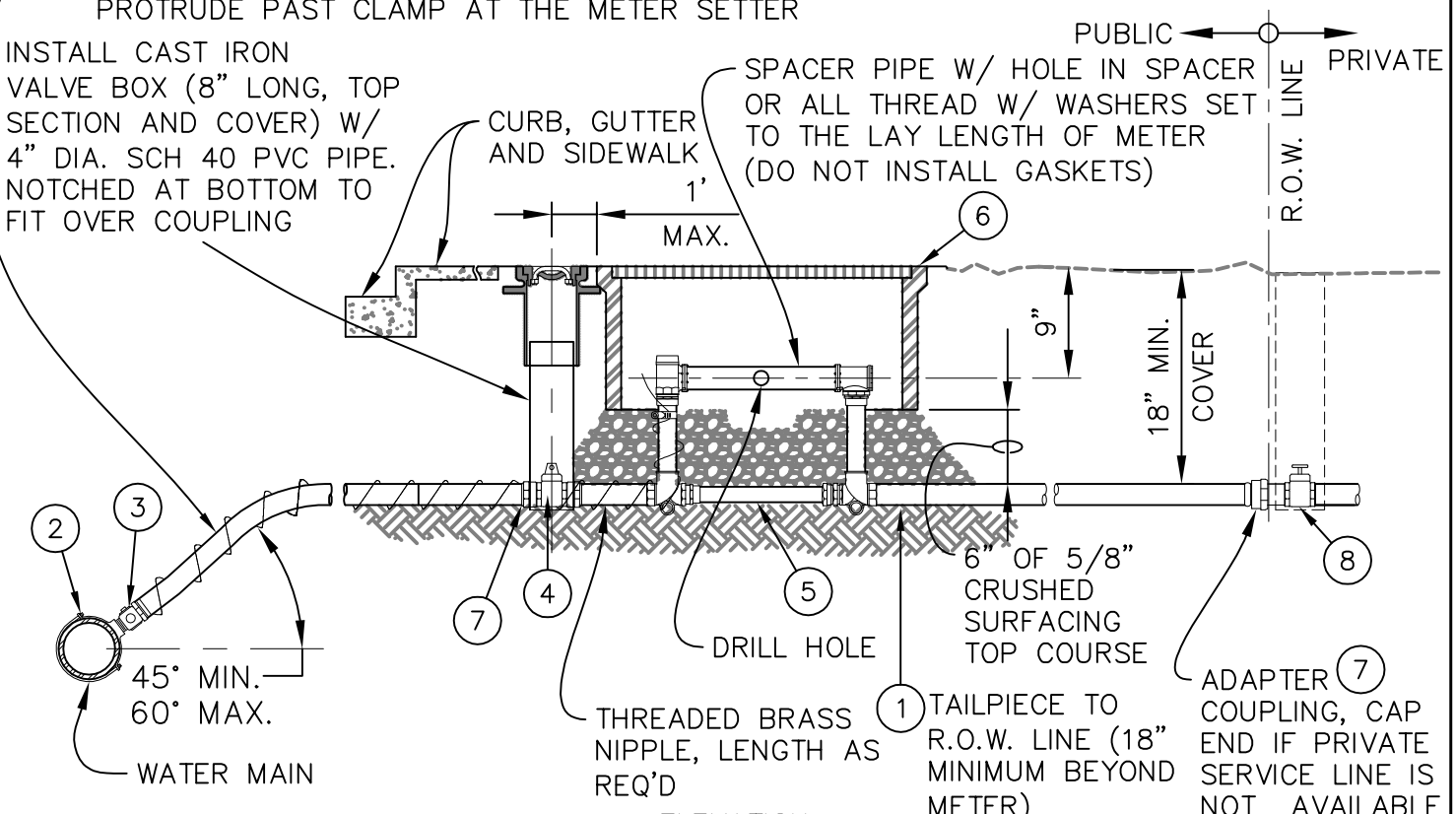
* IF 1" POLYETHYLENE IS USED: SERVICE PIPE W/OUT JOINTS BETWEEN CORP. STOP AND CURB VALVE AND WRAPPED W/ #10 INSULATED COPPER TRACER WIRE. ATTACH BARE TRACER WIRE TO CORP. STOP AND WRAP IT AROUND THE HDPE PIPE AND METER SETTER AS SHOWN W/ HIGH TORQUE SMOOTH STAINLESS STEEL HOSE CLAMPS. A MINIMUM OF 8" BARE WIRE SHALL PROTRUDE PAST CLAMP AT THE METER SETTER

APPROVED BY CITY ENGINEER:	DATE:	CITY OF AUBURN WASHINGTON	1" WATER SERVICE FOR 3/4" AND 1" METERS
Jacob Sweeting	01/05/2021		
PUBLIC WORKS DEPARTMENT			STANDARD DETAIL: W–13.4

Plotted by: Craig Dobyns on 12/30/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL–W–13.4



1 SERVICE PIPE W/OUT JOINTS BETWEEN CORP. STOP AND CURB VALVE AND WRAPPED W/ #10 INSULATED COPPER TRACER WIRE. ATTACH BARE TRACER WIRE TO CORP. STOP AND WRAP IT AROUND THE HDPE PIPE AND METER SETTER AS SHOWN W/ HIGH TORQUE SMOOTH STAINLESS STEEL HOSE CLAMPS. A MINIMUM OF 8" BARE WIRE SHALL PROTRUDE PAST CLAMP AT THE METER SETTER



ELEVATION

NOTES:

1. SEE STANDARD DETAIL W–15 FOR MATERIAL SCHEDULE.
2. ALL DOMESTIC SERVICE LINES FROM THE WATER MAIN TO THE ADAPTER COUPLING, STRAIGHT COUPLING, OR CURB VALVE, SHALL BE A MINIMUM OF 1" IN DIAMETER.
3. METER PROVIDED BY CITY, CONNECTIONS MADE FROM EXISTING WATER MAIN SHALL BE INSTALLED BY THE CITY OF AUBURN AND PAID FOR BY THE APPLICANT OR CONTRACTOR.
4. METER LAY LENGTHS: 1.5" METER = 13" || 2" METER = 17"

APPROVED BY CITY ENGINEER:	DATE:		
Jacob Sweeting	01/05/2021	CITY OF AUBURN WASHINGTON	1 1/2" & 2" WATER SERVICE
PUBLIC WORKS DEPARTMENT			STANDARD DETAIL: W–14.2

Plotted by: Craig Dobyns on 12/30/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL–W–14.2

WATER SERVICE MATERIAL SCHEDULE

(1) THE CITY OF AUBURN ALLOWS 1–1/2" TO 2" POLYETHYLENE SDR–9 (IN COPPER TUBE SIZES) W/ STAINLESS STEEL LINERS IN ALL COUPLINGS & WRAPPED W/ A #10 INSULATED COPPER TRACER WIRE. FOR 1" COPPER, IT SHALL BE TYPE K COPPER TUBING W/OUT TRACER WIRE FOR WATER SERVICE & TAILPIECE CONNECTION, IN ACCORDANCE W/ STANDARD SPECIFICATION SECTION 9–30.6(3). ALL CONNECTIONS TO POLYETHYLENE OR COPPER TUBING SHALL BE W/ MUELLER 110 COMPRESSION CONNECTIONS OR EQUAL. TAILPIECE SHALL EXTEND TO R.O.W. LINE (18" MINIMUM BEYOND METER) & SHALL BE THE SAME SIZE AS THE SERVICE LINE.

(2) SADDLES FOR 1", 1–1/2", OR 2" PIPE TAPS SHALL BE EPOXY COATED OR E–COATED DUCTILE IRON W/ DOUBLE STAINLESS STEEL STRAPS & NEOPRENE GASKETS. SADDLES SHALL HAVE I.P.S. FEMALE THREADS.

(8) CONTRACTOR SHALL FURNISH & INSTALL PRIVATE SERVICE LINE SHUT–OFF VALVE & RISER. FOR CAPITAL PROJECTS, SEE CONTRACT DOCUMENTS, OTHERWISE PROPERTY OWNER TO INSTALL PRIVATE SERVICE LINE SHUT–OFF VALVE AT POINT OF CONNECTION.

METER LOCATIONS:

1) WHERE LANDSCAPE STRIPS ARE PLANNED OR EXIST, THE METER & METER BOX WILL BE PLACED BETWEEN THE BACK OF THE CURB & THE SIDEWALK, ADJACENT TO THE SIDEWALK IF ROOM PERMITS;

2) WHERE THE SIDEWALK IS LOCATED ADJACENT TO THE BACK OF THE CURB OR THE LANDSCAPE STRIP IS TOO NARROW TO ACCOMMODATE THE METER BOX, THE METER & METER BOX WILL BE PLACED ADJACENT TO & AT THE BACK OF SIDEWALK;

3) WHERE METERS & METER BOXES ARE LOCATED IN THE STREET OR SIDEWALK OR IN LOCATIONS WHICH ARE SUBJECTED TO VEHICULAR TRAFFIC, INCLUDING DRIVEWAYS, ETC., A TRAFFIC BEARING METER BOX & LID OF APPROPRIATE LOAD RATING SHALL BE PROVIDED AS SPECIFIED (EAST JORDAN IRON WORKS, OR EQUAL).

4) LOCATE CURB VALVE IN THE METER BOX WHERE POSSIBLE & 1 FT. OUTSIDE IF NO ROOM INSIDE METER BOX IS AVAILABLE.

5) OFF STREET METER LOCATION SHALL BE APPROVED BY THE CITY.

