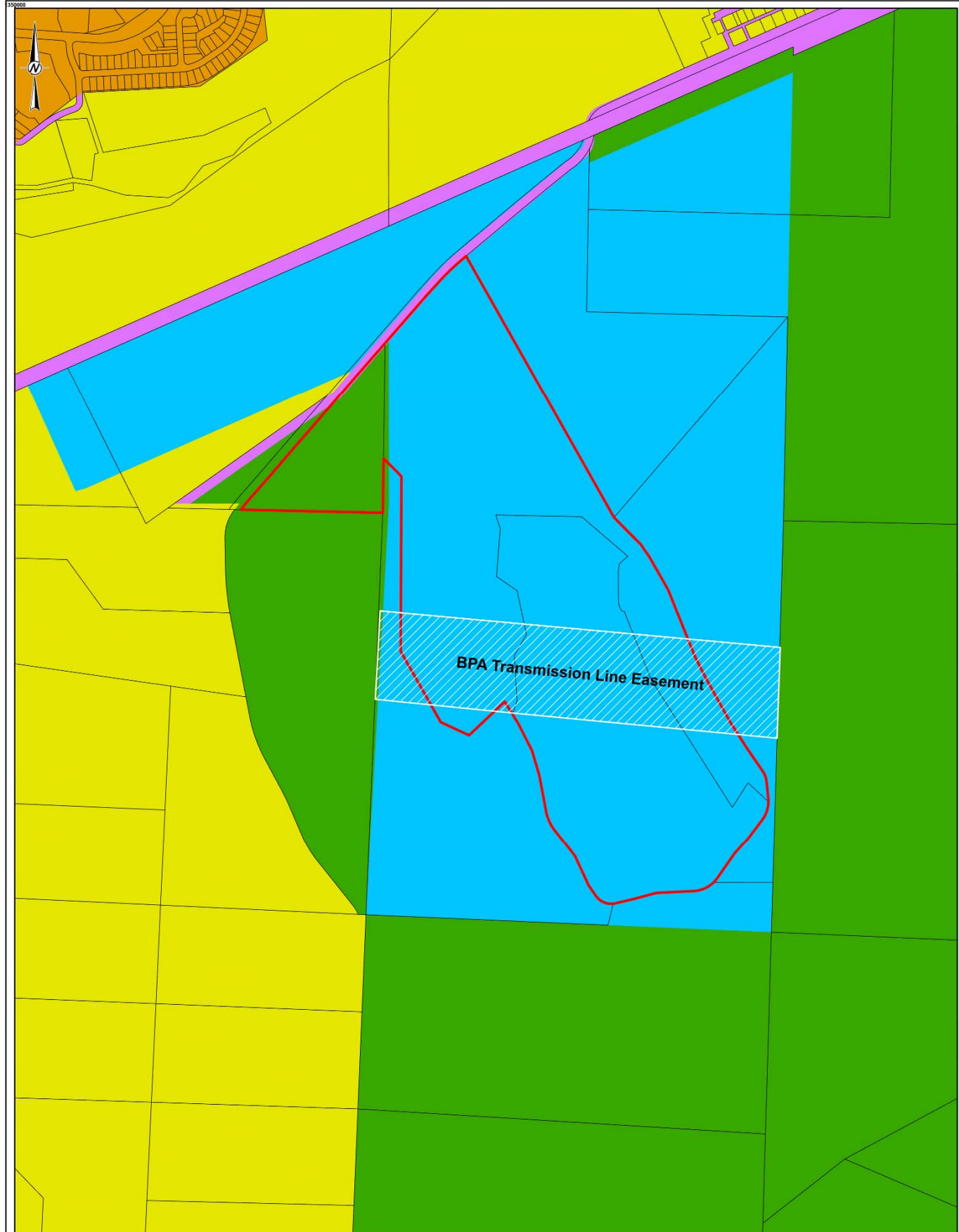


Figures



- LEGEND**
- King County Parcel Boundary
 - Preliminary Site
 - Forest
 - Mineral Resource-Related
 - Rural Area
 - Single-Family Residential
 - Undesignated

DRAFT




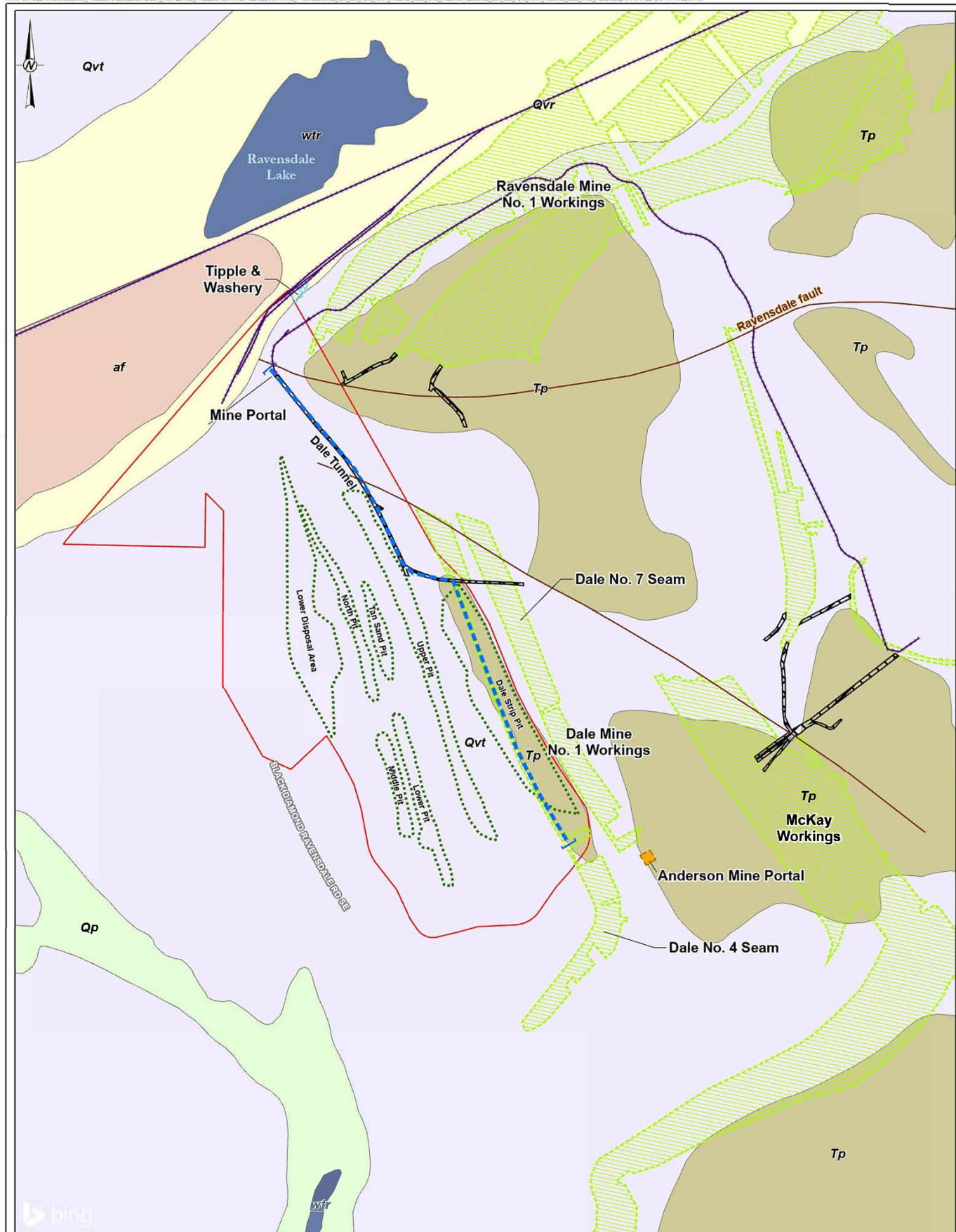
NOTE(S)

