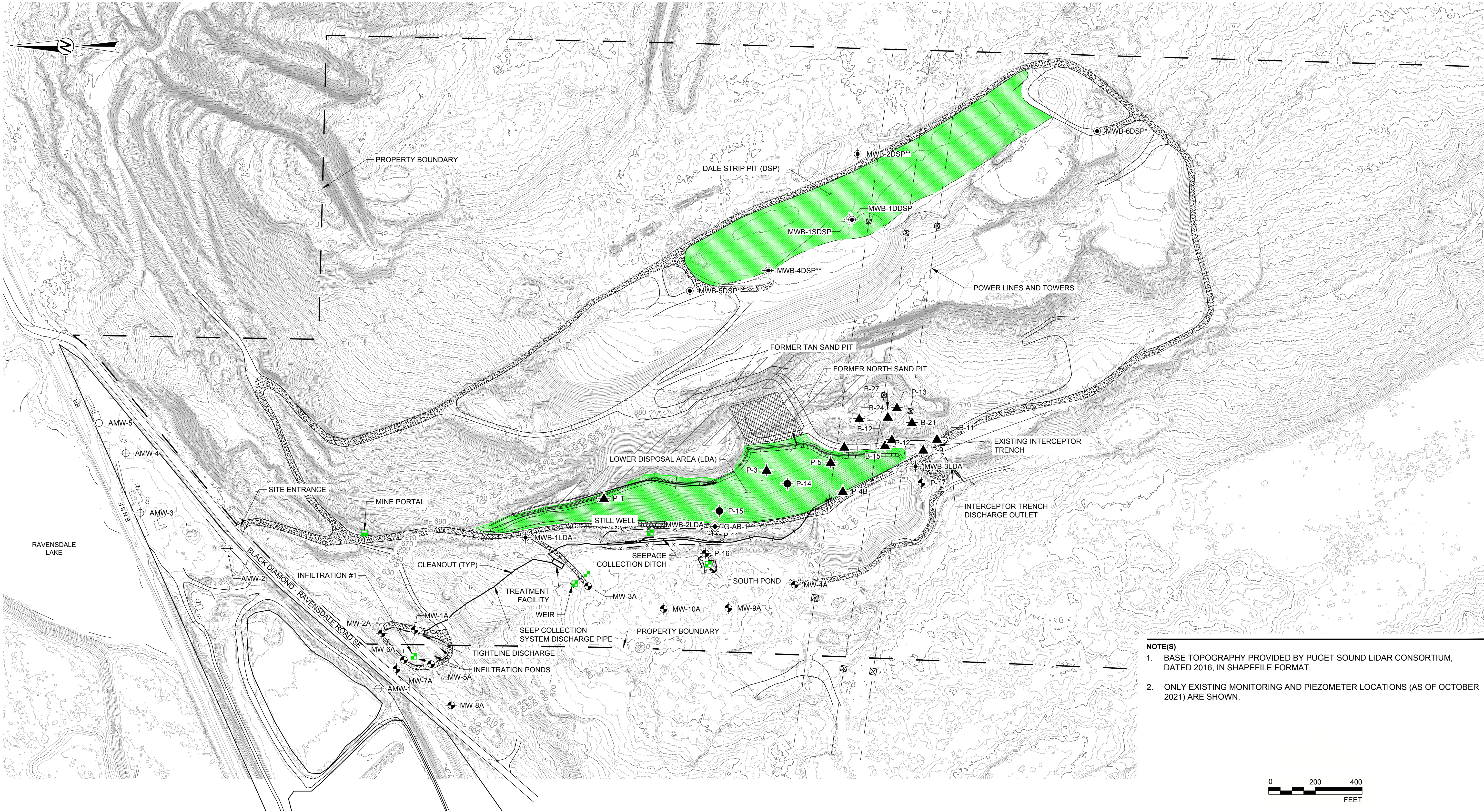


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LEGEND			
	COVER AREA		G-AB-1
	MW-1A		P-1
	MWB-1DDSP		LDA SURFACE WATER SAMPLING LOCATION
	P-14		DSP BEDROCK SAMPLING LOCATION (PORTAL)
	AMW-1		INTERCEPTOR TRENCH SAMPLING LOCATION
	AMW-2		
	AMW-3		
	AMW-4		
	AMW-5		
	AMW-6		
	AMW-7		
	AMW-8		
	AMW-9		
	AMW-10		
	AMW-11		
	AMW-12		
	AMW-13		
	AMW-14		
	AMW-15		
	AMW-16		
	AMW-17		
	AMW-18		
	AMW-19		
	AMW-20		
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	AMW-22		
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	AMW-88		
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	AMW-91		
	AMW-92		
	AMW-93		
	AMW-94		
	AMW-95		
	AMW-96		
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	AMW-98		
	AMW-99		
	AMW-100		

CLIENT
HOLCIM

CONSULTANT



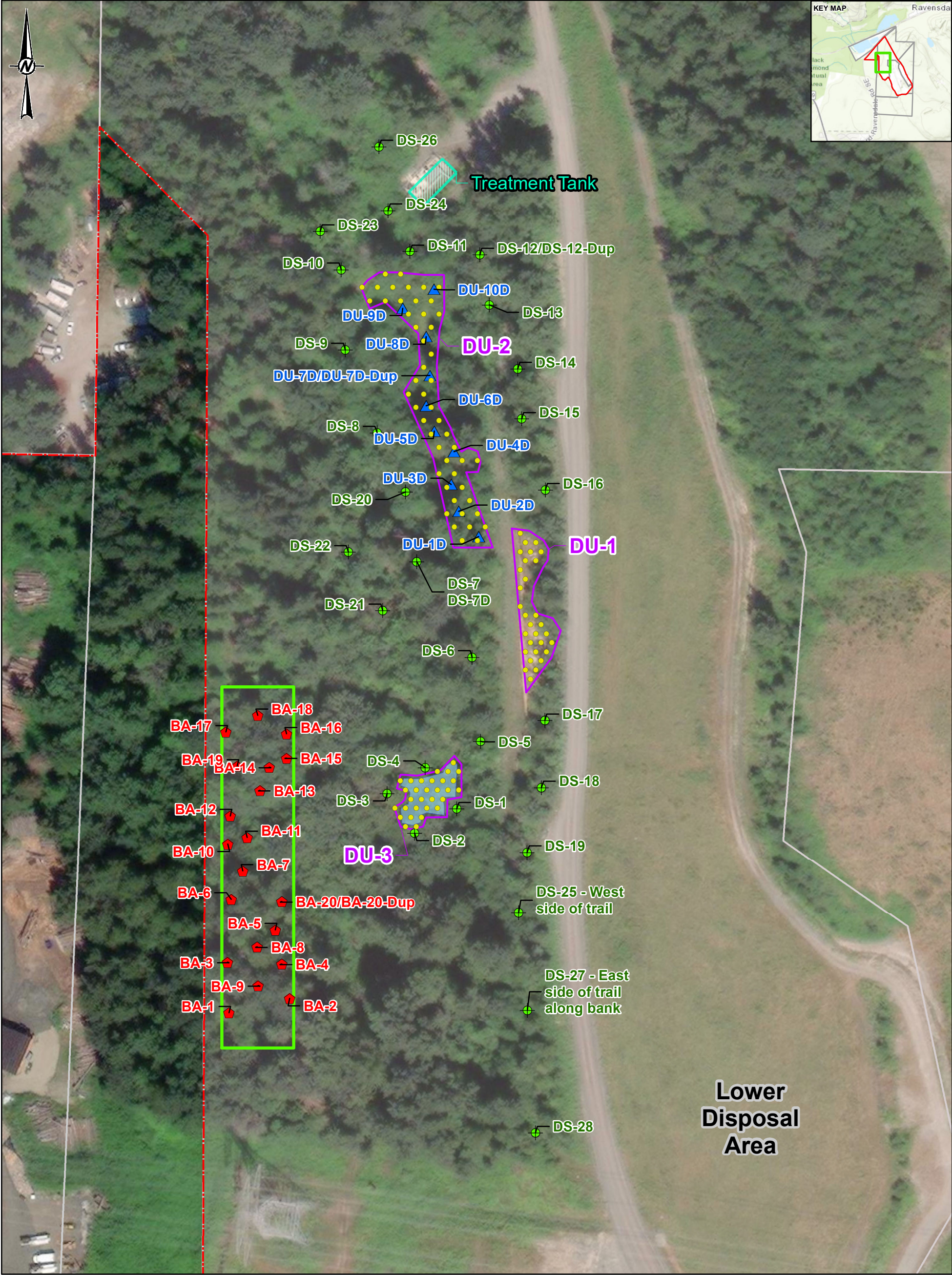
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DESIGNED	GL
PREPARED	TR
REVIEWED	GL
APPROVED	GZ

