

Willamette Water Supply System Board Meeting Agenda Thursday, October 3, 2019 | 12:00 – 2:00 PM

Tualatin Valley Water District – Board Room 1850 SW 170th Avenue, Beaverton, OR 97003

To prepare to address the Willamette Water Supply System Board, please fill out the Public Comment Form located on the table near the main door to the meeting room. **Assistive Listening Devices (ALD) are available upon request 48 hours prior to the day of the meeting by calling (503) 941-4580.** All testimony is electronically recorded.

BOARD LUNCH/EXECUTIVE SESSION - 11:30 AM - TVWD Main Conference Room (MCR)

REGULAR SESSION - 12:00 PM

CALL TO ORDER

1. GENERAL MANAGER'S REPORT – Dave Kraska

(Brief presentation on current activities relative to the WWSS Commission)

2. PUBLIC COMMENT

(This time is set aside for persons wishing to address the Board on items on the Consent Agenda, as well as matters not on the agenda. Additional public comment will be invited on agenda items as they are presented. Each person is limited to five minutes, unless an extension is granted by the Board. Should three or more people testify on the same topic, each person will be limited to three minutes.)

3. CONSENT AGENDA

(The entire Consent Agenda is normally considered in a single motion. Any Commissioner may request that an item be removed for separate consideration.)

A. Approve the September 5, 2019 meeting minutes.

4. BUSINESS AGENDA

- A. Adopt PLM_1.2 Resolution of Necessity Joelle Bennett
- B. Adopt Updated PLW 1.3 Resolution of Necessity Joelle Bennett
- C. Contract Amendments Dave Kraska
 - i. WTP_1.0 Design Amendment for Value Engineering Concepts Incorporation
 - ii. PLW_1.2 Design Amendment for Realignment
- D. Consider changing the January 2, 2020 Board meeting date to January 9, 2020. Dave Kraska

5. INFORMATION ITEMS

- A. Planned November Business Agenda items Dave Kraska
- B. The next regular Board meeting is scheduled on November 7, 2019, at Tualatin Valley Water District Board Room.

6. COMMUNICATIONS AND NON-AGENDA ITEMS

A. None scheduled.

ADJOURNMENT



Fall Driving Safety Tips

October 3, 2019

1

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1. Don't brake on wet leaves

- Wet leaves can be as slippery as ice.
- Drive slowly through them and avoid hard braking.
- Leaves may obscure lane lines and other road markers
- Pay attention to the edge of the road to stay in your lane.

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Our Reliable Water



- At this time of year, the first 15 to 45 minutes after sunrise and before sunset the sun perfectly aligns with east/west roadways and sun glare can be a problem.
- Wear sunglasses, keep your windshield clean, and use north/ south streets or streets with tree cover when possible.

3

3. Use your rain smarts

- Maintain a safe distance from the car in front of you, as wet roads may be more slippery.
- Use your low beams or fog lights (never high beams) in fog conditions.

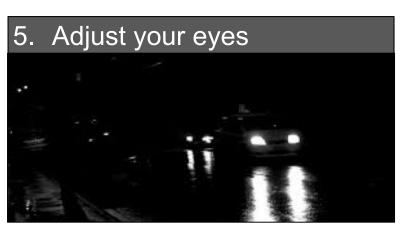
Willamette Water Supply
Own Reliable Water

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- As the temperature begins to drop, morning frost can leave icy patches on bridges, overpasses, and shaded spots.
- Slow down, and avoid hard braking and sharp turns.

5



- We lose 1 to 2 minutes of daylight each day after the autumnal equinox. It takes your eyes between 2 and 5 minutes to start adjusting from indoor lighting to outdoor darkness.
- Give your eyes time to adjust to the dark before driving.

Willamette Water Supply
Our Reliable Water



- Autumn marks the beginning of deer breeding season. They are most active during sunset and sunrise.
- Be vigilant when driving near the woods and near deer crossing signs.

7

7. Check your vehicle

- Check <u>tire pressure</u>.
 (Tires lose 1 to 2 pounds of pressure for every 10-degree temperature drop.)
- Replace <u>windshield wipers</u>.
 (A really clean window can help you see when there's glare.)
- Adjust <u>headlights</u>.
 (If your headlights seem too dim, ask your mechanic to make sure they're aligned properly.)



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Fall Driving Safety Tips

http://www.safebee.com/travel/7-fall-driving-safety-tips

Willamette Water Supply Ow Reliable Water

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MEMO

Date: October 3, 2019

To: Willamette Water Supply System Board of Commissioners

From: David Kraska, P.E., General Manager

Re: Willamette Water Supply System (WWSS) General Manager's Report

The following items will be covered during the report by the General Manager (GM):

1. Be Sure to Use Microphones – Please remember to use your microphone whenever you are speaking. Also, please turn off your microphone when you are not speaking.

- 2. Safety Minute David Kraska will present today's safety minute.
- 3. GM Report Outline This outline for the WWSS GM report is one that I intend to follow as appropriate and subject to any feedback I receive. I'll use this report to provide a brief overview of the Approvals and Procurements Forecast that is attached to the report, and to provide highlights of recent accomplishments on the Willamette Water Supply Program (WWSP) regarding our planning, permitting, communications, design, and construction activities.
- **4. Approvals and Procurements Forecast** Attached to this GM report is the approvals and procurements forecast for October through December. The forecast presents the WWSP activities that have either recently been approved or are scheduled for approval over the next three months by either the WWSP Director, the WWSS Management Committee, or the WWSS Board.

Noteworthy in this forecast is the volume of activity related to intergovernmental agreements (IGAs). These agreements are important tools used by the WWSP to coordinate our work with other agencies, to gain necessary approvals from them, and to manage our schedule risk. In accordance with the Management Authority Matrix approved by the WWSS Board at its September 5, 2019 meeting, all agreements and any amendments to them must be approved by the WWSS Board.

5. Projects Planning, Permitting, and Communications Updates – On September 17, the WWSP held a meeting to restart the WWSS Operations planning work. Planning for the operational phase of the WWSS started almost two years ago, but it had been paused for several months. The next phase of this effort is to begin drafting the more than 250 sections and subsections of the operations plan. The intent is to have a draft plan

GM Report to the WWSS Board of Commissioners

October 3, 2019

Page 2

completed within the next 3.5 years in advance of system commissioning efforts. This schedule will also help support staffing transition efforts that will also take place prior to system commissioning.

With the recent successful closing of Water Infrastructure Finance and Innovation Act (WIFIA) loans, work is now underway to plan for a press event with Senator Merkley, his staff, and representatives from the EPA to recognize this historic news. The event is scheduled for October 9, 2019 and will likely be held at our pipeline construction project along Scholls Ferry Road.

- 6. Projects Design Status Updates Work continues on multiple design projects including nine pipeline projects, the Raw Water Facilities project, the Water Treatment Plant, and the Distributed Control System. This month we received the 90-percent complete design package for the Raw Water Facilities project, which remains on track and is scheduled to begin construction next summer. Also, we are scheduled to receive the contractor's opinion of probable construction cost for that project on October 10, 2019, which we expect will confirm that the project remains on track from a cost standpoint, as well.
- **7. Projects Construction Status Updates** There are currently four projects actively under construction:
 - 1. PLM_1.1 our raw water pipeline project in Wilsonville that extends from our Raw Water Facilities project to Wilsonville Road,
 - 2. PLM_1.2 in Wilsonville another raw water pipeline project being completed in partnership with the City of Wilsonville's Garden Acres Road project,
 - 3. PLM_5.1 a finished water pipeline project being completed in partnership with Washington County's Roy Rogers Road project, and
 - 4. PLM 5.2 a finished water pipeline project in Scholls Ferry and Tile Flat Roads that we are working to complete in advance of development work in the area.

One notable achievement this past month was that final completion was achieved on PLW_1.1 in South Hillsboro. This is the second WWSP project to reach final completion, the first being PLM_2.0 in Wilsonville.

Approvals and Procurement Forecast: October through December 2019

This report provides a three-month projection of (1) forthcoming actions under the WWSS Management Authority Matrix and (2) ongoing and forthcoming procurements.

a = Actual date

e = Email approval

FC = Finance Committee

LCRB = Local Contract Review Board MC = Management Committee

N/A = Not applicable

OC = Operations Committee

Rec. = Recommendation t = Tentative date

TBD = To be determined; sufficient information not available to project a date Note: Dates in red text indicate meetings needed outside the normal meeting

schedule

	Description		Body/Position (projected action date)		
Туре		Projected Action	Program Director	WWSS Committees	WWSS Board
Program Baseline or Related Plans	1. None				
Real Estate	2. PLM_1.2 Resolution of Need	Approve	N/A	MC: 9/18/2019 a	10/3/2019 t
	3. PLW_1.3 Resolution of Need (Update)	Approve	N/A	MC: 9/18/2019 a	10/3/2019 t
IGAs, MOUs, Permit Commitments, & Similar Agreements	4. PLW_2.0 City of Hillsboro (COH_1.0) Project Agreement	Approve	N/A	N/A	8/21/2019 a (Via WWSS MC)
		Execute	10/15/2019 t	N/A	N/A
	5. MPE_1.0 City of Beaverton (COB_1.0) Project Agreement	Approve	N/A	N/A	8/21/2019 a (Via WWSS MC)
		Execute	Pending	N/A	N/A
	6. PLW_1.3 Hagg Lane (Butternut Creek) Agreement Amendment	Approve	N/A	N/A	N/A
		Execute	10/4/2019 t	N/A	N/A
	7. WCLUT Master Project Coordination IGA	Approve	N/A	MC: 10/16/2019 t	11/7/2019 t
		Execute	11/8/2019 t	N/A	N/A
	8. PLM_4.1 WCLUT Design IGA Amendment 2	Approve	N/A	MC: 10/16/2019 t	11/7/2019 t
		Execute	11/8/2019 t	N/A	N/A
	9. PLM_4.2 WCLUT Design IGA Amendment 1	Approve	N/A	MC: 10/16/2019 t	11/7/2019 t
		Execute	11/8/2019 t	N/A	N/A
	10. PLW_1.2 WCLUT Design IGA Amendment 1	Approve	N/A	MC: 10/16/2019 t	11/7/2019 t
		Execute	11/8/2019 t	N/A	N/A

Meeting date: 10/3/2019

Version: 2

			Body/P	osition (projected action	on date)
Туре	Description	Projected Action	Program Director	WWSS Committees	WWSS Commission Board
IGAs, MOUs, Permit Commitments, & Similar Agreements continued	11. PLM_4.4 WCLUT Design IGA	Approve	N/A	MC: 10/16/2019 t	11/7/2019 t
		Execute	11/8/2019 t	N/A	N/A
	12. PLM_5.1 WCLUT Construction IGA Amendment 1	Approve	N/A	MC: 10/16/2019 t	11/7/2019 t
		Execute	11/8/2019 t	N/A	N/A
	13. PLM_5.2 City of Tigard IGA Amendment	Approve	N/A	MC: 10/16/2019 t	11/7/2019 t
		Execute	11/8/2019 t	N/A	N/A
	14. RWF_1.0 City of Wilsonville Project Agreement	Approve	N/A	MC: 10/16/2019 t	11/7/2019 t
		Execute	11/8/2019 t	N/A	N/A
Contracts	15. Pipeline Contractors PrequalificationGoal: Prequalify contractors for 48"- 66"	Approve	11/14/2019 t	N/A	N/A
	 pipeline installation contracts Publish Request for Qualifications: 9/30/2019 Receive Statements of Qualifications: 10/30/2019 Recommendation for Prequalification:11/11/2019 Notice of Prequalification:11/15/2019 	Execute	N/A	N/A	N/A
	16. RES_1.0 Design, Bidding, and	Approve	N/A	MC: 1/23/2020 t	2/6/2020 t
	 Services During Construction Goal: Designer for RES_1.0 Approximate Value: \$6.1M Engineer: TBD Publish Request for Proposals: 10/23/2019 t Proposal Due Date: 11/20/2019 t Rec. of Award: 12/10/2019 e,t Notice of Intent to Award: 12/11/2019 t Notice to Proceed: 2/7/2020 t 	Execute	2/7/2020 t	N/A	N/A
Contract Amendments and Change Orders (above Program Director's Authority)	17. MPE_1.0 Design Amendment for City of Beaverton Pipeline (COB_1.0) Addition	Approve	N/A	N/A	8/21/2019 a (Via WWSS MC)
	 Goal: Amend contract for final design and services during construction to add COB_1.0 project in accordance with project agreement Approximate value: \$1,558,884.40 Contractor: Brown and Caldwell 	Execute	Pending	N/A	N/A
	18. PLW_2.0 Design Amendment for City of Hillsboro Pipeline (COH_1.0) Addition	Approve	N/A	N/A	8/21/2019 a (Via WWSS MC)
	 Goal: Amend contract for final design and services during construction to add COH_1.0 project in accordance with project agreement Value: \$120,217.69 Contractor: Kennedy/Jenks 	Execute	10/2/2019 a	N/A	N/A

Meeting date: 10/3/2019 Version: 2

			Body/P	osition (projected action	on date)
Туре	Description	Projected Action	Program Director	WWSS Committees	WWSS Commission Board
Contract Amendments and	 19. WTP_1.0 Design Amendment for Value Engineering Concepts Incorporation Goal: Amend contract for final design and services during construction to incorporate value engineering concepts Value: \$575,000 Contractor: CDM Smith 	Approve	N/A	MC: 9/18/2019 a	10/3/2019
Change Orders continued (above Program Director's Authority)		Execute	10/4/2019	N/A	N/A
	 20. PLW_1.2 Design Amendment for Realignment Goal: Amend contract for final design and services during construction to reflect realignment established by Washington Co. Value: \$521,789.45 Contractor: Kennedy/Jenks 	Approve	N/A	MC: 9/18/2019 a	10/3/2019
		Execute	10/4/2019	N/A	N/A
Local Contract Review Board (LCRB) Rules Exemption	 21. Findings for Exemption from Competitive Bidding for the Distributed Control System (DCS_1.0) Components Board info item 12/5/2019 	Approve	N/A	11/19/2019 t	1/9/2020 t (as LCRB)
		Execute	N/A	N/A	N/A
	 22. Findings for the Use of Alternative Contracting Methods for Construction of Selected Pipeline Packages Board info item 12/5/2019 	Approve	N/A	11/19/2019 t	1/9/2020 t (as LCRB)
		Execute	N/A	N/A	N/A

Meeting date: 10/3/2019 Version: 2

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Willamette Water Supply System Commission Board Meeting Minutes Thursday, September 5, 2019

Commissioners present:

Tualatin Valley Water District (TVWD): Jim Duggan Hillsboro: John Godsey Beaverton: Denny Doyle

Committee Members present:

TVWD: Tom Hickmann, Management Committee

Carrie Pak, Operations Committee

Hillsboro: Niki Iverson, Management Committee

Beaverton: David Donaldson, Management Committee

David Winship, Operations Committee

Managing Agency Staff present:

Dave Kraska, Willamette Water Supply Program (WWSP) Director; WWSS Commission General Manager Joelle Bennett, WWSP Assistant Director

Bill Van Derveer, WWSP Manager

Justin Carlton, WWSP Finance & Administrative Supervisor

Clark Balfour, TVWD General Counsel

Mike Jacobs, TVWD Risk Management Coordinator; WWSP Safety & Security Supervisor

Matt Oglesby, TVWD Asset Management Division Manager

Mark McConnell, TVWD Facilities

Annette Rehms, WWSP Administrative Assistant

Faye Branton, WWSP Administrative Assistant; WWSS Commission Recorder

Other Attendees:

No members of the public were present.

CALL TO ORDER

Chairman Duggan called the regular Willamette Water Supply System (WWSS) Commission meeting to order at 12:00 p.m.

1. GENERAL MANAGER'S REPORT

Mr. Kraska opened with a safety moment featuring back-to-school safety (*see presentation*), followed by the General Manager's report, which included an overview of the Approvals and Procurement Forecast.



2. PUBLIC COMMENT

There were no public comments.

3. CONSENT AGENDA

A. Approve the August 6, 2019 meeting minutes.

Motion was made by Godsey seconded by Doyle to approve the consent agenda as presented. The motion passed unanimously with Doyle, Duggan, and Godsey, voting in favor.

4. **BUSINESS AGENDA**

A. Consider adopting Resolution WWSS-05-19, a resolution adopting the Joinder to Trust Agreement between the Willamette Water Supply System Commission and Special District Insurance Services. – Staff Report – Mike Jacobs

Mr. Jacobs presented the staff report requesting the Board's adoption of Resolution WWSS-05-19.

Motion was made by Godsey seconded by Doyle to adopt Resolution WWSS-05-19, adopting the Joinder to Trust Agreement between the Willamette Water Supply System Commission and Special District Insurance Services. The motion passed unanimously with Doyle, Duggan, and Godsey, voting in favor.

In response to Commissioner's question, staff replied that the general liability coverage is based on the size of the WWSS operating budget, which is currently small. The Willamette Water Supply Program office is the only insured property at this time. The premium contribution will increase as coverage is added for more WWSS properties.

B. Consider adopting Resolution WWSS-06-19, a resolution adopting a Management Authority Matrix for the Willamette Water Supply System.

Mr. Kraska presented the staff report requesting the Board's adoption of Resolution WWSS-06-19.

Motion was made by Godsey seconded by Doyle to adopt Resolution WWSS-06-19, adopting a Management Authority Matrix for the Willamette Water Supply System. The motion passed unanimously with Doyle, Duggan, and Godsey, voting in favor.

5. INFORMATION ITEMS

A. Upcoming Washington County Intergovernmental Agreements and Related Amendments, and Other Potential Intergovernmental Agreements – *Staff Report – Dave Kraska*

Mr. Kraska presented the staff report and a presented an overview of upcoming Washington County Intergovernmental Agreements (IGAs) and related amendments, calling attention to three critical points

of the Master Project Coordination IGA with Washington County. He also briefed the Board on upcoming IGAs with Washington County and the City of Wilsonville. (see presentation)

In response to Commissioner's question, staff replied that the pending IGA with the City of Wilsonville is not affecting the design schedule. This IGA is in progress and must be completed before we can move forward with the land use application.

Discussion followed with Commissioners expressing support and offering assistance moving IGAs forward, when needed.

B. The next Board meeting is scheduled on October 3, 2019, 12:00 p.m. to 2:00 p.m. at the Tualatin Valley Water District – Board Room.

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6.	COMMUNICATIONS	AND NON-	·AGENDA	11 FIMS

A. None scheduled.

ADJOURNMENT

There being no further business, Chairman Duggan adjourned	I the meeting at 12:28 p.m.
James Duggan, Chair	Denny Doyle, Vice Chair





Safety Moment: Back to School WWSS Commission Board Meeting

September 5, 2019

Heighten your awareness, especially around schools

- Watch for children on and near the road in the morning and after school hours
- Reduce any distractions inside your car:
 - Put down your phone
 - Don't talk or text while driving



Learn more at www.safekids.org



Willamette Water Supply Own Reliable Water

Slowing down provides more reaction time and can save lives



A pedestrian's chance of survival changes with the speed of impact:

- 50% if hit at 30 miles per hour
- 90% if hit at 20 miles per hour

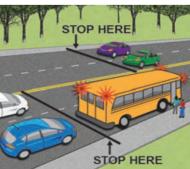
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Stop for school busses when red lights are flashing

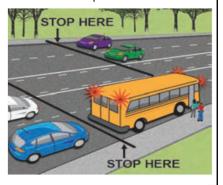
Divided highway with unpaved median or barrier

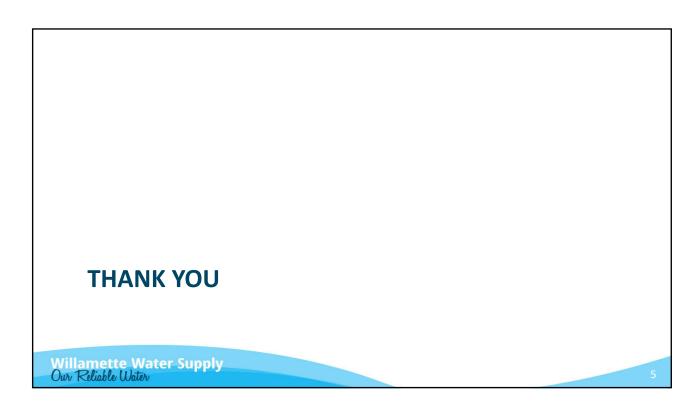


Willamette Water Supply Our Reliable Water 4-lanes with painted median



4-lanes with painted center turn







Washington County Agreements and other Potential Intergovernmental Agreements

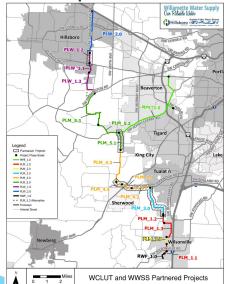
WWSS Commission Board Meeting

September 5, 2019

The Willamette Water Supply Program has numerous successful partnerships with WCLUT

- SW 124th Avenue Extension (PLM_3.0)
 - Tonquin Road
 - Grahams Ferry Road
- Tualatin Sherwood Road (PLM_4.2)
- Highway 99W at Tualatin-Sherwood Road Crossing (PLM_4.1)
- Roy Rogers Road
 - In Sherwood (PLM_4.4)
 - In Washington County south of Scholls Ferry Road (PLM 5.1)
- Cornelius Pass Road (PLW 1.2)

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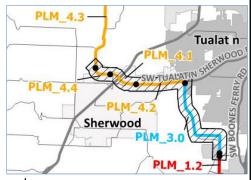
Various changes have occurred that need to be recognized in updates to the IGAs

- Memorializing schedule updates
- Assigning to the Willamette Water Supply System Commission
- Incorporating WIFIA requirements
- Clarifying costs responsibilities

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Additionally, two new IGAs are also being drafted

- PLM_4.4
 - Completes the design-phase partnership
- Master Project Coordination IGA
 - Completes assignment of the MOU from WWSP to WWSS
 - Captures the full list of WWSP/WCLUT partnered projects
 - Confirms the intent to work together and that the use of project-specific design and construction IGAs will be continued
 - Establishes the WWSP operational date, setting a requirement for project schedule management
 - Establishes a "Stage Gate" process of confirming design and construction milestones to support consistent, forward progress
 - Requires WCLUT to include WIFIA-related contracting terms
 - Supports project schedules by linking certain payments to timely project progress



Additionally, two new IGAs are also being drafted

- PLM 4.4
 - Completes the design-phase partnership
- Master Project Coordination IGA
 - Completes assignment of the MOU from WWSP to WWSS
 - Captures the full list of WWSP/WCLUT partnered projects
 - Confirms the intent to work together and that the use of project-specific design and construction IGAs will be continued
 - Establishes the WWSP operational date, setting a requirement for project schedule management
 - Establishes a "Stage Gate" process of confirming design and construction milestones to support consistent, forward progress
 - Requires WCLUT to include WIFIA-related contracting terms
 - Supports project schedules by linking certain payments to timely project progress

The following process is being followed to complete these IGAs

- Final staff-level review and approval
- Final legal review and approval
- Presentation to the WWSS Management Committee at the September 18, 2019 meeting for endorsement
- Presentation to the WWSS Board at the October 3, 2019 meeting for approval

Willamette Water Supply Our Reliable Water

IGA with Wilsonville may also be on the October WWSS Board meeting agenda

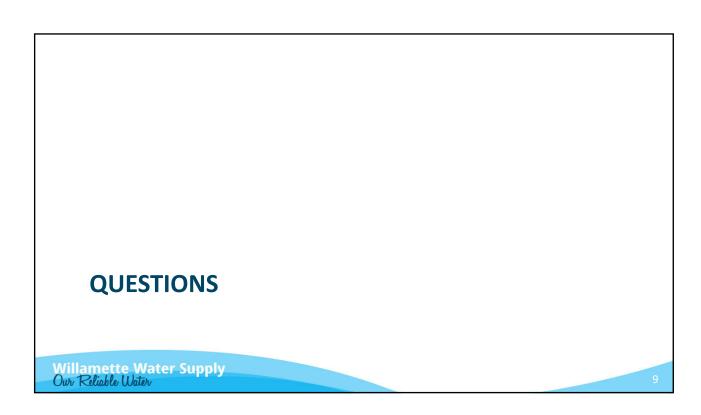
- Establishes the roles and responsibilities for our work at the intake and raw water pump station
 - Timing
 - Coordination
 - Location
 - Incorporation of improvements to WRWTP improvements
 - Cost shares

Willamette Water Supply Our Reliable Water

Wilsonville has recently tied execution of this IGA with approval of our land use application

- This has implications related to our schedule
- The City Attorney is requiring the form of this IGA to be revised
 - This will likely add time to the review and approval process
- The following process will be used for approval
 - Staff and legal counsel review and approval
 - WWSS Management Committee review and endorsement
 - WWSS Board consideration for approval

Willamette Water Supply
Our Reliable Water





STAFF REPORT

To: Board of Commissioners

From: Dave Kraska, P.E., Willamette Water Supply System General Manager

Date: October 3, 2019

Subject: Resolution Declaring Public Necessity to Acquire Permanent and Temporary

Construction Easements Over, Upon, Under, and Through Real Property for Pipeline

Section PLM_1.2 for the Willamette Water Supply System

Requested Board Action:

Consider adopting a resolution declaring public necessity to acquire permanent and temporary construction easements over, upon, under, and through real property for pipeline section PLM_1.2 for the Willamette Water Supply System (WWSS).