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. ASPECT CONSULTING (BPA TRANSMISSION LINE EASEMENT, SITE)
2. KING COUNTY GIS OPEN DATA (PARCEL, ZONING)
3. COORDINATE SYSTEM: NAD 1983 HARN STATEPLANE WASHINGTON NORTH FIPS 4601 FEET

CLIENT HOLCIM	
PROJECT REMEDIAL INVESTIGATION REPORT – RESERVE SILICA RECLAMATION SITE	
TITLE AREA ZONING MAP	
CONSULTANT	
	YYYY-MM-DD 2025-01-15
	DESIGNED TL
	PREPARED CK, KS
	REVIEWED GL
PROJECT NO. GL152030402	PHASE 04
	REV. A
APPROVED GZ	



LEGEND

- Fault
- Preliminary Site
- Conceptual Cross Section (See Figure 2-5)
- Historical Coal and/or Sand Mine Pit Extent
- Anderson Mine Portal
- Historical Mine Features
- Area of Chutes and Pillars
- Underground Mine Portal
- Surface Structure
- Underground Tunnel

Surface Tram/Rail

Water

Water (wtr)

Quaternary Rocks and Deposits

■ Holocene artificial fill and modified land (af)

■ Quaternary bog, marsh, swamp, or lake deposits (Qp)

Tertiary Rocks

■ Vashon Recessional Outwash (Qvr)

■ Vashon Lodgement Till (Qvt)

■ Tertiary sedimentary rocks and deposits (Tp)

NOTES

1. "PRELIMINARY SITE" REFERS TO THE REMEDIAL INVESTIGATION STUDY AREA THAT INCLUDES PARCELS 0121000011 (LOT 5), 3622000138 (LOT 8) AND 3522000046 (BAJA PROPERTY).
2. HISTORICAL COAL MINING FEATURES DIGITIZED FROM DALE COAL COMPANY MAP OF THE DALE MINE NO. 1, DATED JANUARY 28, 1925.

REFERENCE(S)

1. ASPECT CONSULTING (CONCEPTUAL CROSS SECTION, HISTORICAL MINING FEATURES, PIT SITE, SURFACE TRAM/RAIL)
2. COORDINATE SYSTEM: NAD 1983 HARN STATEPLANE WASHINGTON NORTH FIPS 4601 FEET
3. MAP SERVICE LAYER CREDITS:

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HOLCIM

PROJECT
REMEDIAL INVESTIGATION REPORT – RESERVE SILICA RECLAMATION SITE

TITLE
HISTORICAL COAL MINING FEATURES

CONSULTANT



YYYY-MM-DD	
2025-03-10	
DESIGNED	TL
PREPARED	CK, KAS
REVIEWED	GL
APPROVED	GZ

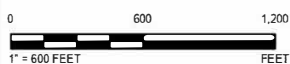
PROJECT NO.
1520304

PHASE
002

REV
A

FIGURE
2-3

DRAFT



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REFERENCE(S)
FIGURE PRESENTED AS RECEIVED FROM ASPECT CONSULTING, LLC MARCH 9, 2020.

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CONSULTANT



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PREPARED	TR
REVIEWED	GL
APPROVED	GZ

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0 400 ft
SCALE IS APPROXIMATE