SCHEDULE NO. & PART	SERVICE LINE SIZE & MUELLER/FORD CATALOG NO. OR APPROVED EQUAL		
	1"	1–1/2"	2"
(3) CORP. STOP	DIRECT TAP OPTION: MUELLER B–25008N OR FORD FB1000–4–Q–NL SADDLE OPTION: MUELLER B–20013N W/ H–15451N OUTLET COUPLING OR FORD FB500–4–NL W/ C14–44–Q–NL OUTLET COUPLING	MUELLER B–2969N W/ H–15451N OUTLET COUPLING OR FORD FB500–6–NL W/ C14–66–Q–NL OUTLET COUPLING	MUELLER B–2969N W/ H–15451N OUTLET COUPLING OR FORD FB500–7–NL W/ C14–77–Q–NL OUTLET COUPLING
(4) CURB VALVE	MUELLER B–20200N OR FORD B11–444W–NL	MUELLER B–20200N OR FORD B11–666W–NL	MUELLER B–20200N OR FORD B11–777W–NL
(5) METER YOKE	MUELLER B–2404R–2N W/ H–14222N INLET & H–14227N OUTLET COUPLINGS, 12" RISER W/ MUELLER H–10879 5/8"x3/4"x1" ADAPTERS FOR 3/4" METERS	MUELLER B–2423–N W/ H–15428N OUTLET COUPLING OR FORD VBH76–12B–11–66–NL W/ C84–66–Q–NL OUTLET COUPLING, 12" RISER	MUELLER B–2423–N W/ H–15428N OUTLET COUPLING OR FORD VBH77–12B–11–77–NL W/ C84–77–Q–NL OUTLET COUPLING, 12" RISER
(6) METER BOX	HUBBELL QUAZITE OR ARMORCAST (NOT PERMITTED FOR USE IN PEDESTRIAN PATHWAYS) 13"x24"x12" POLYMER CONCRETE BOX & COVER W/ READER LID & 2" AMR PORT W/ (2) 2 ½ X 3 MOUSEHOLES (BO3132412M)	HUBBELL QUAZITE OR ARMORCAST (NOT PERMITTED FOR USE IN PEDESTRIAN PATHWAYS), 17"x30"x12" POLYMER CONCRETE BOX & COVER W/ READER LID & 2" AMR PORT & W/ (2) 2 ½ x 3 MOUSEHOLES (BO3173012M)	
(7) COUPLING	MUELLER H–15428N OR FORD C84–44–Q–NL	MUELLER H–15428N OR FORD C84–66–Q–NL	MUELLER H–15428N OR FORD C84–77–Q–NL
(8) SHUT–OFF VALVE	MUELLER B–20200N W/ B–20298–99000 LEVER HANDLE, W/ 8" IRRIGATION BOX AND 6" PVC RISER		

APPROVED BY CITY ENGINEER: Jacob Sweeting

DATE: 01/05/2021

CITY OF AUBURN WASHINGTON

WATER METER LOCATION & MATERIAL SCHEDULE

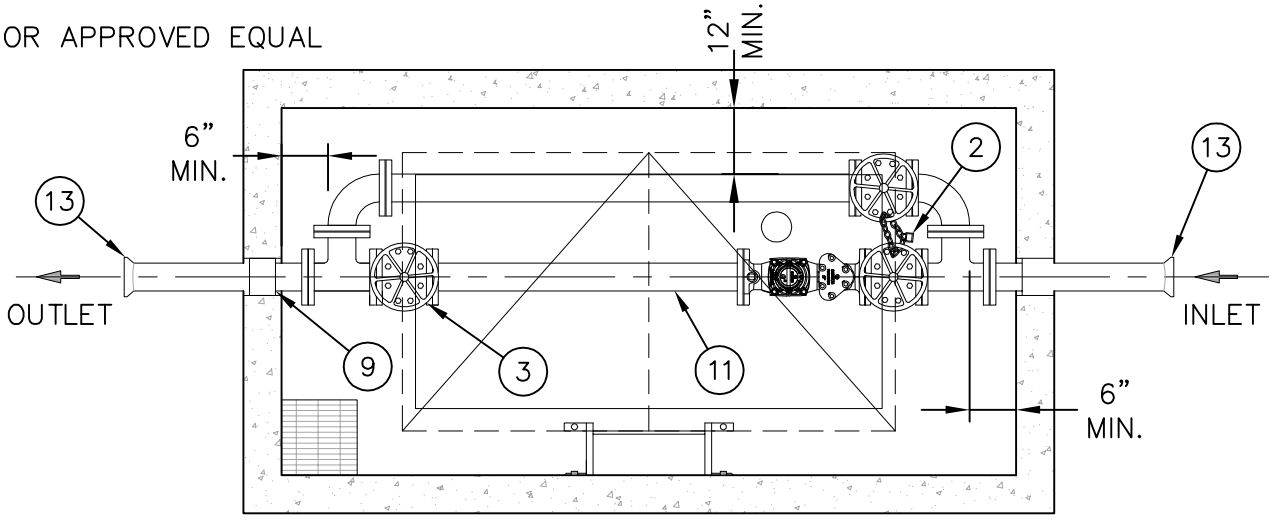
PUBLIC WORKS DEPARTMENT

STANDARD DETAIL: W–15.5

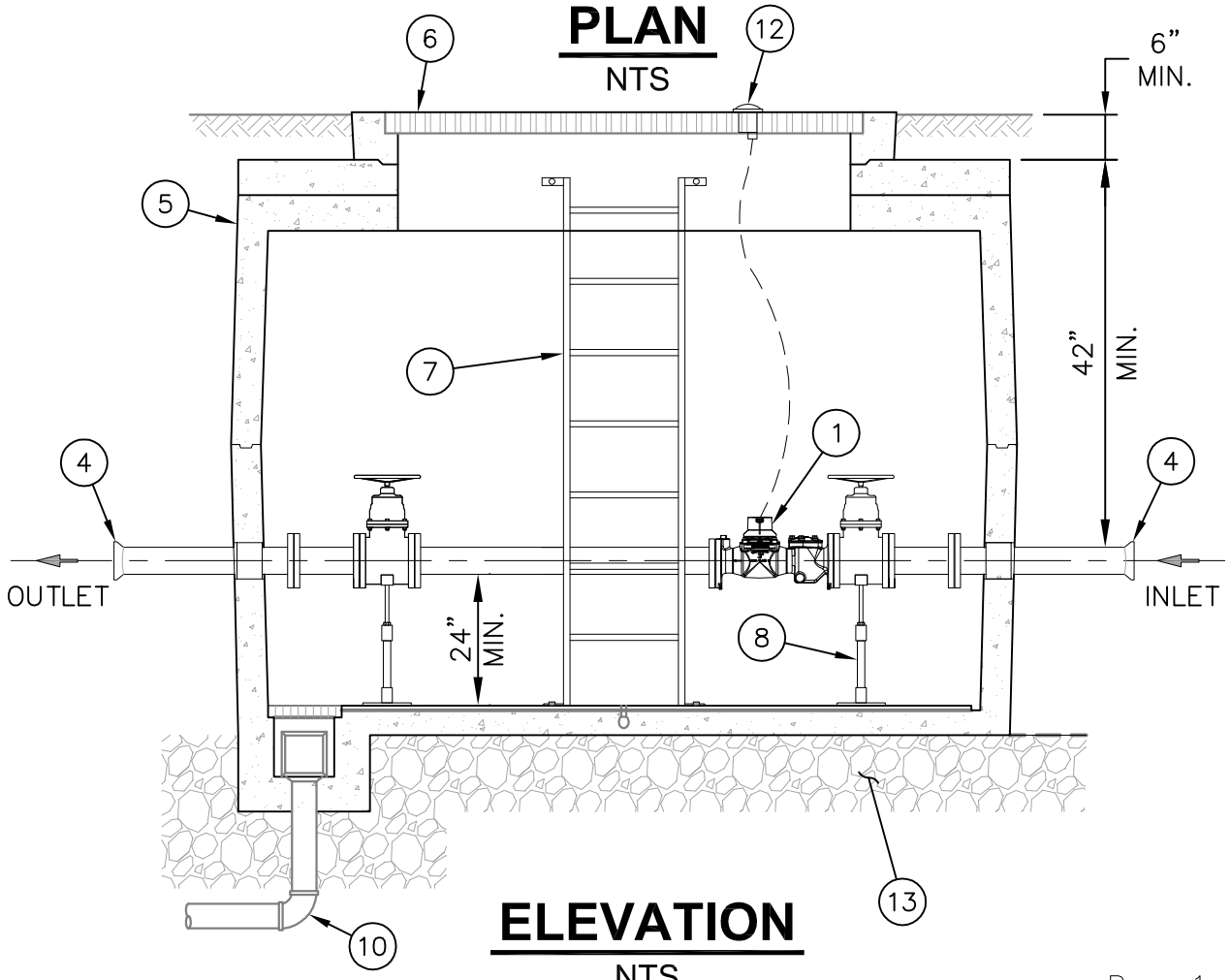
Plotted by: Craig Dobyns on 12/10/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL–W–15.5

METER SIZE	MAIN LINE	BYPASS	METER LENGTH FLG. TO FLG.	MIN. LENGTH	MIN. WIDTH	MIN. HEIGHT	OLDCASTLE VAULT MODEL**	GRANITE VAULT MODEL**
3"	3" D.I.P.	3" D.I.P.	17"	8'–4"	4'–4"	6'–2"	4484–LA	4x8 MV
4"	4" D.I.P.	4" D.I.P.	20"	8'–4"	4'–4"	6'–2"	4484–LA	4x8 MV
6"	6" D.I.P.	6" D.I.P.	24"	10'–6"	5'–0"	6'–2"	5106–LA	5x10 MV
8"	8" D.I.P.	8" D.I.P.	30 1/8"	12'–0"	6'–0"	6'–5"	612–LA	6x12 MV
10"	10" D.I.P.	10" D.I.P.	41 7/8"	14'–0"	8'–0"	6'–5"	814–LA	8x14 MV

** OR APPROVED EQUAL



PLAN
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ELEVATION
NTS

APPROVED BY CITY ENGINEER: Jacob Sweeting
DATE: 01/05/2021
CITY OF AUBURN WASHINGTON
3" OR LARGER WATER METER INSTALLATION
PUBLIC WORKS DEPARTMENT
STANDARD DETAIL: W–16.3

Plotted by: Craig Dobyns on 12/10/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL–W–16.3

BILL OF MATERIALS		
PART NO.	QUANTITY	DESCRIPTION
(1)	1	METER PROVIDED BY CITY FOR CONTRACTOR INSTALLATION: SENSUS OMNI C2 COMPOUND METER OR APPROVED EQUAL FLANGED WITH BUILT-IN STRAINER AND ENCODERS COMPATIBLE WITH CURRENT SENSUS AMR/AMI SYSTEM
(2)	1	LOCK WITH CHAINS
(3)	3	AWWA C-509 OR C-515 GATE VALVE COMPLETE WITH HAND WHEEL
(4)	2	FIRST JOINT OUTSIDE VAULT REQUIRES FIELD LOK GASKET OR OTHER FORM OF JOINT RESTRAINT
(5)	1	PRECAST CONCRETE VAULT COMPLETE WITH COLLAR, C555 WHITE INTERIOR PAINT
(6)	1	36"x72" ALUMINUM HATCH H20-44 CLASS B, STATIC LOADING WITH HOLD OPEN ARM
(7)	1	O.S.H.A. APPROVED SAFETY LADDER W/ TELESCOPING SAFETY POST (IF VAULT IS OVER 30" DEEP). BOLT LADDER TO VAULT FLOOR AND TO VAULT WALL
(8)	2	GALVANIZED STEEL ADJUSTABLE PIPE SUPPORT
(9)	2	MEGALUG OR ROMAGRIP SEALED IN CONCRETE FILLING KNOCKOUT
(10)	1	SUMP DRAIN, CONNECT TO CITY STORM SYSTEM, IF GRAVITY DRAIN IS NOT FEASIBLE, A SUMP PUMP WITH CHECK VALVE ON DISCHARGE LINE IS REQUIRED
(11)	1	SPOOL, MINIMUM LENGTH 2'-0", ONE END OF SPOOL TO BE INSTALLED WITH A UNI-FLANGE W/ RESTRAINT LUGS.
(12)	1	2" AMR PORT
(13)	AS REQ'D	5/8" MINUS CRUSHED ROCK FOUNDATION WITH COMPACTED DEPTH OF 12" MINIMUM

