



Technical Memorandum

Subject: Filtration Facility Land Use Application Pipeline Drawings **A.2 A Site Plans**

PWB Project #s: W02229

Date: March 22, 2023

To: Dan Hogan, P.E., Project Manager
Portland Water Bureau

From: Brad Phelps, P.E., Project Manager
Jacobs



EXPIRES: 12/31/2024

Jacobs

The drawings attached to this technical memorandum (TM) were prepared in support of the City of Portland Water Bureau’s Bull Run Facility Pipelines land use applications in Multnomah County. These drawings were prepared under the direction of a registered professional engineer. These drawings reflect the current status of the Facility Pipelines design, which is approximately 60% complete as of the date of this TM and are considered preliminary and are not for final construction. The drawings are subject to change have been prepared and compiled for the specific purpose of addressing conformance of the project to Multnomah County land use requirements as expressed in the Multnomah County Code.

The contents of each set of drawings are listed in the tables below.

Table 1. Site Plan Drawings		
Drawing Number	Drawing Name	Description
LU-000	COVER SHEET	COVER SHEET
LU-001	KEY MAP	KEY MAP OF SHEETS
LU-002	ZONING MAP	ZONING MAP
LU-100	RAW WATER PIPELINE EXISTING CONDITIONS GRID 1, GRID 2, GRID 3	RAW WATER PIPELINE EXISTING CONDITIONS
LU-102	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 4, GRID 5	FINISHED WATER PIPELINE EXISTING CONDITIONS AT DODGE PARK
LU-103	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 6, GRID 7	FINISHED WATER PIPELINE EXISTING CONDITIONS AT DODGE PARK
LU-104	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 8, GRID 9	FINISHED WATER PIPELINE EXISTING CONDITIONS AT INTERTIE
LU-105	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 10, GRID 11	FINISHED WATER PIPELINE EXISTING CONDITIONS AT LUSTED AND ALTMAN
LU-106	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 12, GRID 13	FINISHED WATER PIPELINE EXISTING CONDITIONS AT ALTMAN
LU-107	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 14, GRID 15	FINISHED WATER PIPELINE EXISTING CONDITIONS AT COTTRELL
LU-108	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 16	FINISHED WATER PIPELINE EXISTING CONDITIONS EAST OF LUSTED HILL TREATMENT FACILITY
LU-200	RAW WATER PIPELINE PROPOSED CONDITIONS GRID 1, GRID 2, GRID 3	RAW WATER PIPELINE PROPOSED CONDITIONS
LU-201	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 4, GRID 5	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT DODGE PARK

Table 1. Site Plan Drawings

Drawing Number	Drawing Name	Description
LU-202	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 6, GRID 7	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT DODGE PARK
LU-203	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 8, GRID 9	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT INTERTIE
LU-204	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 10, GRID 11	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT LUSTED AND ALTMAN
LU-205	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 12, GRID 13	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT ALTMAN
LU-206	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 14, GRID 15	FINISHED WATER PIPELINE PROPOSED CONDITIONS AT COTTRELL
LU-207	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 16	FINISHED WATER PIPELINE PROPOSED CONDITIONS EAST OF LUSTED HILL TREATMENT FACILITY
LU-208	FINISHED WTER PIPELINE TYPICAL APPURTENANCE	FINISHED WTER PIPELINE TYPICAL APPURTENANCE CROSS SECTIONS
LU-500	FINISHED WATER INTERTIE CIVIL SITE PLAN	FINISHED WATER INTERTIE CIVIL SITE PLAN
LU-501	FINISHED WATER INTERTIE LANDSCAPE PLAN	FINISHED WATER INTERTIE LANDSCAPE PLAN
LU-502	FINISHED WATER INTERTIE VISUALIZATIONS	FINISHED WATER INTERTIE VISUALIZATIONS



Portland Water Bureau

Bull Run Filtration Pipelines Project

LAND USE APPLICATION
APPENDIX A.2
A. SITE PLANS

SHEET NUMBER	SHEET NAME	DESCRIPTION
PIPELINES		
1	LU-000	COVERSHEET
2	LU-001	KEY PLAN
3	LU-002	ZONING MAP
4	LU-100	RAW WATER PIPELINE EXISTING CONDITIONS GRID 1, GRID 2, GRID 3
5	LU-102	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 4, GRID 5
6	LU-103	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 6, GRID 7
7	LU-104	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 8, GRID 9
8	LU-105	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 10, GRID 11
9	LU-106	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 12, GRID 13
10	LU-107	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 15, GRID 15
11	LU-108	FINISHED WATER PIPELINE EXISTING CONDITIONS GRID 16
12	LU-200	RAW WATER PIPELINE PROPOSED CONDITIONS GRID 1, GRID 2, GRID 3
13	LU-201	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 4, GRID 5
14	LU-202	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 6, GRID 7
15	LU-203	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 8, GRID 9
16	LU-204	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 10, GRID 11
17	LU-205	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 12, GRID 13
18	LU-206	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 15, GRID 15
19	LU-207	FINISHED WATER PIPELINE PROPOSED CONDITIONS GRID 16
FINISHED WATER INTERTIE		
20	LU-500	FINISHED WATER INTERTIE CIVIL SITE PLAN
21	LU-501	FINISHED WATER INTERTIE LANDSCAPE PLAN
22	LU-502	FINISHED WATER INTERTIE VISUALIZATIONS

Exhibit A.214.a

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No	Date	Description	Appd
Revision			
Survey			