Key Concepts:

The WWSS includes a section of pipeline along SW Garden Acres Road from SW Ridder Road to just north of SW Day Road within the City of Wilsonville and unincorporated Washington County.

- The Willamette Water Supply Program (WWSP) has progressed the design of this pipeline section
 to enable identification of property requirements for construction and long-term operation and
 maintenance of the pipeline.
- Most of the pipeline section PLM_1.2 is under construction under a partnership agreement with
 the City of Wilsonville and within City right of way (ROW). The property interests addressed by
 this resolution are outside of the City of Wilsonville's work. Accordingly, the WWSS Commission
 must acquire these property interests to complete the pipeline between the partnered project
 and the southern portion of the pipeline section PLM_3.0 (SW 124th Avenue Project) completed
 in 2018.
- The WWSS Commission must acquire the property interests now to enable construction in sequence with the rest of the pipeline section PLM_1.2.
- After consideration of various alignments and alternatives, the identified route will be located in
 a manner that will be most compatible with the greatest public good and the least private injury
 to property owners.
- This resolution declares the public need for the property interests and enables the WWSS Commission's agents, including the WWSP team, to begin negotiating with respective interest holders.

Background:

The pipeline alignment for PLM_1.2 includes areas of unincorporated Washington County and the City of Wilsonville. The project area is shown in the attached map. PLM_1.2 will be located within the SW Garden Acres Road and City of Wilsonville ROW except for the portion north of SW Garden Acres, crossing SW Day Road and connecting to the already-constructed PLM_3.0 (SW 124th Avenue Pipeline Project). This pipeline will be 66-inch diameter welded steel pipe.

Page 2 of 3 October 3, 2019

Resolution Declaring Public Necessity to Acquire Easements for WWSP Pipeline Section PLM_1.2

The PLM_1.2 pipeline alignment requires permanent and temporary easements to fulfill WWSP standard construction work zone requirements, particularly in the area of the SW Day Road trenchless crossing.

WWSP continues to coordinate with the City of Wilsonville and Washington County during final design.

Resolution Summary

The WWSS Commission has authority to acquire real property for the WWSS. The pipeline section PLM_1.2 requires the acquisition of temporary and permanent easements on two private properties. The PLM_1.2 pipeline alignment was selected through an extensive alternatives evaluation, and the preferred location was selected based on the best interests of the public and the least private injury to private property owners. The resolution enables the initiation of the property acquisition process, including negotiations with interest holders and, only if necessary, through condemnation.

Budget Impact:

The WWSP real estate team has completed an estimate that represents, in the professional judgment of the real estate team, the budget-level cost required to acquire the easements. The total estimated cost for PLM_1.2 permanent and temporary construction easements is \$161,965. Funds for purchase of these easements are included in the WWSP baseline budget.

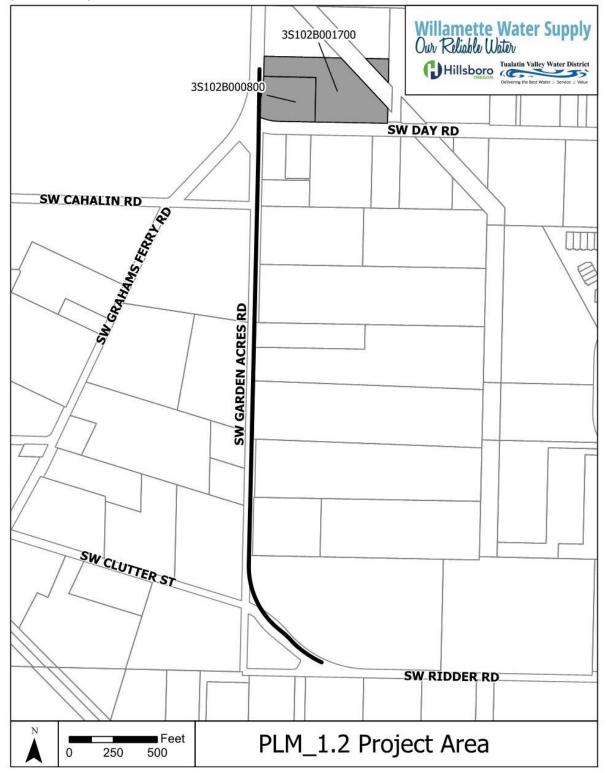
Staff Contact Information:

Dave Kraska, WWSS General Manager, 503-941-4561, david.kraska@tvwd.org Clark Balfour, General Counsel, 503-848-3061, clark.balfour@tvwd.org

Attachments:

Project area map
Proposed Resolution
Exhibit A: Legal Descriptions
Exhibit B: Acquisition Maps

Project area map:





RESOLUTION NO. WWSS-07-19

A RESOLUTION DECLARING PUBLIC NECESSITY TO ACQUIRE PERMANENT AND TEMPORARY CONSTRUCTION EASEMENTS OVER, UPON, UNDER AND THROUGH REAL PROPERTY FOR PIPELINE SECTION PLM_1.2 FOR THE WILLAMETTE WATER SUPPLY SYSTEM.

WHEREAS, the above-entitled matter came before the Board of Commissioners of the Willamette Water Supply System Commission (WWSS Commission) at its regular meeting on October 3, 2019; and,

WHEREAS, the Willamette Water Supply System Intergovernmental Agreement (Agreement) between Tualatin Valley Water District (TVWD), the City of Hillsboro (Hillsboro), and the City of Beaverton (Beaverton) (collectively, Members) created the WWSS Commission, an ORS Chapter 190 intergovernmental entity, effective July 1, 2019, to exercise the powers and duties set forth in the Agreement; and,

WHEREAS, pursuant to the Agreement, TVWD has been designated as the Managing Agency of the WWSS Commission; and,

WHEREAS, the Willamette Water Supply System (WWSS) includes, but is not limited to, an expanded and improved water intake on the Willamette River in the City of Wilsonville currently owned by TVWD and the City of Wilsonville, along with a new raw water pipeline, potable water treatment plant, finished water pipelines, pumping, storage, and other necessary water system facilities to enable the WWSS to utilize existing water rights to provide water system ownership and reliability to the Members' water system users; and,

WHEREAS, the WWSS Commission has been delegated authority by its Members under the Agreement and ORS Chapter 190 pursuant to City Charters, ORS 223.005 to 223.105, ORS 264.240 and Oregon Revised Statutes Chapter 35 to acquire real property by purchase or through eminent domain proceedings; and,

WHEREAS, the WWSS Commissioners determine, consistent with the powers and purposes of the WWSS Commission, that it is necessary for the economic well-being, public health, safety and welfare of the WWSS Commission and the Members' water system users, to acquire fee title to certain real property, as well as necessary rights-of-way, easements, and other property interests, in order to design, locate, construct, operate, and implement the WWSS; and,

WHEREAS, after investigation of various routes for a water pipeline and related water system facilities, the WWSS Commission has determined that permanent and temporary construction easements, are necessary for the construction, location, and operation of the WWSS, and in particular, pipeline section PLM_1.2, and that such use is planned and located in a manner that is most compatible with the greatest public benefit and the least private injury; and,

WHEREAS, such permanent and temporary construction easements are preliminarily described on Exhibits A and depicted for illustration purposes only on Exhibits B attached hereto and incorporated by reference with final legal descriptions and easement documents as determined by TVWD staff,

including the Willamette Water Supply Program (WWSP) and its consultants, as the Managing Agency, on behalf of the WWSS Commission and its Members, to be reasonably necessary to accommodate the design and operation of the WWSS (the Easement Interests); and,

WHEREAS, the Board of Commissioners finds that declaration by resolution to acquire the Easement Interests for the WWSS is necessary and being so advised.

NOW, THEREFORE, BE IT RESOLVED BY THE WILLAMETTE WATER SUPPLY SYSTEM COMMISSION THAT:

- Section 1: The above recitals shall form an integral part of this resolution and shall have the same force and effect as if fully stated herein.
- <u>Section 2:</u> It is necessary for the preservation of economic well-being, public health, safety and welfare of the public served by the Members and the WWSS Commission that the WWSS Commission commence the acquisition process for the Easement Interests through exercise of the power of eminent domain.
- <u>Section 3:</u> That TVWD staff, including the WWSP, and counsel are authorized to retain real estate appraisers, negotiators, and other consultants, with said appraisals to be prepared under the auspices of WWSS Commission counsel, for initiation of proceedings as described below.
- <u>Section 4:</u> That TVWD staff, including WWSP, consultants, and counsel, are authorized to negotiate in good faith necessary agreements to acquire the Easement Interests on behalf of and in the name of the WWSS Commission and to pay just compensation and applicable compensable damages in accordance with applicable law.
- Section 5: That TVWD staff, including WWSP, and counsel, are authorized to file complaints in condemnation on behalf of and in the name of the WWSS Commission, to take other steps as they determine necessary as the Managing Agency, and to prosecute to final determination such actions to acquire title to the Easement Interests if negotiations fail.
- Section 6: That upon the trial of any suit or action instituted to acquire the Easement Interests, counsel acting for and on behalf of the WWSS Commission are authorized to make such stipulation, agreement or admission as in their judgment may be for the best interest of the WWSS Commission and to take possession of the Easement Interests at such time as appropriate in their judgment without necessity of further WWSS Commission approval.

James Duggan, Chair	Denny Doyle, Vice Chair

Approved and adopted at a regular meeting held on the 3rd day of October 2019.

Exhibit A

Portion of 3S1W02B 00800 September 16, 2019

Parcel 1 Permanent Utility Easement

A tract of land being a portion of Lot 4 of the Plat of Garden Acres, Washington County Plat Records, said tract being a portion of that property described in Document Number 89-00075, Washington County Deed Records; said tract being described as follows:

Beginning at the Northeast corner of Doc. No. 2015-093782, said point being on the East right of way line of SW Grahams Ferry Road, said point also being on the North line of said Doc. No. 89-00075; thence leaving said East right of way line, along the North line of said Doc. No. 89-00075 South 88°52'11" East a distance of 30.01 feet; thence 115.65 feet along a non-tangent curve to the right, said curve having a radius of 697.00 feet, an interior angle of 09°30'23" and a chord which bears South 07°17'38" West a distance of 115.51 feet to a point of non-tangency; thence South 01°19'35" West a distance of 128.96 feet the North right of way line of SW Day Road as dedicated by Doc. No. 2001-036484; thence along said North right of way line 29.98 feet along a non-tangent curve to the right, said curve having a radius of 263.00 feet, an interior angle of 06°31'52" and a chord which bears North 70°22'57" West a distance of 29.96 feet to a point of compound curvature; thence continuing along said North right of way line 7.33 feet along a curve to the right, said curve having a radius of 43.00 feet, an interior angle of 09°45'39" and a chord which bears North 62°14'11" West a distance of 7.32 feet to the said East right of way line of SW Grahams Ferry Road; thence along said East right of way North 01°19'35" East a distance of 95.61 feet to a point of non-tangent curvature; thence continuing along said East right of way line as dedicated in Doc. No. 2015-093782 a distance of 136.78 feet along a curve to the left, said curve having a radius of 667.00 feet, an interior angle of 11°44'57" and a chord which bears North 08°28'44" East a distance of 136.54 feet to the Point of Beginning.

This tract of land contains 7,739 square feet, more or less.

REGISTERED PROFESSIONAL LAND SURVEYOR

Jon Yamashita 2019.09.25 07:55:10-07'00'

OREGON JANUARY 12, 2002 JON M. YAMASHITA 53760LS

RENEWS 6/30/2020

Exhibit A

Portion of 3S1W02B 00800 September 16, 2019

Parcel 2 Temporary Construction Easement

A tract of land being a portion of Lot 4 of the Plat of Garden Acres, Washington County Plat Records, said tract being a portion of that property described in Document Number 89-00075, Washington County Deed Records; said tract being described as follows:

Beginning at a point on the north line of said Doc. No. 89-00075 which bears South 88°52'11" East a distance of 30.01 feet from the Northeast corner of Doc. No. 2015-093782, said Northeast corner being on the East right of way line of SW Grahams Ferry Road; thence along said North line South 88°52'11" East a distance of 27.99 feet; thence South 01°19'35" West a distance of 251.43 feet to the North right of way line of SW Day Road as dedicated by Doc. No. 2001-036484; thence along said North right of way line 40.73 feet along a non-tangent curve to the right, said curve having a radius of 263.00 feet, an interior angle of 08°52'26" and a chord which bears North 78°05'06" West a distance of 40.69 feet; thence leaving said North right of way line North 01°19'35" East a distance of 128.96 feet to a point of non-tangent curvature; thence 115.65 feet along a curve to the left, said curve having a radius of 697.00 feet, an interior angle of 09°30'23" and a chord which bears North 07°17'38" East a distance of 115.51 feet to the Point of Beginning.

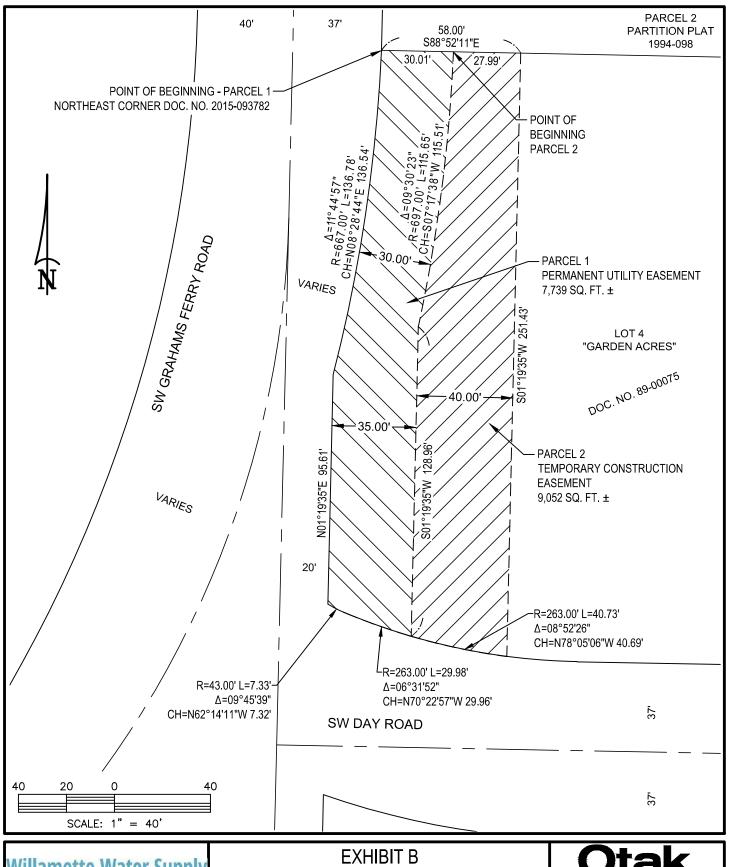
This tract of land contains 9,052 square feet, more or less.

REGISTERED PROFESSIONAL LAND SURVEYOR

Jon Yamashita 2019.09.25 07:53:33-07'00'

OREGON JANUARY 12, 2002 JON M. YAMASHITA 53760LS

RENEWS 6/30/2020



Willamette Water Supply Our Reliable Water

WILLAMETTE WATER SUPPLY PROGRAM 1850 SW 170th Avenue Beaverton, Oregon 97003 Phone: (503) 941-4563

PERMANENT UTILITY AND TEMPORARY CONSTRUCTION EASEMENT NW1/4 S02 T3S R1W - TAX LOT 800

DATE 09/16/2019

DAC

JMY

808 SW 3rd Ave., Ste. 300 Portland, Oregon 97204 Phone: (503) 287-6825 www.otak.com project: 18341



Exhibit A

Portion of 3S1W02B 01700 September 16, 2019

Parcel 1 Permanent Utility Easement

A tract of land being a portion of Parcel 2 of Partition Plat 1994-098, Washington County Plat Records, said tract being a portion of that property described in Document Number 96-034916, Washington County Deed Records; said tract being described as follows:

Beginning at the Southwest corner of said Parcel 2, said corner being on the East right of way line of SW Grahams Ferry Road; thence along said East right of way line North 01°19'35" East a distance of 30.11 feet; thence leaving said right of way line South 43°40'25" East a distance of 42.44 feet to the South line of said Parcel 2; thence North 88°52'11" West a distance of 30.01 feet to the Point of Beginning.

This tract of land contains 452 square feet, more or less.

REGISTERED PROFESSIONAL LAND SURVEYOR

Jon Yamashita 2019.09.25 07:52:14-07'00'

OREGON JANUARY 12, 2002 JON M. YAMASHITA 53760LS

RENEWS 6/30/2020

Exhibit A

Portion of 3S1W02B 01700 September 16, 2019

Parcel 2 Temporary Construction Easement

A tract of land being a portion of Parcel 2 of Partition Plat 1994-098, Washington County Plat Records, said tract being a portion of that property described in Document Number 96-034916, Washington County Deed Records; said tract being described as follows:

Beginning at a point on the East right of way line of SW Grahams Ferry Road which bears North 01°19'35" East a distance of 30.11 feet from the Southwest corner of said Parcel 2; thence along said east right of way line North 01°19'35" East a distance of 35.36 feet; thence South 43°40'25" East a distance of 82.02 feet; thence South 01°19'35" West a distance of 7.27 feet to the south line of said Parcel 2; thence along said south line North 88°52'11" West a distance of 27.99 feet; thence North 43°40'25" West a distance of 42.44 feet to the Point of Beginning.

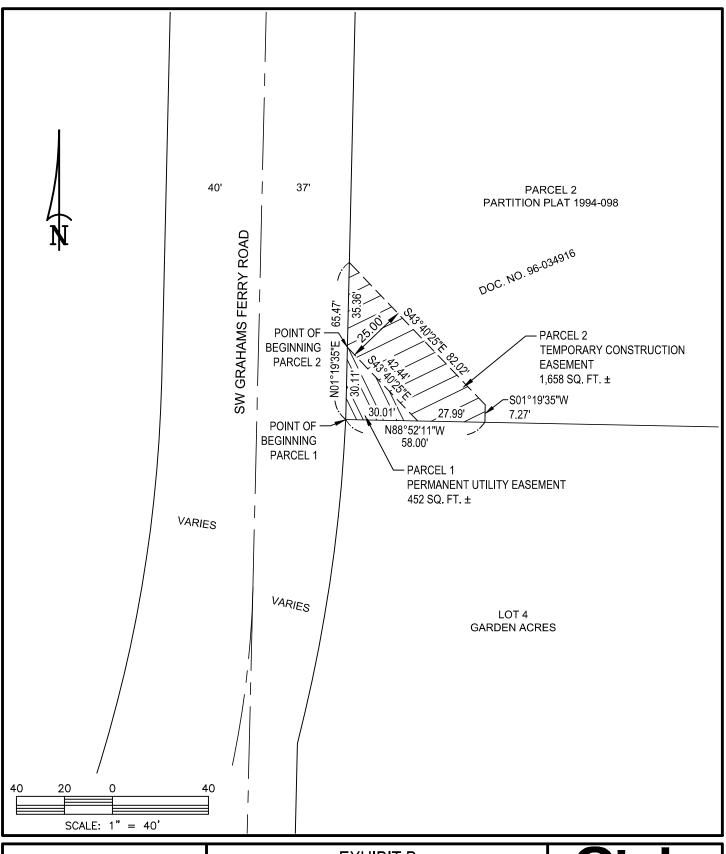
This tract of land contains 1,658 square feet, more or less.

REGISTERED PROFESSIONAL LAND SURVEYOR

Jon Yamashita 2019.09.25 07:51:00-07'00'

OREGON JANUARY 12, 2002 JON M. YAMASHITA 53760LS

RENEWS 6/30/2020



Willamette Water Supply Our Peliable Water

WILLAMETTE WATER SUPPLY PROGRAM 1850 SW 170th Avenue Beaverton, Oregon 97003 Phone: (503) 941-4563

EXHIBIT B PERMANENT UTILITY AND TEMPORARY CONSTRUCTION EASEMENT NW1/4 S02 T3S R1W - TAX LOT 1700

DATE DRAWN BY CHECKED 09/16/2019 DAC JMY





STAFF REPORT

To: Board of Commissioners

From: Dave Kraska, P.E., Willamette Water Supply System General Manager

Date: October 3, 2019

Subject: Update to Resolution Declaring Public Necessity to Acquire Permanent and Temporary

Construction Easements Over, Upon, Under, and Through Real Property for Pipeline

Section PLW_1.3 for the Willamette Water Supply System

Requested Board Action:

Consider adopting an updated resolution declaring public necessity to acquire permanent and temporary construction easements over, upon, under, and through real property for pipeline section PLW_1.3 for the Willamette Water Supply System (WWSS).

Key Concepts:

The WWSS includes a section of pipeline along the future SW Cornelius Pass Road from SW Kinnaman Road to SW Rosedale Road, within the area known as South Hillsboro, and along SW Rosedale Road and SW 209th Avenue to the intersection of SW 209th Avenue and SW Farmington Road.

- The Willamette Water Supply Program (WWSP) has progressed the design of this pipeline section
 to enable identification of property requirements for construction and long-term operation and
 maintenance of the pipeline.
- Although some of this property may become City of Hillsboro or Washington County right of way
 (ROW) in the future, the WWSS Commission must acquire the property now to enable its
 construction in advance of private development projects in the same area.
- WWSP has considered various alignments and alternatives and has determined that the identified route will be located in a manner that will be most compatible with the greatest public good and the least private injury to property owners.
- This resolution declares the public need for the property interests and enables the WWSS Commission's agents, including the WWSP team, to begin negotiating with respective property interest holders.
- This updated resolution incorporates design changes for the pipeline section PLW_1.3 of the WWSS.

Background:

The pipeline alignment for PLW_1.3 includes both unincorporated Washington County and the City of Hillsboro. The project area is shown in the attached map. PLW_1.3 will be located within the current and future ROW for the Cornelius Pass Road extension between SW Kinnaman Road and SW Rosedale Road. This portion of the project will be 66-inch diameter welded steel pipe.

The remainder of the alignment is along SW Rosedale Road and SW 209th Avenue, connecting to the future TVWD facility at the intersection of SW 209th Avenue and SW Farmington Road. This portion of the project will be 30-inch welded steel pipe and is in public ROW.

The current configuration of PLW_1.3 recognizes a pending alignment change for its neighboring project, PLM_5.3. The study to refine the preferred alignment for PLM_5.3 is nearly complete and is anticipated

Page 2 of 3
October 3, 2019
Update to Resolution Declaring Public Necessity to Acquire Easements for WWSP Pipeline Section
PLW 1.3

to realign the PLM_5.3 pipeline from SW Farmington Road between SW Clark Hill Road and SW 209th Avenue, to a north-south route from SW Farmington Road at SW Clark Hill Road to where the future SW Cornelius Pass Road will intersect SW Rosedale Road. This north-south pipeline will remain 66-inches in diameter. This PLM_5.3 alignment change will modify the diameter of the SW Rosedale Road/SW 209th Avenue pipeline. This portion of pipeline will convey water from the WWSS to the future TVWD facility at the intersection of SW 209th Avenue and SW Farmington Road. Due to the timing of the projects, construction for PLW_1.3 will precede the PLM_5.3 construction.

The PLW_1.3 pipeline alignment follows the City of Hillsboro's alignment for the Cornelius Pass Extension. Some of the road ROW has already been dedicated by developers. In these areas, additional permanent and temporary easements are needed to fulfill WWSP standard construction work zone requirements. In areas where ROW dedications have not occurred, WWSP requires easements for the full width of the WWSP standard construction work zone.

Inside the City of Hillsboro limits, WWSP has coordinated with the housing developers (GLC South Hillsboro, LLC; Hagg Lane, LLC; Hagg Lane II, LLC; and Hagg Lane III, LLC) to secure access and easements for efficient construction of the PLW_1.3 pipeline.

Resolution Summary

The WWSS Commission has authority to acquire real property for the WWSS. The pipeline section PLW_1.3 requires the acquisition of several temporary and permanent easements on private property. Approval of this resolution of need is necessary now because the City of Hillsboro requires acquisition of all properties prior to consideration of the WWSS Commission's land use application. The PLW_1.3 pipeline alignment was selected through an extensive alternatives evaluation, and the preferred location was selected based the best interests of the public and the least private injury to private property owners. The resolution enables the initiation of the property acquisition process, including negotiations with interest holders.