- NOTE(S)
- BASE TOPOGRAPHY PROVIDED BY PUGET SOUND LIDAR CONSORTIUM, DATED 2016, IN SHAPEFILE FORMAT.
 - ONLY EXISTING MONITORING AND PIEZOMETER LOCATIONS (AS OF OCTOBER 2021) ARE SHOWN.

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
RI BOREHOLE AND GROUNDWATER MONITORING LOCATIONS

PROJECT NO. TASK REV. FIGURE
GL152030402.001 04 A 4-1



- LEGEND**
- Background Area Sample Location
 - DU-2 Deeper Soil Sample Location
 - Approximate Delineation Soil Sample Location
 - Sampling Location
 - Decision Unit
 - Treatment Tank
 - Background Area
 - South Pond
 - Preliminary Site
 - Parcel

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YYYY-MM-DD	2025-01-15
DESIGNED	TL
PREPARED	MK, MR, KS
REVIEWED	GL
APPROVED	GZ

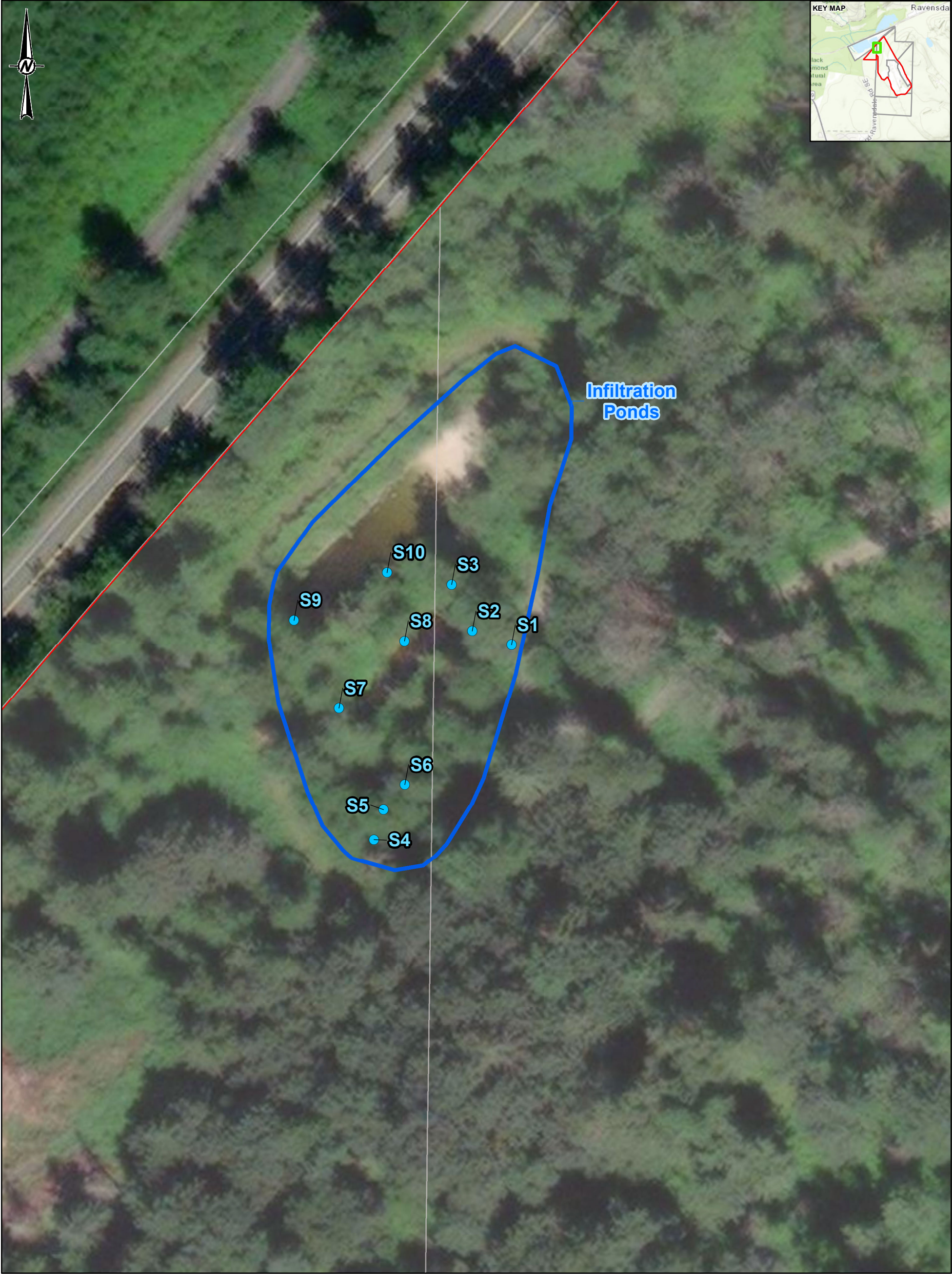
NOTE(S)
1. "PRELIMINARY SITE" REFERS TO THE REMEDIAL INVESTIGATION STUDY AREA THAT INCLUDES PARCELS 0121069011 (LOT 5), 3622069138 (LOT 6) AND 3522069046 (BAJA PROPERTY).

REFERENCE(S)
1. GOLDER (DECISION UNITS, SAMPLING LOCATIONS, TREATMENT TANK)
2. ASPECT CONSULTING (SITE BOUNDARY, PARCEL)
3. COORDINATE SYSTEM: NAD 1983 STATEPLANE WASHINGTON NORTH FIPS 4601 FT US
4. MAP SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP, GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

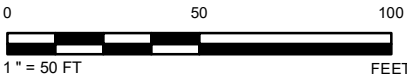
PROJECT
REMEDIAL INVESTIGATION REPORT – RESERVE SILICA
RECLAMATION SITE

TITLE
ISM DECISION UNITS AND SAMPLING LOCATIONS

PROJECT NO.	PHASE	REV.	FIGURE
152030402	004	0	4-2



- LEGEND**
- Infiltration Ponds Sample Location
 - Infiltration Ponds
 - Preliminary Site
 - Parcel



CLIENT
HOLCIM

CONSULTANT



YYYY-MM-DD	2025-01-15
DESIGNED	TL
PREPARED	CK, KS
REVIEWED	GL
APPROVED	GZ

NOTE(S)
1. "PRELIMINARY SITE" REFERS TO THE REMEDIAL INVESTIGATION STUDY AREA THAT INCLUDES PARCELS 0121069011 (LOT 5), 3622069138 (LOT 6) AND 3522069046 (BAJA PROPERTY).

