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VA101-126/24-4

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT - LIFE OF MINE DESIGN REPORT FOR 6,560 AMENDMENT DESIGN DOCUMENT

Rev	Description	Date
0	Issued in Final	September 13, 2024

Knight Piésold CONSULTING

EXECUTIVE SUMMARY

Montana Resources, LLC (MR) is in the process of preparing a permit amendment application (the 6,560 Amendment Application) for continued development of the Yankee Doodle Tailings Impoundment (YDTI) above the currently permitted maximum embankment crest elevation of 6,450 ft to facilitate continued operation of the mine after approximately 2034. The YDTI will continue to provide secure storage of mine tailings resulting from on-going mine operations. The YDTI embankments will continue to be progressively constructed with non-ore rockfill generated during open pit development.

The principal objectives for the YDTI design are to:

- Provide secure tailings and operating pond storage.
- Progressively improve the surface reclamation potential of the YDTI and surrounding facilities.
- Protect regional groundwater and surface waters from further impact.

The ongoing development and operation of the YDTI considers continuously achieving four key performance objectives as fundamental requirements for maintaining consistency with the design of the facility. These objectives incorporate the following:

- The YDTI supernatant pond remains separated from the embankment by large tailings beaches.
- The embankments and adjacent tailings beaches remain well drained, and piezometric elevations within the embankments and foundation remain below prescribed levels.
- Sufficient freeboard is maintained at all times to manage risks associated with extreme flood and seismic events.
- The embankment geometry, including downstream slope angle and crest width, remains consistent with design criteria.

The continued development of the YDTI will consider the following requirements:

- Phased development of the facility over the life of the mine.
- Construction material provided by mining the Continental Pit to the maximum practical extent, with the balance provided from external borrow areas, if required, to meet long-term objectives.
- Construction of the YDTI embankments using similar techniques, equipment, and construction methodologies that have been adopted for previous raises.
- The inclusion of monitoring features to confirm performance goals are achieved and design criteria are met.

The 6,560 Amendment Application considers the 2022 End of Year Reserve Report (Reserve Report), produced by MR, as the basis for evaluation of the long-term tailings and rockfill storage requirements. Knight Piésold Ltd (KP) prepared this report to outline the approximate sequencing for the continued development of the YDTI embankments and adjacent rock disposal sites (RDS). The sequencing of YDTI is presented in six phases considering the projected rockfill volumes, tailings filling schedule, and layout criteria, such as minimum crest widths and overall slopes. The six phases are as follows:

1. Phase 1: Ongoing construction activities to be completed prior to the permit amendment (Prior to Permit)
2. Phase 2: EL. 6,500 ft Embankment Crest Raise
3. Phase 3: EL. 6,500 ft Lower Embankment Lifts

4. Phase 4: EL. 6,500 ft Embankment Lifts and RDS Expansions
5. Phase 5: EL. 6,560 ft Embankment Crest Raise
6. Phase 6: Final Life of Mine (Prior to Closure)

Issue for Construction (IFC) designs for the various development stages will be progressively issued during ongoing mine development. The approximate YDTI development sequencing presented in this report will be updated as required for the IFC designs, and activities attributed to the six phases presented above may be adjusted or combined in the future as part of the ongoing development process. Expansion of the instrumentation and monitoring network around the YDTI and within the RDS areas will be progressively required throughout continued development of the facility.

Preliminary Quantitative Performance Parameters (QPPs) were developed for ongoing operations and facility closure. Active QPPs are formally presented in the Tailings Operations, Maintenance and Surveillance (TOMS) Manual. The QPPs are regularly reviewed and revised when required as part of annual updates to the TOMS Manual. The preliminary QPPs presented in this report may be incorporated into future versions of the TOMS Manual, when appropriate, and updated thereafter during regular reviews of the TOMS Manual.

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ABBREVIATIONS

ACC ..... Anaconda Copper Company
BMFOU ..... Butte Mine Flooding Operable Unit
CMP ..... Construction Management Plan
EL. ..... elevation
EOR ..... Engineer of Record
EPA ..... Environmental Protection Agency
ft. ..... feet
GPS ..... Global Positioning System
GNSS ..... Global Navigation System Satellite
H:V ..... horizontal to vertical
HsB ..... Horseshoe Bend
IFC ..... Issued For Construction
InSAR ..... interferometric synthetic aperture radar
IRP ..... Independent Review Panel
KP ..... Knight Piésold Ltd.
MCA ..... Montana Code Annotated
MDEQ ..... Montana Department of Environmental Quality
MR ..... Montana Resources, LLC
Mtons ..... million tons
N ..... North
NW ..... Northwest
QPPs ..... Quantitative Performance Parameters
RDS ..... rock disposal sites
RMS ..... remote monitoring system
SOL ..... setting out line
SWD ..... surface water ditch
TAC ..... The Anaconda Company
the Design Document ..... 6,560 Amendment Design Document
TOMS ..... Tailings Operations, Maintenance and Surveillance
VWP ..... vibrating wire piezometer
W ..... West
WED ..... West Embankment Drain
YDTI ..... Yankee Doodle Tailings Impoundment

1.0 INTRODUCTION

1.1 LOCATION

Montana Resources, LLC (MR) operates the Montana Resources open pit copper and molybdenum mine located in Butte, Montana. The ore throughput at the mill and processing facilities is approximately 49,000 short tons per day. The tailings from ore processing are conveyed to the Yankee Doodle Tailings Impoundment for disposal and permanent storage. The mine is located in Butte, Silver Bow County and is bounded by Interstate 15 and the Continental Divide on the east, Moulton Reservoir Road on the west, and Farrell Street, Continental Drive and Shields Avenue to the south.

The key components of the MR facilities, as shown on Figure 1.1, include the following:

- Yankee Doodle Tailings Impoundment (YDTI)
- Berkeley Pit
- Continental Pit
- Mill and processing facilities (the Concentrator)
- Horseshoe Bend (HsB) Area and associated facilities

1.2 PURPOSE AND SCOPE

The YDTI is currently permitted to a maximum crest elevation (EL.) of 6,450 feet (ft). The EL. 6,450 ft embankment provides sufficient tailings storage capacity to support mining and ore processing until approximately 2034. MR is preparing a permit amendment application (the 6,560 Amendment Application) to facilitate continued operation of the mine thereafter by aligning approval for tailings storage at the YDTI with the remaining ore reserves. The permit amendment application process requires the permit applicant (MR) to submit a design document when expansion of an existing facility is proposed.