This updated resolution incorporates design changes necessary to accommodate the location and operation of pipeline section PLW_1.3.

Budget Impact:

The WWSP real estate team has completed an estimate that represents, in the professional judgment of the real estate team, the budget-level cost required to acquire the easements. The total estimated cost for PLW_1.3 permanent and temporary construction easements was \$1,988,438. With this update, the cost estimate is \$2,093,918, an increase of \$105,480. Funds for purchase of these easements are included in the WWSP baseline budget.

Staff Contact Information:

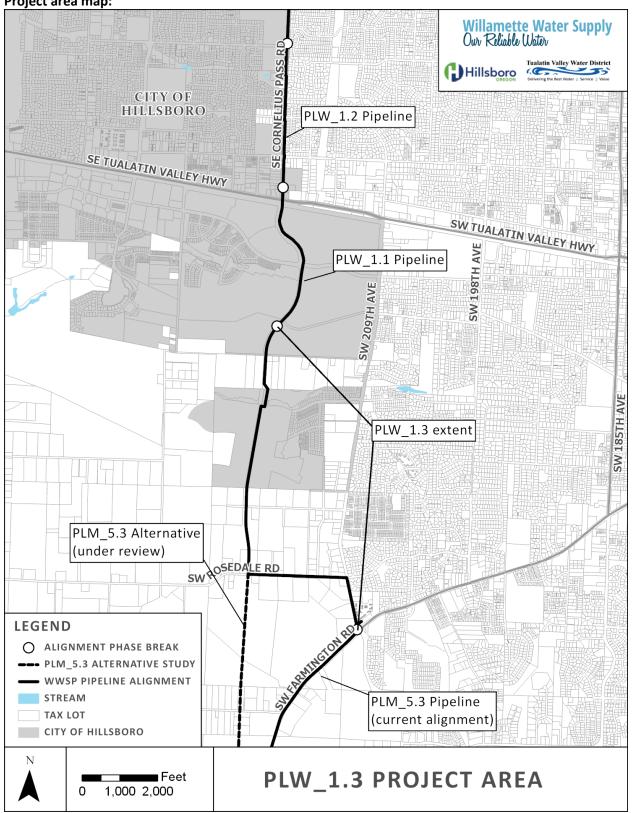
Dave Kraska, WWSS General Manager, 503-941-4561, david.kraska@tvwd.org Clark Balfour, General Counsel, 503-848-3061, clark.balfour@tvwd.org

Attachments:

Project area map Proposed Resolution Exhibit A Legal Descriptions Exhibit B Acquisition Maps

Page 3 of 3
October 3, 2019
Update to Resolution Declaring Public Necessity to Acquire Easements for WWSP Pipeline Section
PLW 1.3







Willamette Water Supply Our Reliable Water

RESOLUTION NO. WWSS-08-19

UPDATE TO RESOLUTION WWSS-04-19 DECLARING PUBLIC NECESSITY TO ACQUIRE PERMANENT AND TEMPORARY CONSTRUCTION EASEMENTS OVER, UPON, UNDER AND THROUGH REAL PROPERTY FOR PIPELINE SECTION PLW_1.3 FOR THE WILLAMETTE WATER SUPPLY SYSTEM.

WHEREAS, the above-entitled matter came before the Willamette Water Supply System Commission (WWSS Commission) at its regular meeting on October 3, 2019; and,

WHEREAS, the Willamette Water Supply System Intergovernmental Agreement (Agreement) between Tualatin Valley Water District (TVWD), the City of Hillsboro (Hillsboro), and the City of Beaverton (Beaverton) (collectively, Members) created the WWSS Commission, an ORS Chapter 190 intergovernmental entity, effective July 1, 2019, to exercise the powers and duties set forth in the Agreement; and,

WHEREAS, pursuant to the Agreement, TVWD has been designated as the Managing Agency of the WWSS Commission; and,

WHEREAS, the Willamette Water Supply System (WWSS) includes, but is not limited to, an expanded and improved water intake on the Willamette River in the City of Wilsonville currently owned by TVWD and the City of Wilsonville, along with a new raw water pipeline, potable water treatment plant, finished water pipelines, pumping, storage, and other necessary water system facilities to enable the WWSS to utilize existing water rights to provide water system ownership and reliability to the Members' water system users; and,

WHEREAS, the WWSS Commission has been delegated authority by its Members under the Agreement and ORS Chapter 190 pursuant to City Charters, ORS 223.005 to 223.105, ORS 264.240 and Oregon Revised Statutes Chapter 35 to acquire real property by purchase or through eminent domain proceedings; and,

WHEREAS, on August 6, 2019, the WWSS Commission approved Resolution No. WWSS-04-19 declaring public necessity to acquire certain permanent and temporary construction easements for pipeline section PLW_1.3 of the WWSS by the power of eminent domain; and,

WHEREAS, Resolution No. WWSS-04-19 also declared that certain permanent and temporary construction easements on private property are necessary for the location of pipeline section PLW_1.3, and that such use was planned and located in a manner that was most compatible with the greatest public benefit and the least private injury; and,

WHEREAS, subsequent to the approval of Resolution No. WWSS-04-19, various design changes were necessary for the location and operation of pipeline section PLW_1.3, which have modified the property interests needed; and,

WHEREAS, the WWSS Commission reaffirms that it is necessary for the economic well-being, public health, safety and welfare of the WWSS Commission, and the public served by its Members

Willamette Water Supply Our Reliable Water

through the WWSS, to acquire fee title to certain real property, as well as necessary rights-of-way, easements, and other property interests, in order to design, construct, locate, operate, and implement the WWSS; and,

WHEREAS, the WWSS Commission also has determined that permanent and temporary construction easements are necessary for the construction, location, and operation of the WWSS, and in particular, the water pipeline and related water system facilities for the pipeline section PLW_1.3, and that such use is planned and located in a manner that is most compatible with the greatest public benefit and the least private injury; and,

WHEREAS, such permanent and temporary construction easements are preliminarily described on the attached Exhibits A and depicted for illustration purposes only on the attached Exhibits B, which are incorporated by reference, with final legal descriptions and easement documents as determined by TVWD staff, including the Willamette Water Supply Program (WWSP) and its consultants, as the Managing Agency, on behalf of the WWSS Commission, to be reasonably necessary to accommodate the design and operation of the WWSS (the Easement Interests); and,

WHEREAS, the WWSS Commission finds that declaration by resolution to acquire the Easement Interests for the WWSS is necessary and being so advised.

NOW, THEREFORE, BE IT RESOLVED BY THE WILLAMETTE WATER SUPPLY SYSTEM COMMISSION THAT:

Section 1: The above recitals shall form an integral part of this resolution and shall have the same force and effect as if fully stated herein.

<u>Section 2:</u> It is necessary for the preservation of economic well-being, public health, safety and welfare of the public served by the Members and the WWSS that the WWSS Commission commence the acquisition process for the Easement Interests through exercise of the power of eminent domain.

<u>Section 3:</u> That TVWD staff, including the WWSP, and counsel are authorized to retain real estate appraisers, negotiators, and other consultants, with said appraisals to be prepared under the auspices of WWSS Commission counsel, for initiation of proceedings as described below.

Section 4: That TVWD staff, including WWSP, consultants, and counsel, are authorized to negotiate in good faith necessary agreements to acquire the Easement Interests on behalf of and in the name of the WWSS Commission and to pay just compensation and applicable compensable damages in accordance with applicable law.

<u>Section 5:</u> That TVWD staff, including WWSP, and counsel, are authorized to file complaints in condemnation, on behalf of and in the name of the WWSS Commission, and to take other steps as they determine necessary as the Managing Agency, and to prosecute to final determination such actions to acquire title to the Easement Interests if negotiations fail.

Section 6: That upon the trial of any suit or action instituted to acquire the Easement Interests, counsel acting for and on behalf of the WWSS Commission are authorized to make such

Willamette Water Supply Our Reliable Water

stipulation, agreement or admission as in their judgment may be for the best interest of the WWSS Commission and to take possession of the Easement Interests at such time as appropriate in their judgment without necessity of further WWSS Commission approval.

Approved and adopted at a re	egular meeting held on the 3rd day of October 2019.
James Duggan, Chair	Denny Doyle, Vice Chair





16552_WWSP_PLW 1.3_LD9.4 7/16/2019 CJM

VANCOUVER OFFICE

1325 SE Tech Center Drive, Suite 140 • Vancouver, WA 98683 360.695.3411 • info@mackaysposito.com

EXHIBIT A TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JULY 16, 2019

PLW 1.3 TAX MAP NO. 1S2140003300

A STRIP OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO PAHLISCH HOMES AT BUTTERNUT CREEK LIMITED PARTNERSHIP PER DOCUMENT NO. 2018-060447 WASHINGTON COUNTY DEED RECORDS, LYING WITHIN TRACT "B" OF PARTITION PLAT 2018-038, WASHINGTON COUNTY RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30: THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30: THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30: THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65: THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03′ 47″ EAST 35.35 FEET TO STATION 45+10.32: THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87: THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00;

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THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;
THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
THENCE NORTH 16° 15' 25" EAST 100.00 FEET TO STATION 63+94.93;
THENCE NORTH 21° 22' 28" EAST 100.00 FEET TO STATION 64+94.93;
THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
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SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

TEMPORARY CONSTRUCTION EASEMENT

STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
22+75.00 TO 25+64.58	50.00 FEET
25+64.58 TO 26+24.58	25.00 FEET
26+24.58 TO 44+74.97	50.00 FEET
44+74.97 TO 46+24.09	50.00 FEET IN A STRAIGHT LINE TO 146.31 FEET

EXCEPT ANY PORTION THEREOF LYING WITHIN THE RIGHT-OF-WAY OF S.E. CORNELIUS PASS ROAD.

ALSO EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

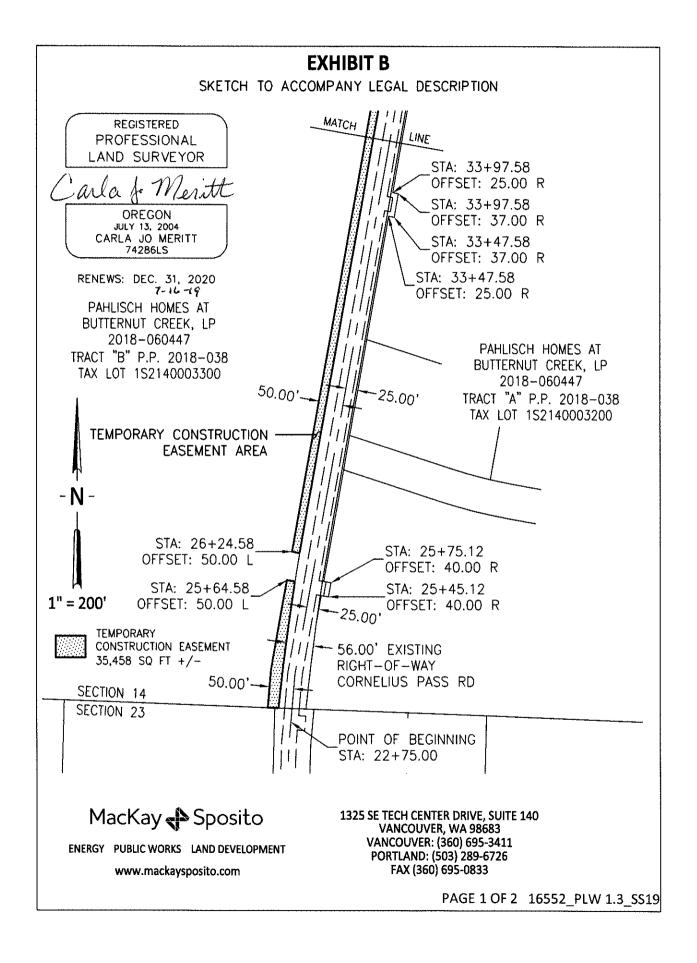
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

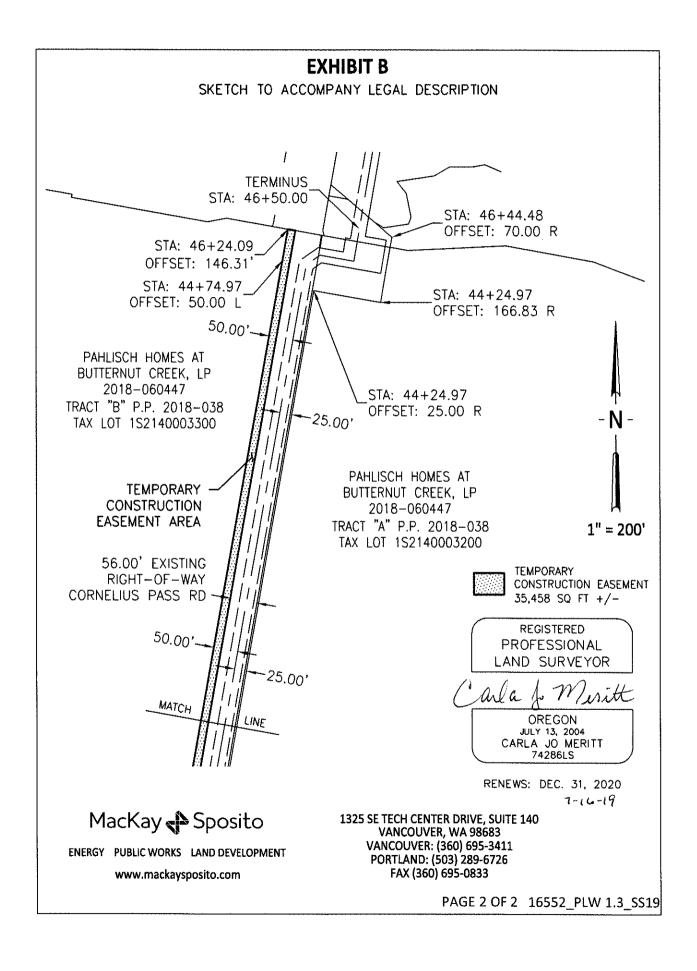
CONTAINING 35,458 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020 7-16-19







1325 SE Tech Center Drive, Suite 140 • Vancouver, WA 98683 360.695.3411 • info@mackaysposito.com

EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JULY 1, 2019

PLW 1.3 TAX MAP NO. 1S2140003400

A STRIP OF LAND LOCATED IN THE NORTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO GLC-SOUTH HILLSBORO, LLC PER DOCUMENT NO. 2000087461, WASHINGTON COUNTY DEED RECORDS, LYING WITHIN TRACT "Z" OF THE PLAT OF REEDS CROSSING, RECORDED AS DOCUMENT NO. 2018-063262, WASHINGTON COUNTY RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00;

THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;
THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
THENCE NORTH 16° 15' 25" EAST 100.00 FEET TO STATION 63+94.93;
THENCE NORTH 21° 22' 28" EAST 100.00 FEET TO STATION 64+94.93;
THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 20.00 FEET TO STATION 68+94.02 AND THE POINT OF TERMINUS.

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

PERMANENT EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
60+25.00 TO 68+54.02	15.00 FEET
68+54.02 TO 68+94.02	35.00 FEET
68+94.02 TO 69+25.24	15.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE

15.00 FEET

EXCEPT ANY PORTION THEREOF LYING WITHIN THE RIGHT-OF-WAY OF S.E. CORNELIUS PASS ROAD.

60+25.00 TO 69+25.24

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

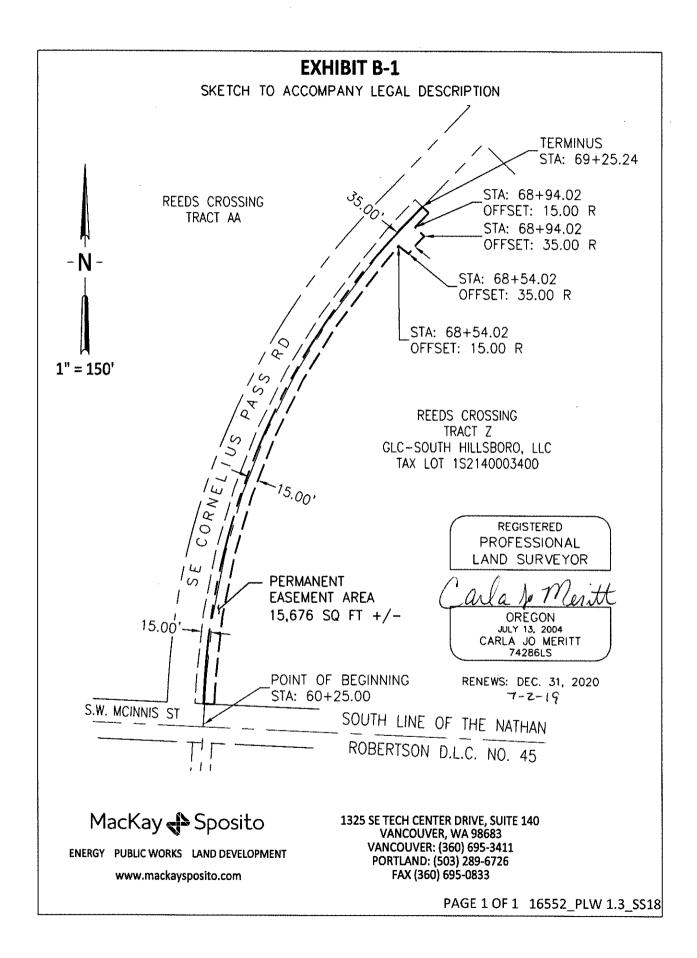
CONTAINING 15,676 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020

7-2-19







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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JULY 1, 2019

PLW 1.3 TAX MAP NO. 1S2140003400

A STRIP OF LAND LOCATED IN THE NORTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO GLC-SOUTH HILLSBORO, LLC PER DOCUMENT NO. 2000087461, WASHINGTON COUNTY DEED RECORDS, LYING WITHIN TRACT "Z" OF THE PLAT OF REEDS CROSSING, RECORDED AS DOCUMENT NO. 2018-063262, WASHINGTON COUNTY RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30: THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30: THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100,00 FEET TO STATION 8+91,30: THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65: THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49: THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97: THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91: THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00;

THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;
THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
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THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
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THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 20.00 FEET TO STATION 68+94.02 AND THE POINT OF TERMINUS.

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

TEMPORARY CONSTRUCTION EASEMENT

STATION TO STATION

EASTERLY OFFSET DISTANCE FROM CENTERLINE

60+25.00 TO 69+25.24

25.00 FEET

EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

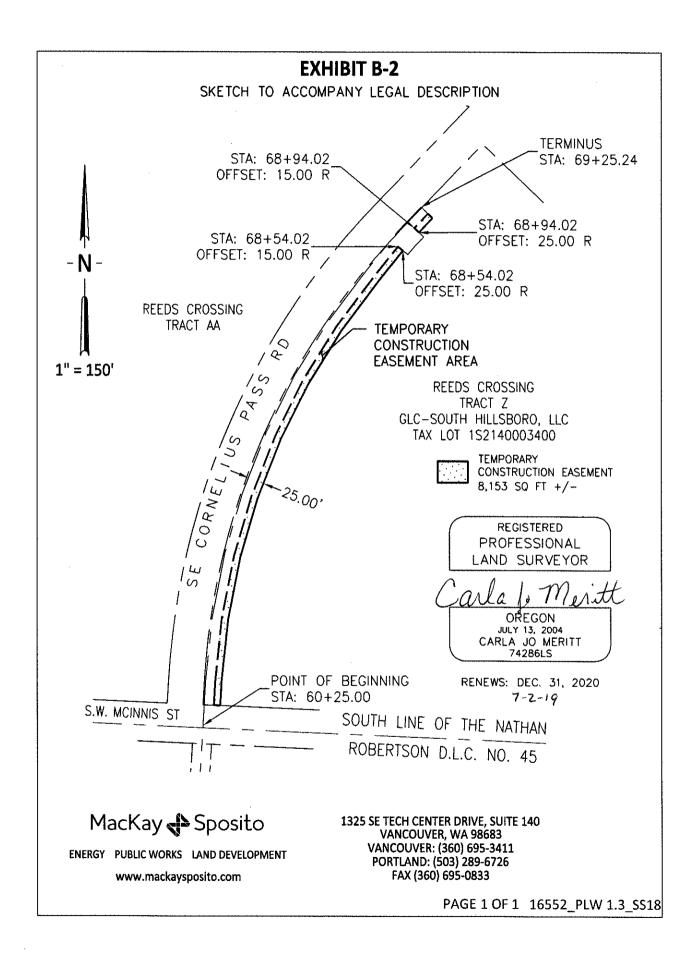
CONTAINING 8,153 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020

7-2-19







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EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2230000401

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO MIROSLAV ROUBAL AND EDNA G. ROUBAL PER DOCUMENT NO. 2018-068085, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87'57'35" EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57' 35" WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST, 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30: THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30: THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82: THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91: THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87: THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35′ 28" WEST 69.65 FEET TO STATION 52+73.65;