REFERENCE(S)
1. GOLDR (DECISION UNITS, SAMPLING LOCATIONS, TREATMENT TANK)
2. ASPECT CONSULTING (SITE BOUNDARY, PARCEL)
3. COORDINATE SYSTEM: NAD 1983 STATEPLANE WASHINGTON NORTH FIPS 4601 FT US
4. MAP SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP, GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY

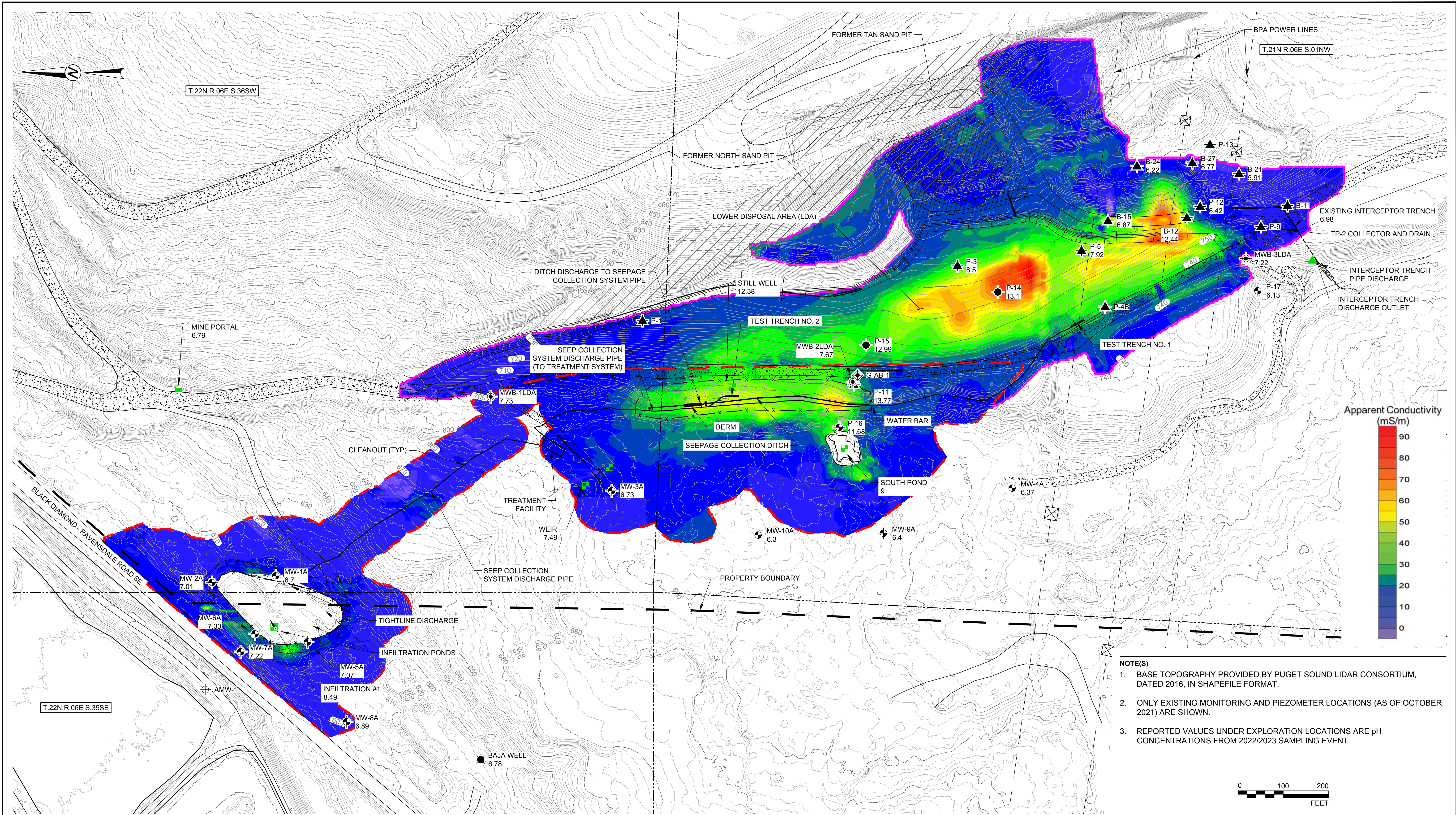
PROJECT
REMEDIAL INVESTIGATION REPORT – RESERVE SILICA RECLAMATION SITE

TITLE
INFILTRATION PONDS SEDIMENT SAMPLING LOCATIONS

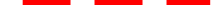
PROJECT NO.	PHASE	REV.	FIGURE
GL 152030402	04	A	4-3

1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSIS

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- NOTE(S)
1. BASE TOPOGRAPHY PROVIDED BY PUGET SOUND LIDAR CONSORTIUM, DATED 2016, IN SHAPEFILE FORMAT.
 2. ONLY EXISTING MONITORING AND PIEZOMETER LOCATIONS (AS OF OCTOBER 2021) ARE SHOWN.
 3. REPORTED VALUES UNDER EXPLORATION LOCATIONS ARE pH CONCENTRATIONS FROM 2022/2023 SAMPLING EVENT.

LEGEND							
	G-AB-1	RI SOIL BORING		P-1	PRE-RI PIEZOMETER		FENCE LINE
	MW-1A	ALLUVIAL/SALLOW MONITORING WELL		BAJA WELL	PRIVATE WELL		APPROXIMATE 2019 GEOPHYSICS SURVEY EXTENTS
	MWB-1DDSP	BEDROCK MONITORING WELL			LDA SURFACE WATER SAMPLING LOCATION		APPROXIMATE 2010 GEOPHYSICS SURVEY EXTENTS
	P-14	LDA MONITORING WELL			DSP BEDROCK SAMPLING LOCATION (PORTAL)		TOWNSHIP, RANGE, SECTION, AND QUARTER BOUNDARIES
	AMW-1	PLANT SITE MONITORING WELLS			INTERCEPTOR TRENCH SAMPLING LOCATION		LAYDOWN AREA