Knight Piésold Ltd. (KP) is developing the 6,560 Amendment Design Document (the Design Document) to support the 6,560 Amendment Application. The Design Document presents the plan to progressively raise the crest elevation of the YDTI embankments to a maximum design crest of EL. 6,560 ft in two or more lifts to support continued mining and ore processing. The Design Document comprises a series of technical reports covering the subject areas and content to meet the requirements specified in Montana State law as well as evaluating opportunities for continued risk reduction to enhance safety as part of the fundamental objective for on-going continuous improvement of the safety of the YDTI. The laws governing tailings storage facility design, operation and reclamation are contained within sections of Montana Code Annotated (MCA) Title 82 Chapter 4 Part 3 (MCA, 2023).

- Title 82: Minerals, Oil, and Gas
  - Chapter 4: Reclamation
    - Part 3: Metal Mine Reclamation

This report has been prepared by KP to outline the proposed life of mine development of the YDTI embankments and rock disposal sites (RDS) up to EL. 6,560 ft. The geotechnical analyses for select stages of YDTI development are presented in a standalone stability assessment report (KP, 2024a).

NOTES:

1. AERIAL IMAGE PROVIDED BY MONTANA RESOURCES, LLC IN JULY 2023.

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT CURRENT GENERAL ARRANGEMENT

Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF NO. 4

FIGURE 1.1

REV 0

1.3 COORDINATE SYSTEM

The YDTI references the site coordinate system known as the ‘Anaconda Mine Grid’ established by The Anaconda Company (TAC) in 1957. The Anaconda Mine Grid is based on the Anaconda Copper Company (ACC) Datum established in 1915. All elevations are stated in Anaconda Mine Grid coordinates with respect to the ACC Vertical Datum unless specifically indicated otherwise. The Montana Resources Global Positioning System (GPS) Site Coordinate System is based on the ‘Anaconda Mine Grid’ and utilizes International Feet.

2.0 DEVELOPMENT OBJECTIVES AND HISTORICAL PRECEDENTS

2.1 OBJECTIVES

The YDTI will continue to provide secure storage of mine tailings resulting from on-going mine operations, with construction materials provided from pit stripping. The principal design objectives for the YDTI are to:

- Provide secure tailings and operating pond storage.
- Progressively improve the surface reclamation potential of the YDTI and surrounding facilities.
- Protect regional groundwater and surface waters from further impact.

The ongoing development and operation of the YDTI considers continuously achieving four key performance objectives as fundamental requirements for maintaining consistency with the design of the facility. These objectives incorporate the following:

- The YDTI supernatant pond remains separated from the embankment by large tailings beaches.
- The embankments and adjacent tailings beaches remain well drained, and piezometric elevations within the embankments and foundation remain below prescribed levels.
- Sufficient freeboard is maintained at all times to manage risks associated with extreme flood and seismic events.
- The embankment geometry, including downstream slope angle and crest width, remains consistent with design criteria.

Active Quantitative Performance Parameters (QPPs), including the prescribed piezometric elevations referenced above, are formally presented in the Tailings Operations, Maintenance and Surveillance (TOMS) Manual. The QPPs are regularly reviewed and revised when required as part of annual updates to the TOMS Manual.

The development of the YDTI embankments and adjacent RDS considers the design and operational objectives outlined above with the goal of continuous improvement in safety and enhancement of stability through slope flattening and progressive buttressing of the facility embankments. These progressive improvements are made possible by continued mining at the site. The development of the YDTI also considers the following requirements:

- Phased development of the facility over the life of the mine.
- Construction material provided by mining the Continental Pit to the maximum practical extent, with the balance provided from external borrow areas, if required, to meet long-term objectives.
- Construction of the YDTI embankments using similar techniques, equipment, and construction methodologies that have been adopted for previous raises.
- The inclusion of monitoring features to confirm performance goals are achieved and design criteria are met.

2.2 LEGACY CROSS SECTION CONVENTION

The design of the YDTI references a series of legacy cross-section locations that have been historically used for the project. These cross-sections most likely align with a historical setting out line for the

embankments that is no longer consistent with the current arrangement; however, the legacy cross-sections are used for the on-going layout in the interest of consistency for as-built drawings and annual reporting. The convention begins with Station 0+00 at the interface between the North-South and East-West Embankments and increases in station number in both directions. The stationing convention uses a directional suffix (e.g., N, NW, or W) to describe the location of the cross-section (e.g., 8+00 N for 800 ft along the North-South Embankment). The actual stationing measured along the current and proposed setting out line (SOL) may not be equal to the stationing as referenced on the cross-section due to differences in the historical and current/proposed setting out lines.

2.3 EXISTING YDTI EMBANKMENTS

The YDTI was originally constructed in 1963 using rockfill from the Berkeley Pit and has been continuously constructed to EL. 6,450 ft using rockfill from the Berkeley Pit (until 1982) and from the Continental Pit (beginning in 1986). The YDTI comprises a valley-fill style impoundment created by a continuous rockfill embankment that for descriptive purposes is divided into three rockfill embankments according to the general geometry of each limb of the continuous embankment. These embankments are the:

- **North-South Embankment:** The North-South Embankment forms the eastern to southeastern limb of the YDTI and runs approximately north to south in orientation. The North-South Embankment abuts onto the base of Rampart Mountain, forming the eastern battery limit of the MR mine site.
- **East-West Embankment:** The East-West Embankment forms the southwestern limb of the YDTI and runs approximately east to west in orientation. The East-West Embankment is constructed upstream of the HsB area and the Berkeley Pit.
- **West Embankment**: The West Embankment forms the western limb of the YDTI and runs approximately north to south in orientation. The West Embankment is constructed along the side of the West Ridge and forms the western battery limit of the facility. The West Embankment incorporates the West Embankment Drain (WED) and several other seepage control features, which will maintain hydrodynamic containment of YDTI seepage as the supernatant pond elevation rises above the lowest groundwater elevations in the West Ridge. The West Embankment also includes zone of material with relatively lower permeability and relatively lower acid generating potential (Zone D1) along the downstream edge of the West Embankment.

2.4 HISTORICAL CONSTRUCTION PRACTICES AND PRECEDENT

The YDTI has historically been constructed by progressively placing rockfill to form free-draining rockfill embankments. The rockfill comprises pit-run material historically end-dumped in approximately 30 to 100 ft lifts with initial compaction from the mine haul fleet traffic and gradual settlement occurring thereafter. Ripping of the embankment surface to enhance vertical infiltration has been commonly completed prior to subsequent fill placement.