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

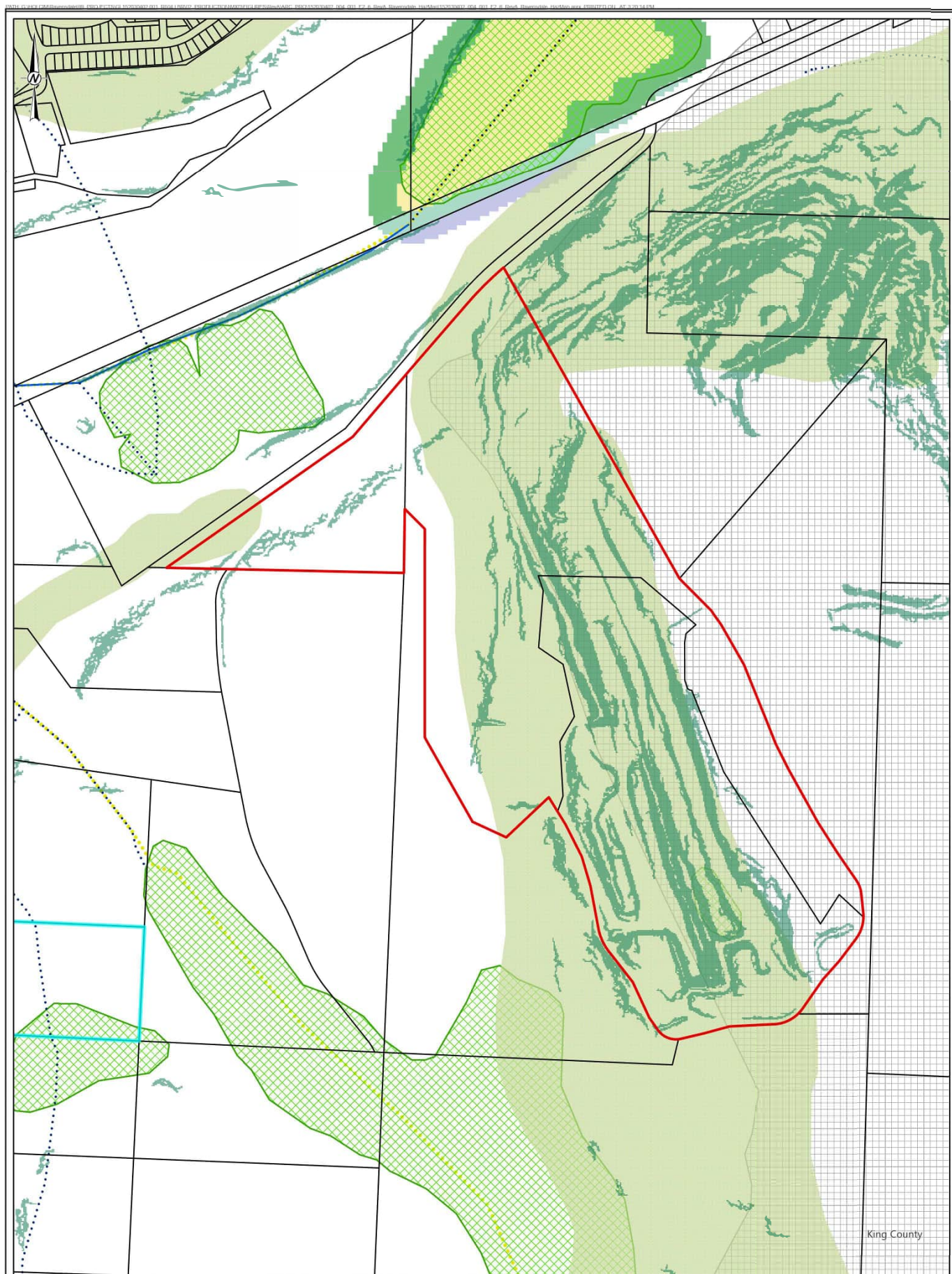
TITLE
CONCEPTUAL SECTION OF DALE NO. 1 COAL SEAM MINING
METHODS

PROJECT NO. TASK
GL152030402.001 04

REV.
A

FIGURE
2-5

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM A20x36



LEGEND

- Preliminary Site
- King County Parcels
- Potential Steep Slope Hazard
- Erosion Hazard
- Coal Mine Hazard
- Stream
- Unclassified Stream
- Wetland
- Wildlife habitat network

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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. ENVIRONMENTALLY SENSITIVE AREAS PROVIDED BY KING COUNTY IMAF (MARCH 2020)
2. PARCEL LINES PROVIDED BY KING COUNTY IMAF (MARCH 2020)

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PROJECT
REMEDIAL INVESTIGATION REPORT – RESERVE SILICA RECLAMATION SITE

TITLE
ENVIRONMENTAL HAZARD MAP

CONSULTANT



YYYYMM-DD	2025-01-15
DESIGNED	MLB
PREPARED	CK, MK, KS
REVIEWED	GL
APPROVED	GZ

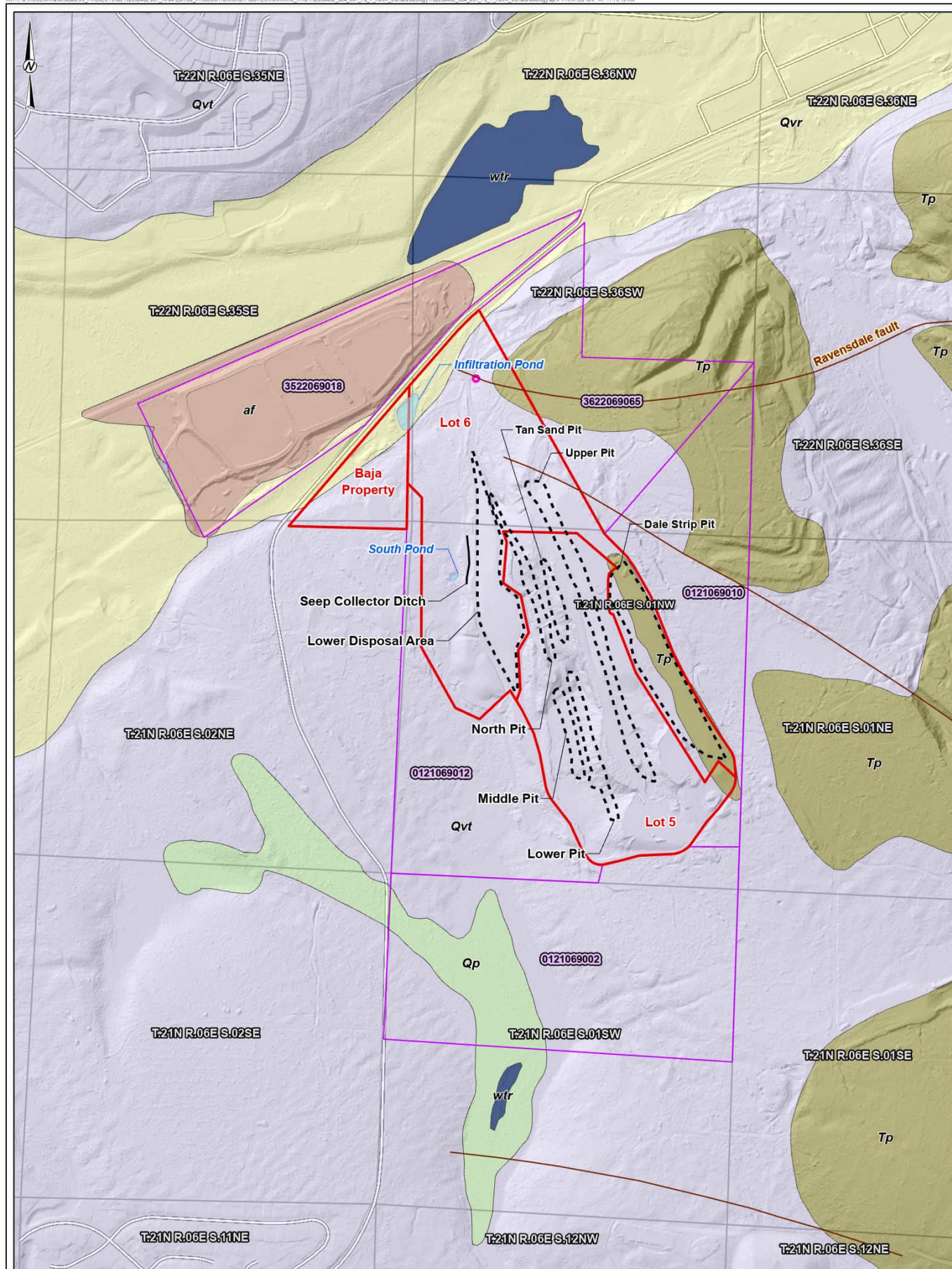
PROJECT NO.
GL152030402

PHASE
04

REV.
A

FIGURE
2-6

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- LEGEND**
- Seep Collector Ditch
 - Fault
 - Mine Portal
 - Pit
 - Pond
 - Parcels within Preliminary Site Boundary
 - Parcel
 - PLSS Quarter Section Boundary