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THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
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THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
```

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

PERMANENT EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
18+00.00 TO 22+59.58	15.00 FEET
22+59.58 TO 22+89.58	30.00 FEET
22+89.58 TO 23+75.37	15.00 FEET

STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
18+00.00 TO 23+75.37	15.00 FEET

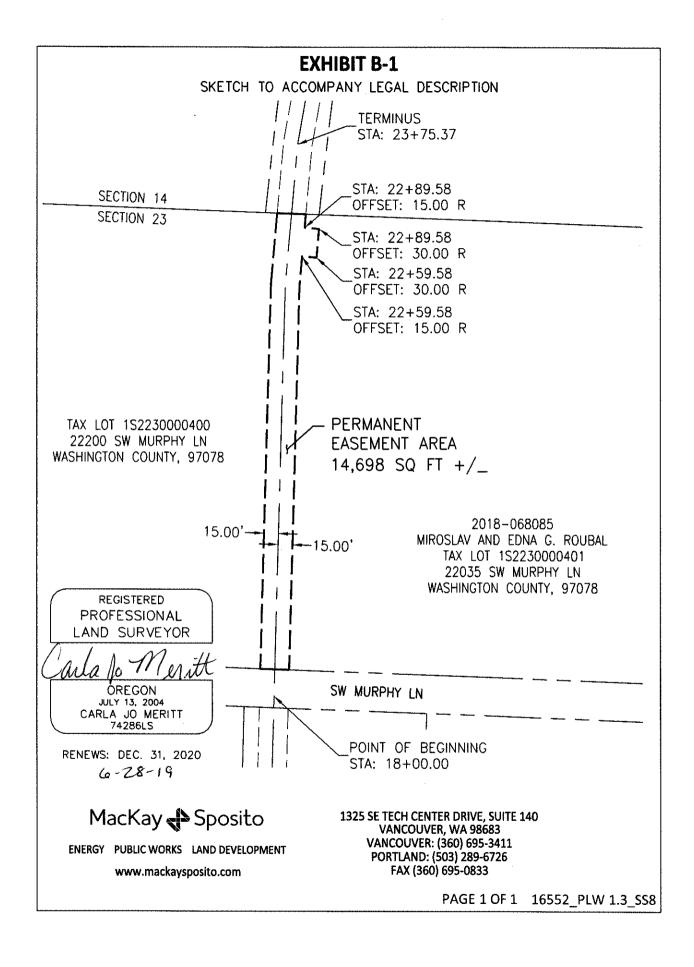
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 14,698 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

> OREGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020 6-28-19







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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2230000401

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO MIROSLAV ROUBAL AND EDNA G. ROUBAL PER DOCUMENT NO. 2018-068085, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87'57'35" EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57' 35" WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00:

THENCE NORTH 02° 27' 01" EAST, 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30: THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65: THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65: THENCE NORTH 03° 15′ 14" WEST 100.00 FEET TO STATION 13+67.65: THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48: THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65:

THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
THENCE NORTH 16° 15' 25" EAST 100.00 FEET TO STATION 63+94.93;
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THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

TEMPOARY CONSTRUCTION EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
18+00.00 TO 23+75.37	45.00 FEET

STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
18+00.00 TO 22+28.49	30.75 FEET
22+28.49 TO 23+01.11	30.75 FEET IN A STRAIGHT LINE TO 35.12 FEET

EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

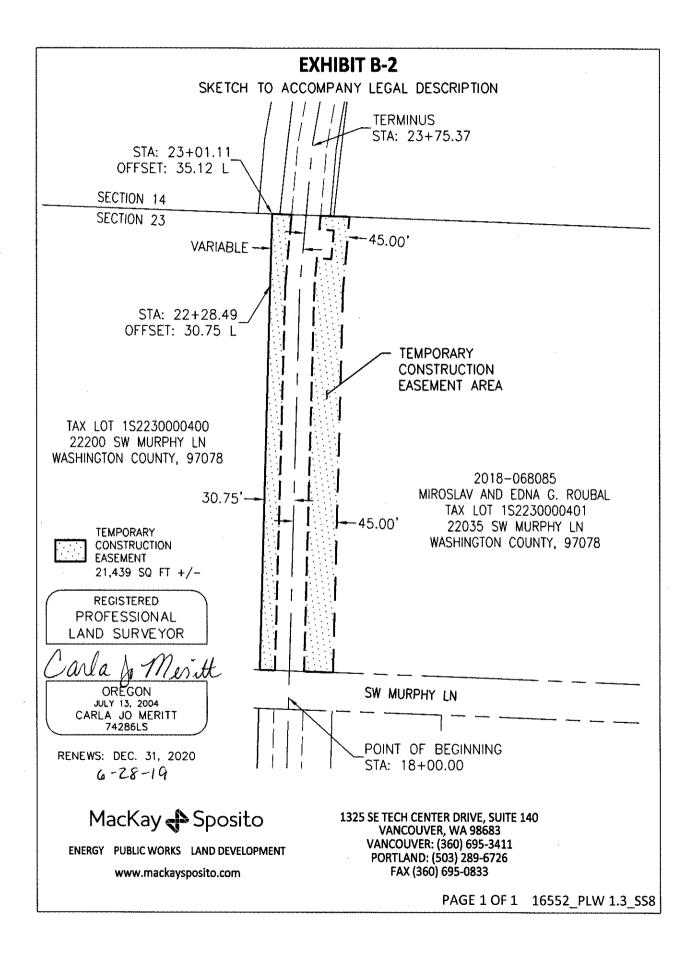
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 21,439 SQUARE FEET, MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

ORĒGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020 6-28-19







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EXHIBIT A-3 TEMPORARY CONSTRUCTION EASEMENT STAGING AREA 2

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2230000401

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO MIROSLAV ROUBAL AND EDNA G. ROUBAL PER DOCUMENT NO. 2018-068085, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87'57'35" EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57' 35" WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST, 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30: THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65: THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65: THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48: THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49: THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37: THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32: THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00;

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THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;
THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
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THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
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SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

TEMPOARY CONSTRUCTION EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
18+00.00 TO 20+55.68	169.25 FEET
20+55.68 TO 22+35.90	245.00 FEET
22+35.90 TO 23+15.37	245.00 FEET IN A STRAIGHT LINE TO 240.30

EXCEPTING THEREFROM THAT TEMPORARY CONSTRUCTION EASEMENT AND PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

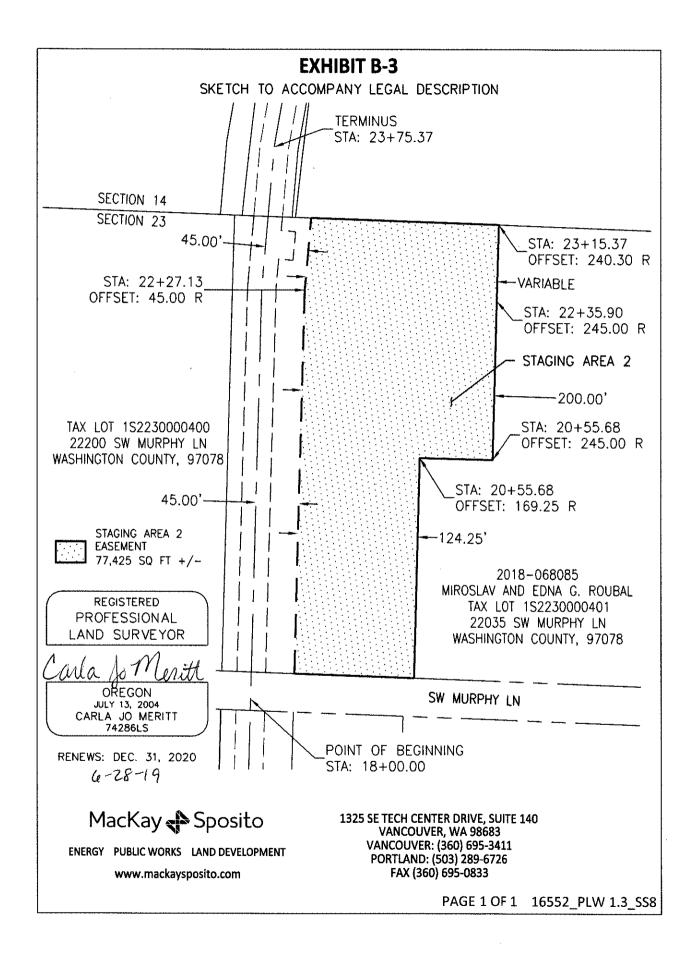
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 77,425 SQUARE FEET, MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020







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EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JUNE 26, 2019

PLW 1.3 TAX MAP NO. 1S2230001400

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO POLARIS FARM LLC PER DOCUMENT NO. 2017-101352, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87'57'35" EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57' 35" WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST, 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30: THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30: THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48: THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87: THENCE NORTH 41° 33′ 50″ WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;

```
THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
THENCE NORTH 16° 15' 25" EAST 100.00 FEET TO STATION 63+94.93;
THENCE NORTH 21° 22' 28" EAST 100.00 FEET TO STATION 64+94.93;
THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
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PERMANENT EASEMENT

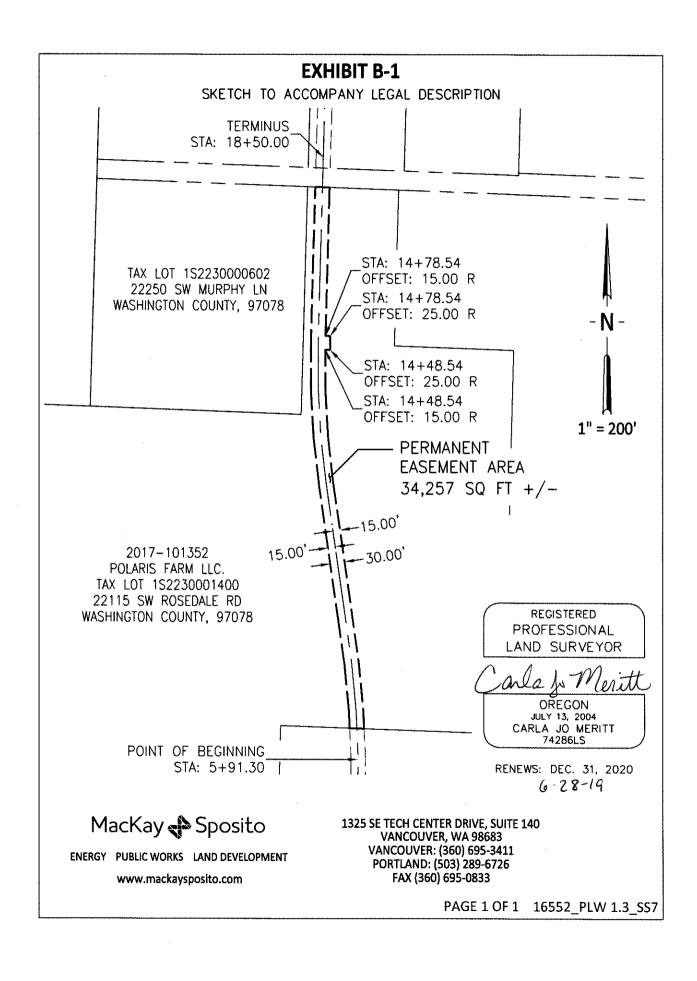
STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
5+91.30 TO 14+48.54	15.00 FEET
14+48.54 TO 14+78.54	25.00 FEET
14+78.54 TO 18+50.00	15.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
5+91.30 TO 18+50.00	15.00 FEET

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 34,257 SQUARE FEET, MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON JULY 13, 2004 CARLA JO MERITT 74286LS







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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2230001400