The Amendment 10 permit application included design and construction specifications outlining subgrade preparation requirements and maximum 50-ft lift thicknesses for rockfill materials. The EL. 6,450 ft embankment design also continued to include a relatively finer-grained material (alluvium) placed on the upstream face of the embankment to limit potential for tailings migration into the rockfill.

The design presented herein for the Design Document is consistent with these historical practices and precedents. Refinements to alluvium placement methodology along the upstream face of the embankment are incorporated as part of the fundamental objective for on-going continuous improvement.

2.5 CONSTRUCTION MATERIALS

The embankment and RDS will generally be constructed using the similar materials and construction practices historically used on site and described below. Placement, compaction, and testing requirements for each material are outlined in the Construction Management Plan (CMP) (KP, 2024b). Specific material boundaries for each embankment are outlined in subsequent sections. Additional supporting materials may be specified during Issued For Construction (IFC) design and are not presented in this report (i.e. additional drainage materials).

- Zone U – Rockfill: 'U' material will be sourced from the Continental Pit and used in various construction areas, including the YDTI embankments, RDS, and other general construction areas such as haul ramps and access roads. Zone U is intended to be constructed in a manner that promotes free draining behavior. 'U' material will typically be hauled and end-dumped in horizontal lifts up to approximately 50 ft thick using the 240-ton mine fleet haul trucks. Segregation will occur as the rockfill is end-dumped from the crest of each lift. The finer particles will tend to accumulate near the top of the lift and the cobbles and boulders roll further down the slope and accumulate at the toe. Zone U (Embankment) is delineated as the structural portion of the embankment, while Zone U (Surcharge) is delineated in areas where Zone U is located above historical tailings materials.
- Zone D1 – Rockfill: 'D1' material will be sourced from the Continental Pit. Zone D1 is intended to have relatively lower acid generating potential (than Zone U) and lower permeability compared to 'U' material. 'D1' rockfill will be hauled and end-dumped by the 240-ton haul trucks and spread in approximately 5 ft thick horizontal lifts prior to compaction. 'D1' rockfill will typically be used to construct the downstream zone of the West Embankment to act as an impediment to horizontal migration of perched seepage flow towards the downstream face of the embankment. The primary design intent of Zone D1 is to encourage collection of seepage flows by the WED at the West Embankment.
- Zone F – Earthfill: 'F' material will be dumped and spread by dozer to construct a separation zone between the tailings and Zone U on the upstream face of the embankment. The primary design intent of Zone F is to limit potential for tailings migration into zones of relatively coarse rockfill.
- Zone D2 – Earthfill: 'D2' material will be placed to provide a capping layer on the downstream slope of the embankment to promote runoff of meteoric water and limit surface exposure of materials with higher acid potential (e.g. Zones U and D1). 'D2' material will typically comprise non-acid generating alluvium dumped by contractor truck fleets and spread by dozer.

3.0 BASIS OF FACILITY DEVELOPMENT

3.1 MATERIAL ESTIMATES

The Design Document considers the 2022 End of Year Reserve Report (2022 Reserve Report) produced by MR (MR, 2023) as the basis for evaluating the long-term tailings and rockfill storage requirements. The estimated tailings and rockfill tonnages from the 2022 Reserve Report are summarized in Table 3.1. The reserve report includes the total proven and probable reserves and is updated by MR each year based on project economics, resource drilling, and other mine operation decisions.

Table 3.1 Summary of the 2022 End of Year Reserve Report

Material	Quantity
	Million Tons (MTons)
Ore (Tailings)	570
Rockfill	562

Note(s):

1. The 2022 Reserve Report (MR, 2023) includes Continental Pit Area CE/CS/DN/DE/DS/EN pushbacks and the Central Zone.

3.2 TAILINGS STORAGE CAPACITY

Tailings deposition modelling to evaluate the storage capacity of the YDTI was updated to support the Design Document as summarized in Appendix A. The modelling indicates the following key timeframes, which were considered for the timing of the facility development:

- The currently permitted and constructed YDTI crest elevation of EL. 6,450 ft will provide sufficient tailings storage capacity until approximately December 2034.
- The embankment crest elevation will need to be raised prior to 2034 to continue to provide tailings storage for ongoing mine operations without interruption.
- The YDTI embankments constructed to the proposed EL. 6,560 ft will provide sufficient tailings storage capacity until the currently identified ore reserves are exhausted (approximately June 2056).

3.3 ROCKFILL SCHEDULE

The total rockfill volume and placement schedule for the RDS in the long-term is dependent on several factors, including MR's rockfill forecast schedule, pit stripping requirements, embankment rockfill material needs, cut-off grades due to fluctuating metal prices, other mine site uses, and the duration of continued mining operations at the site.

A mid-range rockfill mining schedule was produced by MR for the Continental Pit providing the estimated rockfill tonnages available for embankment and RDS construction from 2023 through 2041 (~189 Mtons). This schedule and the projected tailings filling schedule forms the basis of the estimated embankment and RDS construction schedule over that period of time. Short-range mine plans are updated at least annually by MR to set budget numbers and priorities for continued mining.

Longer-term rockfill scheduling, including mining of the Central Zone, has not been completed in detail. A summary of the rockfill quantities and their location within the pit development model, as presented in the 2022 Reserve Report, is provided in Table 3.2.

Table 3.2 2022 End of Year Reserve Report Rockfill Breakdown

Rockfill Location	Rockfill Quantity (Mtons)	Notes
CE/CS/DN Pushback	35	189 Mtons in mid-range mining schedule assumed to be sourced from these locations.
DE/DS/EN Pushback	284	
Central Zone Plan	243	
Total	**562**	

A summary of the estimated annual availability of rockfill used in the YDTI life of mine development plan presented in this report is shown in Table 3.3. The life of mine distribution considers the rockfill quantities presented within the mid-range mining schedule and the 2022 Reserve Report with assumptions related to the future timing of the rockfill mining for materials not contained in the mid-range mining schedule. It was assumed that pre-stripping for continued mining after 2041 will be completed over a 10-year period and begins five years prior to end of the mid-range schedule (i.e., in 2037). The balance of the CE/CS/DN and DE/DS/EN pushbacks remaining after the mid-range schedule was assumed for the pushback striping volume (~130 Mtons) and was evenly distributed over a 10-year period. The Central Zone rockfill mining was assumed to be evenly distributed from 2042 through the life of mine (i.e., through 2056 as per the tailings filling schedule).