STANDARD FABRICATION & FINISHING SPECIFICATION

1. ALL STEEL PIPE SHALL BE SANDBLASTED, EPOXY LINED AND COATED TO AWWA C-120 AND NSF-61 SPECIFICATIONS. FINISH COATING SHALL BE BLUE ENAMEL.
2. GATE VALVE ON THE BYPASS SHALL BE NORMALLY CLOSED AND LOCKED WITH THE GATE VALVE ON THE MAIN LINE AS SHOWN AND KEYS GIVEN TO THE CITY.
3. DUCTILE IRON PIPE SHALL BE ACCORDING TO 9-30.1(1) OF THE STANDARD SPECIFICATIONS.

APPROVED BY CITY ENGINEER: Glenn Lawrence

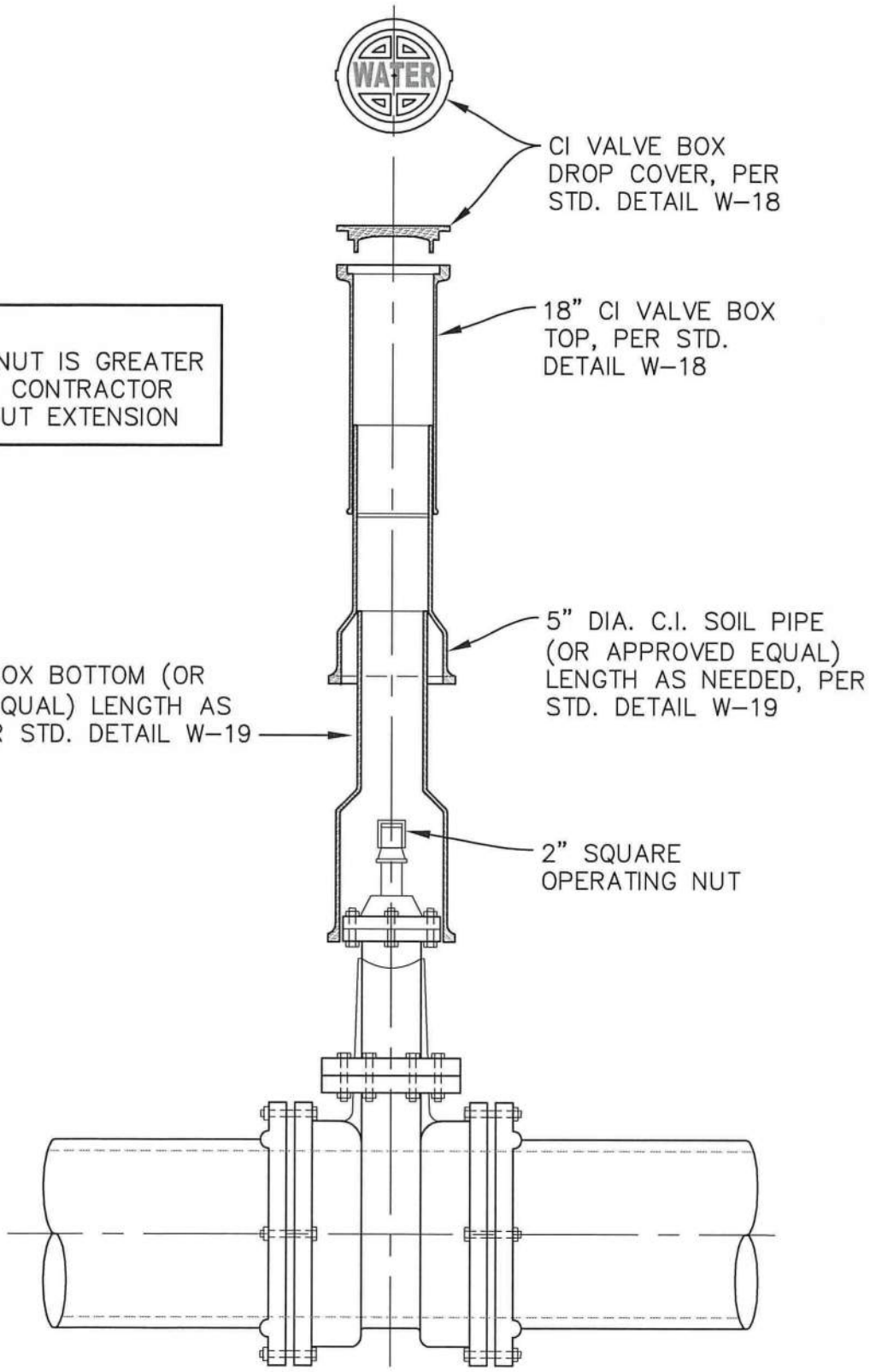
DATE: 01/05/2021

CITY OF AUBURN WASHINGTON

PUBLIC WORKS DEPARTMENT

3" OR LARGER WATER METER INSTALLATION

STANDARD DETAIL: W-16a.4



NOTE:
IF DEPTH OF NUT IS GREATER THAN 7 FEET, CONTRACTOR TO PROVIDE NUT EXTENSION

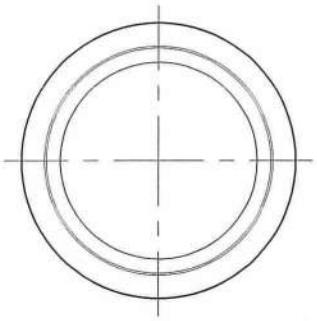
Plotted by: Craig Dobyns on 7/13/2016 File location: M:\Construction Standard Details\Approved Drawing Files (dwg)\Water\STDETL-W-17.1