**PRELIMINARY
NOT FOR
CONSTRUCTION**

Designed By	TWL	Program Mgr	XXX
Drawn By	AP	Const Mgr	XXX
Checked By	SDA	Const Supvr	XXX
Project Mgr	XXX	Date	6/30/22

WARNING
0 1"
If this bar does not measure 1" then the drawing is not to scale



XXX XXX

Date

XXX XXX

Date



Bull Run Filtration Pipelines
LAND USE APPLICATION
APPENDIX A.2
A. SITE PLANS
COVERSHEET

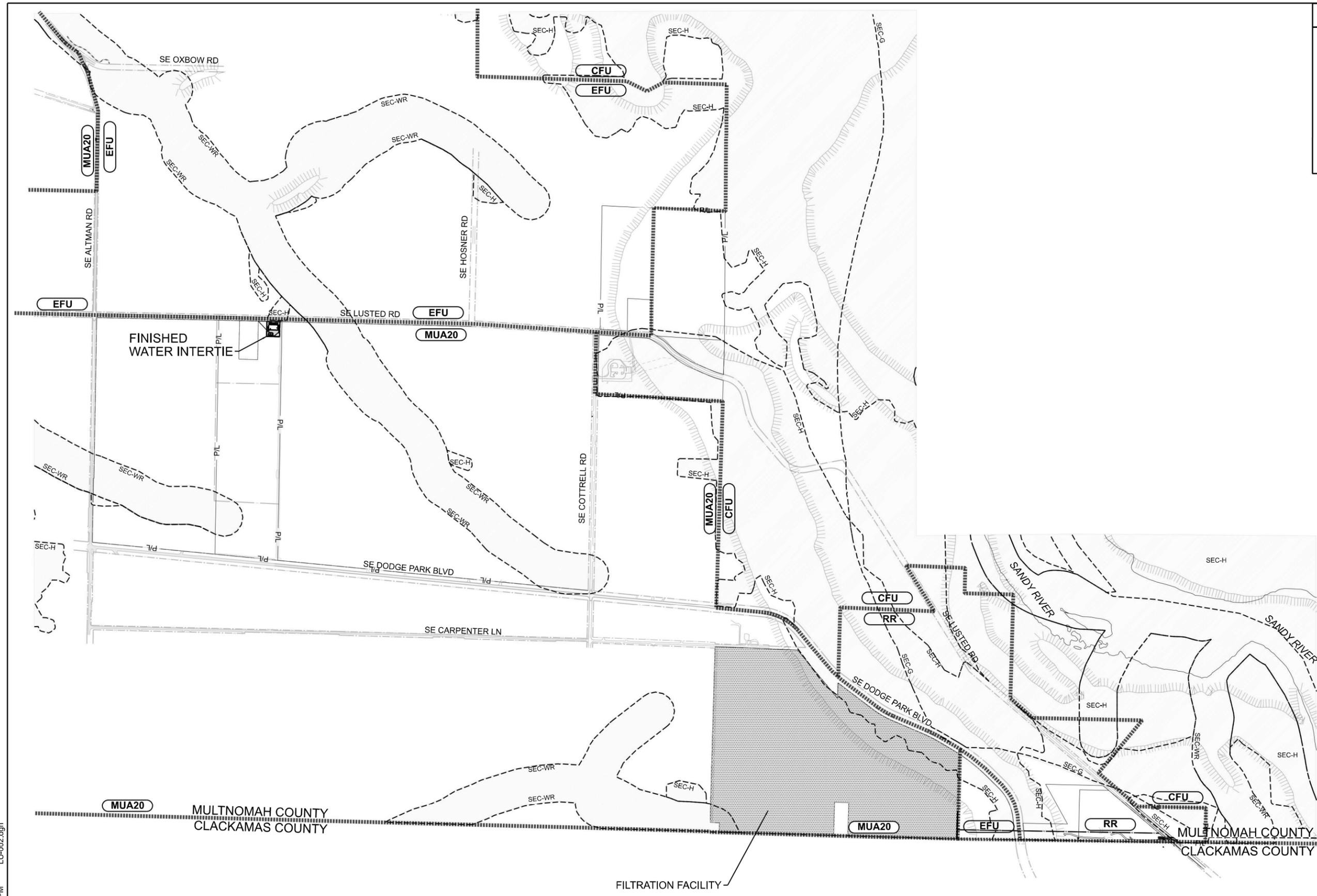
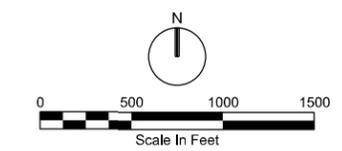
SAP Project No
W02563

1/4 Section

Sheet No
LU-000

LEGEND

-  BASE ZONING
-  SEC ZONES
-  P/L PROPERTY
-  R/W RIGHT OF WAY
-  GEOLOGIC HAZARDS OVERLAY



MULTNOMAH COUNTY
CLACKAMAS COUNTY

MULTNOMAH COUNTY
CLACKAMAS COUNTY

Exhibit A.214.c

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**PRELIMINARY
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Program Mgr
Drawn By
Const Mgr
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Project Mgr
Date
6/30/22