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HOLCIM

CONSULTANT



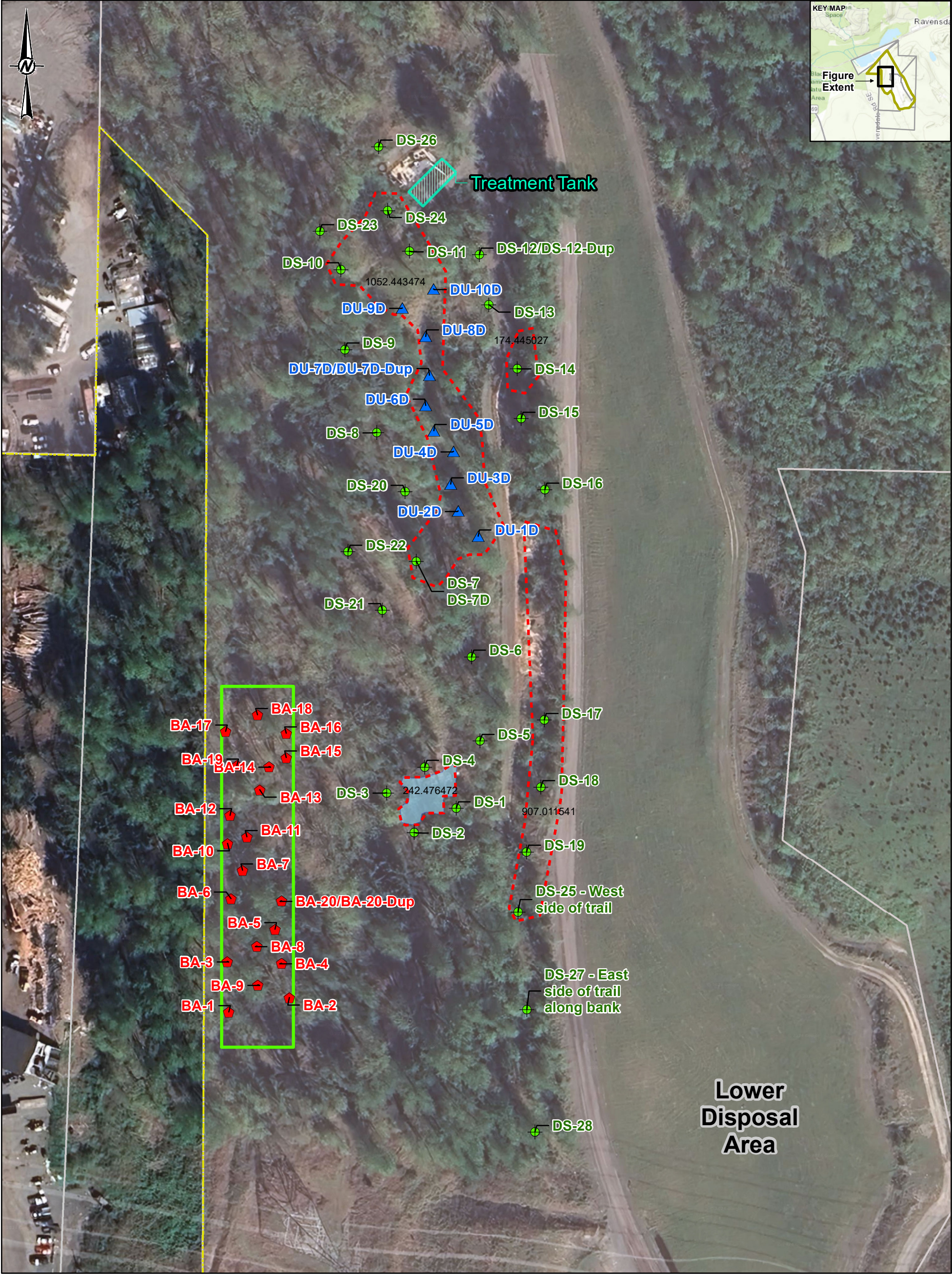
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DESIGNED	GL
PREPARED	TR
REVIEWED	GL
APPROVED	GZ

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
**CORRELATION BETWEEN THE APPARENT CONDUCTIVITY
SURVEYS AND THE PH DATA FROM THE MONITORING WELLS**

PROJECT NO.	TASK	REV.	FIGURE
GL152030402.001 04	04	A	5-1

1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D



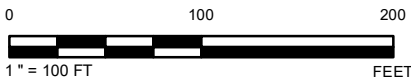
LEGEND

- Background Area Sample Location
- DU-2 Deeper Soil Sample Location
- Approximate Delineation Soil Sample Location
- Background Area
- Treatment Tank
- South Pond
- Parcel
- Preliminary Site
- Soil Delineation Boundary

Approximate areas where COPC concentrations exceed at least one PCUL and background concentration.

CLIENT
HOLCIM

CONSULTANT



YYYY-MM-DD	2025-01-15
DESIGNED	TL
PREPARED	CK/KS
REVIEWED	GL
APPROVED	GZ

NOTE(S)

1. "PRELIMINARY SITE" REFERS TO THE REMEDIAL INVESTIGATION STUDY AREA THAT INCLUDES PARCELS 0121069011 (LOT 5), 3622069138 (LOT 6) AND 3522069046 (BAJA PROPERTY).

REFERENCE(S)

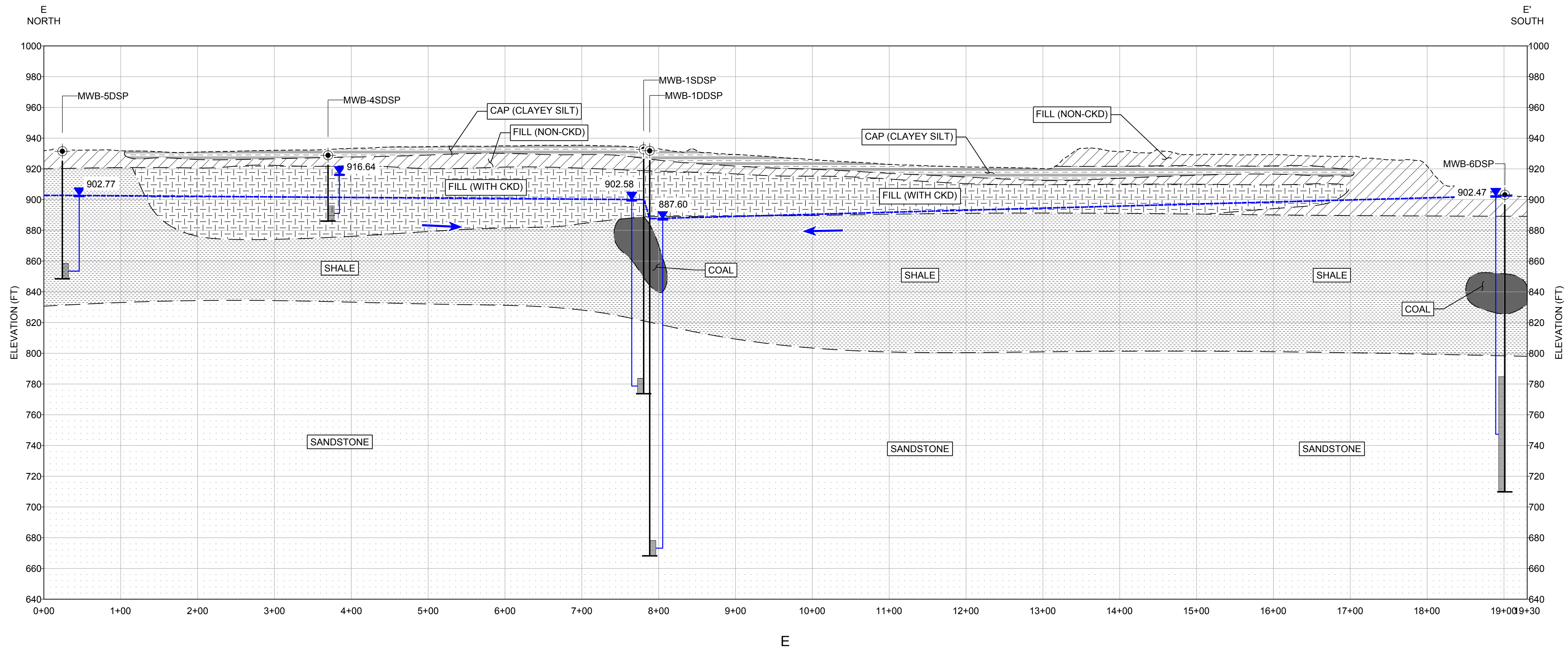
1. GOLDER (DECISION UNITS, SAMPLING LOCATIONS, TREATMENT TANK)
2. ASPECT CONSULTING (SITE BOUNDARY, PARCEL)
3. COORDINATE SYSTEM: NAD 1983 STATEPLANE WASHINGTON NORTH FIPS 4601 FT US
4. MAP SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, INTERMAP, INCREMENT P CORP, GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