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO POLARIS FARM LLC PER DOCUMENT NO. 2017-101352, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87'57'35" EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57' 35" WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST, 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30: THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30: THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65: THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65: THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37: THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87: THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00: THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;

```
THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
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THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
THENCE NORTH 16° 15' 25" EAST 100.00 FEET TO STATION 63+94.93;
THENCE NORTH 21° 22' 28" EAST 100.00 FEET TO STATION 64+94.93;
THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
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TEMPOARY CONSTRUCTION EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
5+91.30 TO 13+09.88	25.00 FEET
13+09.88 TO 18+50.00	45.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
5+91.30 TO 13+17.53	WESTERLY OFFSET DISTANCE FROM CENTERLINE 50.00 FEET
5+91.30 TO 13+17.53	50.00 FEET

EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

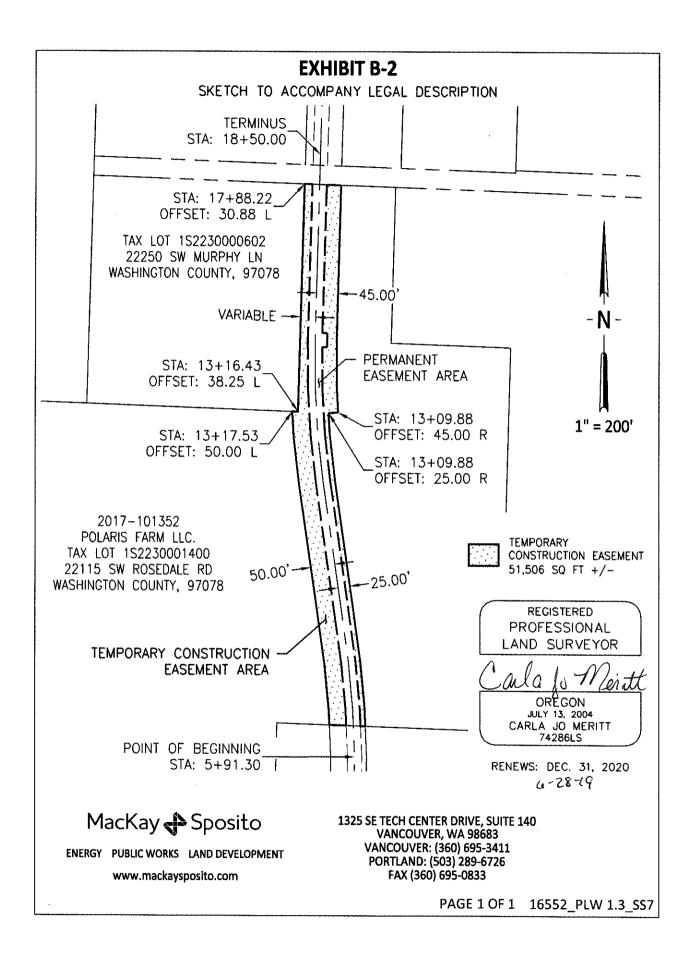
CONTAINING 51,506 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020

Page 2 of 2







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EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY AUGUST 14, 2019

PLW 1.3 TAX MAP NO. 1S2230001401

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN SPECIAL WARRANTY DEED TO A&M CAMERON PROPERTIES, LLC PER DOCUMENT NO. 2018-040932, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30: THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53′ 32" WEST 100.00 FEET TO STATION 8+91.30: THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01′ 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37: THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32: THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82: THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;

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THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
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THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
THENCE NORTH 16° 15' 25" EAST 100.00 FEET TO STATION 63+94.93;
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THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
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PERMANENT EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
0+00.00 TO 0+40.18	25.00 FEET
0+40.18 TO 4+06.58	15.00 FEET
4+06.58 TO 4+36.58	25.00 FEET
4+36+58 TO 6+91.30	15.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
0+00.00 TO 6+91.30	15.00 FFFT

EXCEPT ANY PORTION THEREOF LYING WITHIN THE RIGHT-OF-WAY OF S.W. ROSEDALE ROAD.

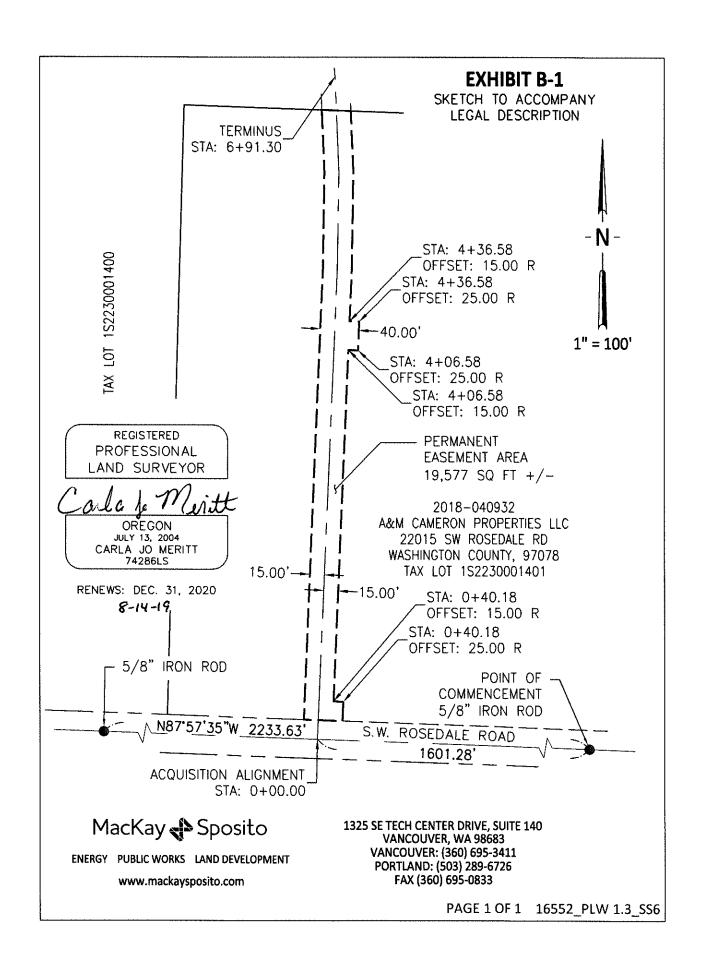
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 19,577 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020 8-14-19





16552_WWSP_PLW 1.3_LD6 9/13/2019 CJM

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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY SEPTEMBER 13, 2019

PLW 1.3 TAX MAP NO. 1S2230001401

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN SPECIAL WARRANTY DEED TO A&M CAMERON PROPERTIES, LLC PER DOCUMENT NO. 2018-040932, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57' 35" EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57' 35" WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30: THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91: THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87: THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00: THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65:

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THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
THENCE NORTH 16° 15' 25" EAST 100.00 FEET TO STATION 63+94.93;
THENCE NORTH 21° 22' 28" EAST 100.00 FEET TO STATION 64+94.93;
THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
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TEMPORARY CONSTRUCTION EASEMENT

5+24.58 TO 6+91.30

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
0+00.00 TO 1+93.06	80.00 FEET
1+93.06 TO 2+73.06	241.33 FEET
2+73.06 TO 3+24.58	80.00 FEET
3+24.58 TO 6+91.30	25.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
0+00.00 TO 3+24.58	95.00 FEET
3+24.58 TO 5+24.58	25.00 FEET

50.00 FEET

EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

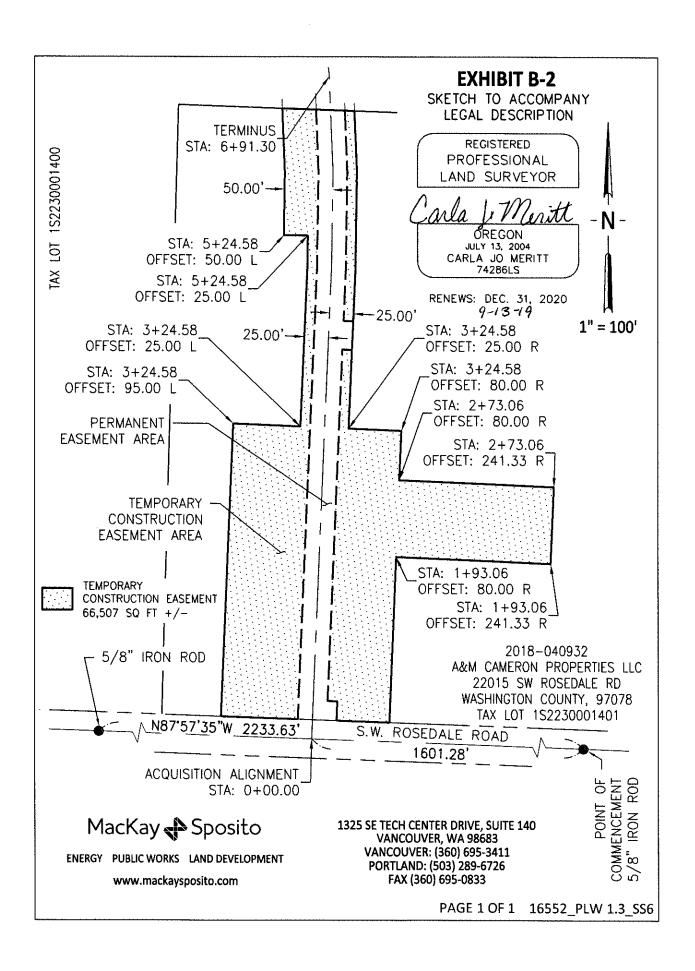
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 66,507 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020 9-13-19





16552_WWSP_PLW 1.3_LD1 6/27/2019 CJM

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EXHIBIT ATEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JUNE 27, 2019

PLW 1.3 TAX MAP NO. 1S2230002200

A STRIP OF LAND LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND LYING WITHIN THAT PROPERTY DESCRIBED IN THAT WARRANTY DEED TO MU HO PYON AND YEOUNG SUK PYON PER DOCUMENT NUMBER 92059102, WASHINGTON COUNTY DEED RECORDS, DESCRIBED AS FOLLOWS:

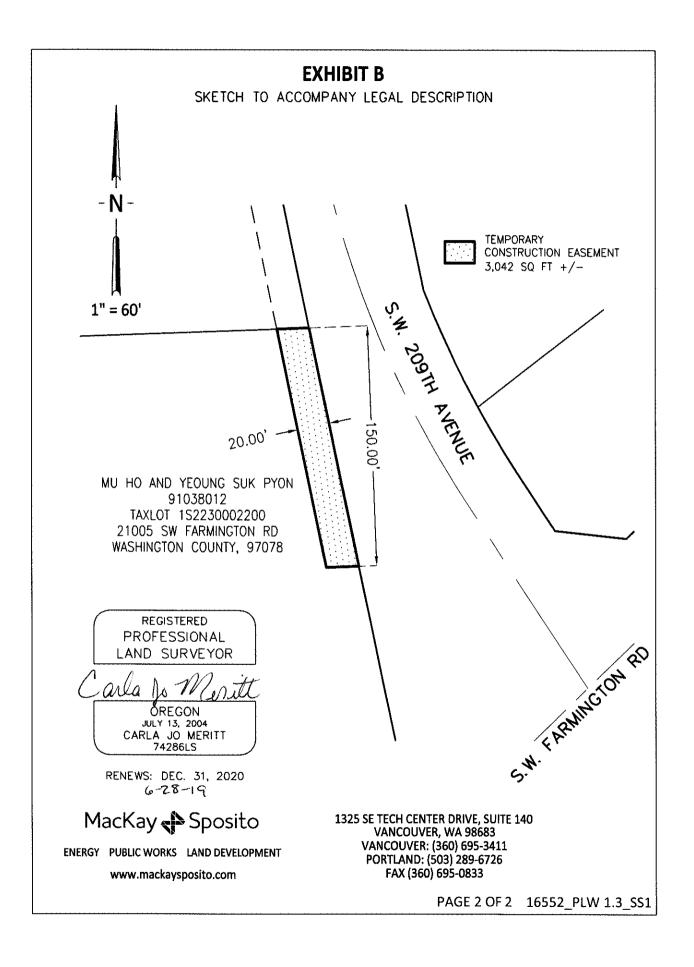
THE EAST 20.00 FEET OF THE NORTH 150.00 FEET OF SAID PARCEL DESCRIBED IN WARRANTY DEED TO MU HO PYON AND YEONG SUK PYON, PER DOCUMENT NO. 92059102, WASHINGTON COUNTY DEED RECORDS.

CONTAINING 3,042 SQUARE FEET MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OŘEGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020 6-28-19



16552_WWSP_PLW 1.3_LD2.1 6/27/2019 CJM

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EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JUNE 27, 2019

PLW 1.3 TAX MAP NO. 1S2230002203

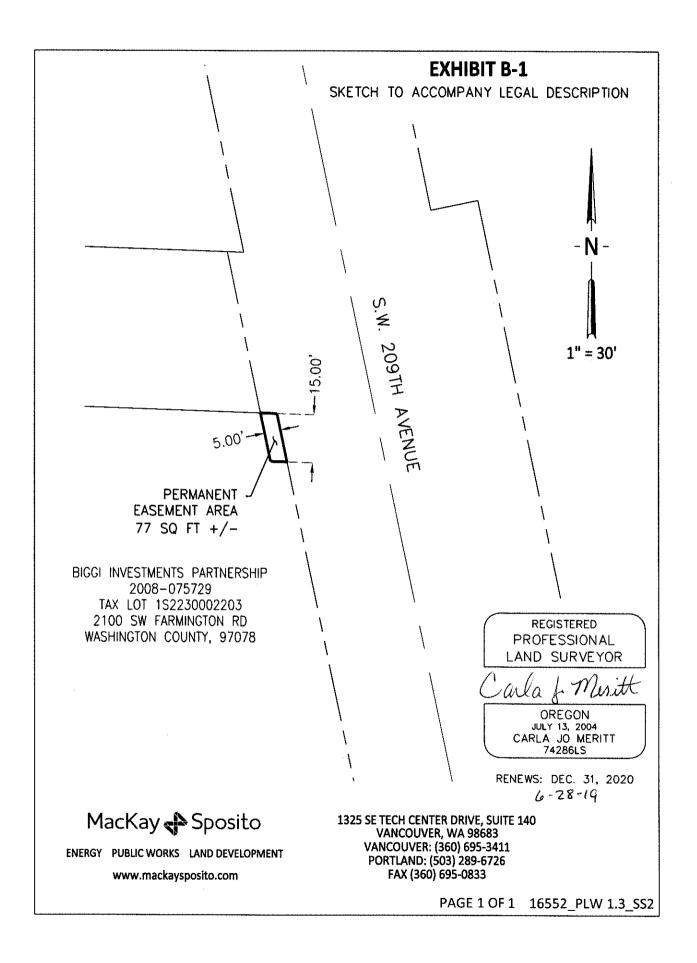
A STRIP OF LAND LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND LYING WITHIN THAT PROPERTY DESCRIBED IN STATUTORY WARRANTY DEED TO BIGGI INVESTMENTS PARTNERSHIP PER DOCUMENT NO. 2008-075729, WASHINGTON COUNTY DEED RECORDS, BEING DESCRIBED AS FOLLOWS:

THE EAST 5.00 FEET OF THE NORTH 15.00 FEET OF SAID PARCEL DESCRIBED IN STATUTORY WARRANTY DEED TO BIGGI INVESTMENTS PARTNERSHIP PER DOCUMENT NO. 2008-075729, WASHINGTON COUNTY DEED RECORDS.

CONTAINING 77 SQUARE FEET, MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON JULY 13, 2004 CARLA JO MERITT 74286LS



16552_WWSP_PLW 1.3_LD2 6/28/2019 CJM

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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2230002203

A STRIP OF LAND LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND LYING WITHIN THAT PROPERTY DESCRIBED IN STATUTORY WARRANTY DEED TO BIGGI INVESTMENTS PARTNERSHIP PER DOCUMENT NO. 2008-075729, WASHINGTON COUNTY DEED RECORDS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE EAST 20.00 FEET OF SAID PARCEL DESCRIBED IN STATUTORY WARRANTY DEED TO BIGGI INVESTMENTS PARTNERSHIP PER DOCUMENT NO. 2008-075729, WASHINGTON COUNTY DEED RECORDS.

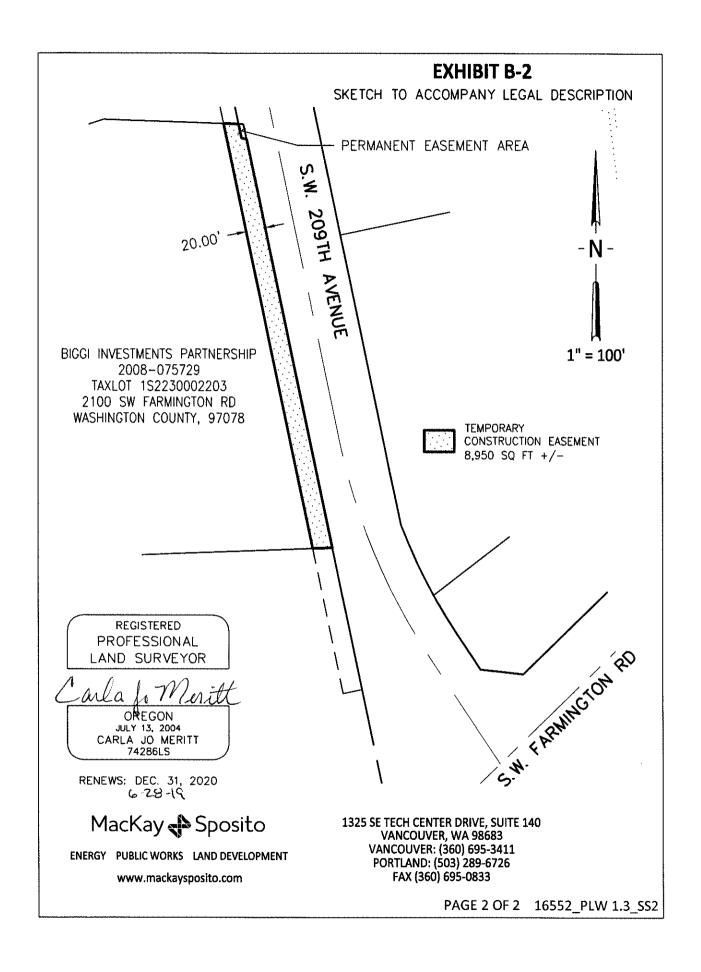
EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

CONTAINING 8,950 SQUARE FEET MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020 6-28-19



16552_WWSP_PLW 1.3_LD5 6/27/2019 CJM

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EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JUNE 27, 2019

PLW 1.3 TAX MAP NO. 1S2230002401

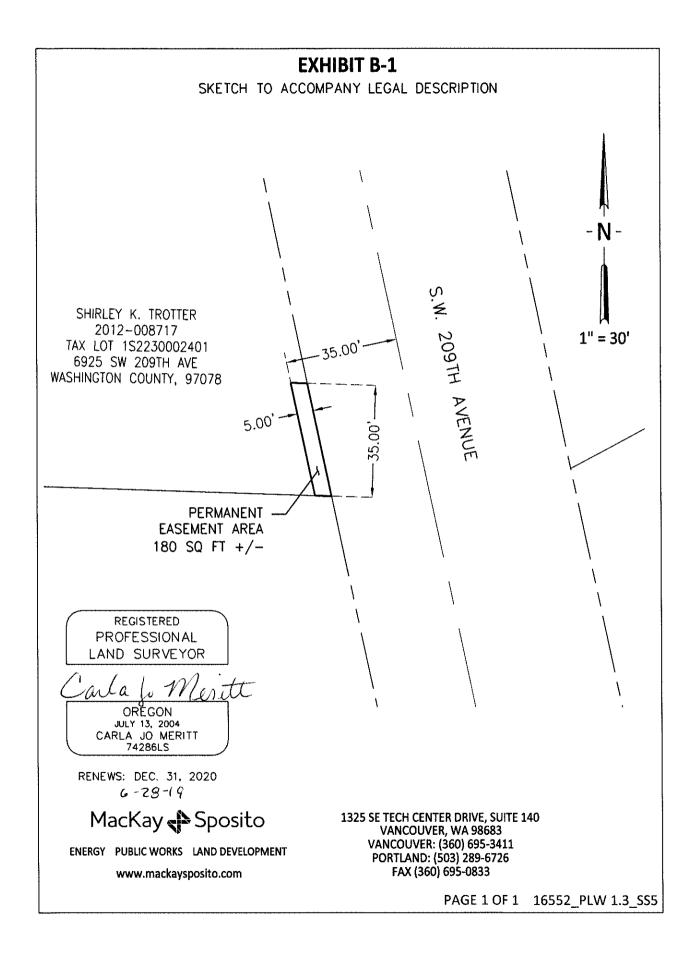
A STRIP OF LAND LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND LYING WITHIN THAT PROPERTY DESCRIBED IN STATUTORY WARRANTY DEED TO SHIRLEY K. TROTTER PER DOCUMENT NO. 2012-008717, WASHINGTON COUNTY DEED RECORDS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THAT PORTION OF THE SOUTH 35.00 FEET OF SAID PARCEL DESCRIBED IN STATUTORY WARRANTY DEED TO SHIRLEY K. TROTTER PER DOCUMENT NO. 2012-008717, WASHINGTON COUNTY DEED RECORDS LYING EAST OF A LINE 35.00 FEET WEST OF, WHEN MEASURED AT RIGHT ANGLES TO THE CENTERLINE OF S.W. 209^{TH} AVENUE.

CONTAINING 180 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS



16552_WWSP_PLW 1.3_LD5.1 6/27/2019 CJM

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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JUNE 27, 2019

PLW 1.3 TAX MAP NO. 1S2230002401

A STRIP OF LAND LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND LYING WITHIN THAT PROPERTY DESCRIBED IN STATUTORY WARRANTY DEED TO SHIRLEY K. TROTTER PER DOCUMENT NO. 2012-008717, WASHINGTON COUNTY DEED RECORDS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

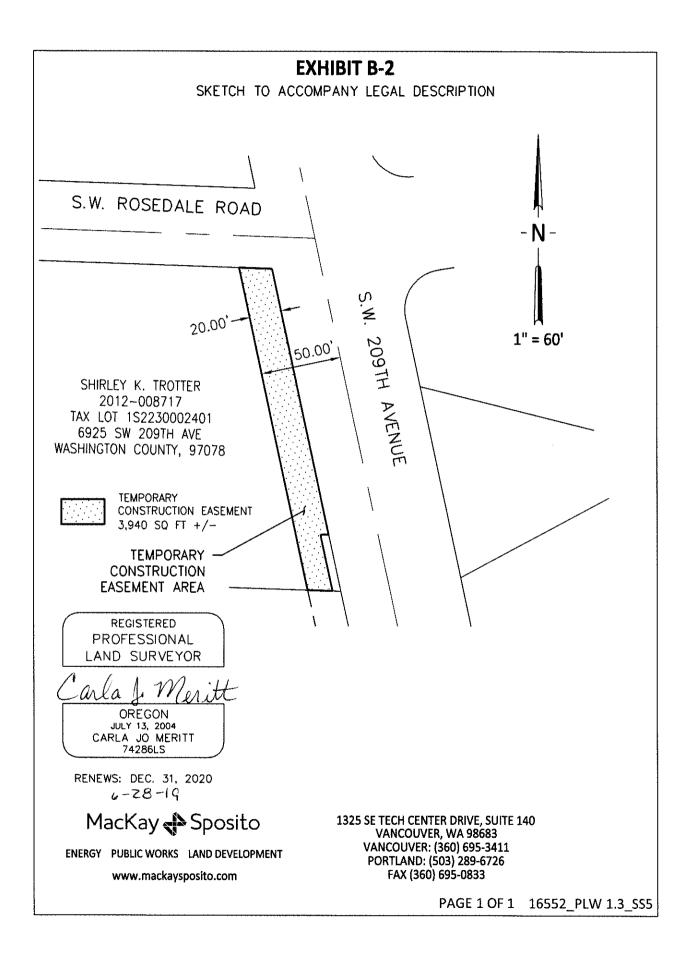
THAT PORTION OF SAID PARCEL DESCRIBED IN STATUTORY WARRANTY DEED TO SHIRLEY K. TROTTER PER DOCUMENT NO. 2012-008717, WASHINGTON COUNTY DEED RECORDS LYING EAST OF A LINE 50.00 FEET WEST OF, WHEN MEASURED AT RIGHT ANGLES TO THE CENTERLINE OF S.W. 209TH AVENUE.

EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

CONTAINING 3,940 SQUARE FEET, MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
742861.5





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EXHIBIT A TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2230002402

A STRIP OF LAND LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND LYING WITHIN THAT PROPERTY DESCRIBED IN STATUTORY WARRANTY DEED TO PAUL G. ROGERS PER DOCUMENT NUMBER 93009981, WASHINGTON COUNTY DEED RECORDS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

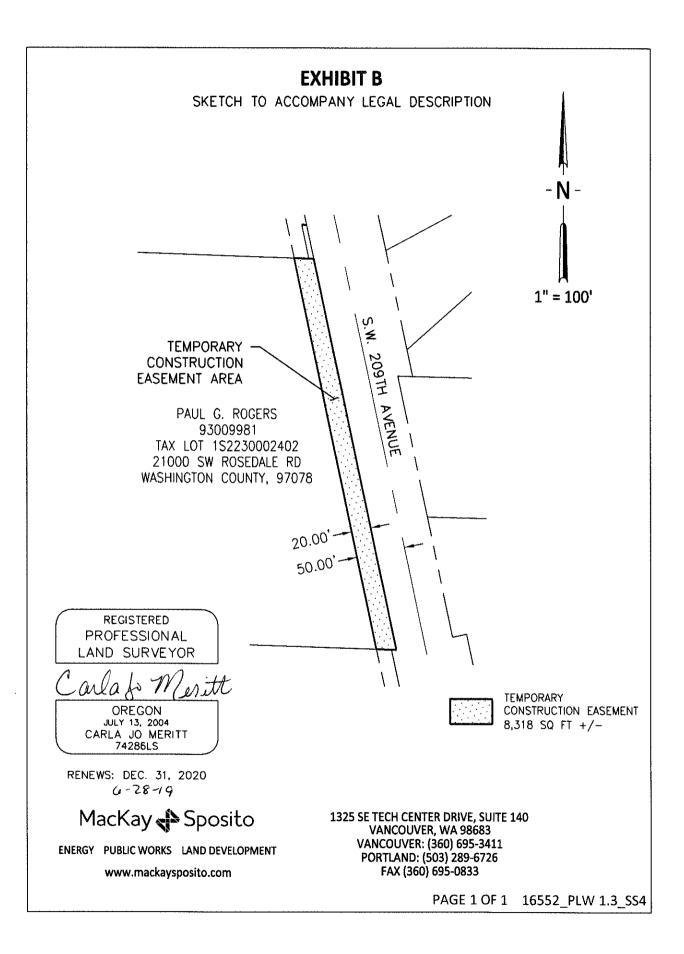
THAT PORTION OF SAID PARCEL DESCRIBED IN STATUTORY WARRANTY DEED TO PAUL G. ROGERS PER DOCUMENT NUMBER 93009981, WASHINGTON COUNTY DEED RECORDS LYING EAST OF A LINE 50.00 FEET WEST OF, WHEN MEASURED AT RIGHT ANGLES TO THE CENTERLINE OF S.W. 209TH AVENUE.

CONTAINING 8,318 SQUARE FEET MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020 4-28-19



16552_WWSP_PLW 1.3_LD3 6/27/2019 CJMC

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EXHIBIT A TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JUNE 27, 2019

PLW 1.3 TAX MAP NO. 1S2230002403

A STRIP OF LAND LYING WITHIN THE SOUTHEAST QUARTER OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND LYING WITHIN THAT PROPERTY DESCRIBED IN STATUTORY WARRANTY DEED TO JOHN MICHAEL GRUND PER DOCUMENT NUMBER 91041931, WASHINGTON COUNTY DEED RECORDS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

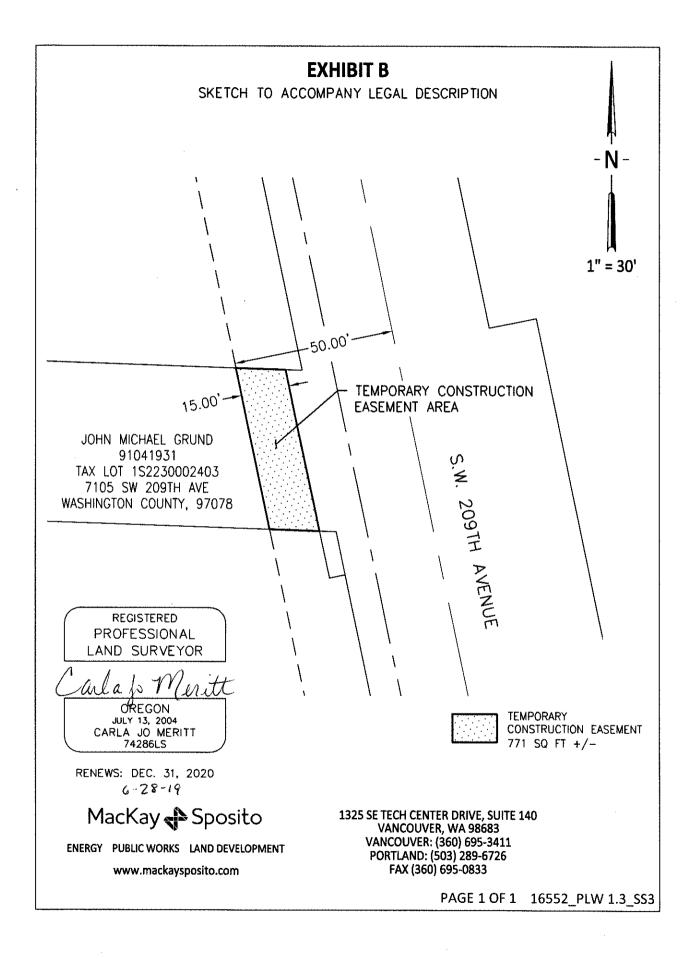
THAT PORTION OF SAID PARCEL OF PROPERTY DESCRIBED IN STATUTORY WARRANTY DEED TO JOHN MICHAEL GRUND PER DOCUMENT NUMBER 91041931, WASHINGTON COUNTY DEED RECORDS LYING EAST OF A LINE 50.00 FEET WEST OF, WHEN MEASURED AT RIGHT ANGLES TO THE CENTERLINE OF S.W. 209TH AVENUE.

CONTAINING 771 SQUARE FEET MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020 6-28-19





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EXHIBIT A-3 TEMPORARY CONSTRUCTION EASEMENT STAGING AREA 1

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2140003200

A TRACT OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO PAHLISCH HOMES AT BUTTERNUT CREEK LIMITED PARTNERSHIP PER DOCUMENT NO. 2018-060447, WASHINGTON COUNTY DEED RECORDS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87'57'35" EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57' 35" WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST, 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 474.49 FEET TO STATION 28+49.86; THENCE SOUTH 71° 56' 07" EAST 25.25 FEET; THENCE NORTH 10° 03' 47" EAST 36.35 FEET TO THE **POINT OF BEGINNING**;

THENCE SOUTH 71° 56' 07" EAST 222.07 FEET TO THE BEGINNING OF A 964.00 FOOT RADIUS CURVE TO THE LEFT;

THENCE ALONG SAID CURVE (THE LONG CHORD OF WHICH BEARS SOUTH 74° 27' 45" EAST 85.01 FEET) THROUGH A CENTRAL ANGLE OF 05° 03' 16" A DISTANCE OF 85.04 FEET; THENCE NORTH 09° 59' 34" EAST 200.23 FEET; THENCE NORTH 71° 56' 13" WEST 307.28 FEET; THENCE SOUTH 10° 03' 47" WEST 126.88 FEET TO THE **POINT OF BEGINNING**.

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 61,988 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS



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EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JULY 1, 2019

PLW 1.3 TAX MAP NO. 1S214CA08400

A STRIP OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT DEDICATED TO THE CITY OF HILLSBORO, AS TRACT "C" OF THE PLAT OF BUTTERNUT CREEK, RECORDED AS DOCUMENT NO. 2018-031746, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00:

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100,00 FEET TO STATION 5+91,30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100,00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30: THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48: THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37: THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87: THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;

THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
THENCE NORTH 16° 15' 25" EAST 100.00 FEET TO STATION 63+94.93;
THENCE NORTH 21° 22' 28" EAST 100.00 FEET TO STATION 64+94.93;
THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

PERMANENT EASEMENT

STATION TO STATION

EASTERLY OFFSET DISTANCE FROM CENTERLINE

50+00.00 TO 50+75.00

15.00 FEET

STATION TO STATION

WESTERLY OFFSET DISTANCE FROM CENTERLINE

50+00.00 TO 50+75.00

15.00 FEET

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

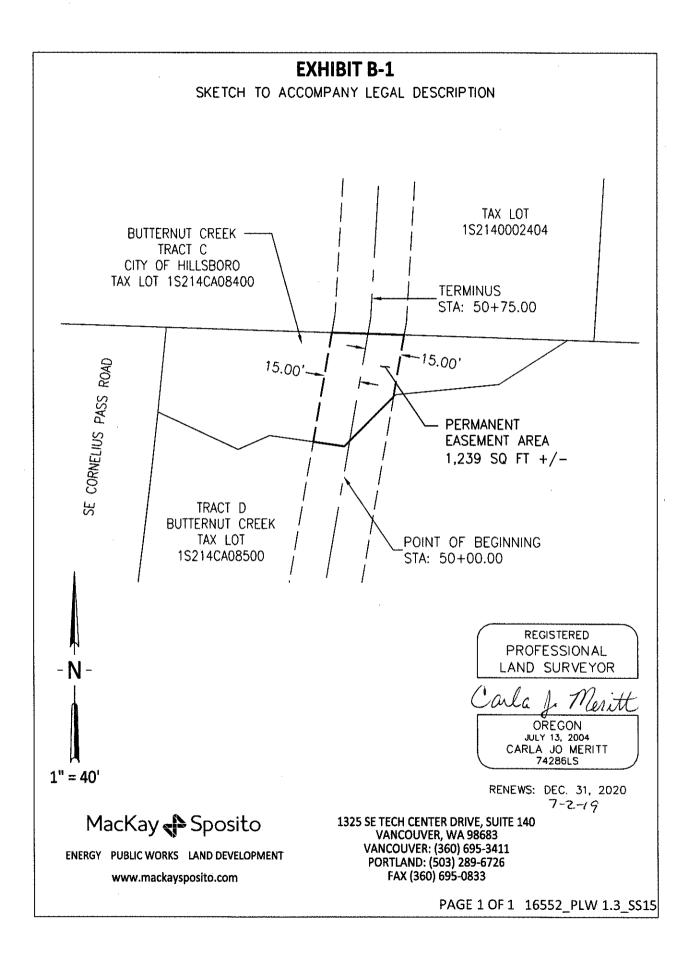
CONTAINING 1,239 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

ORÉGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020

7-2-19







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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JULY 1, 2019

PLW 1.3 TAX MAP NO. 1S214CA08400

A STRIP OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT DEDICATED TO THE CITY OF HILLSBORO, AS TRACT "C" OF THE PLAT OF BUTTERNUT CREEK, RECORDED AS DOCUMENT NO. 2018-031746, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30: THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30: THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65: THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49: THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97: THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82: THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