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Date

Date



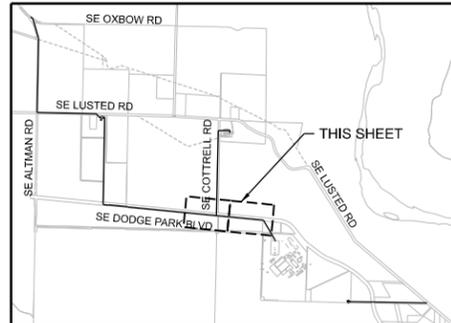
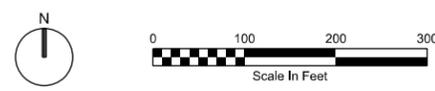
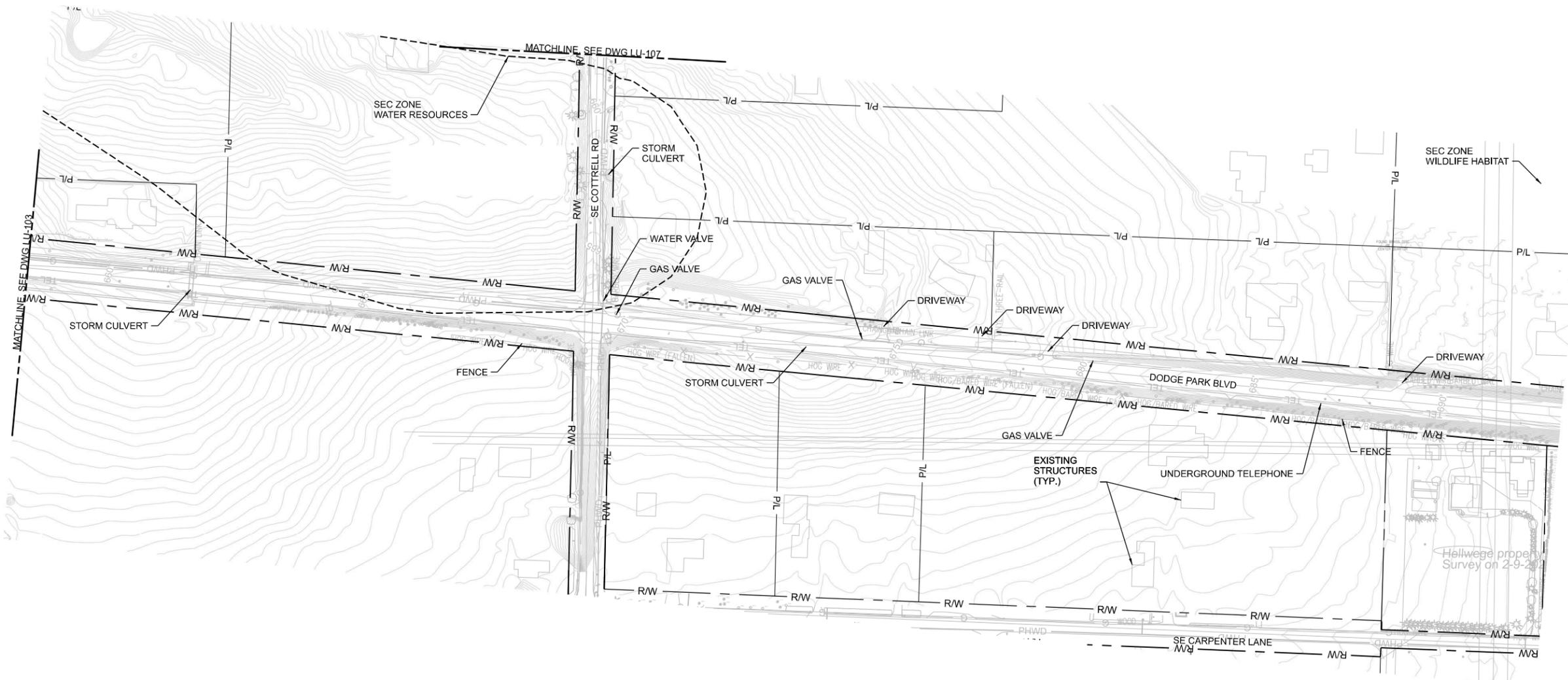
Bull Run Filtration Pipelines

ZONING MAP

SAP Project No W02563
1/4 Section
Sheet No LU-002

REUSE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN ("DOCUMENTS"), AS AN INSTRUMENT OF PROFESSIONAL SERVICE, WAS PREPARED BY JACOBS SOLELY FOR THE PURPOSE OF THIS PROJECT AND DESIGN CRITERIA. JACOBS IS RELEASED FROM ANY AND ALL LIABILITY OF ANY KIND ARISING OUT OF OR RELATING TO THE RE-USE OF THE DOCUMENTS, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT OR EXTENSIONS OF THIS PROJECT.

LEGEND	
-----	SEC ZONE
⊛	CONIFEROUS TREE
○	DECIDUOUS TREE
⊠	ELECTRICAL VAULT
⊕	UTILITY POLE
⊞	WATER METER
— P/L —	PROPERTY LINE
— R/W —	RIGHT-OF-WAY
□	EXISTING STRUCTURES



KEYPLAN

Exhibit A.214.e

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No	Date	Description	Appd
Revisions			
Survey			

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CONSTRUCTION**

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Drawn By	JSL	Const Mgr	XXX
Checked By	RG	Const Supvr	XXX
Project Mgr	XXX	Date	12/22/22

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If this bar does not measure 1" then the drawing is not to scale