PROJECT
REMEDIAL INVESTIGATION REPORT – RESERVE SILICA RECLAMATION SITE

TITLE
DELINEATION AREAS OF SOIL EXCEEDING PRELIMINARY CLEANUP LEVELS

PROJECT NO.	PHASE	REV.	FIGURE
GL 152030402	04	A	5-2

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LEGEND

-----	EXISTING GROUND PROFILE	////	FILL (NON-CKD)
---	INFERRED GEOLOGIC CONTACT		FILL (WITH CKD)
---	INFERRED GROUNDWATER SURFACE		CAP (CLAYEY SILT)
▼	WATER LEVEL MEASURED AUGUST 26, 2019 IN FEET NAVD88	■	COAL
→	CONCEPTUAL GROUNDWATER FLOW DIRECTION	■	SHALE
⊙	BEDROCK GROUNDWATER MONITORING WELL	■	SANDSTONE
O/S	OFFSET (ft)		
⊕	SOIL BORING		
⊕	SCREEN INTERVAL		

NOTE(S)

1. PIEZOMETER / MONITORING WELL ELEVATIONS BASED ON SURVEY DATE AND MAY NOT MATCH SURFACE PROFILE FROM KING COUNTY 2016 LIDAR.
2. GEOLOGIC UNITS INFERRED AND PROJECTED ONTO CROSS SECTION LINE.
3. MWB-4SDSP WATER LEVEL NOT INCLUDED BECAUSE IT IS INSTALLED IN A SHALLOW PERCHED AQUIFER.
4. CROSS SECTION OF FILL (WITH CKD) AND CAP (CLAYEY SILT) PROJECTED ONTO PROFILE LINE E-E' FOR CLARITY.
5. SEE PLAN VIEW ON FIGURE 3-1.
6. GROUNDWATER ELEVATIONS FOR MONITORING WELLS ARE FROM THE MARCH 2024 SAMPLING.

REFERENCE(S)

BASE TOPOGRAPHY PROVIDED BY PUGET SOUND LIDAR CONSORTIUM, DATED 2016, IN SHAPEFILE FORMAT.

CLIENT
HOLCIM

CONSULTANT



YYYY-MM-DD	2025-03-10
DESIGNED	GL
PREPARED	TR
REVIEWED	GL
APPROVED	GZ

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
CONCEPTUAL CROSS SECTION E-E'

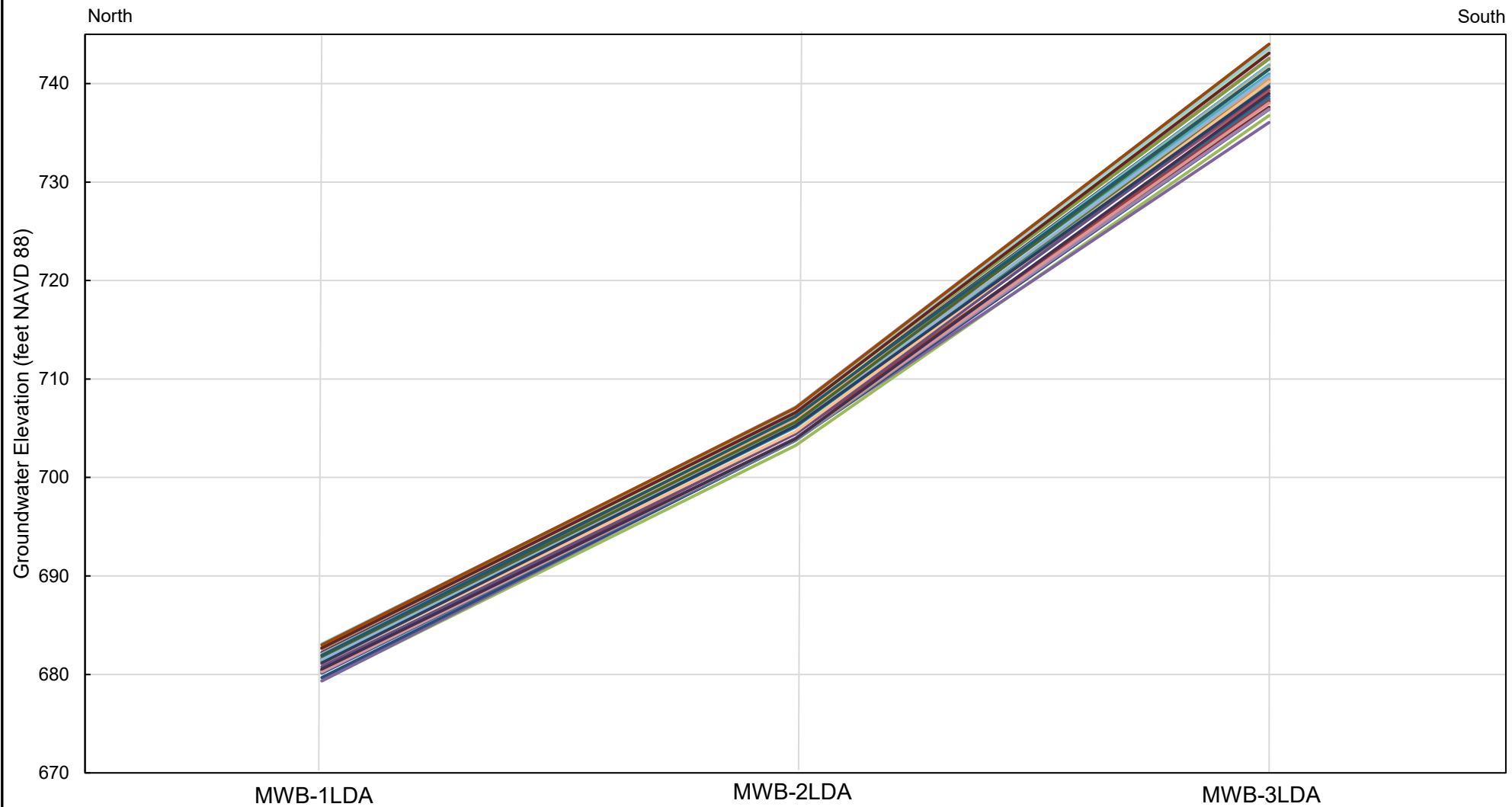
PROJECT NO.
GL152030402.001 04

TASK

REV.
A

FIGURE
6-1

1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D



LEGEND

10-Feb-15	4-May-15	4-Aug-15	4-Nov-15
8-Feb-16	2-May-16	22-Aug-16	1-Nov-16
31-Jan-17	30-May-17	16-Aug-17	9-Nov-17
28-Feb-18	1-May-18	22-Aug-18	6-Nov-18
11-Mar-19	8-May-19	27-Aug-19	13-Nov-19
14-Feb-20	13-Aug-20	9-Dec-20	5-Mar-21
10-Jun-21	13-Oct-21	5-Jan-22	17-Mar-22
21-Jun-22	12-Sep-22	12-Dec-22	15-Mar-23
27-Jun-23	6-Sep-23	12-Dec-23	4-Mar-24