- Water**
- Water (wtr)
- Quaternary Rocks and Deposits**
- Holocene artificial fill and modified land (af)
 - Quaternary bog, marsh, swamp, or lake deposits (Qp)
- Tertiary Rocks**
- Vashon Recessional Outwash (Qvr)
 - Vashon Lodgement Till (Qvt)
 - Tertiary sedimentary rocks and deposits (Tp)

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NOTE(S)

- "PRELIMINARY SITE" REFERS TO THE REMEDIAL INVESTIGATION STUDY AREA THAT INCLUDES PARCELS 0121069011 (LOT 5), 3622069138 (LOT 6) AND 3622069048 (BAJA PROPERTY).
- HISTORICAL COAL MINING FEATURES DIGITIZED FROM DALE COAL COMPANY, MAP OF THE DALE MINE NO. 1, DATED JANUARY 28, 1925.

REFERENCE(S)

- ASPECT CONSULTING (CONCEPTUAL CROSS SECTION, HISTORICAL MINING FEATURES, PIT, SITE, SURFACE TRAIL)
- COORDINATE SYSTEM: NAD 1983 HARN STATEPLANE WASHINGTON SOUTH FIPS 4602 FEET
- MAP SERVICE LAYER CREDITS: WSDOT - PUBLIC ROADS

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PROJECT

REMEDIAL INVESTIGATION REPORT - RESERVE SILICA RECLAMATION SITE

TITLE

SURFACE GEOLOGY MAP OF THE PRELIMINARY SITE

PROJECT NO. GL152030402

PHASE 04

REV. A

FIGURE 2-7

0 700 1,400
1" = 700 FEET FEET

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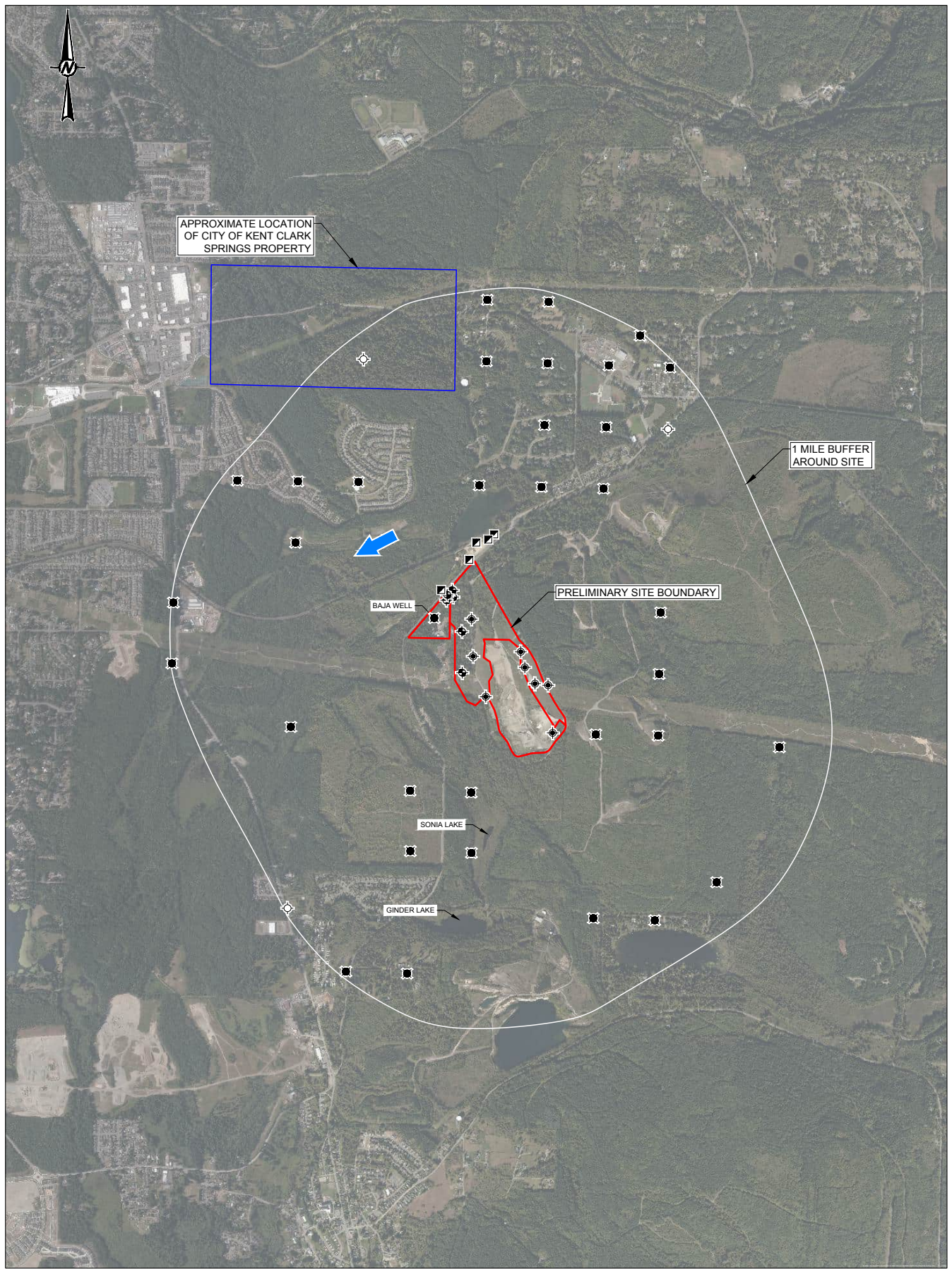
DESIGNED TL