TEMPORARY CONSTRUCTION EASEMENT

STATION TO STATION 50+00.00 TO 50+75.00	EASTERLY OFFSET DISTANCE FROM CENTERLINE 50.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
50+32.86 TO 50+23.27	O FEET IN A STRAIGHT LINE TO 34.74 FEET
50+23.27 TO 50+70.00	34.74 FEET IN A STRAIGHT LINE TO 73.13 FEET

EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

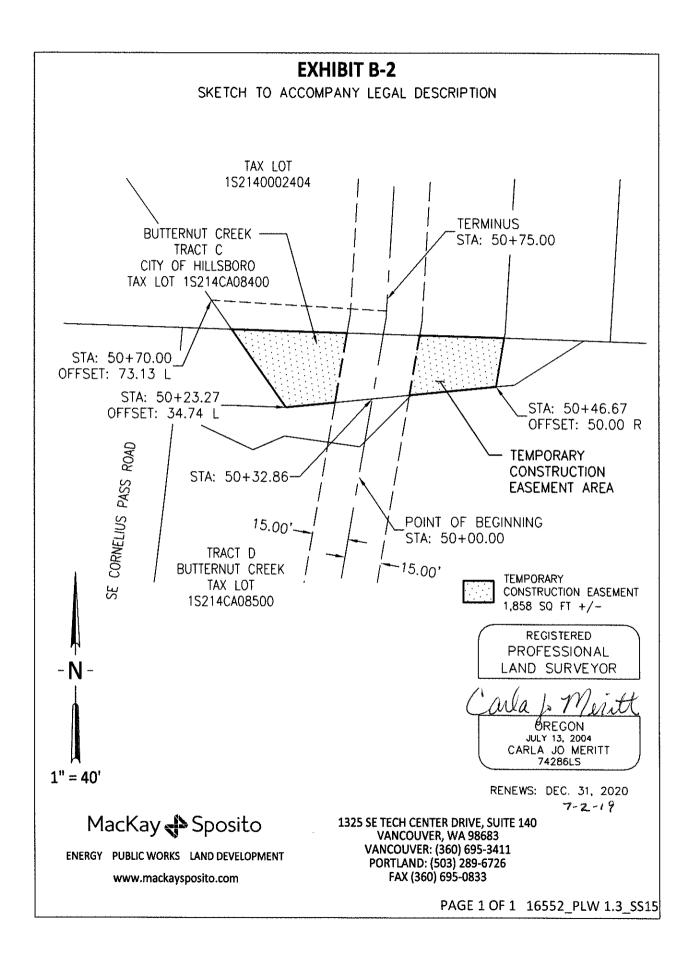
CONTAINING 1,858 SQUARE FEET, MORE OR LESS.

PROFESSIONAL LAND SURVEYOR

ORÈGON JULY 13, 2004 CARLA JO MERITT 742861 S

RENEWS: DEC. 31, 2020

7-2-19





CJM



VANCOUVER OFFICE

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EXHIBIT A PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JULY 1, 2019

PLW 1.3 TAX MAP NO. 1S214CA08500

A STRIP OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT DEDICATED TO THE CITY OF HILLSBORO, AS TRACT "D" ON THE PLAT OF BUTTERNUT CREEK, RECORDED AS DOCUMENT NO. 2018-031746, WASHINGTON COUNTY RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100,00 FEET TO STATION 7+91.30: THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30: THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65: THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65: THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66,48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37: THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65:

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

PERMANENT EASEMENT

STATION TO STATION

EASTERLY OFFSET DISTANCE FROM CENTERLINE

46+50.00 TO 50+50.00

15.00 FEET

STATION TO STATION

WESTERLY OFFSET DISTANCE FROM CENTERLINE

46+50.00 TO 50+50.00

15.00 FEET

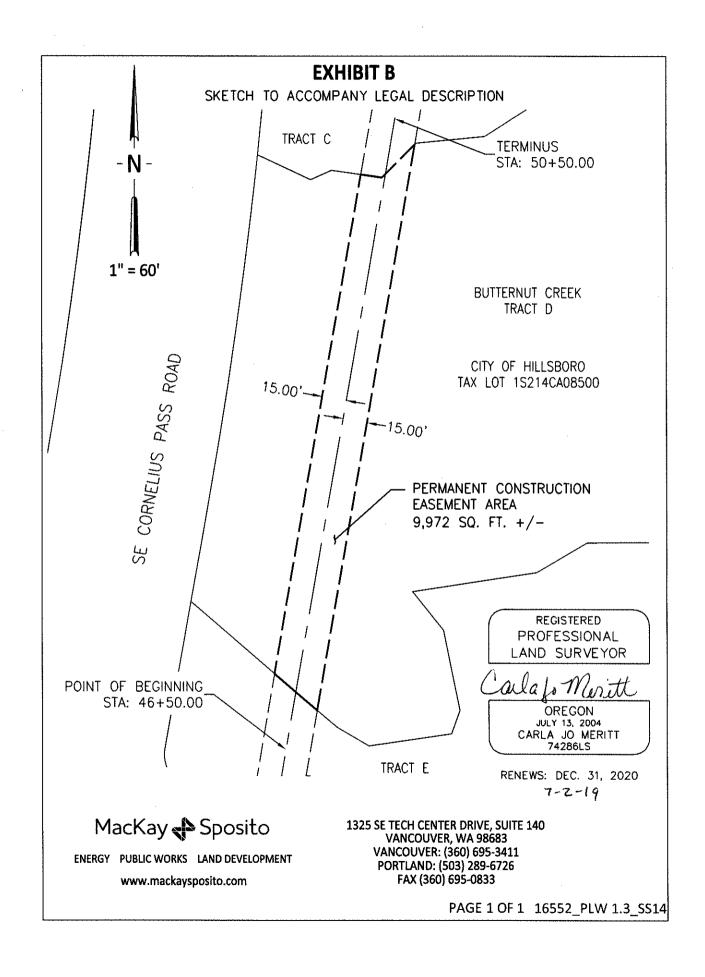
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 9,972 SQUARE FEET, MORE OR LESS.

REGISTERED
PROFESSIONAL
LAND SURVEYOR

OREGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020 7-2-19







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EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JULY 1, 2019

PLW 1.3 TAX MAP NO. 1S214CA08600

A STRIP OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT DEDICATED TO THE CITY OF HILLSBORO, AS TRACT "E" OF THE PLAT OF BUTTERNUT CREEK, RECORDED AS DOCUMENT NO. 2018-031746, WASHINGTON COUNTY RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30: THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65: THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49: THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

PERMANENT EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
46+00.00 TO 46+36.82	60.00 FEET
46+36.82 TO 47+25.00	15.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
STATION TO STATION 46+00.00 TO 46+26.82	WESTERLY OFFSET DISTANCE FROM CENTERLINE 25.00 FEET

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

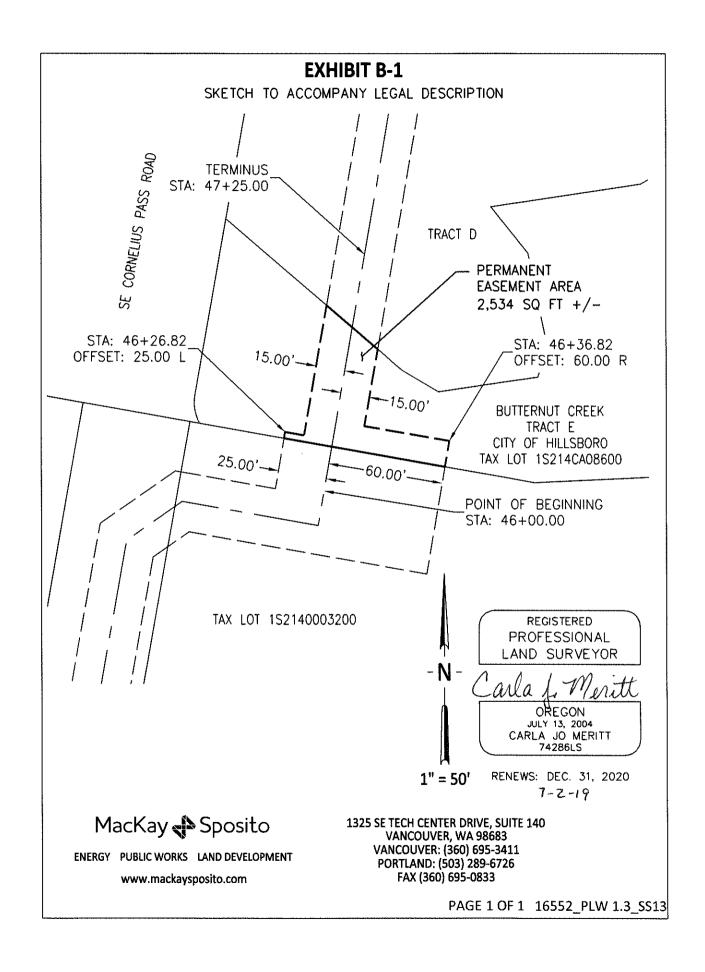
CONTAINING 2,534 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

ORÉGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020

7-2-19







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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JULY 1, 2019

PLW 1.3 TAX MAP NO. 1S214CA08600

A STRIP OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT DEDICATED TO THE CITY OF HILLSBORO, AS TRACT "E" OF THE PLAT OF BUTTERNUT CREEK, RECORDED AS DOCUMENT NO. 2018-031746, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00:

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30: THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30: THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30: THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65: THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49: THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37: THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97: THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

TEMPORARY CONSTRUCTION EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
46+00.00 TO 46+44.32	70.00 FEET
46+44.48 TO 46+86.50	70.00 FEET IN A STRAIGHT LINE TO 0.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
STATION TO STATION 46+00.00 TO 47+07.15	WESTERLY OFFSET DISTANCE FROM CENTERLINE 80.00 FEET

EXCEPT ANY PORTION THEREOF LYING WITHIN THE RIGHT-OF-WAY OF S.E. CORNELIUS PASS ROAD.

EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

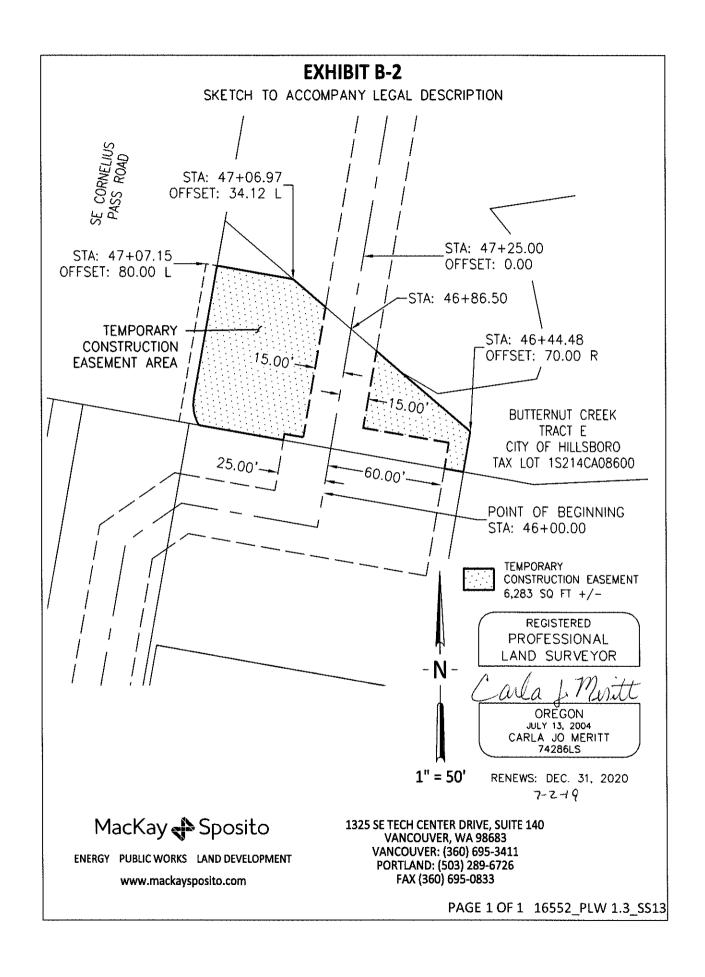
CONTAINING 6,283 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OŘEGON JULY 13, 2004 CARLA JO MERITT 742861 S

RENEWS: DEC. 31, 2020

7-2-19





16552_WWSP_PLW 1.3_LD14 6/28/2019 CJM

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EXHIBIT A TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2140002402

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN BARGAIN AND SALE DEED TO THE MALCOM MCINNIS FAMILY TRUST PER DOCUMENT NO. 2007-080295, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87'57'35" EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57'35" WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00:

THENCE NORTH 02° 27' 01" EAST, 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30: THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65: THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65:

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

TEMPORARY CONSTRUCTION EASEMENT

STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
50+51.41 TO 53+07.68	62.63 FEET IN A STRAIGHT LINE TO 72.06 FEET
53+07.68 TO 53+08.99	72.06 FEET IN A STRAIGHT LINE TO 50.00 FEET
53+08.99 TO 60+25.00	50.00 FEET

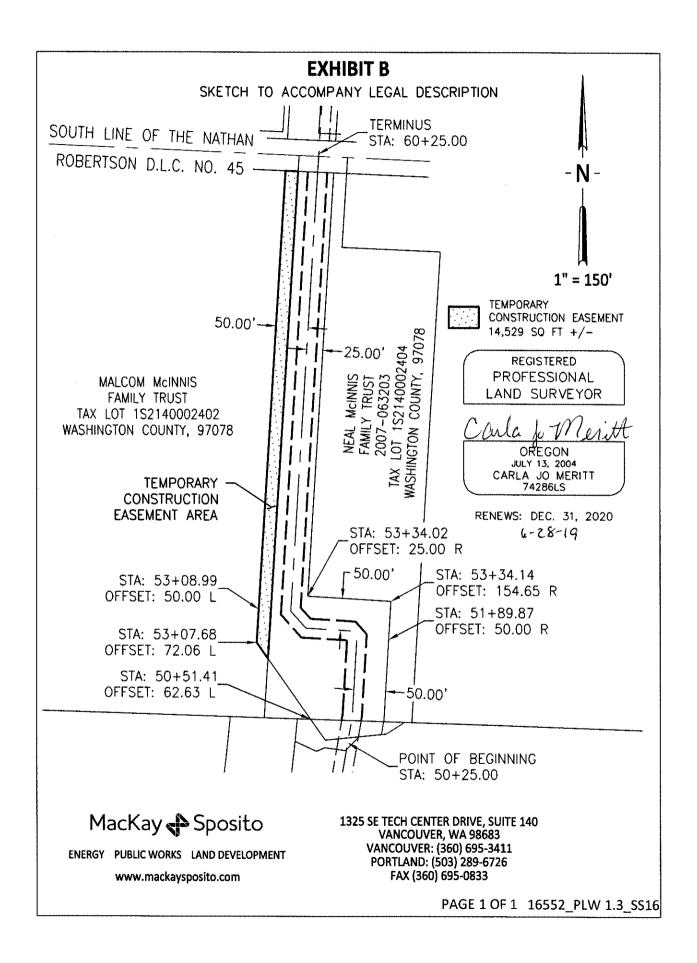
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 14,529 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020







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EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2140002404

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN BARGAIN AND SALE DEED TO THE NEAL MCINNIS FAMILY TRUST PER DOCUMENT NO. 2007-063203, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87'57'35" EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57'35" WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST, 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65; THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

PERMANENT EASEMENT

STATION TO STATION50+25.00 TO 60+25.00 **EASTERLY OFFSET DISTANCE FROM CENTERLINE**15.00 FEET

STATION TO STATION WESTERLY OFFSET DISTANCE FROM CENTERLINE 50+25.00 TO 60+25.00 15.00 FEET

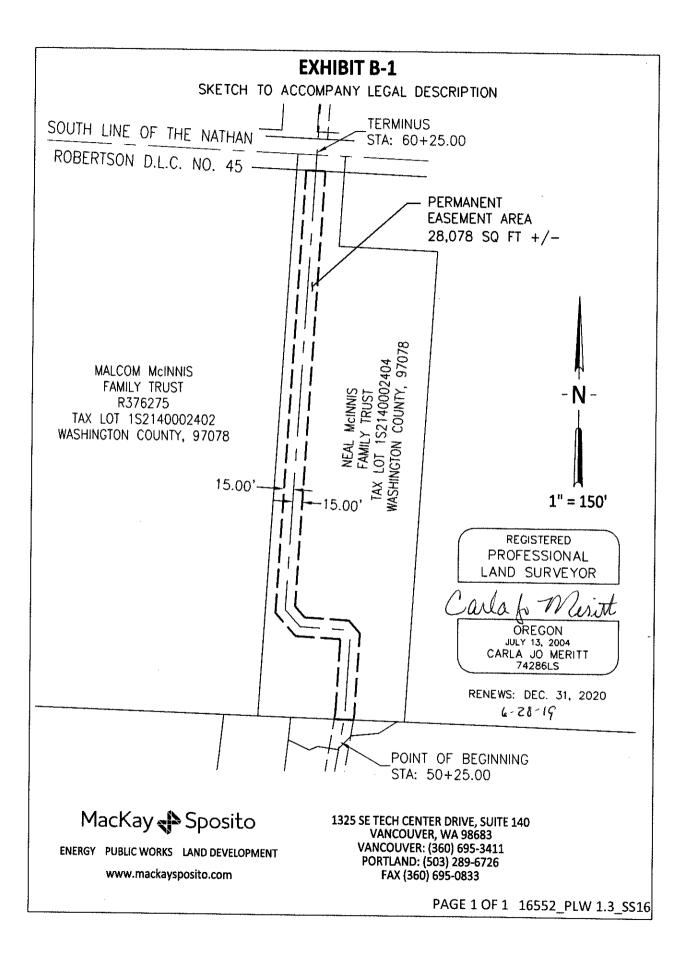
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 28,078 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020







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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JUNE 28, 2019

PLW 1.3 TAX MAP NO. 1S2140002404

A STRIP OF LAND LYING IN THE NORTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN BARGAIN AND SALE DEED TO THE NEAL MCINNIS FAMILY TRUST PER DOCUMENT NO. 2007-063203, WASHINGTON COUNTY DEED RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00;

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65: THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65: THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49: THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33' 50" WEST 14.14 FEET TO STATION 52+04.00; THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65:

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THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
THENCE NORTH 16° 15' 25" EAST 100.00 FEET TO STATION 63+94.93;
THENCE NORTH 21° 22' 28" EAST 100.00 FEET TO STATION 64+94.93;
THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
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SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

TEMPORARY CONSTRUCTION EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
50+25.00 TO 51+89.87	50.00 FEET
51+89.87 TO 53+34.14	50.00 FEET IN A STRAIGHT LINE TO 154.65 FEET
53+34.14 TO 53+34.02	154.65 FEET IN A STRAIGHT LINE TO 25.00 FEET
53+34.02 TO 60+25.00	25.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
STATION TO STATION 50+51.41 TO 53+07.68	WESTERLY OFFSET DISTANCE FROM CENTERLINE 62.63 FEET IN A STRAIGHT LINE TO 72.06 FEET
	62.63 FEET IN A STRAIGHT LINE TO 72.06 FEET
50+51.41 TO 53+07.68	

EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

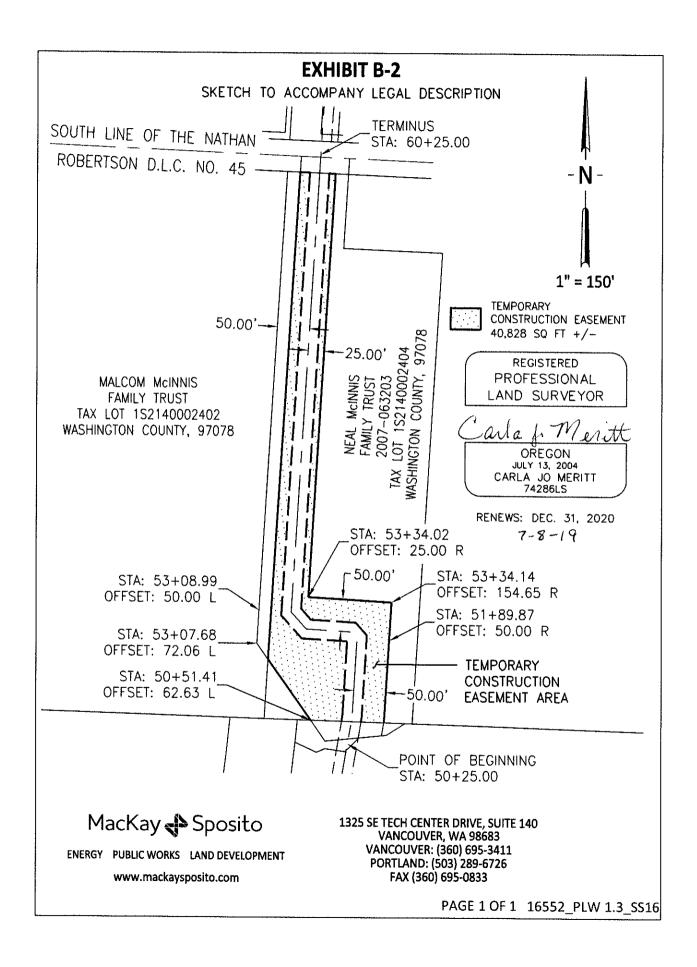
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

CONTAINING 40,828 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

ORÉGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020 7-8-19





16552_WWSP_PLW 1.3_LD9.3 7/16/2019 CJM

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EXHIBIT A-1 PERMANENT EASEMENT

WILLAMETTE WATER SUPPLY JULY 16, 2019

PLW 1.3 TAX MAP NO. 1S2140003200

A STRIP OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO PAHLISCH HOMES AT BUTTERNUT CREEK LIMITED PARTNERSHIP PER DOCUMENT NO. 2018-060447 WASHINGTON COUNTY DEED RECORDS, LYING WITHIN TRACT "A" OF PARTITION PLAT 2018-038, WASHINGTON COUNTY RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00:

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30; THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30: THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30; THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65; THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65: THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65: THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97; THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91; THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33′ 50″ WEST 14.14 FEET TO STATION 52+04.00;

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THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;
THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
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THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
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THENCE NORTH 21° 22' 28" EAST 100.00 FEET TO STATION 64+94.93;
THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
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SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

PERMANENT EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
22+75.00 TO 25+45.12	15.00 FEET
25+45.12 TO 25+75.12	30.00 FEET
25+75.12 TO 33+57.58	15.00 FEET
33+57.58 TO 33+87.58	27.00 FEET
33+87.58 TO 45+81.82	15.00 FEET
45+81.82 TO 45+81.82	15.00 FEET; THENCE SOUTH 79° 56′ 13" EAST A DISTANCE OF 60.00
	FEET; THENCE NORTH 09° 48' 35" EAST A DISTANCE OF 15.00 FEET
	TO A POINT 60.00 FEET EAST OF STATION 45+81.82
45+81.82 TO 46+36.82	60.00 FEET
STATION TO STATION	WESTERLY OFFSET DISTANCE FROM CENTERLINE
22+75.00 TO 45+56.75	15.00 FEET
45+56.75 TO 45+96.93	15.00 FEET IN A STRAIGHT LINE TO 25.00 FEET
45+96.93 TO 46+26.82	25.00 FEET

EXCEPT ANY PORTION THEREOF LYING WITHIN THE RIGHT-OF-WAY OF S.E. CORNELIUS PASS ROAD.

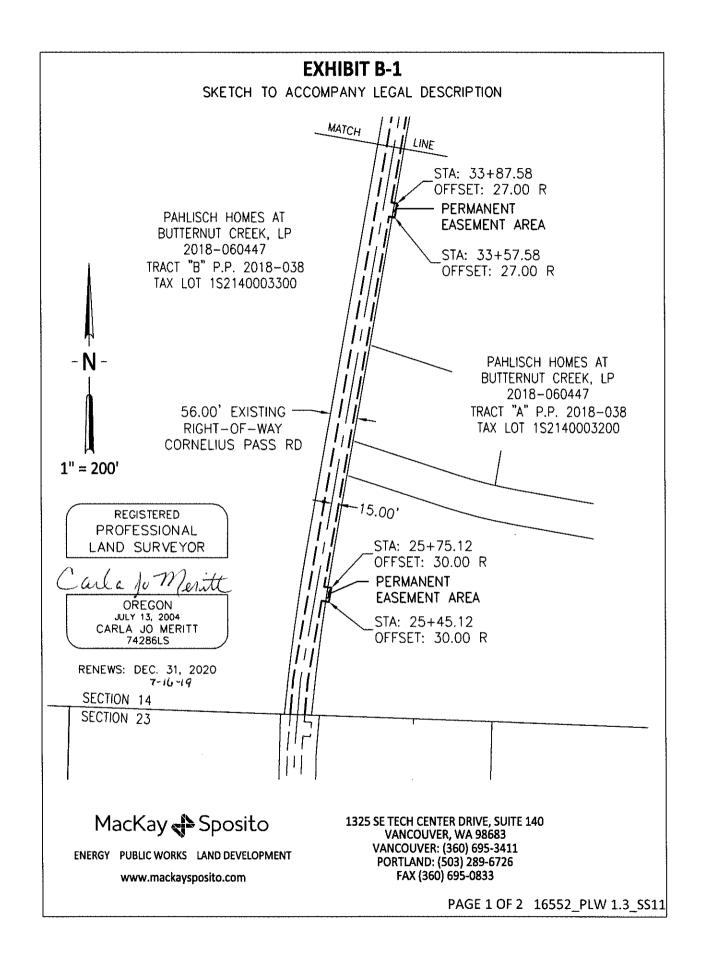
BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

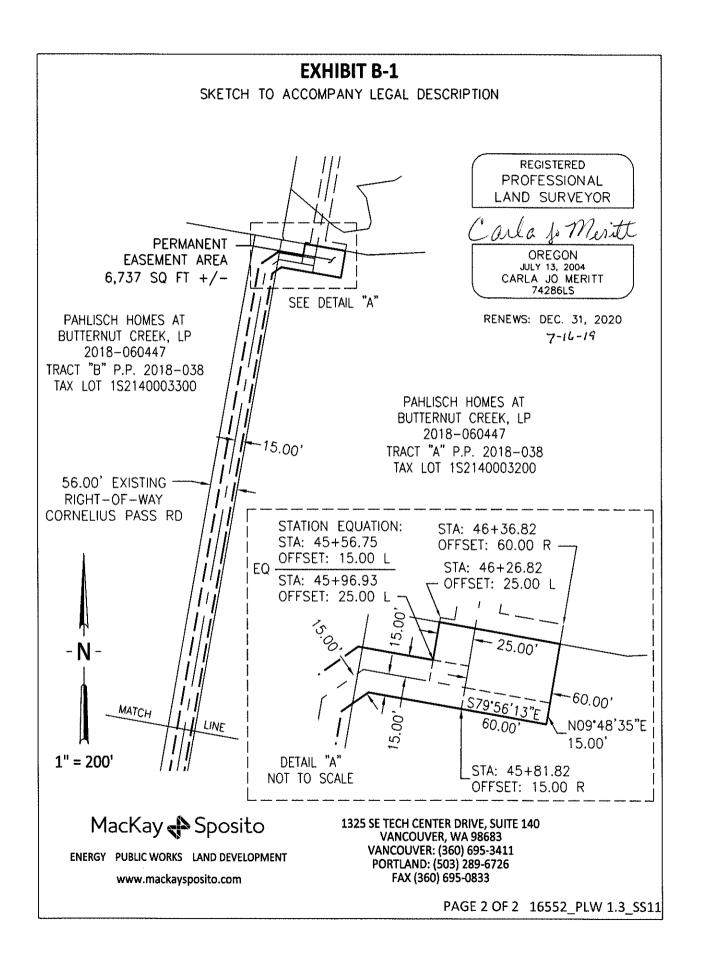
CONTAINING 6,737 SQUARE FEET, MORE OR LESS.

PROFESSIONAL
LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
742861 S

RENEWS: DEC. 31, 2020







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EXHIBIT A-2 TEMPORARY CONSTRUCTION EASEMENT

WILLAMETTE WATER SUPPLY JULY 16, 2019

PLW 1.3 TAX MAP NO. 1S2140003200

A STRIP OF LAND LYING IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, WASHINGTON COUNTY, OREGON, AND BEING A PORTION OF THAT TRACT OF LAND DESCRIBED IN STATUTORY WARRANTY DEED TO PAHLISCH HOMES AT BUTTERNUT CREEK LIMITED PARTNERSHIP PER DOCUMENT NO. 2018-060447 WASHINGTON COUNTY DEED RECORDS, LYING WITHIN TRACT "A" OF PARTITION PLAT 2018-038, WASHINGTON COUNTY RECORDS, AND BEING ALL THAT PORTION OF SAID TRACT DESCRIBED BELOW:

ACQUISITION CENTERLINE:

COMMENCING AT A 5/8 INCH IRON ROD AT AN ANGLE POINT IN THE CENTERLINE OF S.W. ROSEDALE ROAD IDENTIFIED AS STATION 24+41.79 AS SHOWN ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS, WHICH BEARS SOUTH 87° 57′ 35″ EAST FROM A 5/8 INCH IRON ROD IDENTIFIED AS STATION 46+75.41 ON SAID SURVEY NO. 33400; THENCE NORTH 87° 57′ 35″ WEST ALONG THE CENTERLINE OF S.W. ROSEDALE ROAD 1601.28 FEET TO ACQUISITION CENTERLINE STATION 0+00:

THENCE NORTH 02° 27' 01" EAST 491.30 FEET TO STATION 4+91.30: THENCE NORTH 00° 53' 11" EAST 100.00 FEET TO STATION 5+91.30; THENCE NORTH 02° 14' 29" WEST 100.00 FEET TO STATION 6+91.30; THENCE NORTH 05° 22' 10" WEST 100.00 FEET TO STATION 7+91.30: THENCE NORTH 07° 53' 32" WEST 100.00 FEET TO STATION 8+91.30; THENCE NORTH 08° 06' 56" WEST 276.35 FEET TO STATION 11+67.65: THENCE NORTH 06° 29' 42" WEST 100.00 FEET TO STATION 12+67.65: THENCE NORTH 03° 15' 14" WEST 100.00 FEET TO STATION 13+67.65; THENCE NORTH 00° 01' 54" WEST 98.83 FEET TO STATION 14+66.48; THENCE NORTH 01° 34' 13" EAST 762.01 FEET TO STATION 22+28.49; THENCE NORTH 05° 02' 08" EAST 146.88 FEET TO STATION 23+75.37; THENCE NORTH 10° 03' 47" EAST 2099.60 FEET TO STATION 44+74.97: THENCE NORTH 55° 03' 47" EAST 35.35 FEET TO STATION 45+10.32; THENCE SOUTH 79° 56' 13" EAST 71.50 FEET TO STATION 45+81.82; THENCE NORTH 09° 48' 35" EAST 485.09 FEET TO STATION 50+66.91: THENCE NORTH 03° 27' 49" EAST 122.96 FEET TO STATION 51+89.87; THENCE NORTH 41° 33′ 50" WEST 14.14 FEET TO STATION 52+04.00:

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THENCE NORTH 86° 35' 28" WEST 69.65 FEET TO STATION 52+73.65;
THENCE NORTH 41° 33' 50" WEST 35.34 FEET TO STATION 53+08.99;
THENCE NORTH 03° 27' 49" EAST 785.94 FEET TO STATION 60+94.93;
THENCE NORTH 06° 01' 20" EAST 100.00 FEET TO STATION 61+94.93;
THENCE NORTH 11° 08' 23" EAST 100.00 FEET TO STATION 62+94.93;
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THENCE NORTH 21° 22' 28" EAST 100.00 FEET TO STATION 64+94.93;
THENCE NORTH 26° 29' 31" EAST 100.00 FEET TO STATION 65+94.93;
THENCE NORTH 31° 36' 33" EAST 100.00 FEET TO STATION 66+94.93;
THENCE NORTH 36° 43' 36" EAST 100.00 FEET TO STATION 67+94.93;
THENCE NORTH 38° 46' 28" EAST 79.09 FEET TO STATION 68+74.02;
THENCE NORTH 43° 49' 55" EAST 10.00 FEET TO STATION 68+84.02 AND THE POINT OF TERMINUS.
```