APPROVED BY CITY ENGINEER: DATE: 8/5/2016

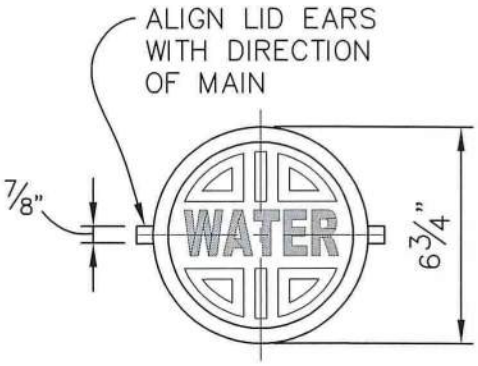
CITY OF AUBURN WASHINGTON

VALVE WRENCH EXTENSION BOX

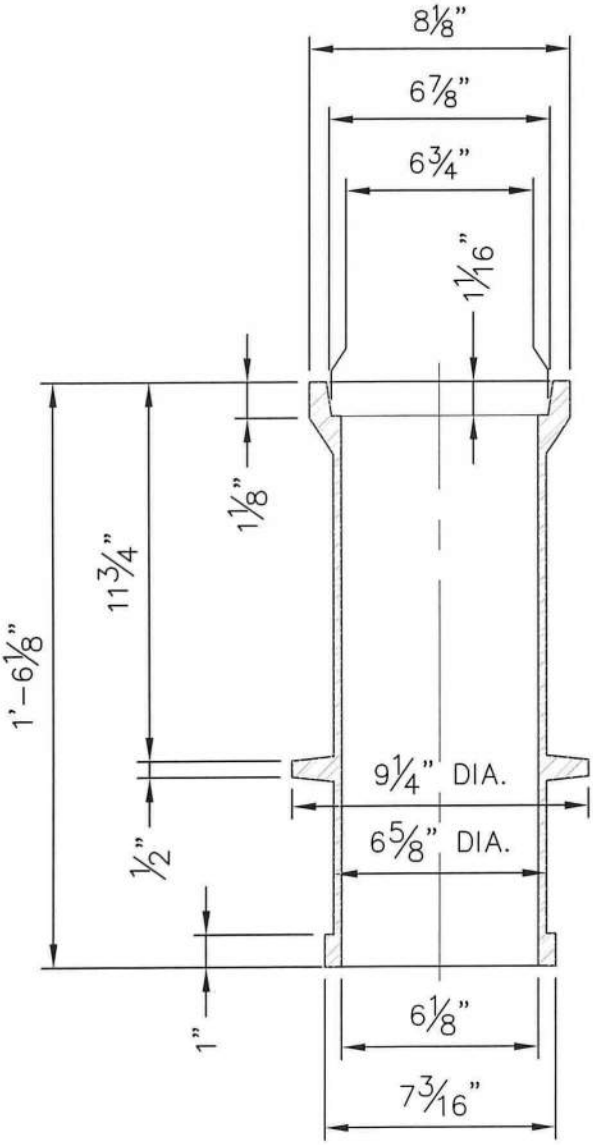
COMMUNITY DEVELOPMENT & PUBLIC WORKS DEPT. STANDARD DETAIL: W-17.1



TOP VIEW

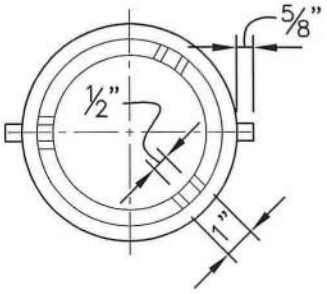


TOP VIEW

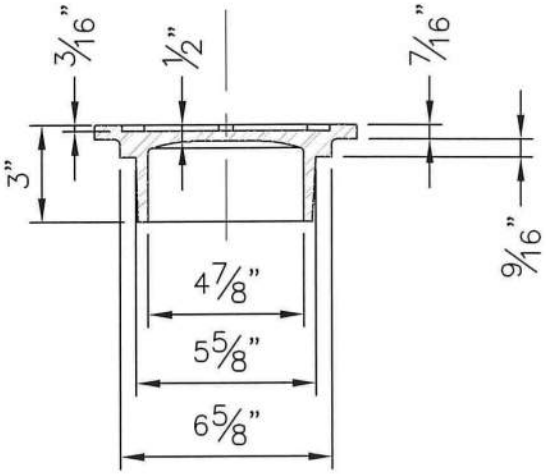


18" CAST IRON VALVE BOX TOP & COVER

NOT TO SCALE



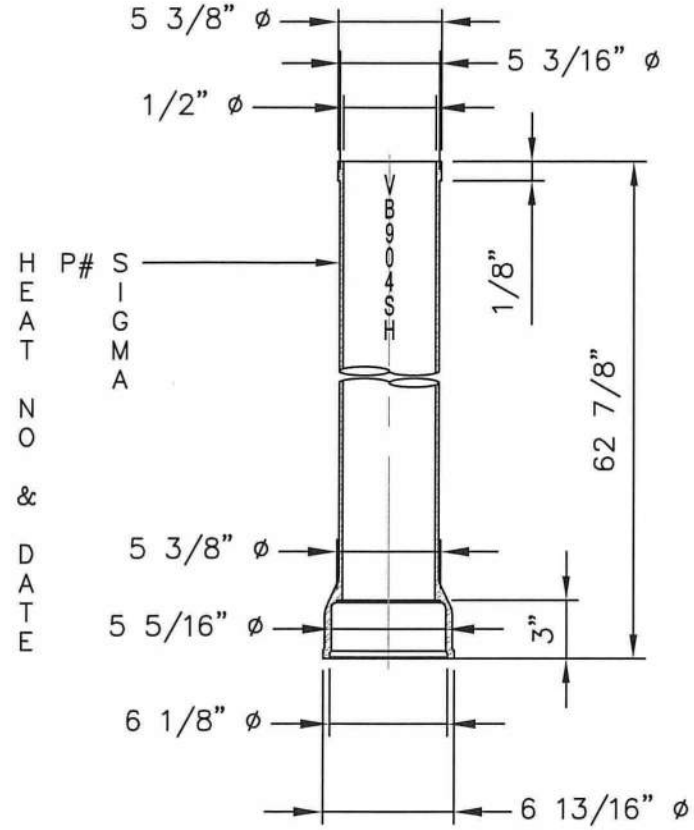
BOTTOM VIEW



VALVE BOX DROP COVER

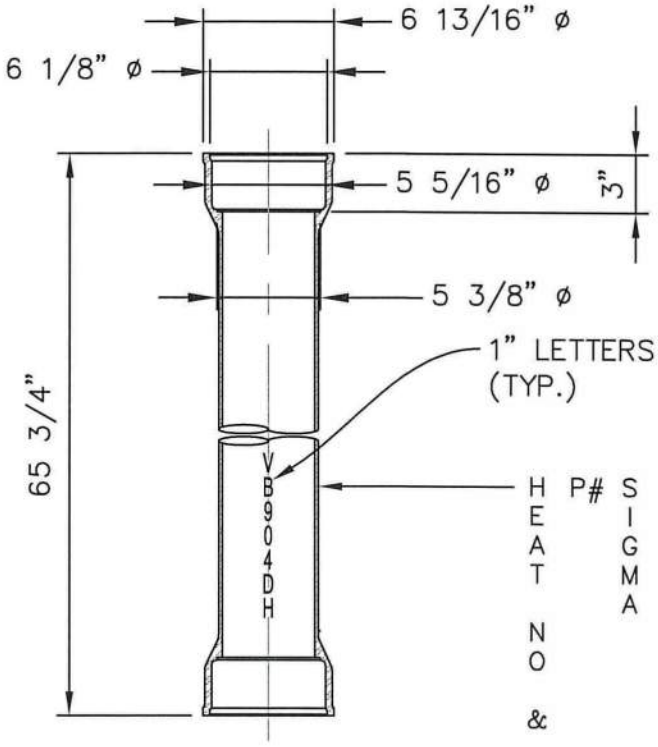
NOT TO SCALE

APPROVED BY CITY ENGINEER: Mark Scheuerell DATE: 12/20/19	CITY OF AUBURN WASHINGTON	C.I. VALVE BOX TOP & VALVE BOX COVER
PUBLIC WORKS DEPARTMENT		STANDARD DETAIL: W-18.3



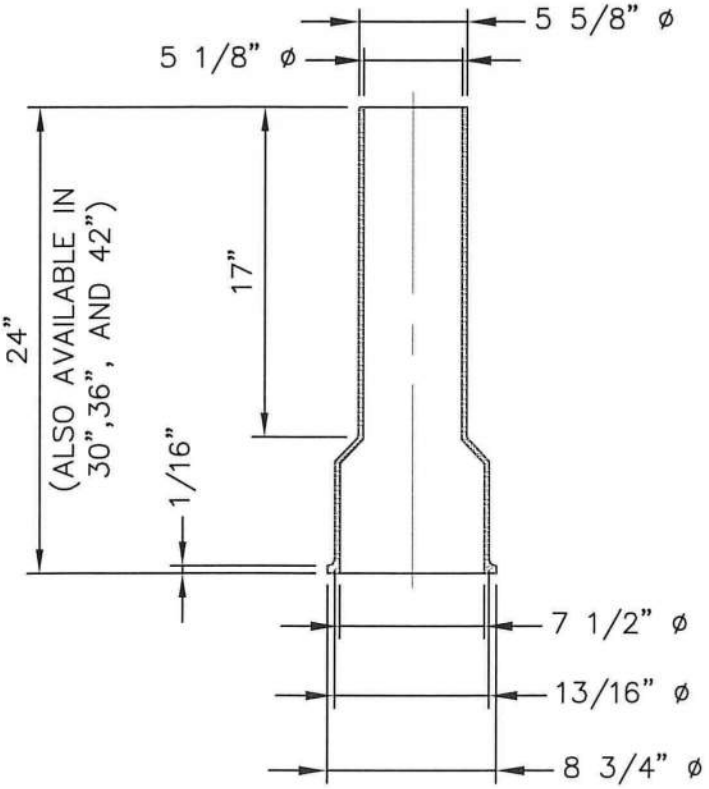
SINGLE HUB 5" C.I. SOIL PIPE VALVE BOX EXTENSION

NOT TO SCALE



DOUBLE HUB 5" C.I. SOIL PIPE VALVE BOX EXTENSION

NOT TO SCALE

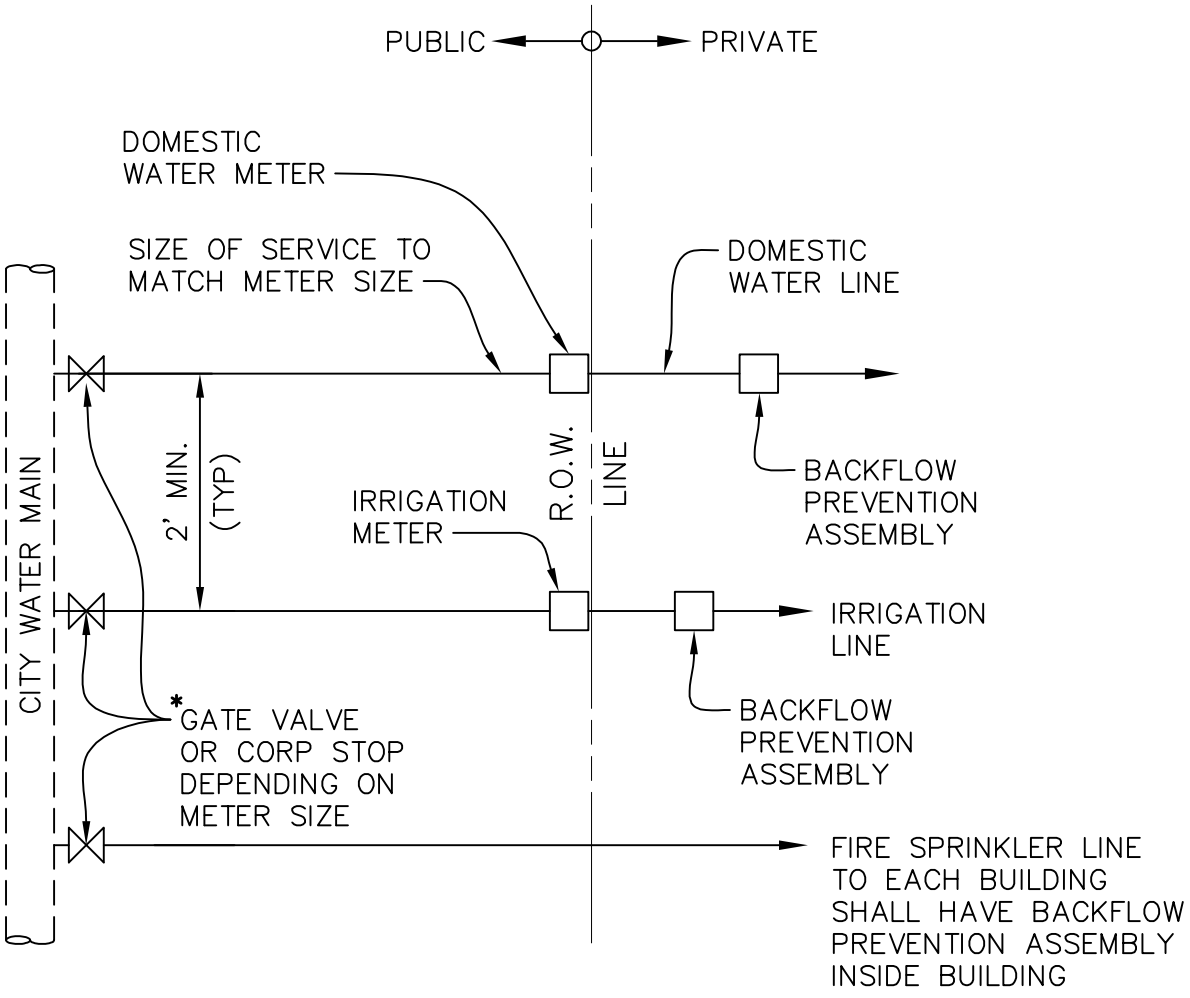


C.I. VALVE BOX BOTTOM

NOT TO SCALE

APPROVED BY CITY ENGINEER:	DATE: 8/5/2016	CITY OF AUBURN WASHINGTON	5" C.I. SOIL PIPE VALVE BOX EXTENSION & C.I. VALVE BOX BOTTOM
COMMUNITY DEVELOPMENT & PUBLIC WORKS DEPT.			STANDARD DETAIL: W-19.1

Plotted by: Craig Dobyns on 7/13/2016 File location: M:\Construction Standard Details\Approved Drawing Files (dwg)\Water\STDETL-W-19.1



NOTES:

1. CONNECTION TO CITY WATER MAIN PER CITY OF AUBURN REQUIREMENTS.
2. BACKFLOW ASSEMBLY IS REQUIRED ON FIRE SPRINKLER, DOMESTIC, & IRRIGATION LINES. TYPE OF ASSEMBLY SHALL BE PER DESIGN STANDARDS.
3. PLANS FOR SEPARATE FIRE SPRINKLER LINE MUST BE SUBMITTED & APPROVED BY THE FIRE MARSHAL PRIOR TO INSTALLATION, AND SHALL BE DESIGNED BY A FIRE PROTECTION ENGINEER.