Date
XXX XXX

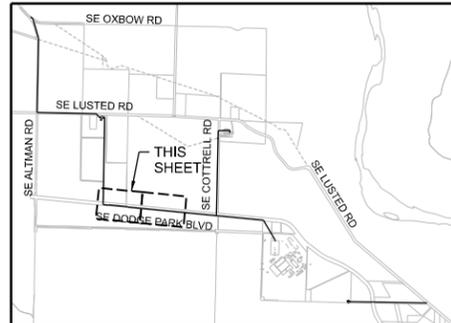
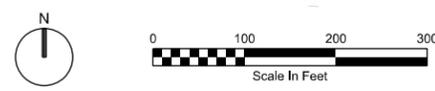
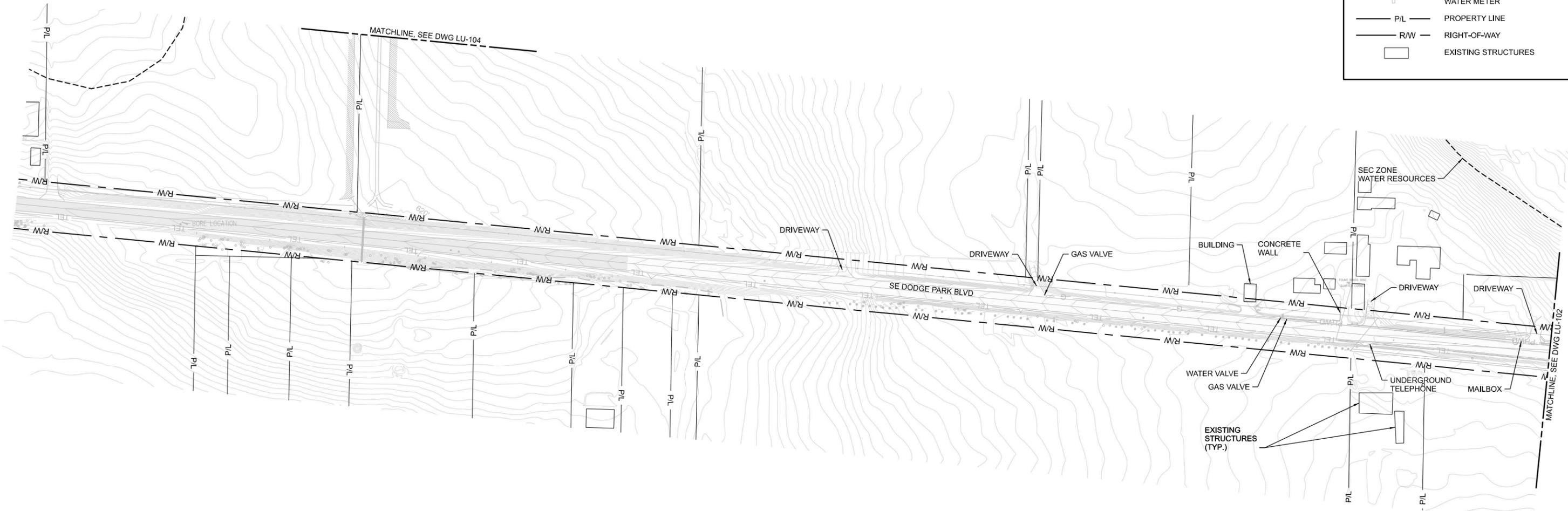
Date
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**Bull Run Filtration Pipelines
FINISHED WATER PIPELINE
EXISTING CONDITIONS**
GRID 4, GRID 5

SAP Project No	W02563
1/4 Section	3866
Sheet No	LU-102

LEGEND	
---	SEC ZONE
☼	CONIFEROUS TREE
○	DECIDUOUS TREE
⊠	ELECTRICAL VAULT
⊕	UTILITY POLE
⊞	WATER METER
— P/L —	PROPERTY LINE
— R/W —	RIGHT-OF-WAY
□	EXISTING STRUCTURES



KEYPLAN

Exhibit A.214.f

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No	Date	Description	Appd
Revisions			
Survey			

**PRELIMINARY
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Drawn By	JSL	Const Mgr	XXX
Checked By	RG	Const Supvr	XXX
Project Mgr	XXX	Date	12/22/22