Table 3.3 Estimated Rockfill Schedule

Year	Rockfill Quantity (Mtons)				
	Mid-Range Mine Schedule	Pushback Stripping	Central Zone Mining	Total Annual Rockfill	Total Cumulative Rockfill
2023[1]	19	-	-	19	19
2024[1]	25	-	-	25	44
2025	22	-	-	22	66
2026	19	-	-	19	85
2027	17	-	-	17	102
2028	16	-	-	16	118
2029	18	-	-	18	136
2030	18	-	-	18	154
2031	6	-	-	6	160
2032	4	-	-	4	164
2033	2	-	-	2	166
2034	2	-	-	2	168
2035	1	-	-	1	169
2036	2	-	-	2	171
2037	4	13	-	17	188
2038	3	13	-	16	204
2039	4	13	-	17	221
2040	4	13	-	17	238
2041	3	13	-	16	254
2042	-	13	16	29	283
2043	-	13	16	29	312
2044	-	13	16	29	341
2045	-	13	16	29	370
2046	-	13	16	29	399
2047	-	-	19	19	418
2048	-	-	16	16	434
2049	-	-	16	16	450
2050	-	-	16	16	466
2051	-	-	16	16	482
2052	-	-	16	16	498
2053	-	-	16	16	514
2054	-	-	16	16	530
2055	-	-	16	16	546
2056	-	-	16	16	562
Total	**189**	**130**	**243**	**562**	

Note(s):

1. Rockfill placement for 2023 (complete) and 2024 (ongoing).

4.0 QUANTITATIVE PERFORMANCE PARAMETERS (OPERATIONS)

4.1 GENERAL

QPPs provide quantitative parameters that are indicators of performance that can be easily measured and evaluated on-site without complex calculation or data interpretation. QPPs are a good reference to quickly assess the performance and development of the YDTI and RDS. The QPPs can be measured and monitored during facility development to confirm construction is meeting the specifications. Active QPPs are formally presented in the TOMS Manual. The QPPs are regularly reviewed and revised when required as part of annual updates to the TOMS Manual. QPP status is monitored regularly as part of the surveillance activities during ongoing operations at the mine.

4.2 PRELIMINARY QUANTITATIVE PERFORMANCE PARAMETERS

Preliminary geometric QPPs for the two main stages of the proposed YDTI embankment development (i.e. the EL. 6,500 and EL. 6,560 ft crest elevations) and the RDS around the facility are summarized in Table 4.1. These QPPs were developed to guide the embankment layout geometry and construction sequencing prepared for the YDTI and adjacent RDS. The Preliminary QPPs will be reviewed (and revised, if required) during preparation of the IFC designs with the latest versions incorporated into revisions to the TOMS Manual.

Table 4.1 Preliminary Geometric QPPs – Operations

Stage	Embankment Limb	Layout QPP[1]	Value
EL. 6,500 ft Embankment Crest	North-South	Overall Downstream Slope	No steeper than 2.5H:1V
		Minimum Crest Width[1]	> 200 ft
	East-West	Overall Downstream Slope	No steeper than 2.5H:1V
		Downstream Upper Slope[2]	No steeper than 2H:1V
		Minimum Crest Width[1]	> 200 ft
	West	Downstream Overall Slope	No steeper than 3H:1V
		Minimum Crest Width[1,4]	> 200 ft
EL. 6,560 ft Embankment Crest	North-South	Overall Downstream Slope	No steeper than 3H:1V
		Minimum Crest Width[1]	> 200 ft
	East-West	Overall Downstream Slope	No steeper than 3H:1V
		Downstream Upper Slope[3]	No steeper than 3H:1V
		Minimum Crest Width[1]	> 200 ft
	West	Overall Downstream Slope	No steeper than 3H:1V
		Minimum Crest Width[1,4]	> 200 ft
Rock Disposal Sites	All	Overall Downstream Slope	No steeper than 3H:1V

Note(s):

1. Minimum crest width considers embankment portion only (excludes substantial upstream surcharge zone).
2. Upper slope measured from the Seep 10 bench to embankment crest.
3. Upper slope measured from the booster pump station 3 bench to embankment crest.
4. West Embankment includes Zones D1 and U (embankment).
5. H:V = horizontal : vertical (H:V).

5.0 FACILITY LAYOUT AND CONSTRUCTION CRITERIA

5.1 GENERAL

The life of mine development for the YDTI is presented as a phased sequence to illustrate major milestones during the proposed remaining life of mine. The phased designs of the embankment and RDS were developed considering the layout and construction criteria described below. These criteria are based on historical construction practices and layout methodology with the objective to continuously improve safety of the facility through slope flattening and progressive buttressing of the facility embankments. The proposed phases are described in detail in Section 6 and are summarized as:

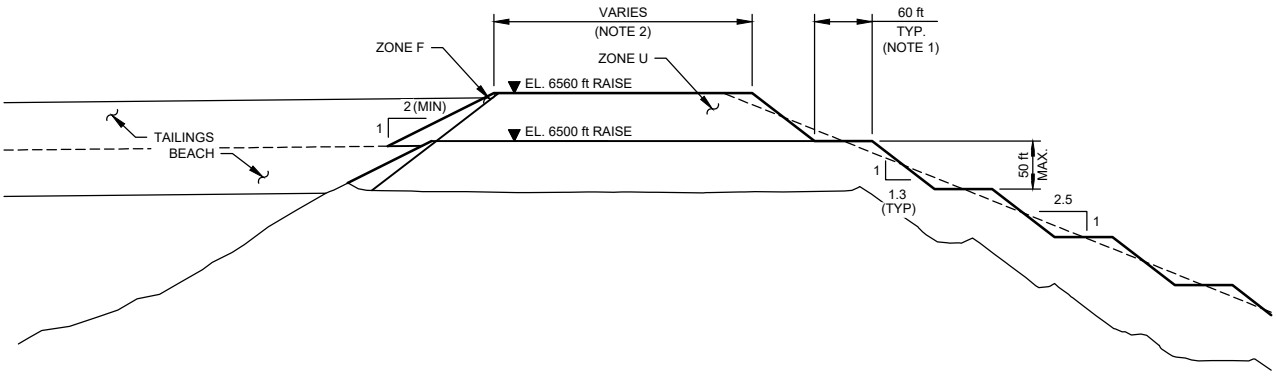
- Phase 1: Ongoing construction activities to be completed prior to the permit amendment (Prior to Permit)
- Phase 2: EL. 6,500 ft Embankment Crest Raise
- Phase 3: EL. 6,500 ft Lower Embankment Lifts
- Phase 4: EL. 6,500 ft Embankment Lifts and RDS Expansions
- Phase 5: EL. 6,560 ft Embankment Crest Raise
- Phase 6: Final Life of Mine (Prior to Closure)