PREPARED CK, MK, KS

REVIEWED GL

APPROVED GZ

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM A3/4 B



LEGEND

- PRELIMINARY SITE BOUNDARY
- ALLUVIAL MONITORING WELLS
- BEDROCK MONITORING WELLS
- WELLS WITHIN RADIUS

- PRIVATE WELLS (LOCATIONS OBTAINED FROM ECOLOGY'S WELL REPORT DATABASE)
- GROUNDWATER MONITORING WELL
- REGIONAL GROUNDWATER FLOW DIRECTION

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PREPARED	GL
REVIEWED	GL
APPROVED	GZ

NOTE(S)

- WELL LOCATION SHOWN ARE APPROXIMATE LOCATION BASED ON TRS LOCATION SHOWN IN ECOLOGY DATABASE.
- "PRELIMINARY SITE" REFERS TO THE REMEDIAL INVESTIGATION STUDY AREA THAT INCLUDES PARCELS 0121069011 (LOT 5), 3622069138 (LOT 6) AND 3522069046 (BAJA PROPERTY).

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
PUBLIC, PRIVATE, AND MONITORING WELL LOCATION MAP

PROJECT NO. TASK
GL152030402.001 04

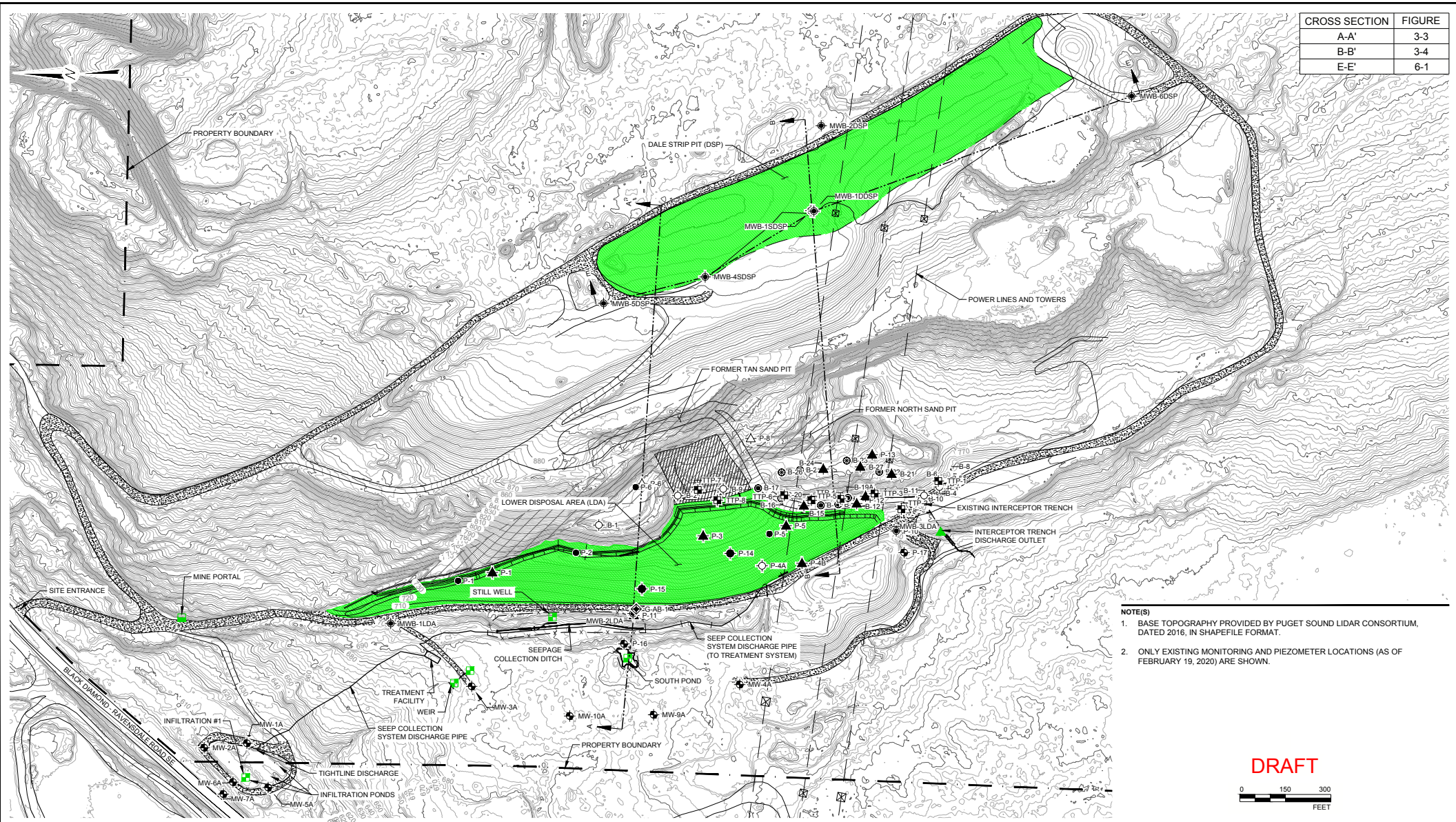
REV.
A

FIGURE
2-8

DRAFT



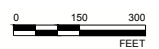
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CROSS SECTION	FIGURE
A-A'	3-3
B-B'	3-4
E-E'	6-1

- 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 FEBRUARY 19, 2020) ARE SHOWN.

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- LEGEND**
- MW-1A ALLUVIAL/SALLOW MONITORING WELL
 - MWB-1DDSP BEDROCK MONITORING WELL
 - P-14 LDA MONITORING WELL
 - P-1 PRE-RI PIEZOMETER (EXISTING)
 - P-6 PRE-RI PIEZOMETER (NO LONGER EXISTING)
 - B-13 2017 PRE-RI INTERCEPTOR TRENCH EXTENSION BOREHOLE
 - B-13 2016 PRE-RI INTERCEPTOR TRENCH EXTENSION BOREHOLE

- G-AB-1 RI SOIL BORING
- B-1 PRE-RI EXPLORATORY BOREHOLE (BACKFILLED)
- TTP-1 PRE-RI TEST PIT (MAY 2010)
- P-1 PRE-RI DIRECT PUSH PROBE
- LDA SURFACE WATER SAMPLING LOCATION
- DSP BEDROCK SAMPLING LOCATION (PORTAL)
- INTERCEPTOR TRENCH SAMPLING LOCATION