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Date

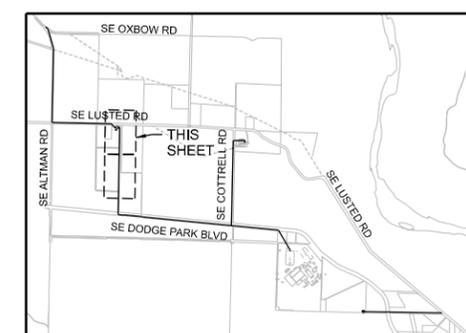
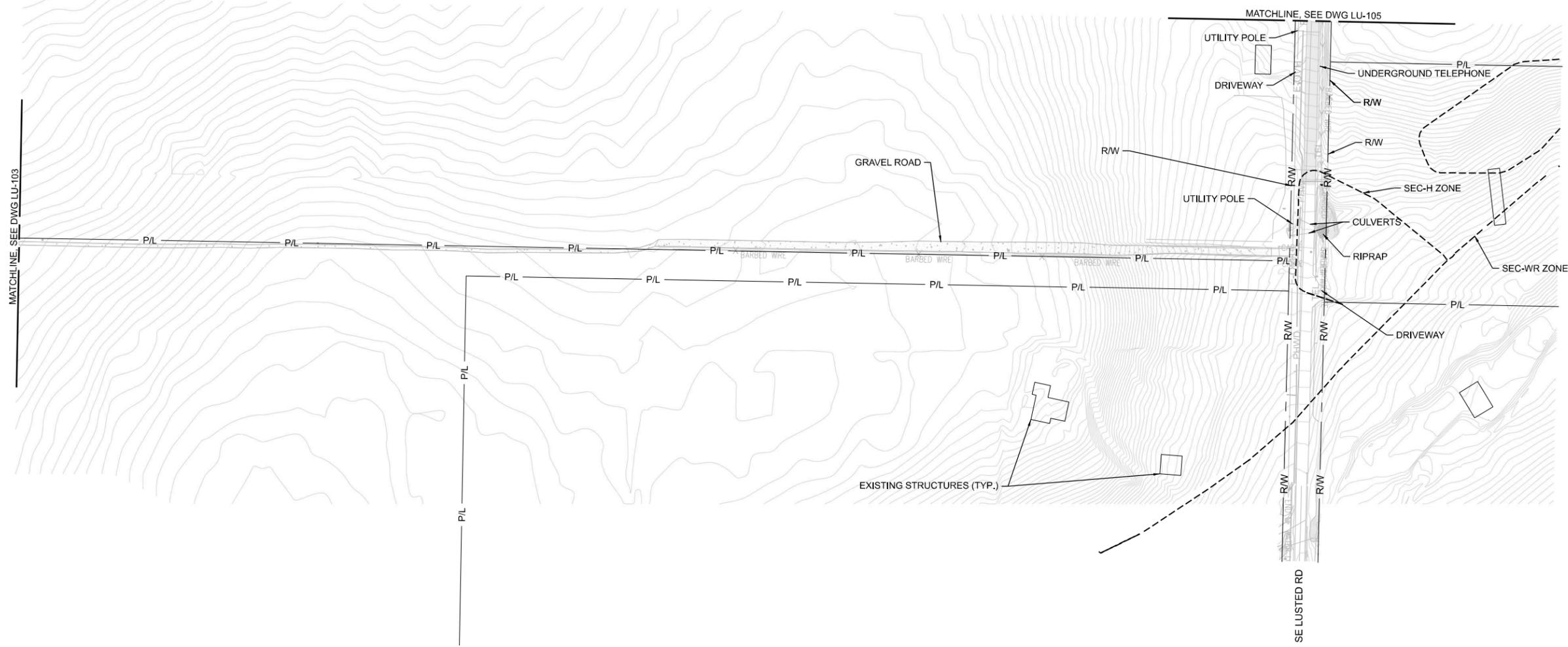
Date



**Bull Run Filtration Pipelines
FINISHED WATER PIPELINE
EXISTING CONDITIONS**
GRID 6, GRID 7

SAP Project No
W02563
1/4 Section
3866
Sheet No
LU-103

LEGEND	
---	SEC ZONE
✳	CONIFEROUS TREE
○	DECIDUOUS TREE
■	STORM INLET
□	ELECTRICAL VAULT
+	UTILITY POLE
○	WATER METER
- · - · -	COUNTY LINE
— P/L —	PROPERTY LINE
— R/W —	RIGHT-OF-WAY
▨	EXISTING ROAD
□	EXISTING STRUCTURES



KEYPLAN
Exhibit A.214.g

No	Date	Description	Appd
Revisions			
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Drawn By	JSL	Const Mgr	XXX
Checked By	RG	Const Supvr	XXX
Project Mgr	XXX	Date	12/22/22

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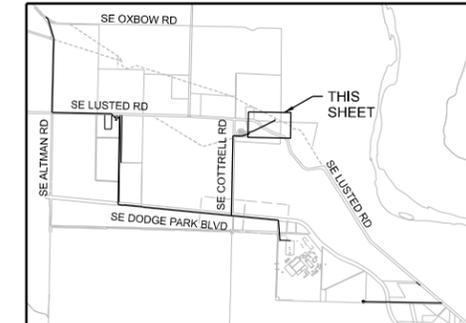
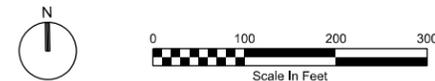
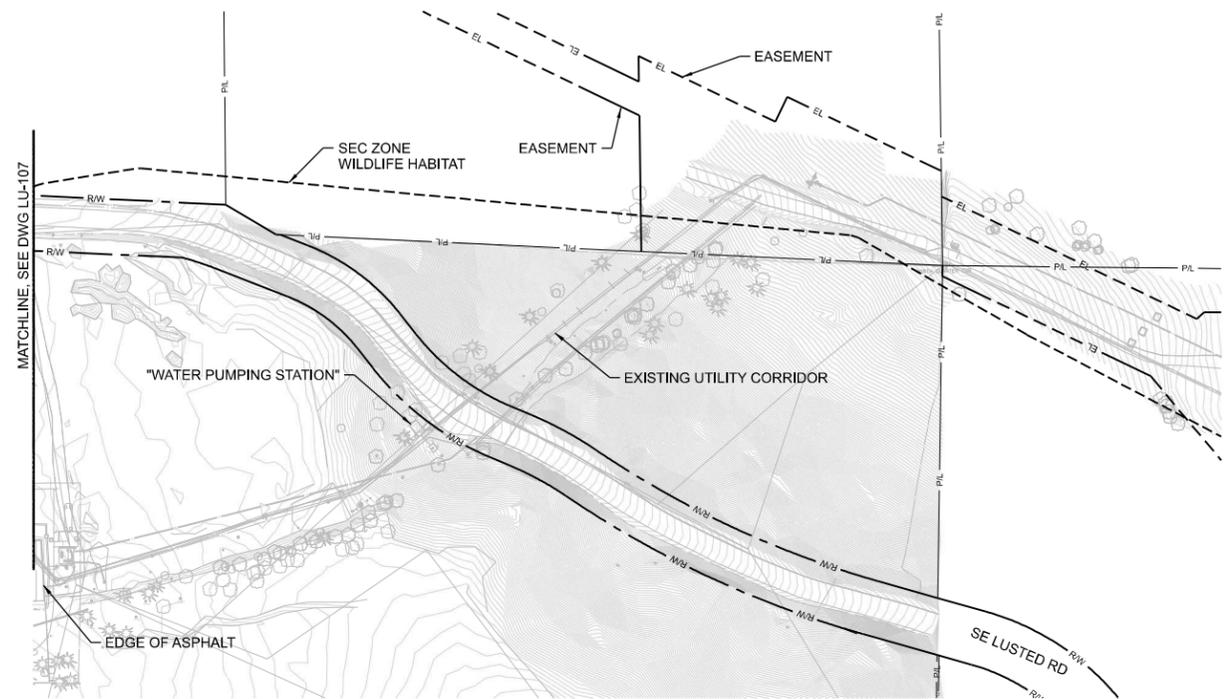