5.2 EMBANKMENT DEVELOPMENT

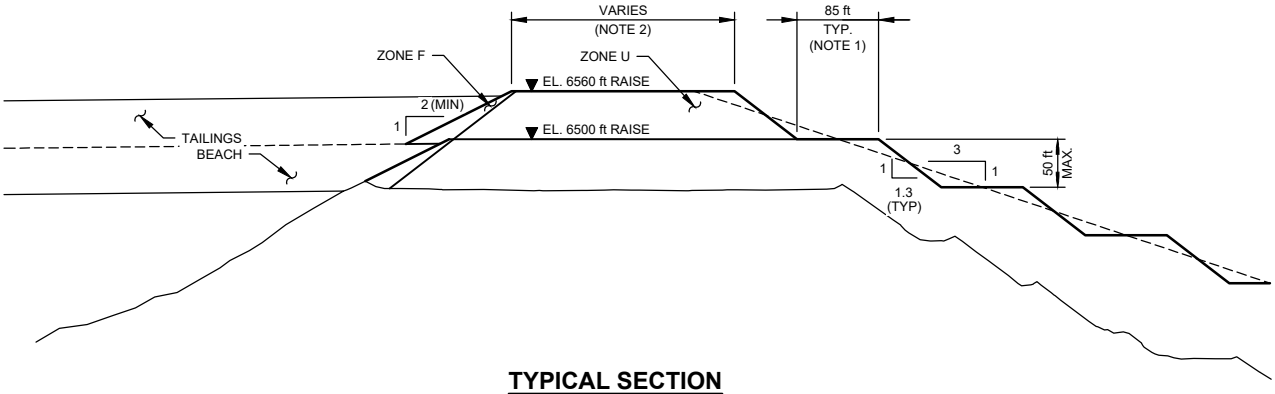
5.2.1 GENERAL

General layout and construction criteria that apply to each embankment limb are summarized below. Criteria specific to each embankment limb and stage are described in subsequent sections. Sections showing typical details (i.e. lift height, slope angle, and bench width) to achieve 2.5H:1V and 3H:1V overall embankment slopes during construction are shown on Figure 5.1.

- Embankment Zone U upstream slopes are specified at angle of repose or flatter in select areas to facilitate placement of Zone F materials along the upstream face of each lift. ‘F’ material will be placed as required with a slope of 2H:1V or flatter to maintain a separation zone between the tailings and embankment rockfill (Zone U).
- Overall embankment downstream slopes are specified and will be achieved by incorporating benches between successive 50 to 100 ft high angle of repose slopes (consistent with historical construction practices). The width and frequency of the benches controls the overall slope angle, and wider benches than used historically will need to be incorporated to create flatter overall slope angles to align with the geometric QPPs for each stage.
- Overall embankment crest width may vary for each limb and crest elevation. The embankment layout considers previously constructed surfaces and designs, requirements for future raises, and priority areas of downstream construction based on rockfill availability.
- Regrading, shaping and reclamation of any final downstream slopes should be completed concurrently where and when practicable.



TYPICAL SECTION
2.5H:1V OVERALL SLOPE
SCALE A



TYPICAL SECTION
3H:1V OVERALL SLOPE
SCALE A

SCALE A: 100 0 100 200 300 400 500 ft

NOTES:

1. CATCH BENCHES MAY BE ADJUSTED BY MONTANA RESOURCES, LLC TO ACCOMMODATE ACCESS ROADS, HAUL ROADS, OR TAILINGS PIPELINES PROVIDED OVERALL SLOPE IS MAINTAINED.
2. CREST WIDTH VARIES AROUND THE YDTI.
3. EL. 6560 ft RAISE TO BE COMPLETED IN A MINIMUM OF TWO LIFTS.

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
TYPICAL CONSTRUCTION SECTIONS

Knight Piésold CONSULTING

P/A NO. VA101-126/24 | REF NO. 4

FIGURE 5.1 | REV 0

5.2.2 NORTH-SOUTH EMBANKMENT

The North-South Embankment will primarily comprise Zone U constructed in maximum 50 ft thick lifts using the downstream embankment construction method. Typical sections for the North-South Embankment at EL. 6,500 ft and EL. 6,560 ft are shown on Figure 5.2. Key layout criteria used for the development of the embankment design were as follows:

Setting Out line

- The SOL is generally aligned with the upstream edge of the crest (or interface between the surcharge and embankment zones, where present). The position of the SOL changes for each stage (i.e. changes for the 6,500 ft and 6,560 ft crest elevations).

Crest Width

- The minimum embankment crest width is 220 ft measured perpendicular from the SOL towards the downstream side of the embankment.
  - The crest between Section 0+00 and north of Section 8+00 N is wider than the minimum due to the upstream surcharge zone.
  - The North RDS will be progressively constructed downstream of the northeast trending embankment limb which provides additional buttressing and will significantly increase the crest width of that area in later phases.

Downstream Slope

- The minimum overall downstream slope is approximately 3H:1V following the EL. 6,500 crest raise (Phase 2) and EL. 6,560 crest raise (Phase 5). The North-South Embankment will be progressively buttressed by the North RDS resulting in flatter overall slope angles during buttress development.

Upstream Slope

- The design incorporates a final upstream slope for each lift of approximately 2H:1V or flatter following placement of Zone F to create a continuous zone connecting to the Zone F layer along the previous lift.