- COVER AREA
- FENCE LINE
- ACCESS ROAD
- LAYDOWN AREA

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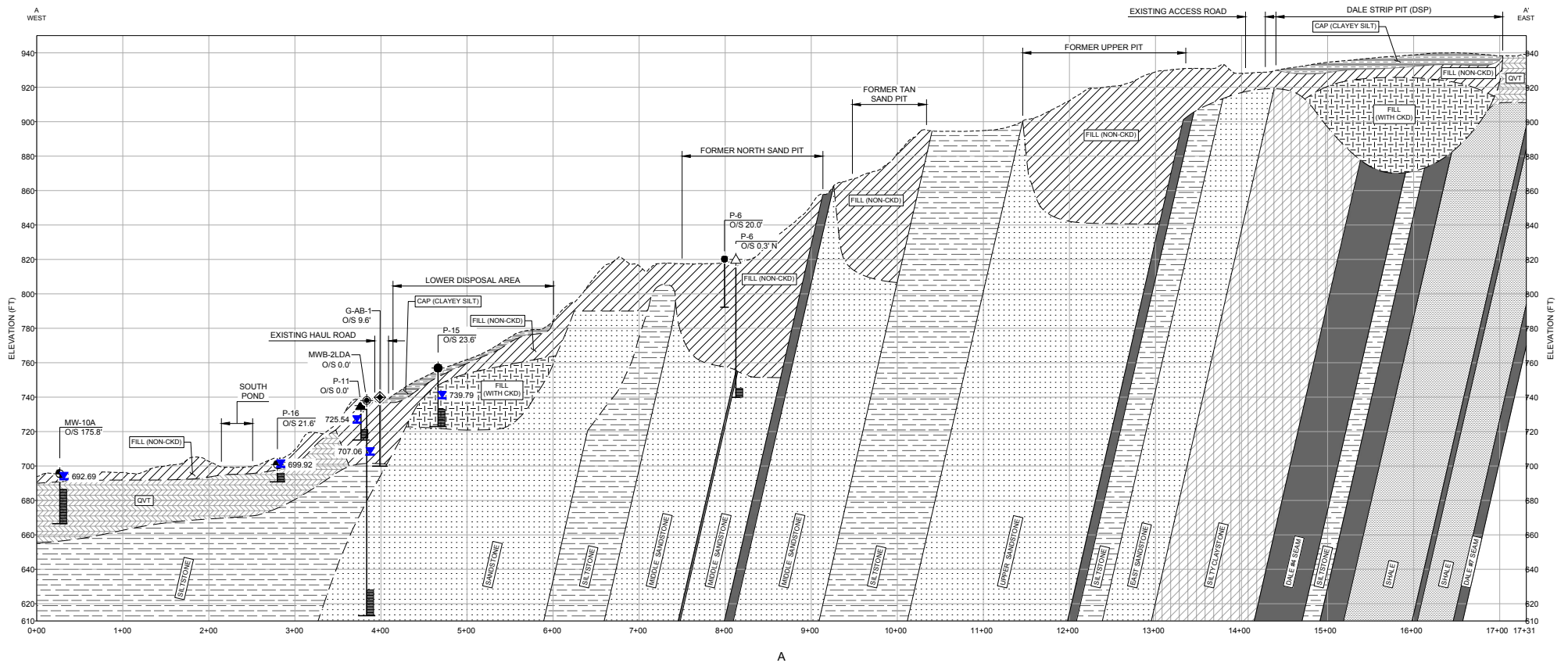
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PREPARED	TR
REVIEWED	GL
APPROVED	GZ

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
EXISTING SITE PIEZOMETERS, MONITORING WELLS, PREVIOUS BOREHOLES AND TEST PITS

PROJECT NO.	TASK	REV.	FIGURE
GL152030402.001 04		A	3-1

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LEGEND

- EXISTING GROUND PROFILE
- INFERRED GEOLOGIC CONTACT
- WATER LEVEL MEASURED AUGUST 26, 2019 IN FEET NAVD88
- PRE-RI PIEZOMETER (EXISTING)
- PRE-RI PIEZOMETER (NO LONGER EXISTING)
- BEDROCK GROUNDWATER MONITORING WELL
- LDA MONITORING WELL
- ALLUVIAL/SALLOW MONITORING WELL
- RI SOIL BORING

- PUSH PROBE
- O/S OFFSET (ft)
- SOIL BORING
- SCREEN INTERVAL

- FILL (NON-CKD)
- FILL (WITH CKD)
- CAP (CLAYEY SILT)
- QVT
- COAL
- SHALE
- SANDSTONE
- SILTY CLAYSTONE
- SILTSTONE

NOTE(S)

- PIEZOMETER / MONITORING WELL ELEVATIONS BASED ON SURVEY DATE AND MAY NOT MATCH SURFACE PROFILE FROM KING COUNTY 2016 LIDAR.
- GROUNDWATER ELEVATION FOR MONITORING WELL ARE FROM THE MARCH 2024 SAMPLING.
- SEE PLAN VIEW ON FIGURE 3-1.

REFERENCE(S)

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

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PREPARED	TR
REVIEWED	GL
APPROVED	GZ

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
CONCEPTUAL CROSS SECTION A-A'

PROJECT NO.
GL152030402.001 04

TASK

REV.
A

FIGURE
3-3

DRAFT

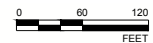


FIGURE 3-4

DRAFT





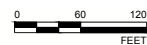
LEGEND

- Exploration Name: **AB-12 (741.77)** Boring (Aspect)
Surface Elevation (ft, NAVD83)
- Test Pit
- Historical Coal and/or Sand Mine Pit Extent
- Property
- Tax Parcel

REFERENCE(S)

INFORMATION DISPLAYED PROVIDED BY ASPECT CONSULTING, DATED MARCH 2019, DELIVERED IN PDF FORMAT.