* FOR METERS 2" OR LESS USE CORP STOP & FOR METERS LARGER THAN 2" USE GATE VALVE WITH 2" STANDARD OPERATING NUT & COA VALVE BOX TO SURFACE.

APPROVED BY CITY ENGINEER:	DATE:		NON-SINGLE FAMILY SERVICE LINES
Jacob Sweeting	01/05/2021	CITY OF AUBURN WASHINGTON	
PUBLIC WORKS DEPARTMENT			STANDARD DETAIL: W-20.3

Plotted by: Craig Dobyns on 12/30/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL-W-20.3

Plotted by: Craig Dobyns on 7/13/2016 File location: M:\Construction Standard Details\Approved Drawing Files (dwg)\Water\STDETL-W-21.1

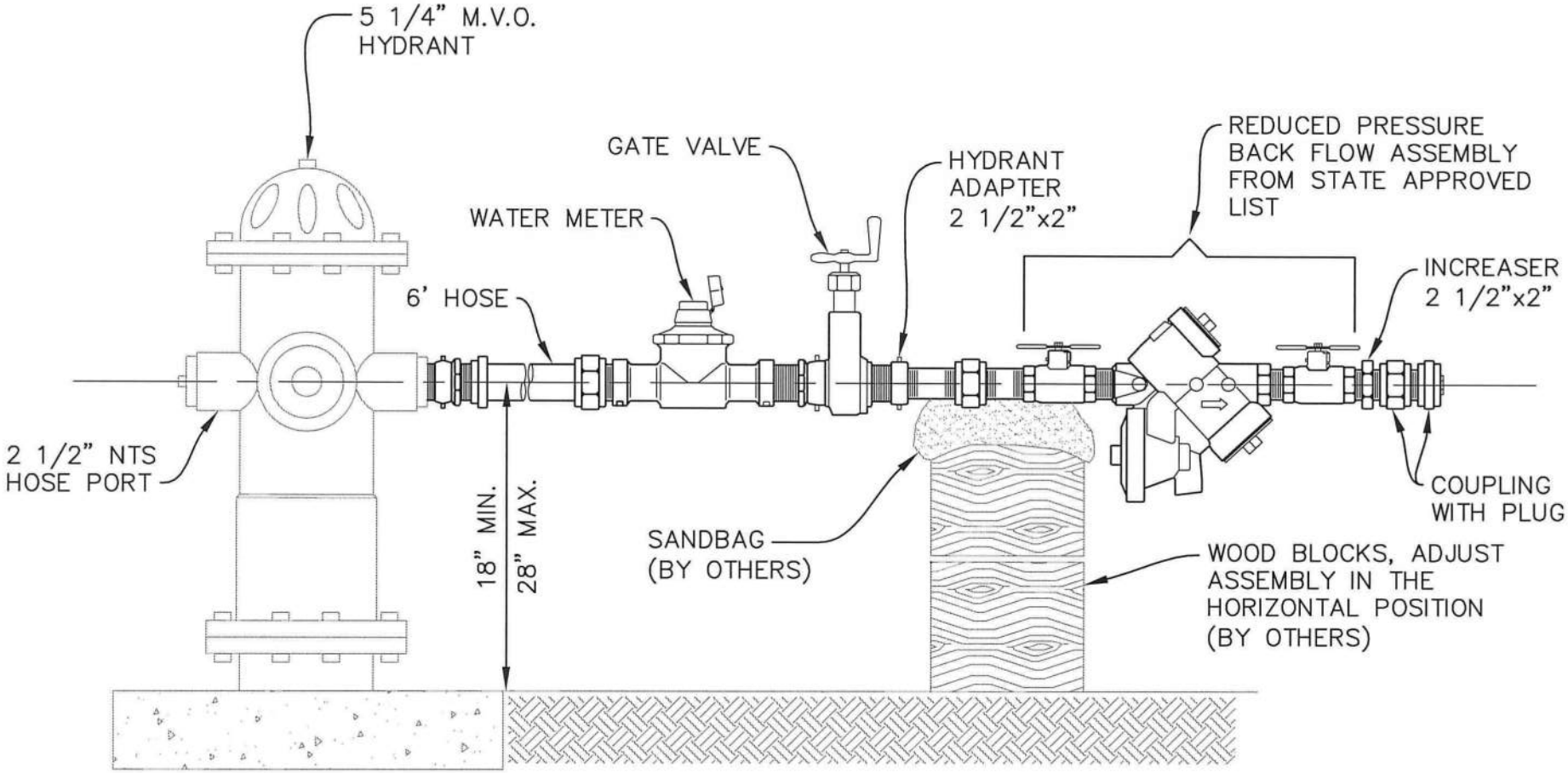
APPROVED BY CITY ENGINEER: Phil Seib DATE: 8/5/2016

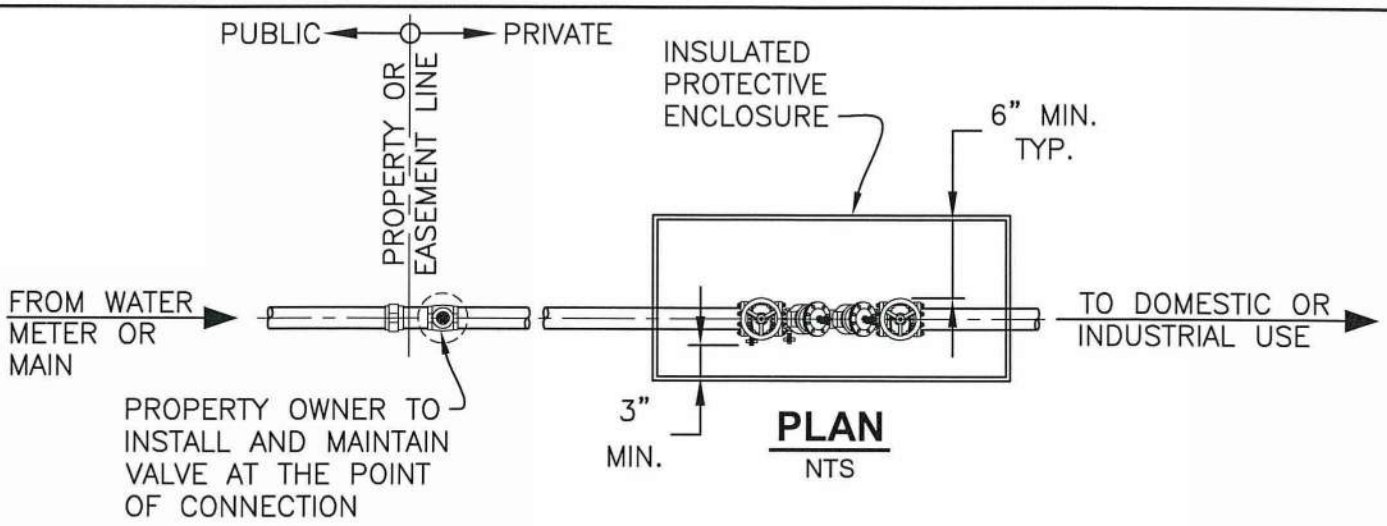
CITY OF AUBURN WASHINGTON

COMMUNITY DEVELOPMENT & PUBLIC WORKS DEPT.