**Bull Run Filtration Pipelines
FINISHED WATER PIPELINE**
EXISTING CONDITIONS
GRID 8, GRID 9

SAP Project No	W02563
1/4 Section	3866
Sheet No	LU-104

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LEGEND	
-----	SEC ZONE
☎	CONIFEROUS TREE
○	DECIDUOUS TREE
-----	COUNTY LINE
— P/L —	PROPERTY LINE
— R/W —	RIGHT-OF-WAY
— EL —	EASEMENT



KEYPLAN
Exhibit A.214.k

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Drawn By	JSL	Const Mgr	XXX
Checked By	RG	Const Supvr	XXX
Project Mgr	XXX	Date	6/30/22

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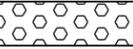
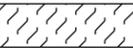
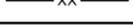
**Bull Run Filtration Pipelines
FINISHED WATER PIPELINE**
EXISTING CONDITIONS
GRID 16

SAP Project No	W02563
1/4 Section	3765
Sheet No	LU-108

GENERAL SHEET NOTES

1. ALL WORK AREAS RESTORED TO EXISTING GRADE
2. SEE SHEET GEN-L-061 FOR PLANT SCHEDULE AND SPEC 32 92 00 FOR SEEDING INFORMATION.
3. RESTORE EXISTING DRIVEWAYS IMPACTED DURING CONSTRUCTION.

LEGEND

-  ROADSIDE SEEDING
-  AGRICULTURAL SOIL TREATMENT
-  GRAVEL ACCESS ROAD
-  EXISTING STRUCTURES
-  CONTOURS
-  PIPELINE
-  SEC ZONE
-  CONIFEROUS TREE
-  DECIDUOUS TREE
-  EASEMENT
-  PROPERTY LINE
-  R/W - RIGHT OF WAY
-  IRRIGATION LINE
-  XX - PROPOSED FENCE

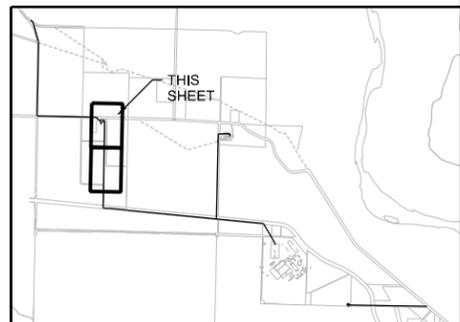
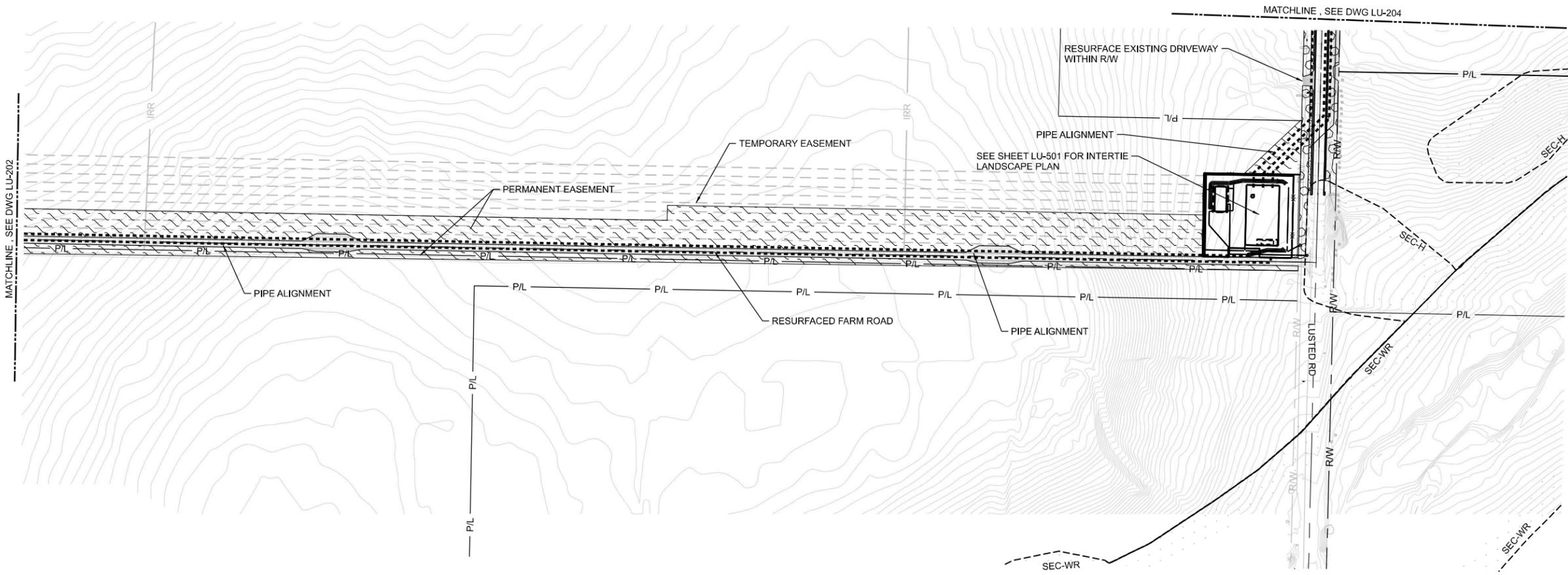