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DESIGNED	GL
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PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

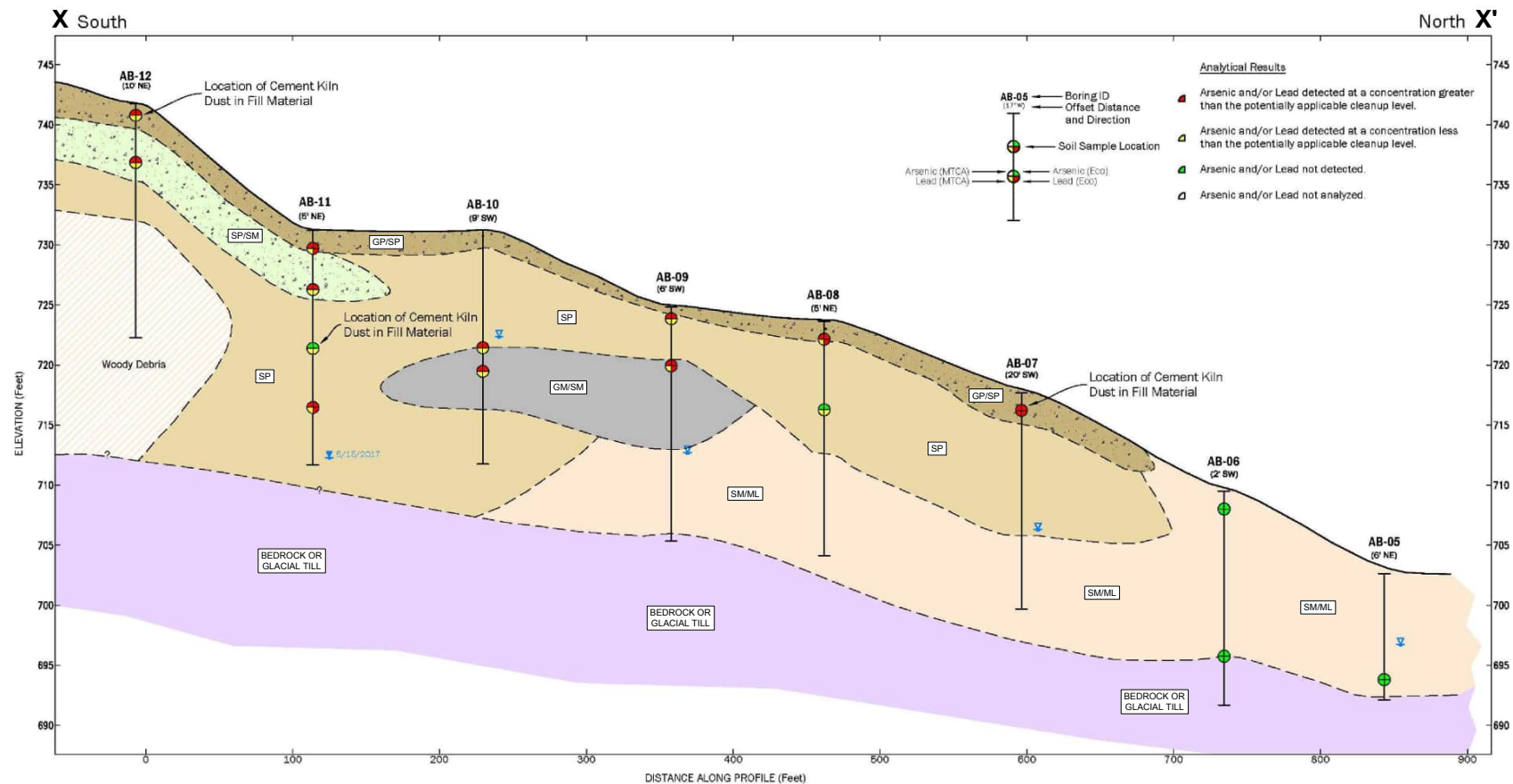
TITLE
LOWER HAUL ROAD PLAN

PROJECT NO. TASK
GL152030402.001 04

REV.
A

FIGURE
3-6

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LEGEND

Fill	Native
Sand and gravel, contains variable amounts of silt, mixed with slag fragments (GP/SP)	Bedrock or glacial till
Silty sand or sandy silt, mixed with gravel, coal fragments, organic material, woody debris and brick fragments (SM/ML)	Depth to Groundwater at Time of Drilling
Slightly silty sand, orange-yellow, medium to coarse grained, mixed with coal fragments and woody debris, variable silt and gravel (SP)	Depth to Groundwater (5/15/17)
Sand or silty sand, dark-colored with coal and slag fragments (SP/SM)	Estimated Fill/Native Soils Contact
Silty gravel and silty sand with coal fragments fining downward (GM/SM)	Fill Horizons Contain Slag

REFERENCE(S)

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REVIEWED	GL
APPROVED	GZ

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
LOWER HAUL ROAD CROSS SECTION

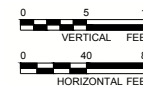
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TASK
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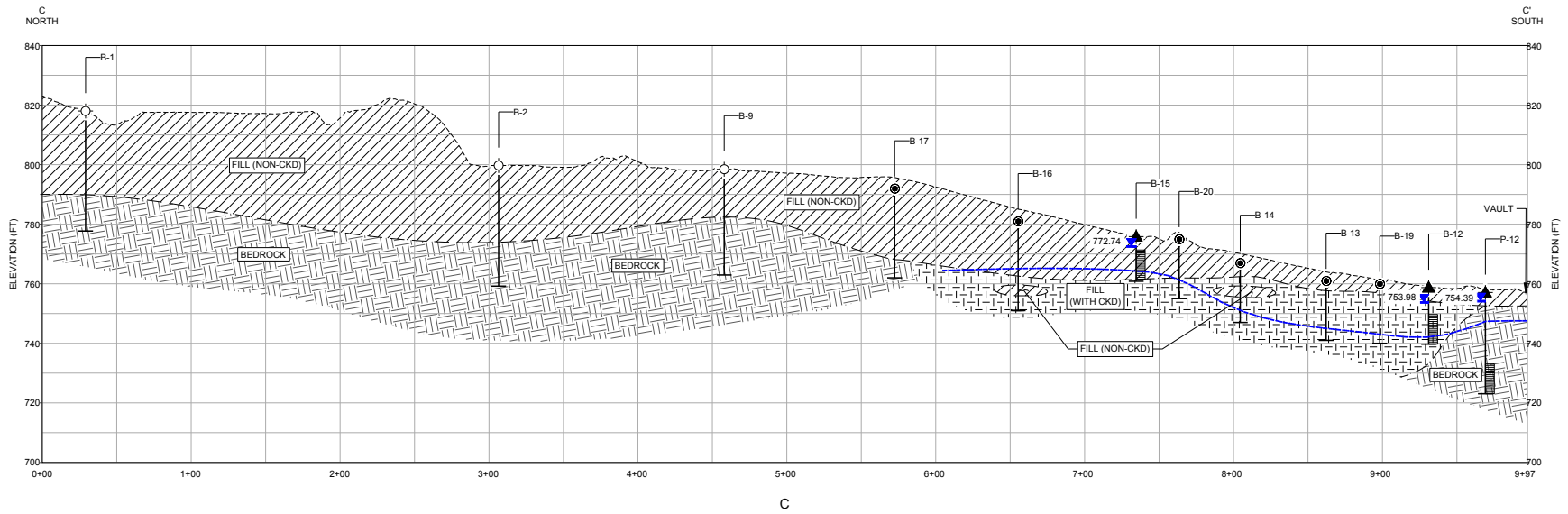
REV.
A