SAVED: M:\1\01\00126\24\A\Acad\FIGS\A29, 7/9/2024 1:26:25 PM , RMCLELLAN PRINTED: 8/27/2024 9:47:03 AM, FIG 5.2, RMCLELLAN ACAD VERSION: 25.0S (LMS TECH)
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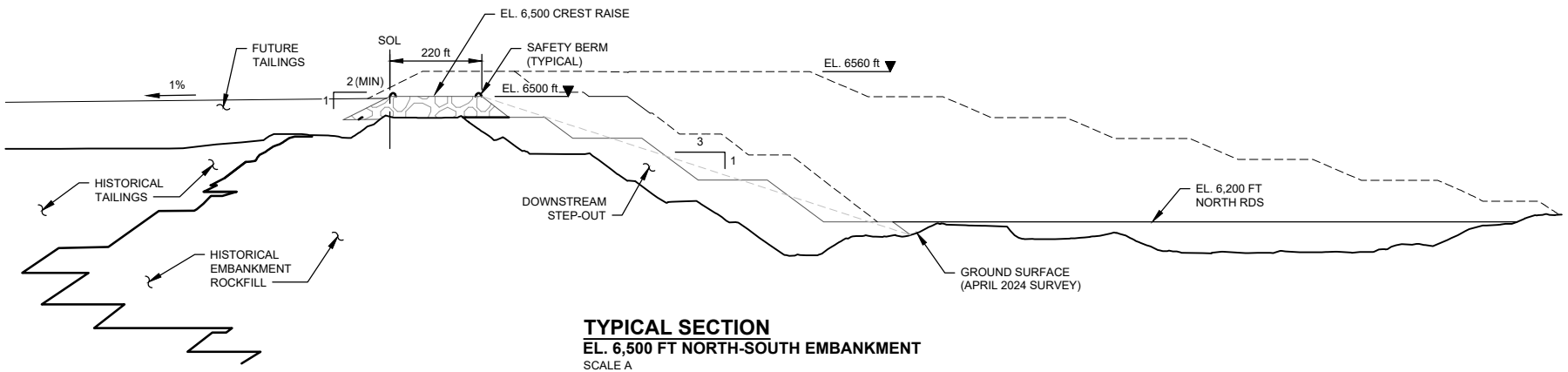
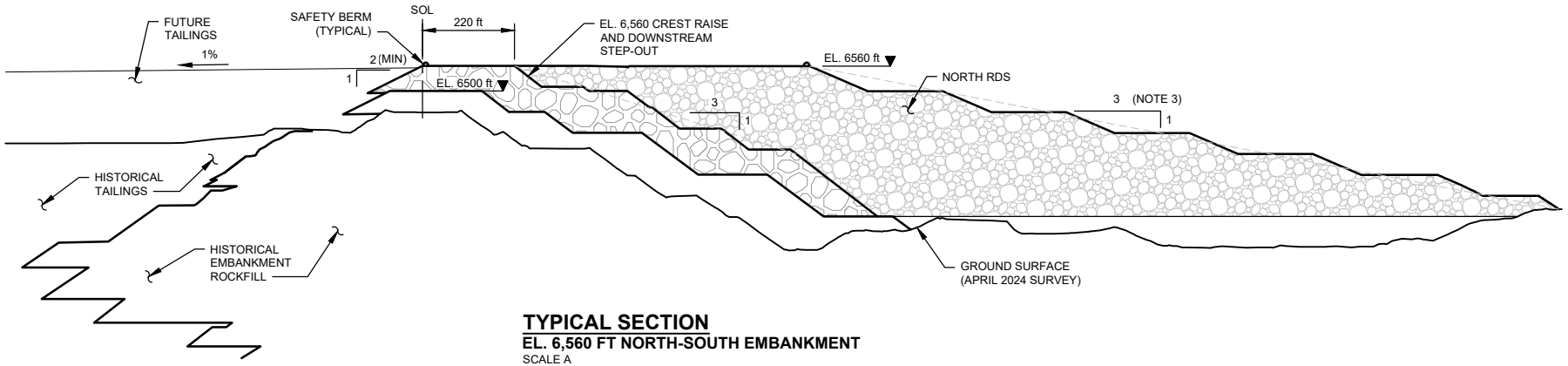


TYPICAL SECTION
EL. 6,500 FT NORTH-SOUTH EMBANKMENT
SCALE A



TYPICAL SECTION
EL. 6,560 FT NORTH-SOUTH EMBANKMENT
SCALE A

NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS ARE BASED ON ANACONDA MINE GRID.
2. APRIL 2024 TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
3. RDS IS LAID OUT WITH AN OVERALL DOWNSTREAM SLOPE OF 3H:1V. SECTION SHOWN IS NOT PERPENDICULAR TO RDS CREST.

SCALE A: 200 0 200 400 600 800 1000 ft

LEGEND:

- EMBANKMENT ROCKFILL
- ROCK DISPOSAL SITE / RAMPS / OTHER
- OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
TYPICAL SECTIONS

Knight Piésold CONSULTING

P/A NO.	REF NO.
VA101-126/24	4

FIGURE 5.2 REV 0

5.2.3 EAST-WEST EMBANKMENT

The East-West Embankment will primarily comprise Zone U constructed in a maximum 50 ft thick lifts using centerline and downstream embankment construction methods. Typical sections of the East-West Embankment at EL. 6,500 ft and EL. 6,560 ft are shown on Figure 5.3. Key layout criteria used for the development of the embankment design are as follows:

Setting Out line

- The SOL is generally aligned with the upstream edge of the structural portion of the crest (interface between the surcharge and embankment zones). The position of the SOL changes for each stage (i.e. changes for the 6,500 ft and 6,560 ft crest elevations). The proposed EL. 6,500 ft raise design follows centreline construction methods, and the EL. 6,560 embankment raise design follows the downstream method.

Crest Width

- The minimum crest width is 220 ft measured perpendicular from the downstream edge of the crest towards the SOL. Most of the embankment crest width is significantly wider due to upstream transition and rockfill surcharge loading zones at EL. 6,500 and EL. 6,560 ft.

Downstream Slope

- Overall downstream slope of approximately 3H:1V or flatter from the downstream side EL. 6,500 ft crest raise to the downstream toe of the Stage 1 HsB RDS. The downstream slope above the Stage 1 HsB RDS (i.e. the upper slope) is approximately 2H:1V and will be progressively flattened to approximately 3H:1V as the lower embankment lifts for the downstream step-out are constructed.
- Overall downstream slope of approximately 4H:1V following the EL. 6,560 ft crest raise and considering the full HsB RDS development. The downstream slope of the upper slope (i.e. from the relocated tailings pipeline ramp to the downstream edge of the crest) is approximately 2H:1V.

Upstream Slope

- The design incorporates a final upstream slope for each lift of approximately 2H:1V or flatter following placement of Zone F to create a continuous zone connecting to the Zone F layer along the previous lift.