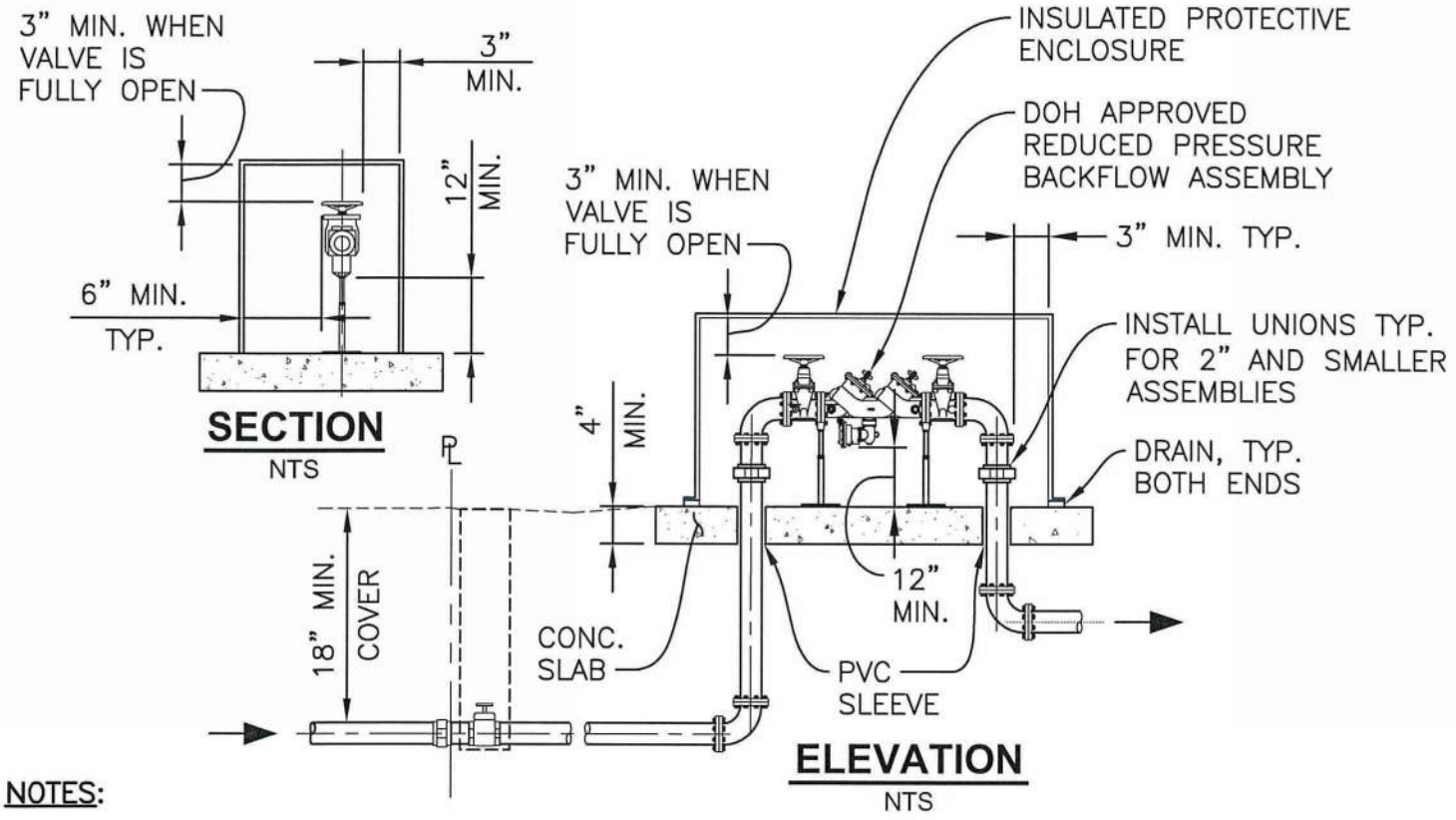
TEMP. COMBINATION HYDRANT METER/ REDUCED PRESSURE BACK FLOW ASSEMBLY

STANDARD DETAIL: W-21.1





PLAN
NTS



SECTION
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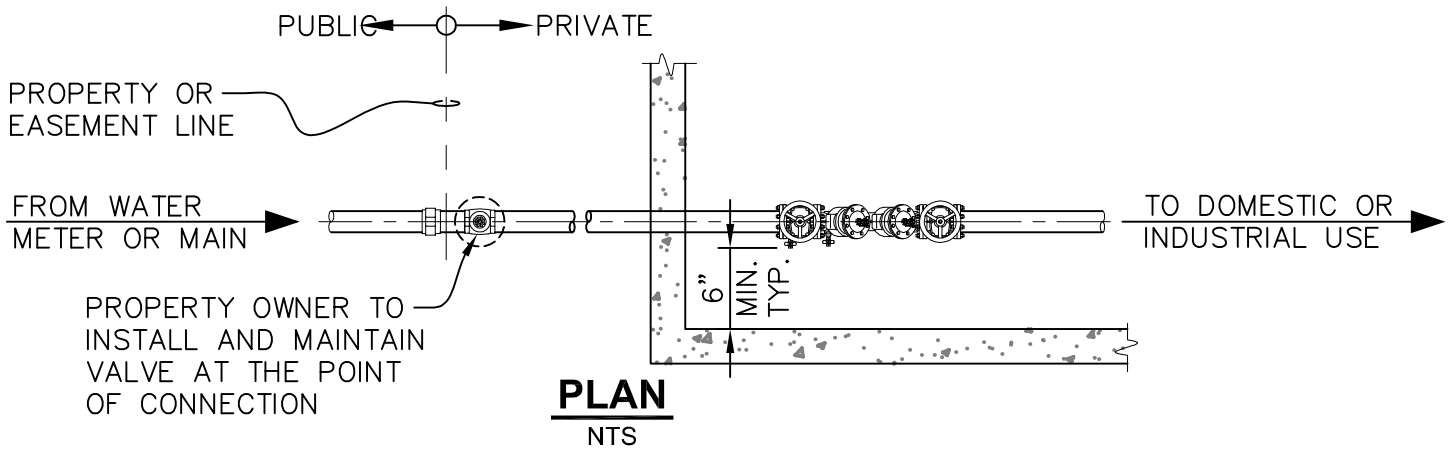
ELEVATION
NTS

NOTES:

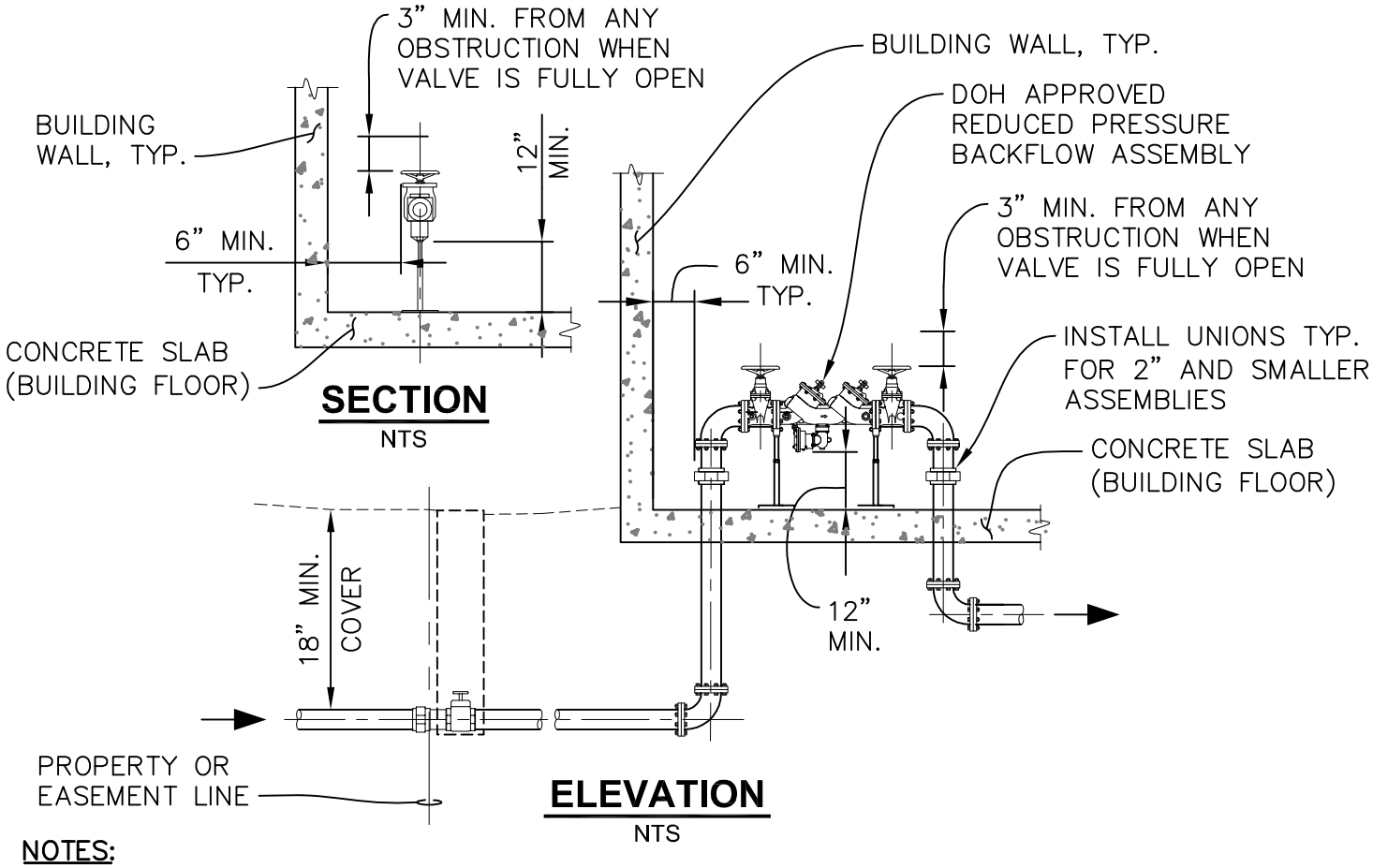
1. INSULATED PROTECTIVE ENCLOSURE MUST COMPLY WITH THE AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) 1060 OUTDOOR ENCLOSURES FOR BACKFLOW PREVENTION ASSEMBLIES. IT SHALL BE LOCKABLE WITH A KEY LOCK OR PADLOCK AND SHALL ALLOW FOR MINIMUM CLEARANCES AND PROVIDE ADEQUATE DRAINAGE.
2. RPBA SHALL BE INSTALLED ADJACENT TO THE METER AND HAVE NO BRANCH CONNECTION BETWEEN THE METER AND THE BACKFLOW ASSEMBLY. INSTALL RPBA HORIZONTALLY.
3. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
4. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
5. A MINIMUM OF TWO SUPPORTS MUST FIRMLY ANCHOR THE ASSEMBLY.

APPROVED BY CITY ENGINEER: Craig Dobyns DATE: 12/31/18	CITY OF AUBURN WASHINGTON	REDUCED PRESSURE BACKFLOW ASSY. (OUTSIDE INSTALLATION)
PUBLIC WORKS DEPARTMENT		STANDARD DETAIL: W-22.2

Plotted by: Craig Dobyns on 12/31/2018 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL-W-22.2