CLIENT
HOLCIM

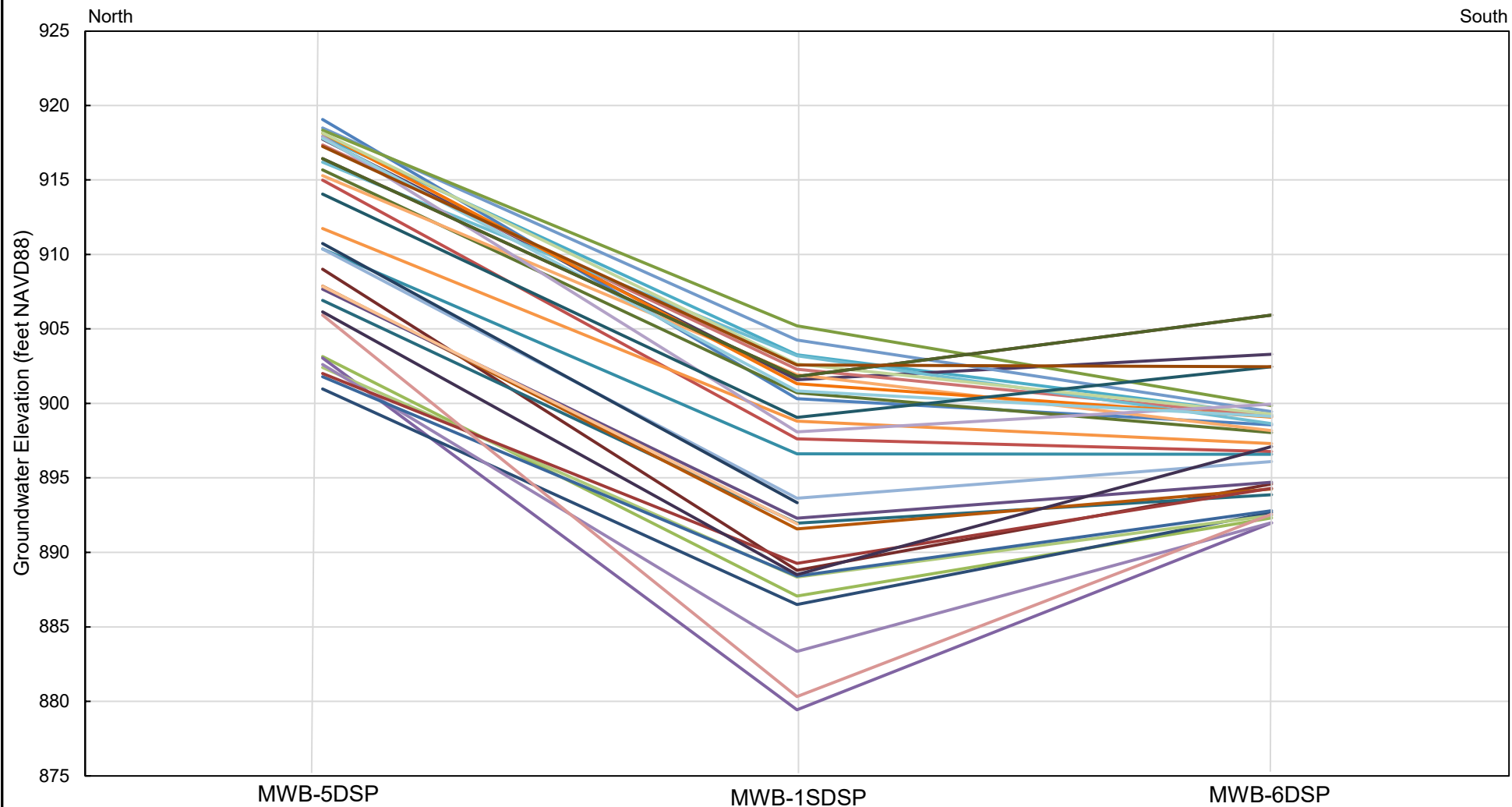
CONSULTANT



PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
LDA HISTORICAL BEDROCK GROUNDWATER ELEVATIONS

PROJECT NO. GL152030402.001	PHASE 04	REV. A	FIGURE 6-2
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Note: Groundwater elevations shown in the time series chart in wells MWB-5DSP and MWB-6DSP are corrected with a downward gradient observed in well pair MWB-1SDSP and MWB-1DDSP based upon screen elevations.

LEGEND

10-Feb-15	4-May-15	4-Aug-15	4-Nov-15
8-Feb-16	2-May-16	22-Aug-16	1-Nov-16
31-Jan-17	30-May-17	16-Aug-17	9-Nov-17
28-Feb-18	1-May-18	22-Aug-18	6-Nov-18
11-Mar-19	8-May-19	27-Aug-19	13-Nov-19
14-Feb-20	13-Aug-20	9-Dec-20	5-Mar-21
10-Jun-21	13-Oct-21	5-Jan-22	17-Mar-22
21-Jun-22	12-Sep-22	12-Dec-22	15-Mar-23
27-Jun-23	6-Sep-23	12-Dec-23	4-Mar-24