SAVED: M:\1\01\00126\24\A\Acad\FIGS\A42, 8/27/2024 9:48:24 AM , RMCLELLAN PRINTED: 8/27/2024 9:50:44 AM, FIG 5.3, RMCLELLAN ACAD VERSION: 25.0S (LMS TECH)
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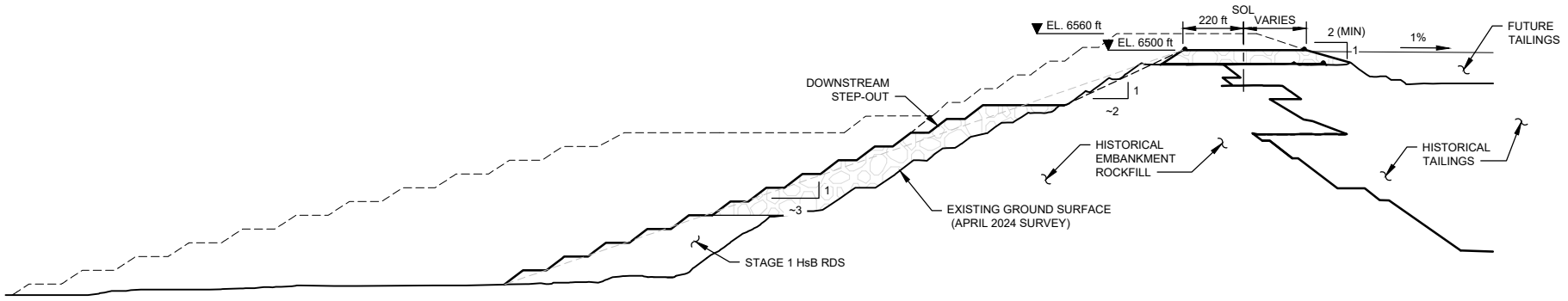
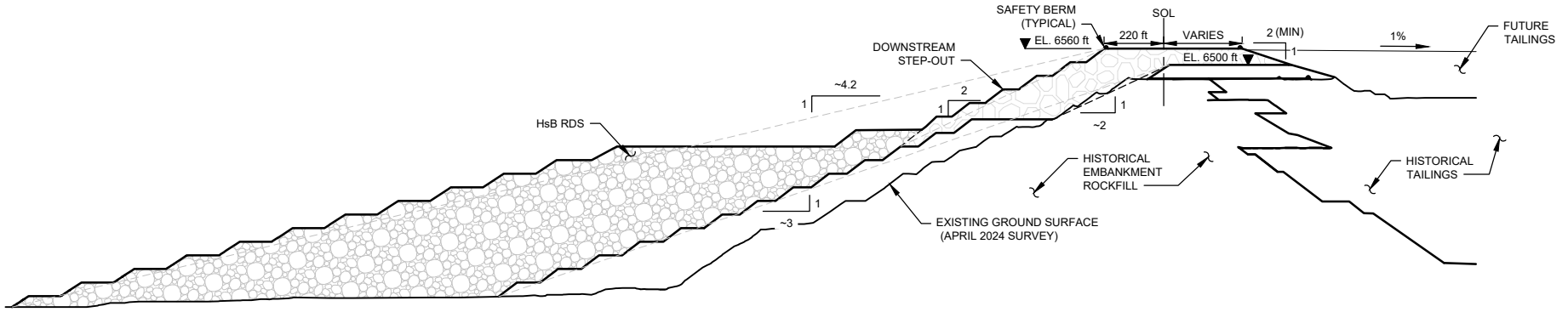


TYPICAL SECTION
EL. 6,500 FT EAST-WEST EMBANKMENT
SCALE A



TYPICAL SECTION
EL. 6,560 FT EAST-WEST EMBANKMENT
SCALE A

300 0 300 600 900 1200 1500 ft
SCALE A

NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS ARE BASED ON ANACONDA MINE GRID.
2. APRIL 2024 TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.

LEGEND:

- EMBANKMENT ROCKFILL
- ROCK DISPOSAL SITE / RAMPS / OTHER
- OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
TYPICAL SECTIONS

Knight Piésold CONSULTING

P/A NO. VA101-126/24 | REF NO. 4

FIGURE 5.3 | REV 0

5.2.4 WEST EMBANKMENT

The EL. 6,450 ft West Embankment was constructed with a substantial width to accommodate future raises up to EL. 6,560 ft without significant disturbance beyond the existing downstream toe. Future embankment raises will be completed using the centerline method over the existing wider base with the final layout achieving a configuration like a downstream constructed embankment. The embankment fill will comprise primarily Zone U south of Section 63+00 NW, and a combination of Zone U and thinner lifts in Zone D1 north of Section 63+00 NW. The 'U' and 'D1' materials will be placed in maximum 50 ft and 5 ft thick lifts, respectively. Typical sections of West Embankment at EL. 6,500 ft and EL. 6,560 ft are shown on Figure 5.4. Key layout criteria used for the development of the embankment design are as follows:

Setting Out line

- SOL is aligned 70 ft from the downstream edge of the EL. 6,500 ft and EL. 6,560 ft embankment crest and is the approximate interface between Zone D1 and Zone U at the crest, where Zone D1 is present.

Crest Width

- The minimum embankment crest width is 220 ft measured perpendicular from the downstream edge to the upstream edge of the crest at EL. 6,560 ft.
- The EL. 6,500 ft lift crest width will be significantly wider than the minimum 220 ft because of the construction approach for this embankment.

Downstream Slope

- The EL. 6,500 ft lift has been laid out with an overall downstream slope of approximately 3H:1V, except between approximately Section 50+00 NW and 65+00 NW where the downstream slope will be slightly steeper (approximately 2H:1V) to maintain the existing WED Extraction Pond. This is consistent with the current slopes for the EL. 6,450 ft crest.
- The EL. 6,560 ft lift has been laid out with an overall downstream slope of approximately 3H:1V, except at the following locations:
  - The area immediately upslope of the Extraction Pond, as described above, and
  - North of approximately Section 110+00 NW, which will gradually become slightly steeper moving to the north (up to approximately 2.1H:1V) to limit further disturbance on the downstream side beyond the existing EL. 6,450 ft embankment toe.

Upstream Slope

- The design incorporates a final upstream slope for each lift of approximately 2H:1V or flatter following placement of Zone F to create a continuous zone connecting to the Zone F layer along the previous lift.