PLAN
NTS



SECTION
NTS

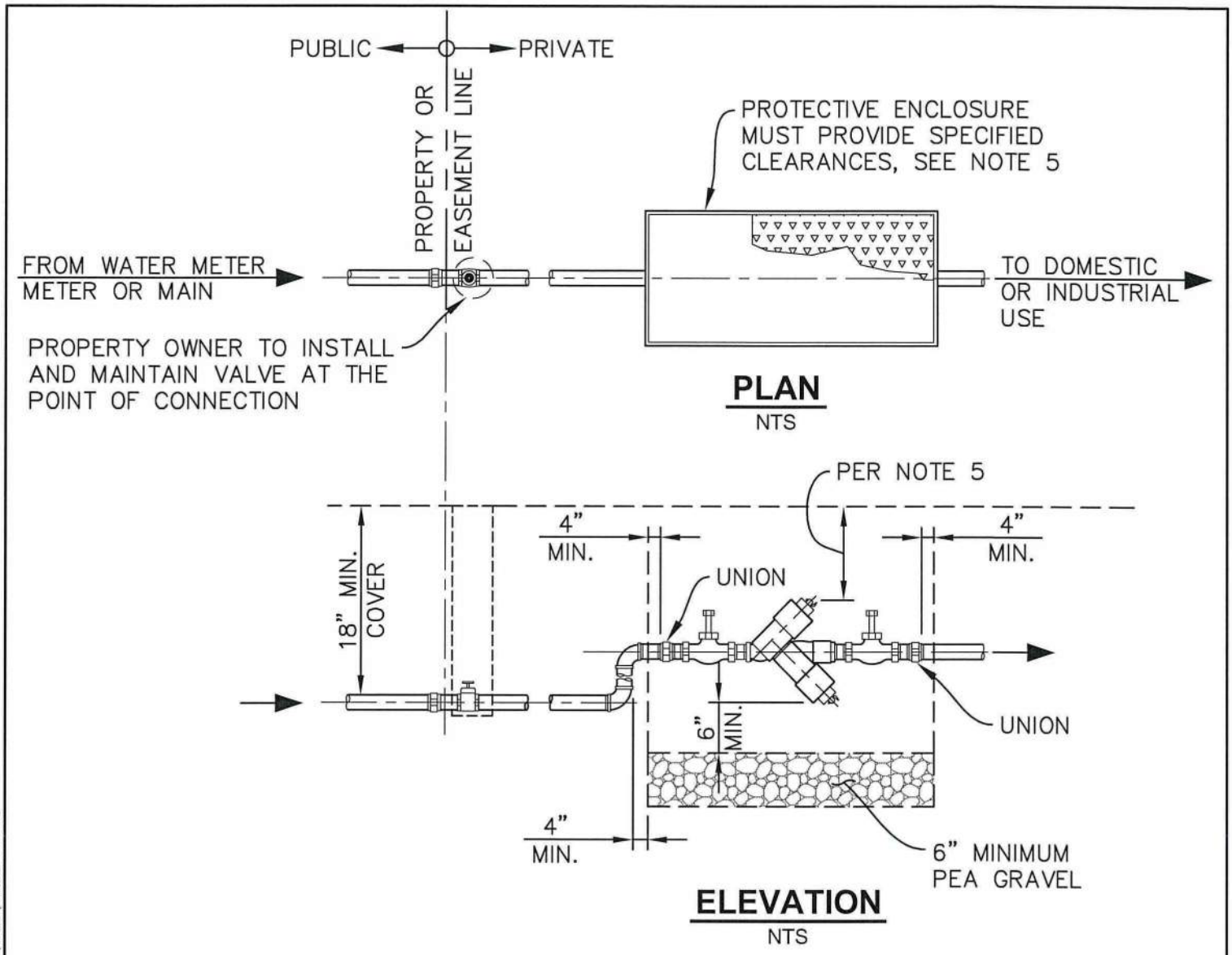
ELEVATION
NTS

NOTES:

1. RPBA INSTALLED INSIDE BUILDING SHALL HAVE NO BRANCH CONNECTIONS BETWEEN THE METER AND THE BACKFLOW ASSEMBLY. INSTALL RPBA HORIZONTALLY.
2. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
3. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
4. A MINIMUM OF TWO SUPPORTS MUST FIRMLY ANCHOR THE ASSEMBLY.
5. ADEQUATE DRAINAGE MUST BE PROVIDED.

APPROVED BY CITY ENGINEER:	DATE:	CITY OF AUBURN WASHINGTON	REDUCED PRESSURE BACKFLOW ASSY. (INSIDE INSTALLATION)
Jacob Sweeting	01/05/2021		
PUBLIC WORKS DEPARTMENT			STANDARD DETAIL: W-23.3

Plotted by: Craig Dobyns on 12/10/2020 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL-W-23.3

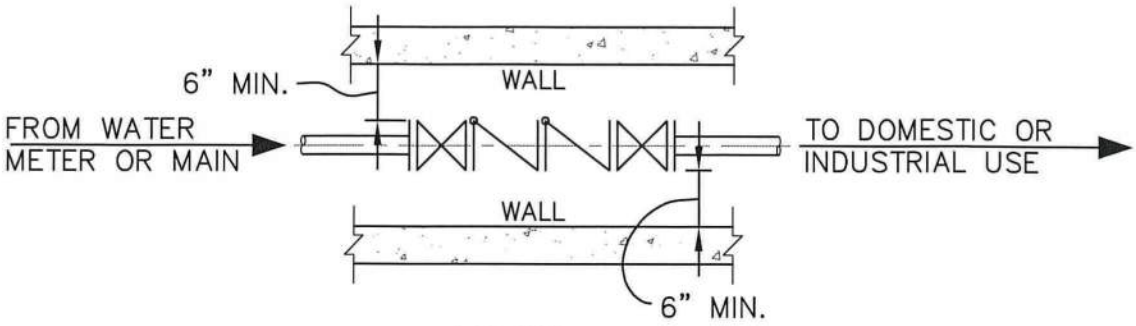


NOTES:

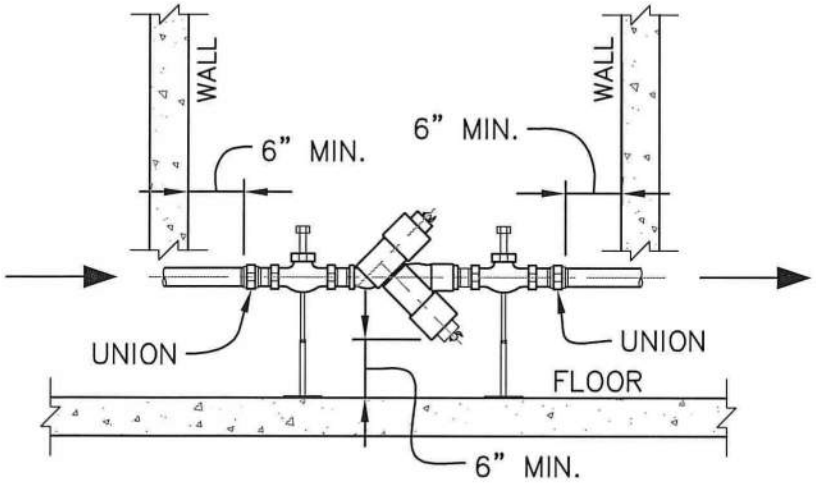
1. BACKFLOW ASSEMBLY MUST HAVE ADEQUATE SPACE CONSIDERATIONS FOR PROPER TESTING AND MAINTENANCE. A MINIMUM OF 12" CLEARANCE FROM ANY OBSTRUCTIONS ON THE TEST SIDE. A MINIMUM OF 6" CLEARANCE BELOW ASSEMBLY AND A MINIMUM OF 6" OF PEA GRAVEL IN THE BOTTOM OF THE BOX. THE MINIMUM CLEARANCE FROM THE TOP OF THE PEA GRAVEL TO THE BOTTOM OF THE ASSEMBLY IS 6".
2. DCVA MUST BE INSTALLED WITH TEST COCKS FACING UP. TEST COCKS MUST BE PLUGGED WITH BRASS OR PLASTIC PLUGS. INSTALL DCVA HORIZONTALLY.
3. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
4. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
5. MINIMUM CLEARANCE AT ABOVE ASSEMBLY SHALL BE: 9" (FOR 3/4" METER), 12" (FOR 1" METER), AND 14" (FOR 1 1/2" & 2" METER).

APPROVED BY CITY ENGINEER: Craig Dobyns 12/31/18	DATE:	CITY OF AUBURN WASHINGTON	DOUBLE CHECK VALVE ASSEMBLY (OUTSIDE INSTALLATION)
PUBLIC WORKS DEPARTMENT			STANDARD DETAIL: W-24.2

Plotted by: Craig Dobyns on 12/31/2018 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL-W-24.2



PLAN
NTS



ELEVATION
NTS

NOTES:

1. BACKFLOW ASSEMBLY MUST HAVE ADEQUATE SPACE CONSIDERATIONS FOR PROPER TESTING AND MAINTENANCE. A MINIMUM OF 6" SIDE CLEARANCE BETWEEN DCVA AND WALL OR ANY OBSTRUCTIONS AND A MINIMUM OF 6" CLEARANCE BELOW ASSEMBLY SHALL BE PROVIDED.
2. DCVA MUST BE INSTALLED WITH TEST COCKS FACING UP. TEST COCKS MUST BE PLUGGED WITH BRASS OR PLASTIC PLUGS.
3. DCVA INSTALLED INSIDE BUILDING SHALL HAVE NO BRANCH CONNECTIONS BETWEEN THE METER AND THE BACKFLOW ASSEMBLY. INSTALL DCVA HORIZONTALLY.
4. BACKFLOW ASSEMBLY MUST BE APPROVED FOR USE IN WASHINGTON STATE BY THE DEPARTMENT OF HEALTH (DOH). IT MUST BE TESTED BY A STATE CERTIFIED "BAT" AT THE TIME OF INSTALLATION, ANNUALLY, AFTER THE ASSEMBLY IS REPAIRED, MOVED OR AFTER AN INCIDENT AT OWNER'S EXPENSE.
5. BACKFLOW ASSEMBLY SHALL BE PURCHASED AND INSTALLED AS A UNIT, AS SHIPPED BY THE MANUFACTURER, WITH NO MODIFICATIONS TO ANY PART OF THE ASSEMBLY.
6. TWO SUPPORTS, EITHER WALL OR FLOOR, ONE ON EACH SIDE OF THE ASSEMBLY, MUST FIRMLY ANCHOR THE ASSEMBLY.

APPROVED BY CITY ENGINEER: Craig Mercier DATE: 12/31/18	CITY OF AUBURN WASHINGTON	DOUBLE CHECK VALVE ASSEMBLY (INSIDE INSTALLATION)
PUBLIC WORKS DEPARTMENT		STANDARD DETAIL: W-25.2

Plotted by: Craig Dobyns on 12/31/2018 File location: M:\Construction Standard Details\Current Working DWG\Water\STDETL-W-25.2

AGENDA BILL APPROVAL FORM

Agenda Subject:
Resolution No. 5611 (Gaub)

Date:
August 10, 2021

Department:
Public Works

Attachments:
Resolution No. 5611
Location Map
Water Emergency Declaration 2021-02

Budget Impact:
Current Budget: $0
Proposed Revision: $0
Revised Budget: $0

Administrative Recommendation:

City Council adopt Resolution No. 5611.

Background for Motion:

The Hidden Valley/Braunwood neighborhood is served by a single well with a limited amount of water that can be withdrawn each year. Recent high rate of water usage by the neighborhood is projected to result in the annual well limits being reached by this Fall. Emergency measures are needed to reduce the residents' water use. The Mayor declared a Stage 1 Water Emergency on August 9, 2021 so that City staff can provide public education about the critical need to conserve water.

Background Summary:

The Hidden Valley/Braunwood (HVB) neighborhood is located in the southeastern portion of Auburn along 47th Street SE as shown on the attached location map. It was developed in the late 1980s by a private developer. It contains 12 current customers plus one currently-vacant lot. Water service is provided by a single groundwater well with a State water right of 6.5 acre feet per year. The closest point of connection to the City's water system is 1.5 miles away at 53rd Street SE and Kersey Way SE. In August 1990, the City entered into a Satellite Water System Service Contract to own, operate, maintain, and manage the HVB system. Recognizing that the well supply is limited, the agreement included certain limitations on irrigation usage.