SAID EASEMENT BEING DELINEATED BY THE FOLLOWING STATIONS AND OFFSETS FROM THE ACQUISITION CENTERLINE DESCRIBED ABOVE.

TEMPORARY CONSTRUCTION EASEMENT

STATION TO STATION	EASTERLY OFFSET DISTANCE FROM CENTERLINE
22+75.00 TO 25+45.12	25.00 FEET
25+45.12 TO 25+75.12	40.00 FEET
25+75.12 TO 33+47.58	25.00 FEET
33+47.58 TO 33+97.58	37.00 FEET
33+97.58 TO 44+24.97	25.00 FEET
44+24.97 TO 46+44.48	166.83 FEET IN A STRAIGHT LINE TO 70.00 FEET

EXCEPT ANY PORTION THEREOF LYING WITHIN THE RIGHT-OF-WAY OF S.E. CORNELIUS PASS ROAD.

ALSO EXCEPTING THEREFROM THAT PERMANENT EASEMENT FOR WATER LINES, FIXTURES AND FACILITIES CONCURRENTLY ACQUIRED FOR THIS PROJECT.

BEARINGS ARE BASED ON SURVEY NO. 33400, WASHINGTON COUNTY SURVEY RECORDS.

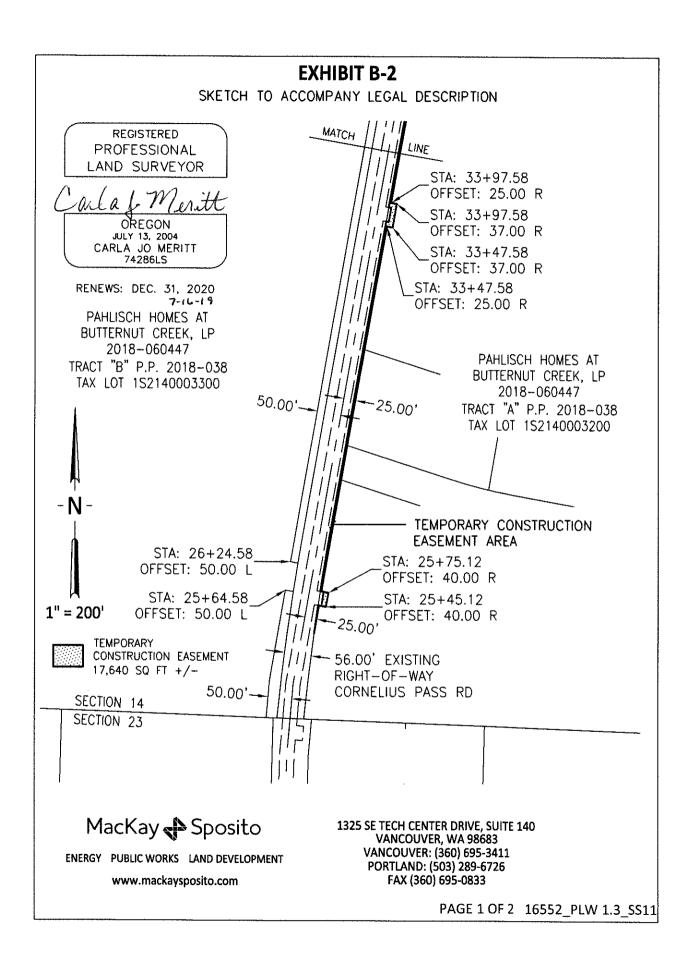
CONTAINING 17,640 SQUARE FEET, MORE OR LESS.

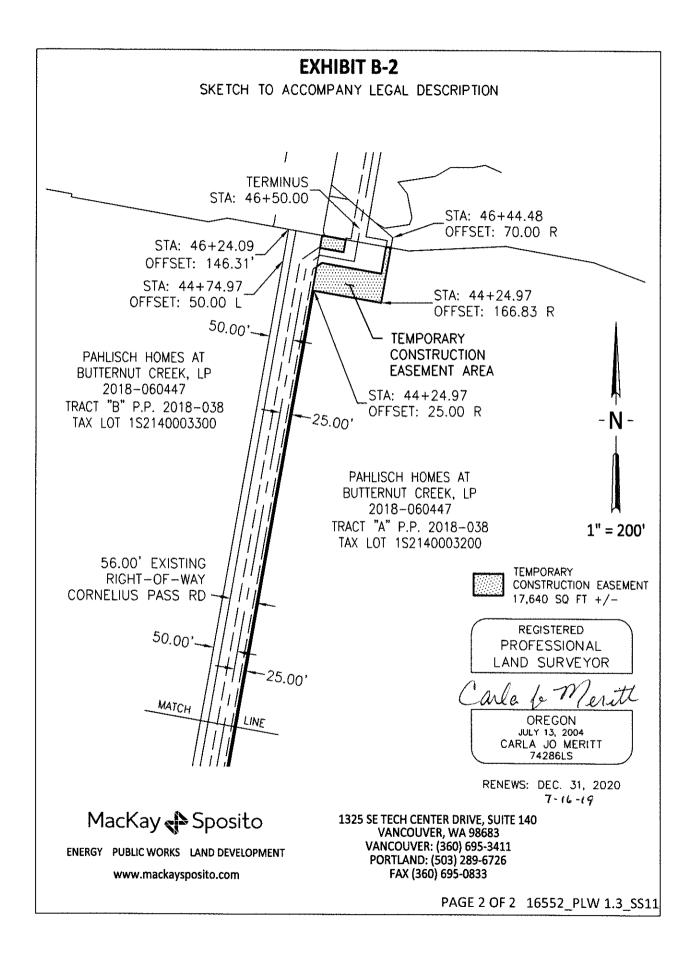
REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
742861 S

RENEWS: DEC. 31, 2020

7-16-19





16552_WWSP_PLW 1.3_LD9.5 9/09/19 CJM

VANCOUVER OFFICE

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EXHIBIT A-5 MAINTENANCE ACCESS ROAD EASEMENT

WILLAMETTE WATER SUPPLY SEPTEMBER 9, 2019

PLW 1.3 TAX MAP NO. 1S2140003200

A PORTION OF TRACT 'A' OF PARTITION PLAT NUMBER 2018-038 LOCATED IN THE SOUTHWEST QUARTER OF SECTION 14, TOWNSHIP 1 SOUTH, RANGE 2 WEST, WILLAMETTE MERIDIAN, CITY OF HILLSBORO, WASHINGTON COUNTY, OREGON, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF LOT 58 OF THE PLAT OF "BUTTERNUT CREEK" BEING ON THE EAST LINE OF TRACT 'A' OF PARTITION PLAT NO. 2018-038;

THENCE SOUTH 10° 03′ 42″ WEST ALONG SAID EAST LINE 278.20 FEET TO THE SOUTHWEST CORNER OF LOT 147 "BUTTERNUT CREEK NO. 2":

THENCE SOUTH 24° 56′ 00" EAST ALONG THE WESTERLY LINE OF S.E. DELINE STREET, AS DEDICATED ON THE PLAT OF BUTTERNUT CREEK NO. 2", A DISTANCE OF 21.50 FEET TO THE NORTHERLY LINE OF THAT ACCESS EASEMENT DESCRIBED IN EXHIBIT "A" OF SECOND AMENDMENT TO EASEMENT FOR ACCESS RECORDED IN DOCUMENT 2018-087192, WASHINGTON COUNTY DEED RECORDS, AND THE TRUE POINT OF BEGINNING;

THENCE ALONG SAID EXISTING EASEMENT THE FOLLOWING COURSES:

THENCE SOUTH 65° 04' 00" WEST 18.61 FEET TO A POINT ON 40.00 FOOT RADIUS CURVE TO THE RIGHT;

THENCE ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 124° 59' 47" (THE LONG CHORD OF WHICH BEARS NORTH 52° 26' 06" WEST 70.96 FEET) A DISTANCE OF 87.26 FEET;

THENCE NORTH 10° 03' 47" EAST 146.23 FEET TO A 60.00 FOOT RADIUS CURVE TO THE LEFT:

THENCE ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 98° 03' 54" (THE LONG CHORD OF WHICH BEARS NORTH 38° 58' 10" WEST 90.61 FEET) A DISTANCE OF 102.69 FEET TO THE WEST LINE OF SAID EASEMENT, ALSO BEING A POINT ON THE NORTH LINE OF THAT ACCESS EASEMENT DESCRIBED IN DOCUMENT NO. 2018-031745, WASHINGTON COUNTY DEED RECORDS:

THENCE NORTH 87° 59' 59" WEST ALONG SAID NORTH LINE 689.56 FEET TO THE EAST LINE OF CORNELIUS PASS ROAD, AS DEDICATED IN PARTITION PLAT NO. 2018-038 AND BEING 28.00 FEET FROM, WHEN MEASURED AT RIGHT ANGLES TO THE CENTERLINE THEREOF;

THENCE SOUTH 10° 03' 47" WEST ALONG SAID EAST LINE 20.20 FEET TO THE SOUTH LINE OF SAID ACCESS EASEMENT DESCRIBED IN DOCUMENT NO. 2018-031745, WASHINGTON COUNTY DEED RECORDS;

THENCE SOUTH 87° 59' 59" EAST ALONG SAID SOUTH LINE 692.40 FEET TO A 40.00 FOOT RADIUS CURVE TO THE RIGHT, SAID POINT ALSO BEING THE MOST WESTERLY POINT ON THE SOUTH LINE OF AFORESAID ACCESS EASEMENT DESCRIBED IN DOCUMENT NO. 2018-087192, WASHINGTON COUNTY DEED RECORDS;

THENCE CONTINUING ALONG THE SOUTH AND WEST LINES OF SAID EXISTING EASEMENT THE FOLLOWING COURSES:

THENCE ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 98° 03' 54 (THE LONG CHORD OF WHICH BEARS SOUTH 38° 58' 10" EAST 60.41 FEET) A DISTANCE OF 68.46 FEET;

THENCE SOUTH 10° 03' 47" WEST 146.23 FEET TO A 60.00 FOOT RADIUS CURVE TO THE LEFT;

THENCE ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 119° 47′ 31" (THE LONG CHORD OF WHICH BEARS SOUTH 49° 49′ 59" EAST 103.81 FEET) A DISTANCE OF 125.45 FEET TO THE EAST LINE OF AFORESAID TRACT 'A'

THENCE NORTH 24° 56' 00" WEST ALONG SAID EAST LINE 5.25 FEET;

THENCE NORTH 65° 04' 00" EAST CONTINUING ALONG SAID EAST LINE 24.05 FEET;

THENCE NORTH 24° 56' 00" WEST CONTINUING ALONG SAID EAST LINE 14.50 FEET TO THE TRUE POINT OF BEGINNING.

CONTAINING 20,878 SQUARE FEET, MORE OR LESS.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON
JULY 13, 2004
CARLA JO MERITT
74286LS

RENEWS: DEC. 31, 2020

9-10-19

EXHIBIT B - 5 SKETCH TO ACCOMPANY LEGAL DESCRIPTION TAXLOT 1S2140003200 POINT OF WASHINGTON COUNTY, 97078 COMMENCEMENT (SW CORNER LOT 58 56' "BUTTERNUT CREEK") S10'03'47"W 20.20' N87'59'59"W 689.56' S87'59'59"E 692.40" N10'03'47"E MAINTENANCE 146.23 ACCESS ROAD EASEMENT S10'03'47"W 146.23 - 1"=200' POINT OF **BEGINNING LINE TABLE** LINE NO. DIRECTION **LENGTH** S24°56'00"E 21.50 L1 L2 S65'04'00"W 18.61 REGISTERED L3 N24°56'00"W 5.25 **PROFESSIONAL** L4 N65°04'00"E 24.05 LAND SURVEYOR N24'56'00"W 14.50

CURVE TABLE

CURVE NO. LENGTH **RADIUS DELTA** CHORD BEARING CHORD LENGTH C1 87.26 40.00 124°59'47" 70.96 S52'26'06"E C2 102.69 98'03'54" 60.00 N38'58'10"W 90.61 98'03'54" C3 68.46 40.00 N38'58'10"W 60.41 119'47'31" C4 125.45 60.00 S49'49'59"E 103.81

20,878 SQ FT +/-

MAINTENANCE ACCESS ROAD EASEMENT

OREGON JULY 13, 2004 CARLA JO MERITT 74286LS

RENEWS: DEC. 31, 2020

9-10-19



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PAGE 1 OF 1 16552_PLW 1.3_SS20



STAFF REPORT

To: WWSS Board of Commissioners

From: Mike Britch, WWSP Engineering and Construction Manager

Date: October 3, 2019

Subject: WTP_1.0 Design Amendment for Value Engineering Concepts Incorporation

Requested Board Action:

Consider approving a change order in the amount of \$575,743.12 to CDM Smith's (the WTP_1.0 design consultant) contract for incorporation of value engineering concepts into the 60% design of the project.

Key Concepts:

- The 30% design submittal opinion of probable construction cost (OPCC) estimated the cost of the new WWSS Water Treatment Plant (WTP) at \$266 million, including contingency.
- A value engineering (VE) workshop was conducted shortly after the 30% design submittal to identify potential value engineering (VE) ideas.
- For approximately two months after the VE workshop, CDM Smith, at the direction of the Owners, evaluated VE ideas generated, which resulted in reducing the cost of the WTP to approximately \$228 million.
- The change order submitted by CDM Smith for the VE evaluation efforts is approximately 1.5% of the \$38 million savings that resulted from the VE efforts and is less than two months cost at their average monthly billing rate to date.

Background:

In May 2019, a 30% OPCC was created by CDM Smith for their 30% design deliverable. This OPCC estimated the cost of the new WWSS WTP at \$266 million (March 2019 dollars), including contingency. This OPCC was approximately \$61.6 million higher than the concept design report (CDR) based OPCC (with contingency, when escalated to March 2019 dollars). Primary reasons for this difference in cost included:

- Basin concrete/architectural (+\$16 million difference)
- Rock drilling/blasting, crushing, and hauling (+\$26 million difference)
- Administration building (+\$5 million difference)
- Main corridor (+\$3 million difference)
- Equipment (+\$12 million difference)
- Maintenance area (+\$1.5 million difference)
- Off-site utilities (+\$1 million difference)

Shortly after the 30% submittal, a workshop was conducted (on March 27 and 28, 2019) to identify potential value engineering (VE) ideas. Approximately 160 ideas were generated at the workshop.

WTP_1.0 Design Amendment for Value Engineering Concepts Incorporation

For approximately two months after the workshop (in April and May 2019), per direction by the Owners, CDM Smith delayed start of the 60% detailed design to work on evaluating the VE ideas generated (outside the scope of their original contract). This resulted in reducing the cost of the WWSS WTP from \$266 million to approximately \$228 million (a \$38 million reduction). The \$228 million cost is approximately 10% higher than the original budgeted cost, but includes some concepts not originally envisioned when the CDR-based OPCC was developed, including:

- Added accommodations for future re-rate to 72 mgd (instead of 60 mgd capacity)
- Extended water, sanitary sewer, and potable water utilities beyond the WTP property boundary due to City of Sherwood requirements
- Added accommodations for more specific level of service (LOS) goals (i.e., greater concrete thicknesses and redundant solids thickener)

For the additional two months required to evaluate VE items, CDM Smith submitted a change order in the amount of \$575,743.12. This change order cost is approximately 1.5% of the \$38 million savings that resulted from the VE efforts. The change order cost is less than two months at the average monthly billing of approximately \$400,000 per month for their first 11 invoices.

It should also be noted that the project schedule was adjusted (via a separate change order – PCO 8) to allow CDM Smith two additional months to complete the 60% design. This change did not affect the date of the land use submittal or the date of the 100% design submittal. This change alleviated acceleration charges that CDM Smith requested prior to the change.

Budget Impact:

This change order will increase the design contract for CDM Smith by \$575,742.12.

Staff Contact Information:

Mike Britch, WWSP Engineering and Construction Manager, 503-941-4565, mike.britch@tvwd.org Dave Kraska, WWSS General Manager, 503-941-4561, david.kraska@tvwd.org

Attachments:

Exhibit 1: Potential Change Order 6 (PCO-6) Incorporation of Major Value Engineering Concept Changes (submitted July 15, 2019)



Memorandum

To: Matt Gribbins, PE

Project Manager

Willamette Water Supply Program WTP_1.0 Design

From: Greg Lindstadt, PE

Date: July 15, 2019

Subject: Potential Change Order 6 (PCO-6)

Incorporation of Major Value Engineering Concept changes

Description of Change

This scope of work change will authorize and provide budget for CDM Smith to expend engineering and architectural efforts to develop new preliminary design concepts to incorporate major changes to the 30% design documents in response to Value Engineering ideas accepted by WWSP. The Value Engineering and Constructability hours provided in the original budget were identified for preparing workshop agendas, workshop participation, and follow-up summaries. The original efforts were concluded under budget, and the budget remainder was used to further the development of the initial VE ideas.

This added work is proposed to be accomplished under tasks 2.1.2 Project Management and Task 5.10.1, 60% Drawings, since the results are expected to serve as the basis for the 60% design deliverables. New design concepts will be developed for the following major VE ideas accepted:

- 5 MG, single-cell cast-in-place rectangular Clearwell (expandable to 10 MG in the future) (efforts on this were stopped as of June 28 due to WWSP exploration of prestressed clearwell alternative).
- 10 MG, single cell circular prestressed concrete Clearwell. New shape and inlet/outlet configuration require changes to site layout, yard piping, and FWPS wet well.
- Delete Future Chemical facilities and reserve space in a new location; revise site arrangement to accommodate.
- Single-Story Admin Building with significantly reduced and re-arranged floorplan to replace multi-story design.
- Shrink / rearrange Maintenance space to reduce cost, and coordinate with adjoining spaces.

- Defer initial standby UV reactor and defer piping for standby UV reactor and future fourth UV reactor; identify and include provisions to allow these items to be added in the future with minimal shutdown required.
- Move Raw Water flow metering to be incorporated into the Finished Water Pump Station and reconfigure / simplify Flash Mix area to reduce cost and incorporate elevator and stairway to the top deck.
- Convert to two-train ozone contractor from three-train to eliminate one basin wall and two baffle walls.
- Change buried Ozonated Water Pipe to filters to overhead to reduce rock blasting and excavation, eliminate encasement and reduce pipe length.
- Lower Central Corridor Roof and revise structural and architectural systems
- Combine Equalization and Overflow functions into a single facility and combine/simplify WWW and Overflow yard piping.
- Convert Dewatering Building design to accommodate initial units only and be expandable in the future. Revise internal arrangement between floors to reduce site footprint.
- Revise layout at the north-east end of the process block to integrate deferred future chemicals and relocated standby power generation and main switchgear facilities.
- Main-Tie-Main changes to switchgear and MCCs.
- Downsize initial transformers and power distribution cables for re-rate capacity, not ultimate.
- Filter changes: convert design to two-valve outlet; swap locations of blower and electrical rooms to support overhead ozonated water pipe.
- Change Thickener troughs from stainless steel to cast-in-place concrete
- Change masonry wall system to steel Moment Frame at Chemical, Dewatering, and FWPS structures
- Move bulk tank and pump skid locations to consolidate Main Chemical area layout to reduce building size.
- Reduce Equipment Storage Building height.

This additional work will proceed under the following assumptions:

- Conceptual development of VE ideas began in April and will continue through August.
- Efforts outlined above reflect those still required as of June 28, 2019
- Design team will provide progress presentations on key areas at scheduled Progress Meetings
- WWSP will provide feedback and acceptance or re-direction as needed at these presentations

Potential Change Order 6 (PCO-6) – Major Value Engineering Concept Incorporation July 15, 2019 Page 3

- No formal 30% Submittal of revised concepts or formal comment/response cycle are anticipated, to minimize schedule impact.
- With WWSP concurrence with revised concepts, design development will proceed through 60%.
- WWSP's VE spreadsheet will serve as the basis of the Design Change Log that will track decisions
- WWSP will adjust 60% and Land Use deliverable dates by one to two months to compensate for the delay in ability to start on affected areas of the design (details will be the subject of a separate PCO)
- The design team PM and PE may attend up to three half-day specialty meetings to review and discuss new concepts as needed. Technical and/or discipline leads will participate by phone.

Proposed Change to SOW:

No specific revision to the language of the SOW appears needed.

Background and Justification for the Change

WWSP's Value Engineering effort identified approximately \$27,000,000 in estimated construction cost that could be avoided through significant changes to the 30% design concept. To support achievement of this major reduction in construction cost, it will be necessary to set aside portions of the 30% design concept and develop a new basis for proceeding with 60% design. The proposed additional engineering effort is anticipated to cost approximately 2% of the construction cost reduction estimated to be achieved. An additional approximately 45 VE ideas will be addressed and resolved as part of the currently budgeted launch of the 60% design.

Effects of Change on Project

Effects on Design

Effects on Design Content: New concepts will be developed for many areas of the 30% design. Remaining areas will be adjusted as needed to accommodate and coordinate with the new concepts.

<u>Effects on Design Schedule</u>: Setting aside previously developed 30% design concepts and developing new concepts will delay the start of portions of the 60% effort. The design team is endeavoring to adjust the production schedule and staffing to minimize the impact of this delayed start. No change to the 60% deliverables date is anticipated at this time.

Potential Change Order 6 (PCO-6) – Major Value Engineering Concept Incorporation July 15, 2019
Page 4

Effects on Design Cost:

- CDM Smith will incur modest added labor effort to revise the production and staffing plan, revise the line-item task budgets, update internal tracking systems, and manage the added engineering and CAD efforts.
- CDM Smith and subconsultants will incur added technical labor effort develop new preliminary design concepts, redo calculations, present concept alternatives to WWSP, respond to input, and capture the new basis for proceeding with design to 60%.
- CDM Smith will incur minor other direct costs (ODCs) for additional travel to the Program office to review and confirm VE ideas, present alternatives, and confirm final decisions.

The total budget increase for this PCO is \$575,743.12 as detailed on the attached Fee and Rate spreadsheet.

Effects on Construction

The revised design resulting from this effort is intended to significantly reduce the construction cost and level of effort. Impact on construction schedule has not been evaluated.

Alternatives Considered

The alternative to pursuing this VE-driven redesign is to advance the 30% design to 60%. The alternative would simplify design efforts and scheduling and avoid an approximately 4% increase in design engineering cost. The alternative would not realize an estimated 10% reduction in construction cost.

Risks, Opportunities, and Effects on Program or Other Projects

Revising a significant portion of the 30% design poses a modest potential risk to delivering the anticipated level of 60% completion on the currently scheduled submittal date. Compressing the development of new concepts into a one-month period to help maintain the schedule poses a modest risk of a less-well integrated and resolved new design. No risks to the Program have been identified.

This PCO supports an opportunity to significantly reduce Program construction costs. No other effects on the Program or other Program projects have been identified.

Potential Change Order 6 (PCO-6) – Major Value Engineering Concept Incorporation July 15, 2019 Page 5

Contract Time Impact Estimate

Zero days of impact to the contract time are anticipated at this time.





STAFF REPORT

To: Willamette Water Supply System Board of Commissioners

From: Mike Britch, WWSP Engineering and Construction Manager

Date: October 3, 2019

Subject: PLW_1.2 Design Amendment for Washington County Land Use and Transportation

Requested Realignment

Requested Board Action:

Consider approving a change order in the amount of \$521,789.45 and 879 days to the Kennedy/Jenks Consultants, Inc. contract for the design of PLW_1.0 for incorporation of a pipeline alignment change to PLW_1.2 as directed by Washington County, WWSP's partner for this project.