CLIENT
HOLCIM

CONSULTANT



PROJECT

REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE

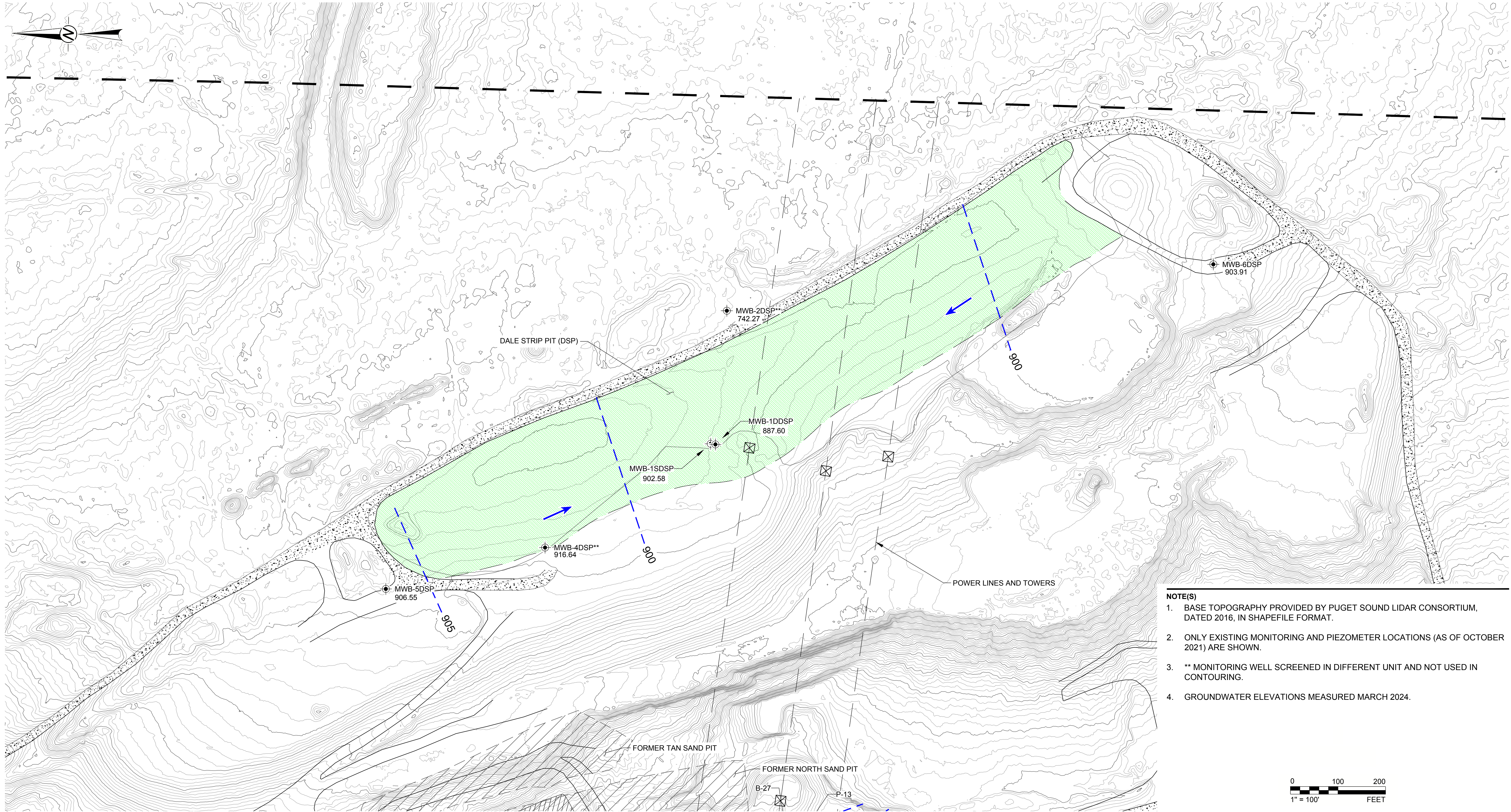
DSP HISTORICAL BEDROCK GROUNDWATER ELEVATIONS

PROJECT NO.
GL152030402.001 04

REV.
A

FIGURE
6-4

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LEGEND					
	COVER AREA		P-1		PRE-RI PIEZOMETER
	MW-1A		ALLUVIAL/SALLOW MONITORING WELL		LDA SURFACE WATER SAMPLING LOCATION
	MWB-1DDSP		BEDROCK MONITORING WELL		DSP BEDROCK SAMPLING LOCATION (PORTAL)
	P-14		LDA MONITORING WELL		CONCEPTUAL GROUNDWATER FLOW DIRECTION
	AMW-1		PLANT SITE MONITORING WELLS		INTERCEPTOR TRENCH SAMPLING LOCATION
					ACCESS ROAD
					FENCE LINE
					INFERRED GROUNDWATER SURFACE

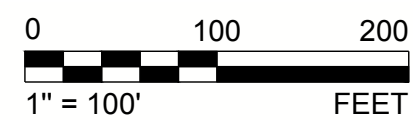
CLIENT
HOLCIM

CONSULTANT



YYYY-MM-DD	2025-03-10
DESIGNED	GL
PREPARED	TR
REVIEWED	GL
APPROVED	GZ

- NOTE(S)**
1. BASE TOPOGRAPHY PROVIDED BY PUGET SOUND LIDAR CONSORTIUM, DATED 2016, IN SHAPEFILE FORMAT.
 2. ONLY EXISTING MONITORING AND PIEZOMETER LOCATIONS (AS OF OCTOBER 2021) ARE SHOWN.
 3. ** MONITORING WELL SCREENED IN DIFFERENT UNIT AND NOT USED IN CONTOURING.
 4. GROUNDWATER ELEVATIONS MEASURED MARCH 2024.



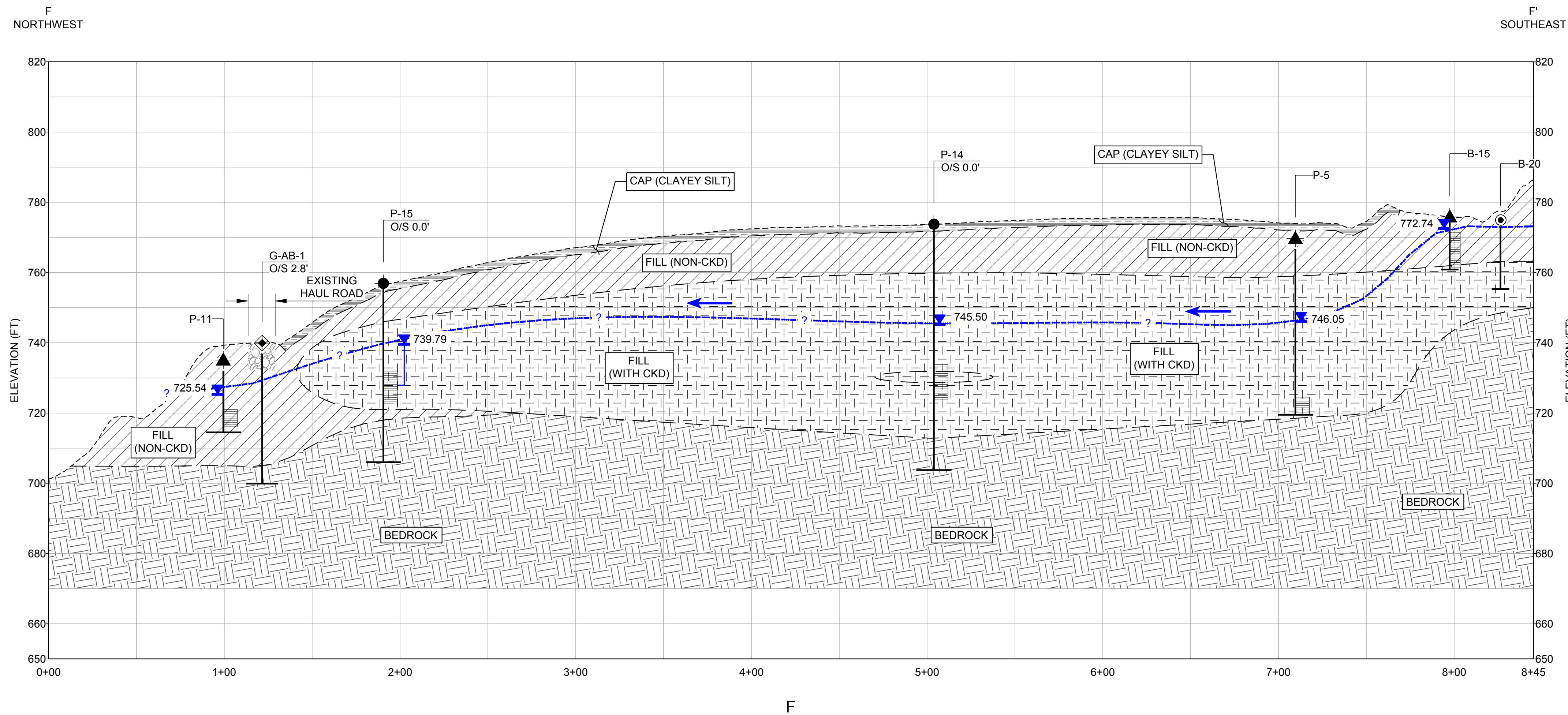
PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
CONCEPTUAL DSP BEDROCK GROUNDWATER ELEVATIONS