In May 2021, the City discovered that several customers were using large amounts of water each week, above the limits in the agreement. On June 14, 2021, the City sent each customer a letter comparing their water use to sustainable levels and asking them to conserve. Water usage continued to increase in June and July to the point that unless the customers curtail their water use, especially outdoor water use, the well supply will reach its annual production limit during the Fall 2021 and have to be shut down until a new water year begins on January 1, 2022.

In addition, on July 14, 2021, the department of Ecology issued a drought emergency order that included the HVB area.

On August 10, 2021, City staff mailed and hand-delivered a second letter to the HVB customers, comparing their more recent water use to sustainable levels and informing them of the Mayor's

Water Emergency Declaration. The Mayor and City staff have scheduled a virtual meeting with the customers on August 19, 2021 at 5:30 p.m. to discuss the situation and answer any questions. In addition, a publication in the City's newspaper of record (Seattle Times) is required for this emergency and is anticipated to be published on August 12, 2021.

Resolution No. 5611 ratifies the Mayor's August 9, 2021 proclamation of a Stage 1 Water Shortage Emergency per Auburn City Code 13.14.030.A for the Hidden Valley/Braunwood neighborhood.

Reviewed by Council Committees:

Councilmember:	Stearns	**Staff:**	Gaub
Meeting Date:	August 16, 2021	Item Number:	RES.C

RESOLUTION NO. 5611

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, RATIFYING THE MAYOR'S AUGUST 9, 2021 DECLARATION OF STAGE I WATER SHORTAGE EMERGENCY

WHEREAS, on August 9, 2021, the Mayor declared a Stage I water shortage emergency affecting the residents of the City's Hidden Valley/Braunwood neighborhood (HVB) currently serving 12 residential customers pursuant to RCW 35.21.210, RCW 38.52 and ACC 13.14;

WHEREAS, the HVB system is an isolated system and is not connected to the remainder of the City's water supply; and

WHEREAS, because the water usage patterns in HVB have nearly tripled their documented average and continued water consumption at that rate will result in HVB running out of water entirely by the fall of 2021, the Mayor further determined and declared that exigent circumstances required immediate implementation and enforcement of water emergency measures without Council action; and

WHEREAS, on July 14, 2021, the Department of Ecology issued a drought emergency order that included the HVB area; and

WHEREAS, the Council has received information regarding the nature and urgency of the water emergency affecting HVB, and agrees that a water shortage emergency exists in HVB;

WHEREAS, the Council intends to ratify the Mayor's August 9, 2021 emergency declaration;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF AUBURN, WASHINGTON, HEREBY RESOLVES as follows:

Section 1. The City Council ratifies the Mayor's determination that on and after August 9, 2021, an ACC 13.14.030.A Stage I water shortage emergency exists in HVB that necessitated the Mayor's immediate action without advance Council action;

Section 2. The Mayor or Mayor's designee was and continues to be authorized to implement measures necessary to address the emergency, and any action taken prior to this resolution in furtherance thereof is hereby ratified.

Section 3. This Resolution shall take effect and be in full force upon passage and signatures.

Dated and Signed this _____ day of _____, 2021.

CITY OF AUBURN

_____
NANCY BACKUS, MAYOR

ATTEST:

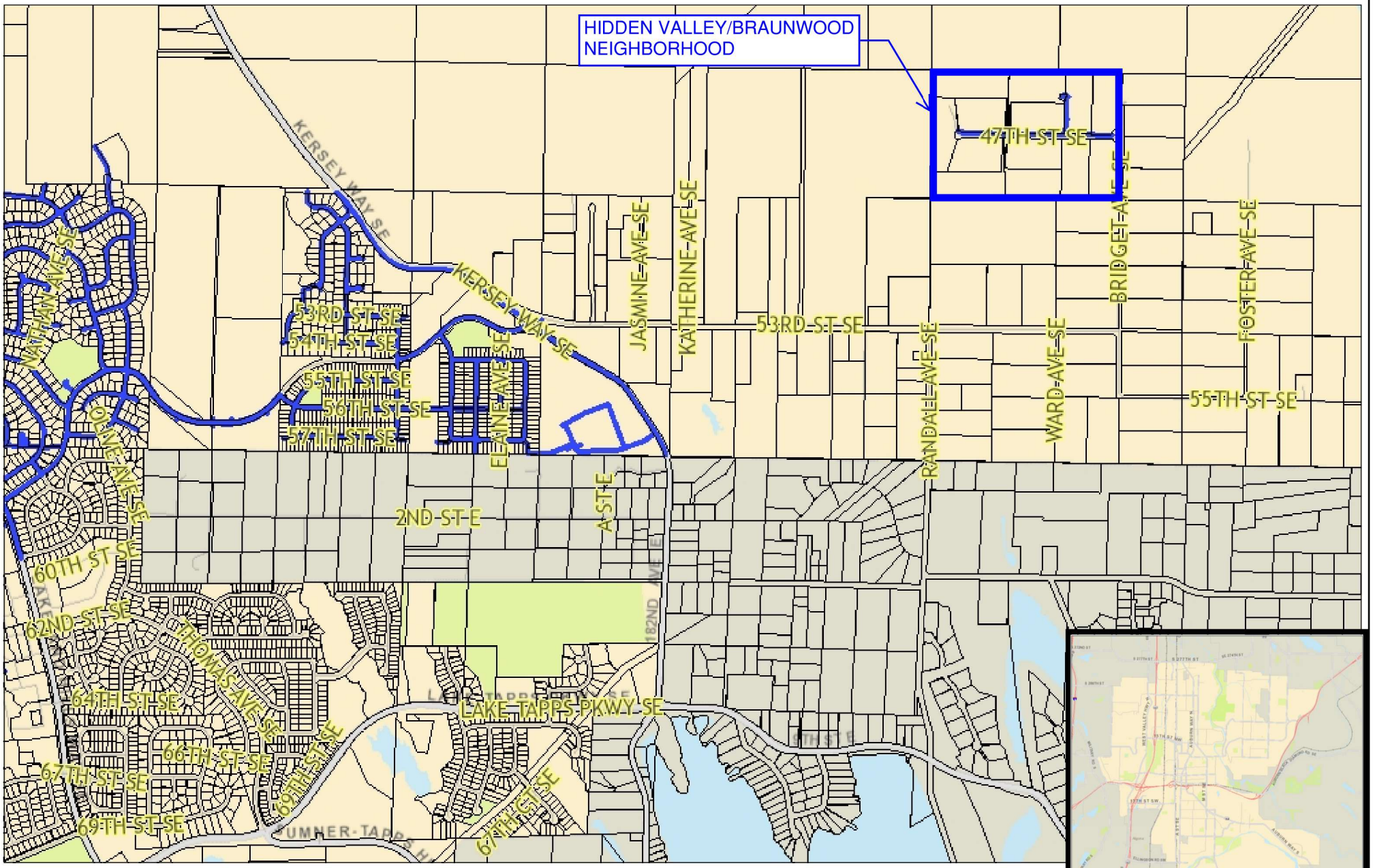
_____
Shawn Campbell, MMC, City Clerk

APPROVED AS TO FORM:

_____
Kendra Comeau, City Attorney

Hidden Valley/Braunwood Water System

Printed Date: 8/9/2021
Map Created by City of Auburn eGIS
Imagery Date: May 2015



2,666.7 0 1,333.3 2,666.7 Feet

NAD_1983_StatePlane_Washington_North_FIPS_4601_Feet

1in = 1,333 ft 1: 16,000

WATER EMERGENCY DECLARATION 2021-02

A DECLARATION OF STAGE I WATER EMERGENCY IN THE HIDDEN VALLEY/BRAUNWOOD NEIGHBORHOOD, FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND WELFARE

WHEREAS, RCW 35.21.210 authorizes the City to control and regulate its water supply; and

WHEREAS, RCW 38.52 and ACC 13.14 authorize the Mayor to declare emergencies and to exercise emergency powers related to the City's water supply including the implementation of water conservation measures when necessary to protect the health, welfare and safety of the City's water users; and

WHEREAS, ACC 13.14.030 establishes different stages of water emergencies depending on the immediacy and pervasiveness of a water shortage, and authorizes the Mayor to determine the geographical area(s) of the City's water supply that may be affected by a shortage and corresponding emergency; and

WHEREAS, by an agreement in 1990, the City accepted the water system serving the Hidden Valley/Braunwood (HVB) neighborhood into its water supply. The HVB water supply comes from a single well that has legally binding limits on its water production amounts to serve the 12 residential customers. Given these legal and logistical water supply limitations, the 1990 agreement included provisions requiring HVB residents to (inter alia) restrict outdoor irrigation to a maximum of 7 properties at

a time, using no more than 10 gallons of water per minute; and

WHEREAS, given observed and documented water usage patterns, the yearly average water use by HVB residents is expected to be 450 gallons per day. Since the spring of 2021, however, the water use by HVB residents has nearly tripled this expected average, to 1,025 gallons per day; and

WHEREAS, this recent excessive water use by HVB residents greatly exceeds the expected water use average and the water use restrictions in the 1990 agreement; and

WHEREAS, this rate of HVB water consumption amounts to a Stage I water emergency under ACC 13.14.030.A because continued water consumption at this rate will result in the HVB water system running out of water entirely by the fall of 2021, potentially leaving HVB residents with no reliable water supply;

WHEREAS, to protect the public health, safety and welfare of HVB residents, and pursuant to the above legal authorities,

NOW THEREFORE I, Nancy Backus, Mayor of the City of Auburn, declare as follows:

Section 1. To protect the public health, safety and welfare of HVB residents and pursuant to RCW 35.21.210, RCW 38.50 and ACC 13.14, I do hereby declare a Stage I water emergency in the HVB neighborhood.

Section 2. Pursuant to Section 1, I hereby direct the City of Auburn public works department to engage in public education efforts with HVB residents regarding the necessity and benefits of their water conservation.

Section 3. I further determine that pursuant to ACC 13.14.030.F, the urgency of the anticipated water shortage in HVB constitutes exigent circumstances that necessitate immediate implementation and enforcement of the requirements in a Stage I Anticipated Water Shortage emergency.

Dated and signed: 8.9.21

CITY OF AUBURN

Nancy Backus

NANCY BACKUS, MAYOR