Key Concepts:

- The Willamette Water Supply Program (WWSP) has successfully partnered with Washington County Land Use and Transportation (WCLUT) to deliver coordinated pipeline and roadway projects at various locations in the region.
- A design intergovernmental agreement (IGA) is already in place for the Cornelius Pass Tualatin Valley Highway to Frances Street project (executed in 2017, WWSP project PLW_1.2)
- After delivery of the WWSP 90% design submittal, WCLUT staff directed that the WWSP pipeline
 move within the right of way corridor. The change of alignment will result in a redesign and a
 resubmittal of both the 60% and 90% design deliverables.
- Additional field work, including geotechnical borings and utility relocates, will be required.

Background:

Establishing effective partnerships has been an objective for the Willamette Water Supply Program since its inception. With the support of the Willamette Water Supply System (WWSS) partner agencies, WWSP has established a strong partnership with WCLUT, allowing for the design and construction of multiple pipeline projects in conjunction with WCLUT roadway projects. The WWSP project PLW_1.2 is partnered with WCLUT's Cornelius Pass – Tualatin Valley Highway to Frances Street project, located in the City of Hillsboro.

Washington County has requested that the alignment for PLW_1.2 be adjusted to minimize the traffic control impacts on Cornelius Pass Road. The new alignment generally follows the alignment of an existing communications duct bank that will be relocated by the communications utility owner. These adjustments will require redesign of the overall PLW_1.2 project and resubmittal of the 60% design and 90% design packages. The schedule adjustment of 879 days is required to accommodate the revised design schedule and Washington County's most current construction schedule.

Budget Impact:

This change order will increase the design contract for Kennedy/Jenks Consultants, Inc. by \$521,789.45.

Page 2 of 3
October 3, 2019
PLW_1.2 Design Amendment for Washington County Land Use and Transportation Requested
Realignment

Staff Contact Information:

Mike Britch, WWSP Engineering and Construction Manager, 503-941-4565, mike.britch@tvwd.org Dave Kraska, WWSS General Manager, 503-941-4561, david.kraska@tvwd.org

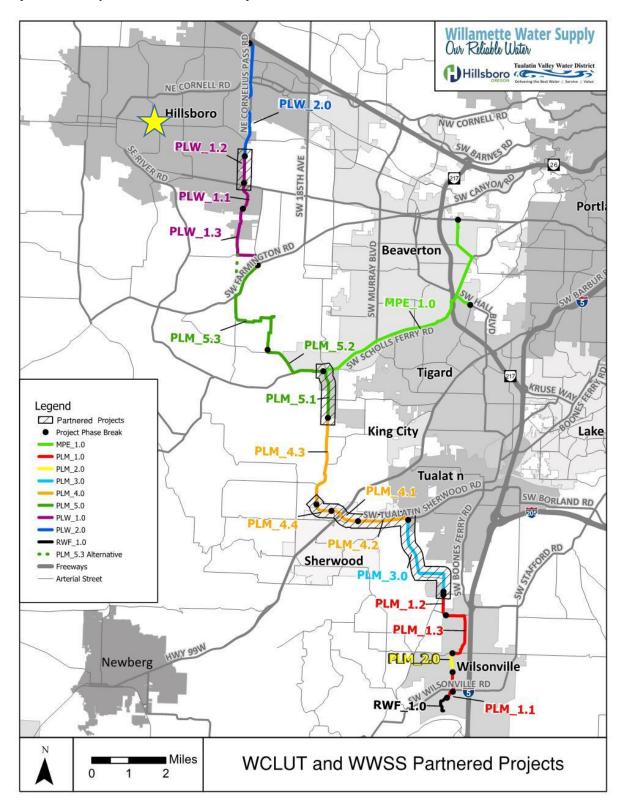
Attachments:

Project Area Map

Exhibit 1: Project Change Order Documentation

Willamette Water Supply Our Reliable Water

Project Area Map: WCLUT Partnered Projects





Scope Change/Budget Augmentation Request

This document is notification of the need for additional work that is outside the contractually agreed-upon project scope, due to unforeseen outside factors, engineer of record, client-requested changes or additions to scope. Effort on the additional work will not proceed until written acknowledgement/authorization is received from client.

Project Name: WWSP PLW_1.0	Date: September 8, 2019
Client: TVWD and City of Hillsboro	Project No.: 1676010

Description of Scope Change

This scope of work (SOW) change is to revise approximately 3,370 LF of 48-inch pipe, and 497 LF of 18-inch DIP pipeline alignment, and schedule for PLW_1.2. PLW_1.2 is being designed and constructed in partnership with Washington County. The major design deliverable milestones for PLW_1.2 were established to align closely with the design deliverable milestones for the Cornelius Pass Road Widening Project being performed by Washington County.

Washington County has requested that the alignment for PLW_1.2 be adjusted further to the east to minimize the traffic control impacts on Cornelius Pass Road. The new alignment generally follows the alignment of an existing communications duct bank that will be relocated by the utility owner. These adjustments will require redesign of the overall PLW_1.2 project, and resubmittal of the 60% design and 90% design packages.

In addition to the design changes, the schedule for the Cornelius Pass Road Widening Project has been adjusted by Washington County, necessitating adjustments to the PLW_1.2 schedule so that it can continue to align the major milestone deliverables with those for the Cornelius Pass Road Widening Project. Keeping the 2 project major milestones aligned minimizes the potential for rework between the projects.

To align the schedules, it is necessary to extend the design schedule for PLW_1.2 approximately 9 months to allow for formalization and approval of the revised alignment and pipeline size(s), and to minimize the amount of rework.

Task 04.0 – Project Management and Administration

Kennedy Jenk's original duration for PM activities extended through July 2019. With the revised design duration extending to May 2020 (NTP for PLW_1.3 construction), the overall duration for design PM activities has increased from August 2019 through April 2020, or 9 additional months. The time extension will require additional monthly reports (task 4.04) invoices (task 4.06), additional document management (task 4.07), and additional project management effort (task 4.08) for 9 months for the Kennedy/Jenks team. The time extension will require:

- Task 4.04 preparation of 9 additional monthly reports at an average cost of \$1,988 per month (which is lower than the amount for the original contracted scope/fee (\$1,763/month) once the 3 annual rate adjustments (~9%) are factored in).
- Task 4.06 preparation of 9 additional monthly invoices at an average cost of \$3,312 per month (which is lower than the amount for the original contracted scope/fee (\$3,510/month).
- Task 4.07 Additional document management at an average cost of \$1,857 per month (which is similar to the amount for the original contracted scope/fee (\$1,707/month) once the 3 annual rate adjustments

1 of 6

 $(\sim 9\%)$ are factored in).

• Task 4.08 - Additional project management effort at an average cost of \$6,606 per month (which is lower than the amount for the original contracted scope/fee (\$7,775/month).

In summary, the original budget incorporated average monthly expenditures for these 4 tasks of approximately \$14,756/month once the 3 annual rate adjustments (~9%) are factored in. Factoring in some efficiencies due to some of the subconsultants having completed their design work by July 2019, the average monthly expenditures for these tasks is expected to reduce to an average of \$13,763/month for the additional 9 months needed.

PLW 1.2, Tasks 05ii.12 (Geotechnical Assessments)

The pipeline alignment is being shifted east of its current location at the trenchless crossing, bringing it nearer to adjacent structures / residences. This adjustment in the alignment is expected to require a modification to the trenchless crossing configuration to avoid the existing sanitary sewer. It's anticipated that the trenchless crossing will also need to be lengthened.

Updating the dewatering calculations and analysis for the trenchless crossing operation provides the benefit of confirming that drawing down the groundwater to the required depth for the revised trenchless crossing configuration will not impact the adjacent structures / residences. The dewatering scenarios (to below casing invert and to casing crown) previously conducted will be updated based on the revised pipeline configuration and depth. The Engineer will revise the Geotechnical Design Report to incorporate the updated dewatering analysis results.

Preparing an updated finite element model (FEM) and conducting additional analysis will confirm that the revised configuration will be seismically resilient. Engineer will revise the FEM to incorporate the pipeline configuration at the trenchless crossing, re-run the finite element model, and analyze the results. The FEA Memorandum and 60% Design MDR checklist shall be revised to incorporate the changes due to the revised alignment.

PLW 1.2, Tasks 05ii.14 (Survey/SUE Update)

Engineer shall prepare and submit an updated Utility Location Plan describing the approach, methodologies and procedures for locating existing utilities. Engineer shall update the existing utility information incorporating the revised alignment for PLW_1.2, and coordinate with the utility owner through the Owners, to receive any required approvals prior to potholing (up to 3 additional potholes have already been budgeted). These potholes shall be performed using vacuum type potholing methods (vacuum excavation). Engineer shall adjust the CAD layering system based on information obtained for the potholing results.

PLW 1.2, Task 05ii.15 - 60% Design Drawings

Engineer will revise the design drawings for PLW_1.2 to incorporate the revised pipeline alignment. It is anticipated that the following drawings will be revised, updated, or created:

- General drawings, G-1 through G-12
- Plan and profile drawings, PP-01 through PP-09
- Appurtenance Plans and Details drawings, BP-01, BP-07 and BP-08
- Appurtenance Detailed PP drawings (BP-09 through BP-16) new drawings
- Erosion control plan, EC-01
- Standard Details drawings, SD-01 through SD-28
- Traffic Control Plans, TC-01 through TC-02

The Engineer will prepare an agenda and minutes and participate in a 60% design review workshop with the

2 of 6

WWSP.

PLW 1.2, Tasks 05ii.16 (60% Design Specifications)

Several of the previous design specifications need to be updated to incorporate impacts due to the alignment change. These include the earthwork, auger bore, steel pipe, and pressure testing of piping specifications. Updating the specifications will provide a set of specifications that is consistent with the pipeline design drawings. Engineer will revise the specifications incorporating changes based on the revised alignment and resubmit the 60% design specifications.

PLW 1.2, Tasks 05ii.17 (60% Design Data Handbook)

Engineer will revise the design calculations to incorporate the impacts on the pipe, appurtenances, and corrosion due to the revised alignment, and incorporate the calculations into the design data handbook. A 60% design data handbook will be created and submitted.

PLW 1.2, Task 05ii.20 - Final Trenchless Crossings Design TM

Updating the Trenchless TM will provide a final version of the TM that is consistent with the revised final pipeline vertical and horizontal configuration, including an expected increase in trenchless length, and changes in the dewatering requirements. Engineer will update the Draft Trenchless Crossings Design TM to incorporate the revised alignment (vertical and horizontal) for the trenchless crossing. Engineer shall submit a draft Final Trenchless Crossings Design TM, address comments received from the WWSP, and issue a Final Trenchless Crossings Design TM.

PLW 1.2, Task 05ii.22 - 90% Design Drawings

Engineer will revise the design drawings for PLW_1.2 to incorporate the revised pipeline alignment. It is anticipated that the following drawings will be revised and/or updated:

- General drawings, G-1 through G-12
- Plan and profile drawings, PP-01 through PP-09
- Appurtenance Plans and Details drawings, BP-01, BP-07 and BP-08
- Appurtenance Detailed PP drawings (BP-09 through BP-16) new drawings
- Erosion control plan, EC-01
- Standard Details drawings, SD-01 through SD-28
- Traffic Control Plans, TC-01 through TC-02

The Engineer will prepare an agenda and minutes and participate in a 90% design review workshop with the WWSP.

PLW 1.2, Tasks 05ii.23 (90% Design Specifications)

Engineer will address comments received from the WWSP on the 60% design specifications and update the specifications for 90% design.

PLW 1.2, Tasks 05ii.24 (90% Design Data Handbook)

Engineer will address comments received from the WWSP on the 60% design data handbook and update the design calculations to incorporate the impacts on the pipe, appurtenances, and corrosion due to the revised alignment. A 90% design data handbook will be created and submitted.

PLW 1.2, Task 05ii.25 - 90% Design OPCC

Engineer will update the quantities, and develop a 90% design OPCC.

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PLW 1.2, Task 05ii.26 - 90% Design Construction Schedule and Submittal Register

Engineer will update the construction schedule to reflect the revised traffic control approach and pipeline realignment.

PLW 1.2, Task 06ii.03 - Traffic Control Plan Drawings

Washington County's traffic control plans for Cornelius Pass Road were not available when PLW_1.2's 90% design was submitted. In addition, with the realignment of the pipeline, adjustments in the traffic control plans prepared by Washington County are expected. The traffic control plans for Frances St. need to be updated to show the traffic control transition between the 2 roads as with Washington County's plans only pertain to Cornelius Pass Road. The alignment on Frances St will also be revised to accommodate the vault locations in Reedville Park, necessitating an update to the Frances St. traffic control plans, and addressing pedestrian impacts. Engineer, through the services of a subconsultant (DKS), shall prepare updated traffic control plan drawings (60% and 90%) for PLW_1.2 that incorporate the revised alignment on Frances St. DKS will update temporary traffic control plans at the intersection of SW Cornelius Pass Road and SW Frances Street to reflect the updated pipe alignment and transition from the traffic control on Cornelius Pass Road to the traffic control on Frances St. In addition, one temporary traffic control plan sheet will be added to accommodate pedestrians during the closure of a sidewalk segment on SW Frances Street at Reedville Park. Updated plans will be resubmitted at the 60% and 90% levels of completion.

PLW 1.2, Task 09 - Coordination with Other Consultants

Coordination with others for PLW 1.2

Engineer shall coordinate with the following:

- Cornelius Pass Road Widening Project (Washington County/WSP)
 - o Design and Construction Deliverables (design, schedule, and format)
 - o Traffic Control transition from Cornelius Pass Rd to Frances St.
 - Erosion Control
- Washington County Utility conflicts and design
- City of Hillsboro Parks and Recreation Department for Reedville Park vaults

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Task 12.0 – Project Schedule

Phase 2 (PLW 1.2) in Table 12-1 shall be amended to read as follows:

Task/Deliverable Description	Completion Date (1)
Phase 2 (PLW_1.2)	
Submit 30% Design Deliverables per Section 5.5	2/27/2017
30% Design Complete	3/31/2017
Submit Revised 60% Design Deliverables per Section 5.5	11/13/2019
60% Design Complete	2/14/2020
Submit Revised 90% Design Deliverables per Section 5.5	2/24/2020
90% Design Complete	3/23/2020
Draft Permit Applications	2/24/2020
Submit 100% Design Deliverables per Section 5.5	4/22/2020
Final Permit Applications	4/22/2020
100% Design Complete, including Signed and Sealed Design Documents for Bidding	5/20/2020
Conformed Bid Documents Complete	11/17/2021
Record Drawings Complete	2/19/2024

- (1) All deliverables shall meet requirements per Section 5. Owners will provide consolidated and adjudicated comments within 5 days following receipt of deliverables for PLW 1.1, within 10 days following receipt of deliverables for PLW 1.2 30% design phase deliverables, and within 15 days following receipt of deliverables for the remainder of the design for PLW 1.2 and PLW 1.3.
- (2) In the event NTP is issued early, all dates will remain as indicated in the table above.
- (3) Engineer understands that access to land may be deferred following the issuance of NTP. In the event land access is not available after NTP, all other dates listed above will be adjusted accordingly (Day for Day) with no cost impact.

Letter describing	scope change	included a	s an attachment
 Letter describing	Scope change	menudeu a	s an anacimien

Assumption(s)

- 1. PLW_1.2 will generally follow the current alignment of an existing communications duct bank on the east side of Cornelius Pass Road.
- 2. PLW_1.2 will be issued as part of the bid package for Washington County's Cornelius Pass Road Widening Project.
- 3. Erosion control on Cornelius Pass Road and all related 1200C permitting will be addressed by Washington County, and is not included in the scope of work.
- 4. The vault at Reedville Park will be separated into a meter vault and a PRV vault, and the redesign effort will be budgeted under a separate PCR.
- 5. An updated Construction Submittal Register is not included in the SOW.
- 6. Frontier Communications will relocate their existing communications duct bank.

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Budget Augmentation Request				
\$521,789.45 in new funds.				
□ Detailed fee estimate included as an attachment.				
Estimated Effect on Deliverable Schedule (if any)				
879 calendar days. See adjusted schedule dates above.				
Effect on Contract/Authorized Budget				
Sufficient budget to cover the scope change request may be available in the current project budget and work can proceed. A formal request for additional budget will be issued later if required.				
☐ Insufficient budget available in the current contract budget to cover the scope change request. Authorization is required prior to proceeding with the additional work.				
Originated by:	Date:			
Mark Nelson	9/8/19			
Approved by (K/J Project Manager):	Date:			
Client Acknowledgement/Authorization				
☐ Scope Change/Budget Augmentation Request is authorized. A contract amendment to cover additional work will be promptly executed. Proceed with the additional work.				
Scope Change/Budget Augmentation Request is authorized. A contract amendment to cover additional work will be executed later if required to cover additional cost.				
☐ Scope Change/ Budget Augmentation Request is approved but do not proceed with additional work until a contract amendment is authorized.				
☐ Scope Change request is not authorized. Do not proceed.				
☐ Scope Change request is considered to be part of original scope. Follow-up discussion is required.				
Authorized by (Client Project Manager):	Date:			
Print Name:				
Distribution:	I.			

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STAFF REPORT

To: WWSS Board of Commissioners

From: David Kraska, P.E., Willamette Water Supply System General Manager

Date: October 3, 2019

Subject: Change January 2, 2020 WWSS Board meeting date to January 9, 2020

Requested Board Action:

Consider a motion to change the date of the January 2020 WWSS Board meeting from January 2, 2020 to January 9, 2020.

Suggested Motion: "I move that the regular Commission meeting currently set for January 2, 2020 be rescheduled to January 9, 2020 and that Staff provide necessary notifications of this change."

Key Concepts:

Due to proximity to the holidays, we recommend moving the date of the January 2020 WWSS Board meeting from January 2, 2020 to January 9, 2020.

Background:

To conduct regular business for the WWSS Commission, the Board of Commissioners needs to set regular business meeting dates. At its July 3, 2019 meeting, the WWSS Board adopted Resolution WWSS-03-19 that set the regular calendar of monthly meetings. The calendar was based on the assumption that WWSS Board meetings would be held on the first Thursday of every month.

Upon further review, it was noticed that the first Thursday of January 2020 is on the 2nd of the month. Given the proximity to the holidays, staff recommends delaying this meeting by one week to the 9th.

Budget Impact:

There is no budget impact from this action.

Staff Contact Information:

David Kraska, P.E.; WWSS General Manager; 503-941-4561; david.kraska@tvwd.org

Attachments:

None.



STAFF REPORT

To: Willamette Water Supply System Board of Commissioners

From: David Kraska, P.E., Willamette Water Supply System General Manager

Date: October 3, 2019

Subject: Anticipated Business Agenda Items for the November 7, 2019 Meeting of the Willamette

Water Supply System Board of Commissioners

Key Concepts:

• The November WWSS Commission Board meeting agenda is anticipated to include several business items that are new or amended intergovernmental agreements (IGAs).

- With Washington County Land Use and Transportation (WCLUT), two new IGAs have been created: 1) Master Project Coordination IGA, and 2) PLM_4.4 Design IGA. Additionally, existing IGAs for the following projects are being amended to account for, among other changes, updated schedules, assignment to the WWSS, and Water Infrastructure Finance and Innovation Act (WIFIA) requirements: PLM_4.1, PLM_4.2, PLW_1.2, and PLM_5.1.
- The existing agreement with the City of Tigard (Tigard) will be amended to account for assignment to the WWSS Commission, update the connection configuration, and update the cost and operational elements including use of Tigard water for multiple WWSP projects.
- A new agreement with the City of Wilsonville (Wilsonville) will facilitate coordination of the WWSS RWF_1.0 project with Wilsonville's requirements for the work – this IGA may require consideration and approval during a special meeting prior to the regular November meeting.

Background:

Establishing effective partnerships has been an objective for the Willamette Water Supply Program (WWSP) since its inception. The WWSP formalizes these partnerships by negotiating IGAs with the other agencies. Several new IGAs are planned to be presented to the WWSS Commission Board for consideration at the regular November 2019 meeting. Additionally, several existing IGAs require amending to address various changes that have occurred since their execution.

With the support of the WWSS partner agencies, WWSP has established a strong partnership with WCLUT, allowing for the design and construction of pipeline projects in conjunction with WCLUT roadway projects. The desire to partner was memorialized in the Partnering MOU established in November 2016, documenting the agencies' intentions to partner on road and waterline projects along SW Tualatin-Sherwood Road and SW Roy Rogers Road. A new Master Project Coordination IGA will replace the MOU and update agreement terms such as project timing, addition of WIFIA contracting requirements, and specific guidance for use of WWSP restoration funds intended to facilitate WCLUT's completion of road design and construction projects coincident with pipeline projects on the WWSP's schedule. Additionally, this new IGA will establish a stage-gate process for the covered projects to improve the efficiency with which they are completed.

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Anticipated Business Agenda Items for the November 7, 2019 Meeting of the Willamette Water Supply System Board of Commissioners

A new IGA is being prepared for the PLM_4.4 project, which completes the design-phase partnerships with WCLUT for the entire extent of Roy Rogers Road within Sherwood city limits. This IGA will be under the umbrella of the Master Project Coordination IGA discussed above. Following the template of previous design IGAs, this agreement outlines the responsibilities for each party, how work will be coordinated or shared, and how the costs of common items will be divided. It will include the new agreement terms being incorporated into existing agreements: assignment from the WWSP to the WWSS, requirements to include WIFIA-related contracting terms, responsibility for certain costs, and up-to-date project schedules.

The following existing project IGAs require amendments to formalize changes such as: assignment from the WWSP to the WWSS Commission, adding requirements for partnered projects to include WIFIA-related contracting terms, clarifying responsibility for certain costs, and updating project schedules:

- IGA between WCLUT, Tualatin Valley Water District (TVWD), and the City of Hillsboro (Hillsboro) for the WWSP Joint Design of PLM_4.1 Highway 99 Crossing Pipeline and Tualatin-Sherwood Road Langer Farms Parkway to Borchers Drive (2017, PLM_4.1) (Amendment One was executed in early 2019)
- IGA between WCLUT, TVWD, and Hillsboro for the WWSP Joint Design of PLM_4.2 SW Tualatin-Sherwood Road Teton to Langer Farms Parkway (2019, PLM 4.2)
- IGA between WCLUT, TVWD, and Hillsboro for the WWSP Joint Design of Cornelius Pass Road (Frances Street to Tualatin Valley Highway) and PLW_1.2 South Hillsboro Pipeline Projects (2017, PLW_1.2)
- IGA between WCLUT, TVWD, and Hillsboro for the WWSP Joint Construction of Roy Rogers Road (Beef Bend to Scholls Ferry) and PLM_5.1 Scholls Area Pipeline Projects (2018, PLM_5.1)

The WWSP secured access to water from Tigard through an IGA executed in April 2018 between TVWD, Hillsboro, and Tigard. The IGA specified the location of temporary water access from Tigard to WWSP and memorialized how a future emergency intertie could be built at that location by Tigard and under a separate IGA. The original IGA provided access to Tigard water for WWSP project PLM_5.1 through a single connection. WWSP and Tigard have determined that the previously agreed upon access point and potential additional and temporary access points will be beneficial for the testing and maintenance of multiple WWSP projects. This amendment will cover assignment of the original IGA to the WWSS Commission, provide for water supply access to multiple WWSP projects, and update cost and operational elements.

The Raw Water Facilities project (RWF_1.0) will require moving two of the Willamette River Water Treatment Plant's raw water pumps, and construction of the raw water pipeline through park lands that are currently owned by Wilsonville and TVWD. The WWSS Commission and Wilsonville have agreed to enter into an IGA to establish the requirements for this work to proceed. Wilsonville is requiring the completion of this IGA prior to proceeding with the review of the land use submittal for the RWF_1.0 project. The IGA defines the work to be done and establishes the obligations of the parties separately and together for the design and construction phases. This IGA is in the final review stages and it is expected to be considered by the Wilsonville City Council on October 21, 2019. Given the schedule constraints on our land use application, we expect to request holding a special WWSS Commission Board meeting on October 28, 2019 following the Willamette Intake Facilities (WIF) Commission Board meeting to act on this one IGA.

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October 3, 2019

Anticipated Business Agenda Items for the November 7, 2019 Meeting of the Willamette Water Supply System Board of Commissioners

Budget Impact:

No budgetary impact. The funds for these efforts are included in the WWSP Baseline budget.

Staff Contact Information:

Dave Kraska, WWSP Program Director, 503-941-4561, david.kraska@tvwd.org Clark Balfour, General Counsel, 503-848-3061, clark.balfour@tvwd.org

Attachments:

None.