FIGURE
3-7










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LEGEND

-----	EXISTING GROUND PROFILE		SOIL BORING
- - - - -	INFERRED GEOLOGIC CONTACT		SCREEN INTERVAL
-----	INFERRED GROUNDWATER SURFACE		FILL (NON-CKD)
	WATER LEVEL MEASURED AUGUST 26, 2019 IN FEET NAVD88		FILL (WITH CKD)
	PRE-RI PIEZOMETER (EXISTING)		BEDROCK
	2016 INTERCEPTOR TRENCH EXTENSION BOREHOLE		
	EXPLORATORY BOREHOLE (BACKFILLED)		
O/S	OFFSET (ft)		

NOTE(S)

1. PIEZOMETER / MONITORING WELL ELEVATIONS BASED ON SURVEY DATE AND MAY NOT MATCH SURFACE PROFILE FROM KING COUNTY 2016 LIDAR.
2. GROUNDWATER ELEVATION FOR MONITORING WELL ARE FROM THE MARCH 2024 SAMPLING.
3. SEE PLAN VIEW ON FIGURE 3-2.

REFERENCE(S)

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

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HOLCIM

CONSULTANT

wsp

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 C-C'

PROJECT NO.
GL152030402.001 04

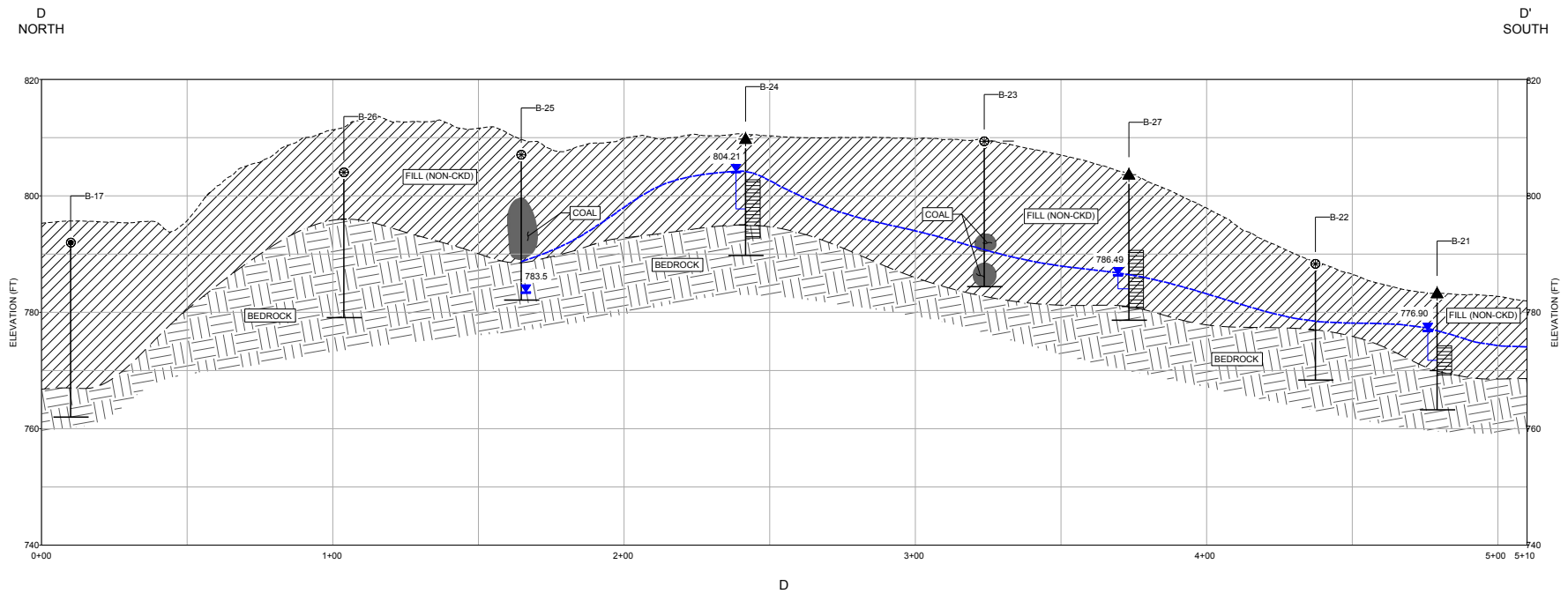
REV.
A

FIGURE
3-8

DRAFT



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LEGEND

- EXISTING GROUND PROFILE
- - - - - INFERRED GEOLOGIC CONTACT
- INFERRED GROUNDWATER SURFACE
- ▼ WATER LEVEL MEASURED AUGUST 26, 2019 IN FEET NAVD88
- ▲ PRE-RI PIEZOMETER (EXISTING)
- ⊙ 2017 INTERCEPTOR TRENCH EXTENSION BOREHOLE
- ⊙ 2016 INTERCEPTOR TRENCH EXTENSION BOREHOLE
- O/S OFFSET (ft)

- SOIL BORING
- SCREEN INTERVAL
- FILL (NON-CKD)
- COAL
- BEDROCK

NOTE(S)

1. PIEZOMETER / MONITORING WELL ELEVATIONS BASED ON SURVEY DATE AND MAY NOT MATCH SURFACE PROFILE FROM KING COUNTY 2016 LIDAR.
2. GROUNDWATER ELEVATION FOR MONITORING WELL ARE FROM THE MARCH 2024 SAMPLING.
3. SEE PLAN VIEW ON FIGURE 3-2.

REFERENCE(S)

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

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DESIGNED	GL
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REVIEWED	GL
APPROVED	GZ

PROJECT
REMEDIAL INVESTIGATION REPORT
RESERVE SILICA RECLAMATION SITE

TITLE
CONCEPTUAL CROSS SECTION D-D'

PROJECT NO.
GL152030402.001 04

TASK

REV.
A

FIGURE
3-9

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