PROJECT NO.	TASK	REV.	FIGURE
GL152030402.001 04		A	6-5

1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

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LEGEND

-----	EXISTING GROUND PROFILE		EXPLORATORY BOREHOLE (BACKFILLED)
---	INFERRED GEOLOGIC CONTACT	O/S	OFFSET (ft)
---	INFERRED GROUNDWATER SURFACE		SOIL BORING
	WATER LEVEL MEASURED AUGUST 26, 2019 IN FEET NAVD88		SCREEN INTERVAL
	CONCEPTUAL GROUNDWATER FLOW DIRECTION		FILL (NON-CKD)
	PRE-RI PIEZOMETER (EXISTING)		FILL (WITH CKD)
	LDA MONITORING WELL		CAP (CLAYEY SILT)
	RI SOIL BORING		BEDROCK
	2016 INTERCEPTOR TRENCH EXTENSION BOREHOLE		SAND AND GRAVEL, CONTAINS VARIABLE AMOUNTS OF SILT, MIXED WITH SLAG FRAGMENTS

NOTE(S)

- PIEZOMETER / MONITORING WELL ELEVATIONS BASED ON SURVEY DATE AND MAY NOT MATCH SURFACE PROFILE FROM KING COUNTY 2016 LIDAR.
- GEOLOGIC UNITS INFERRED AND PROJECTED ONTO CROSS SECTION LINE.
- SEE PLAN VIEW ON FIGURE 3-2.
- GROUNDWATER ELEVATIONS FOR MONITORING WELLS ARE FROM THE MARCH 2024 SAMPLING.

REFERENCE(S)

BASE TOPOGRAPHY PROVIDED BY PUGET SOUND LIDAR CONSORTIUM, DATED 2016, IN SHAPEFILE FORMAT.

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HOLCIM

CONSULTANT



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PREPARED	TR
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APPROVED	GZ

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
CONCEPTUAL CROSS SECTION F-F'

PROJECT NO.
GL152030402.001 04

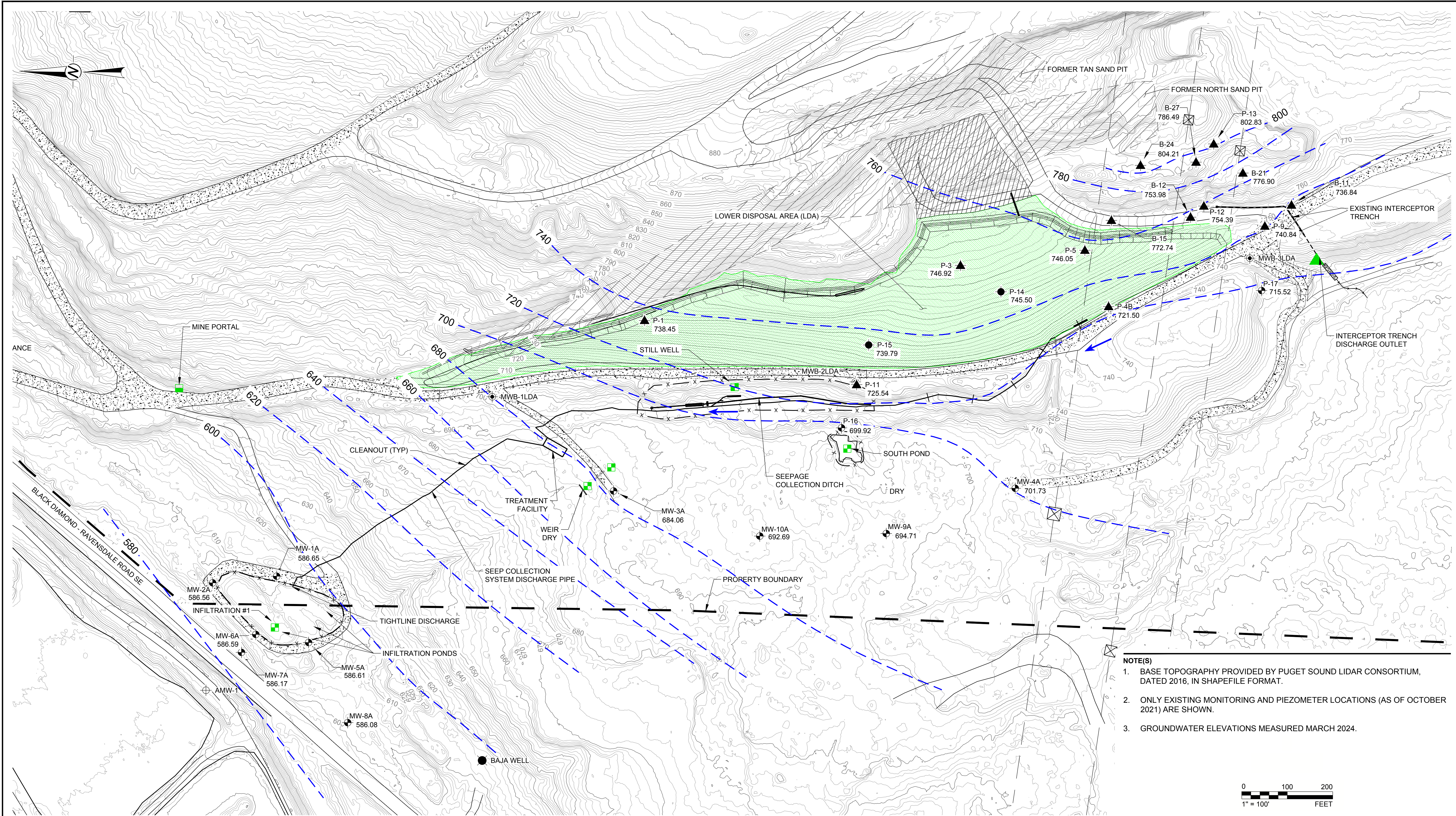
TASK

REV.
A

FIGURE
6-6

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

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LEGEND			
	COVER AREA		P-1
	MW-1A		PRE-RI PIEZOMETER
	MWB-1DDSP		LDA SURFACE WATER SAMPLING LOCATION
	P-14		DSP BEDROCK SAMPLING LOCATION (PORTAL)
	AMW-1		INTERCEPTOR TRENCH SAMPLING LOCATION
	PLANT SITE MONITORING WELLS		BAJA WELL
			PRIVATE WELL
			FENCE LINE
			INFERRED GROUNDWATER SURFACE
			CONCEPTUAL GROUNDWATER FLOW DIRECTION
			ACCESS ROAD
			LAYDOWN AREA

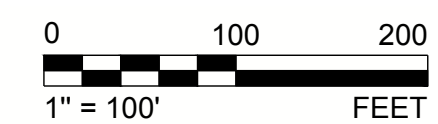
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CONSULTANT



YYYY-MM-DD	2025-03-10
DESIGNED	GL
PREPARED	TR
REVIEWED	GL
APPROVED	GZ

- NOTE(S)**
1. BASE TOPOGRAPHY PROVIDED BY PUGET SOUND LIDAR CONSORTIUM, DATED 2016, IN SHAPEFILE FORMAT.
 2. ONLY EXISTING MONITORING AND PIEZOMETER LOCATIONS (AS OF OCTOBER 2021) ARE SHOWN.
 3. GROUNDWATER ELEVATIONS MEASURED MARCH 2024.



PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
CONCEPTUAL SHALLOW GROUNDWATER CONTOUR MAP

PROJECT NO.
GL152030402.001 04

TASK

REV.
A

FIGURE
6-7

1 in IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D