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**PRELIMINARY
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CONSTRUCTION**

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Drawn By	DG	Const Mgr	XXX
Checked By	BN	Const Supvr	XXX
Project Mgr	XXX	Date	12/22/22

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**Bull Run Filtration Pipelines
FINISH WATER PIPELINE**
PROPOSED CONDITIONS PLAN
GRID 8, GRID 9

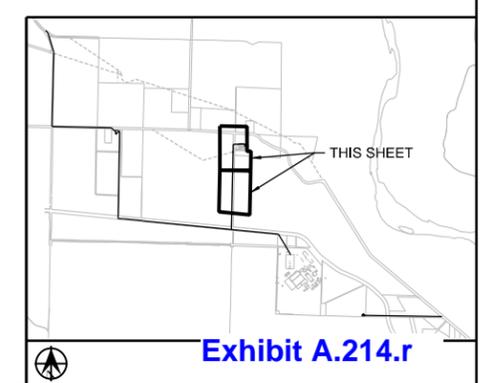
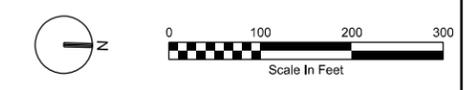
SAP Project No
W02563
1/4 Section
3866
Sheet No
LU-203

GENERAL SHEET NOTES

1. ALL WORK AREAS RESTORED TO EXISTING GRADE
2. REFER TO SEC LH-01 (APPENDIX A.3) FOR DETAILS SEC WORK.
3. SEE SHEET GEN-L-061 FOR LANDSCAPE PLANT SCHEDULE AND SPEC 32 92 00 FOR SEEDING INFORMATION

LEGEND

- ROADSIDE SEEDING
- EXISTING STRUCTURES
- CONTOURS
- PIPELINE
- SEC ZONE
- CONIFEROUS TREE
- DECIDUOUS TREE
- EASEMENT
- PROPERTY LINE
- R/W - RIGHT OF WAY



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CONSTRUCTION**

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Drawn By	DG	Const Mgr	XXX
Checked By	BN	Const Supvr	XXX
Project Mgr	XXX	Date	12/22/22

WARNING
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XXX XXX _____ Date
XXX XXX _____ Date



**Bull Run Filtration Pipelines
FINISH WATER PIPELINE**
PROPOSED CONDITIONS PLAN
GRID 14, GRID 15

SAP Project No	W02563
1/4 Section	3066
Sheet No	LU-206

GENERAL SHEET NOTES

1. SEE ARCHITECTURAL SHEETS FOR INTERTIE VAULT DETAILS
2. SEE LANDSCAPE SHEETS FOR PLANTED YARD AREAS

CONSTRUCTION NOTES

1. SHEET KEYNOTES APPLY TO SPECIFIC DRAWING ELEMENTS ON THE SHEET THEY ARE LOCATED.

LEGEND

- ACP FULL DEPTH RECONSTRUCTION MATCH COUNTY STANDARD SECTION OR MATCH EXISTING, WHICHEVER IS GREATER
- GRAVEL
- CONCRETE
- STORM DRAINAGE CULVERT
- SEC ZONE
- CONIFEROUS TREE
- DECIDUOUS TREE
- COUNTY LINE
- P/L PROPERTY LINE
- R/W RIGHT-OF-WAY
- EL EXISTING EASEMENT
- PE PROPOSED EASEMENT
- TCE TEMP CONSTRUCTION EASEMENT
- DITCH

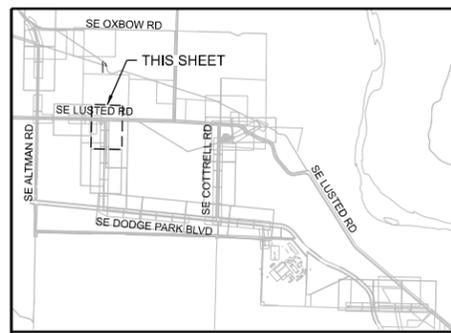
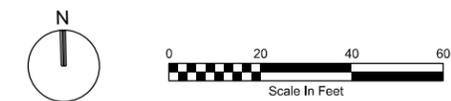
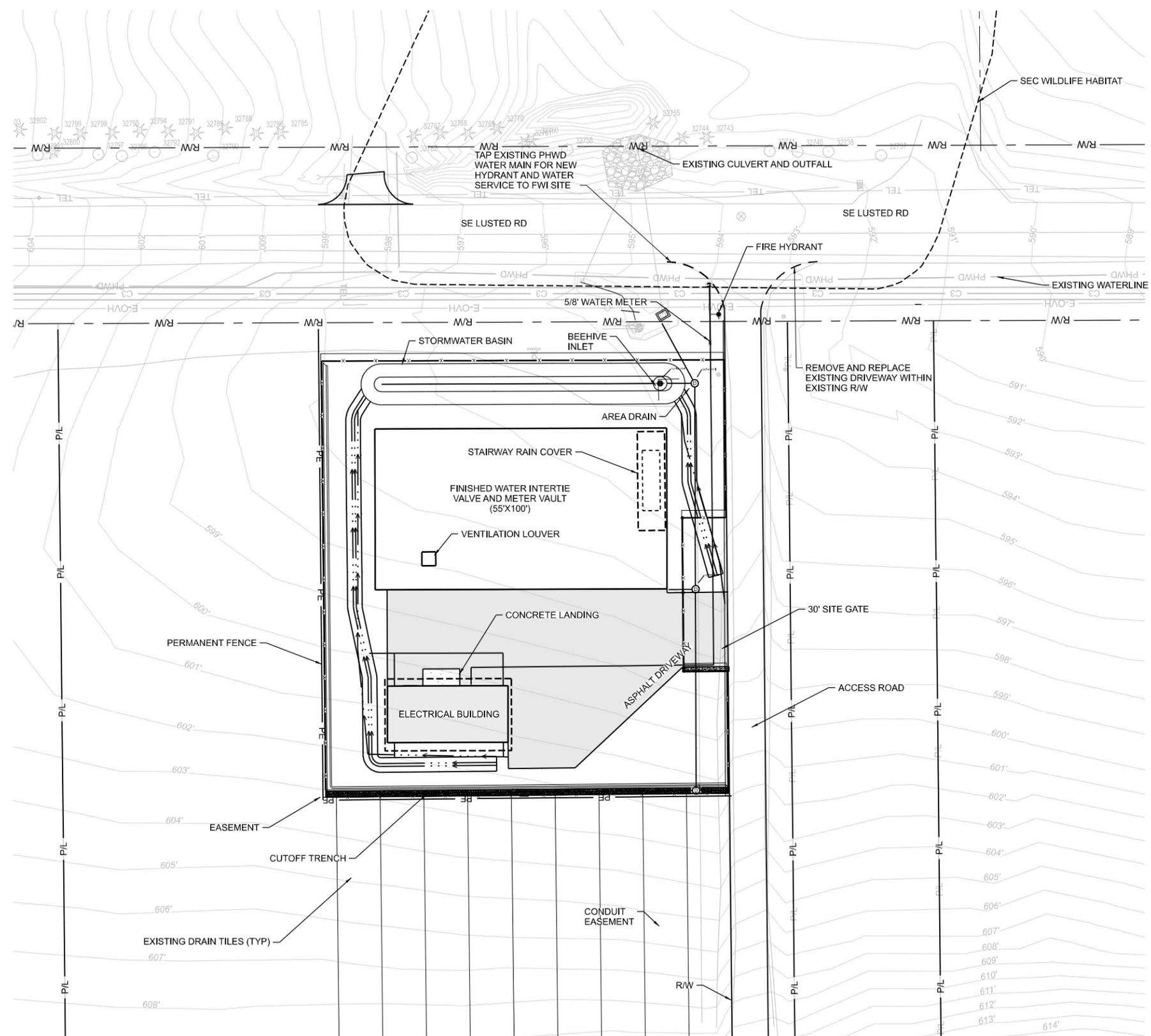


Exhibit A.214.u



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CONSTRUCTION**

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Checked By	RG	Const Supvr	XXX
Project Mgr	XXX	Date	12/22/22

WARNING
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XXX XXX _____ Date
XXX XXX _____ Date



**Bull Run Filtration Pipelines
FINISHED WATER INTERTIE
SITE PLAN**

SAP Project No
W02563
1/4 Section
3866
Sheet No
LU-500



VISUALIZATION A



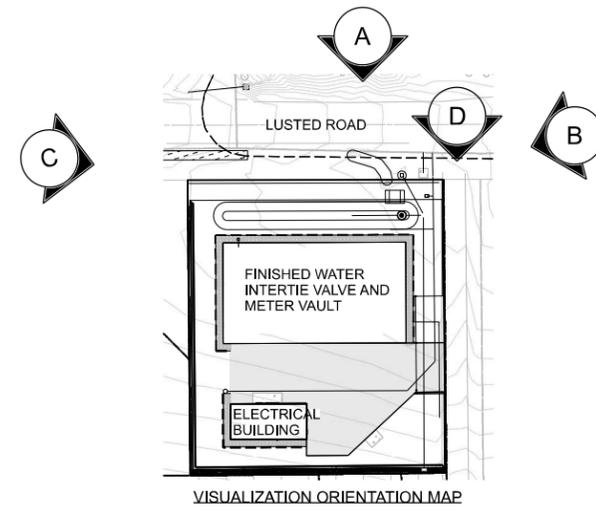
VISUALIZATION B



VISUALIZATION C



VISUALIZATION D



VISUALIZATION ORIENTATION MAP



Exhibit A.214.w

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No	Date	Description	Appd
		Revision	
		Delivered	
		Description	
		Revision	
		Survey	

**PRELIMINARY
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CONSTRUCTION**

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Drawn By	DG	Const Mgr	XXX
Checked By	BN	Const Supvr	XXX
Project Mgr		Date	3/22/23

WARNING
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If this bar does not measure 1" then the drawing is not to scale



Date
XXX XXX

Date
XXX XXX



**Bull Run Filtration Pipelines
FINISHED WATER INTERTIE
VISUALIZATIONS**

SAP Project No
W02563
1/4 Section
Sheet No
LU-502