SAVED: M:\1\01\00126\24\A\Acad\FIGS\A30, 6/26/2024 2:02:18 PM , RMCLELLAN PRINTED: 8/27/2024 9:49:52 AM, FIG 5.4, RMCLELLAN ACAD VERSION: 25.0S (LMS TECH)
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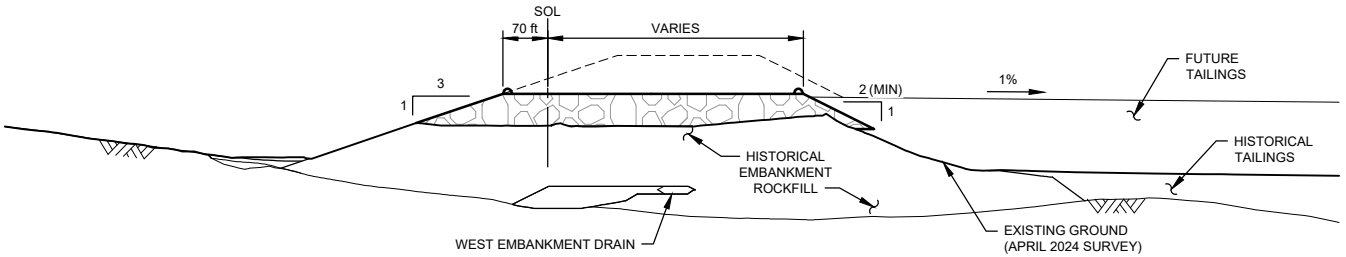
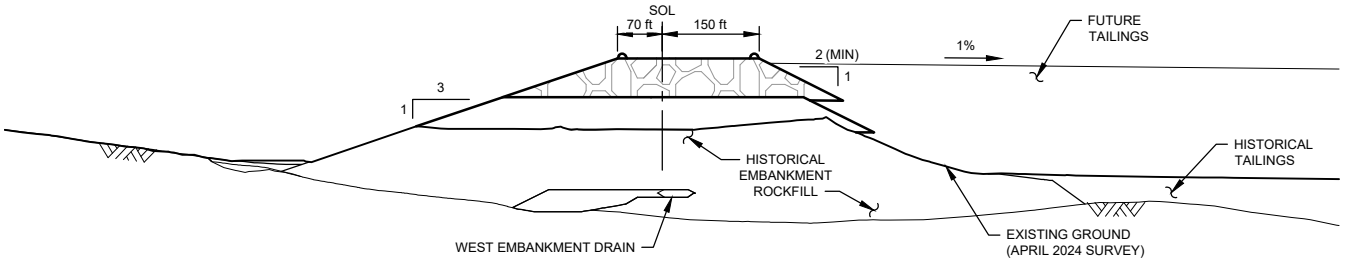


TYPICAL SECTION
EL. 6,500 WEST EMBANKMENT
SCALE A



TYPICAL SECTION
EL. 6,560 FT WEST EMBANKMENT
SCALE A

SCALE A
150 0 150 300 450 600 750 ft

NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS ARE BASED ON ANACONDA MINE GRID.
2. APRIL 2024 TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.

LEGEND:

EMBANKMENT ROCKFILL

OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
TYPICAL SECTIONS

Knight Piésold CONSULTING

P/A NO.	REF NO.
VA101-126/24	4

FIGURE 5.4 REV 0

5.3 ROCK DISPOSAL SITE LAYOUTS

Three areas (two existing and one new) located immediately downstream of the YDTI embankments are proposed for use as RDS for surplus rockfill from mine operations. The RDS will continue to enhance the stability of the YDTI by providing a buttressing effect in select areas and may provide opportunities for progressive reclamation at the mine site once the final footprints are established.

The RDS will be constructed by the mine fleet in maximum 50 ft thick lifts and developed progressively as surplus rockfill is available from mining. The overall downstream slopes specified will be achieved by incorporating benches between successive 50 ft high angle of repose slopes. Excess rockfill above the capacity of the proposed RDS locations is expected to be stored within the Continental Pit following mine operations; however, storage of rockfill within the pit is not a component of the Design Document as it is not related to YDTI development.

A description and key layout criteria for the three RDS are as follows:

HsB (East-West) RDS:

- Located within the HsB area and will be completed over the life of the mine. Stage 1 of the RDS (to EL. 5,900 ft) is underway and anticipated to be constructed prior to the crest raise to EL. 6,500 ft. Stage 1 provides storage for approximately 20 Mtons of rockfill.
- Progressive HsB RDS construction throughout the remaining mine life will further enhance stability of the East-West Embankment in the central pedestal area and may be required concurrently with construction of the relocated tailings pipeline ramp to maintain target factors of safety for embankment stability (KP, 2024a).
- Expansion of the HsB RDS above EL. 5,900 ft requires the relocation of the existing high voltage transmission line along the EL. 5,900 ft bench.
- Future expansion of the HsB RDS south of the Stage 1 RDS requires the relocation of the truck shop and maintenance yard.
- Overall downstream slopes are specified at 3H:1V to enhance surface reclamation potential.
- Provides approximate rockfill storage capacity of 130 Mtons in addition to the Stage 1 HsB RDS capacity.

North RDS:

- Located downstream of the North-South Embankment and initially permitted under Amendment 10.
- Construction of the EL. 6,200 ft lift is anticipated to be constructed prior to the crest raise to EL. 6,500 ft.
- Overall downstream slopes are specified at 3H:1V.
- Provides approximate rockfill storage capacity of 75 Mtons above EL. 6,200 ft.
- The North RDS will also include storage for alluvium for use during reclamation.

West RDS:

- Located along the northwest trending limb of the East-West Embankment in the area formerly known as the Northwest Dumps.
- Overall downstream slopes are specified at 3H:1V to enhance reclamation potential along this section of the East-West Embankment.
- Provides approximate rockfill storage capacity of 30 Mtons.

5.4 EMBANKMENT AND RDS DRAINAGE CONSIDERATIONS

The West Embankment IFC designs may include provisions for the extension of the secondary seepage collection systems associated with the WED as required to manage runoff from the upstream catchment(s). The secondary seepage collection drains will be designed in a similar manner as previous designs and will follow the topographic lows below the embankment rockfill. The purpose of the secondary seepage collection drains is to direct any runoff and seepage through the embankment materials to the WED to prevent water accumulation along the downstream toe of the embankment. The secondary drains will be extended as required prior to each embankment raise.

The alignment for the long-term outlet from the WED Extraction Pond has been considered in the layout of the East-West Embankment and West RDS. This alignment will allow overflow from the pond via a piped outlet to be passively conveyed to the HsB area following closure.

The HsB RDS will include considerations for new drainage features and expansion of the Stage 1 HsB RDS Drainage System (KP, 2023a). Drainage features within the HsB area will be specified as part of the detailed design for the HsB RDS expansion, and IFC drawings may include:

- Conversion or replacement of Surface Water Ditch (SWD) #10 along the Seep 10 bench to a rock drain.
- Conversion or replacement of SWDs #8 and #9 around the truck shop and maintenance yard to rock drains.
- Additional surface water and collection ditches around the RDS if required.
- Additional rock drains at various locations within the RDS foundation.

6.0 PROPOSED FACILITY DEVELOPMENT

6.1 GENERAL

Construction of the embankments and RDS will be completed as a continuous activity as rockfill is available from mine operations. The delivery of embankment construction materials will be scheduled to coincide with availability of rockfill from the mine to meet the phased lift construction requirements. The timing required for the completion of each phase will depend on rockfill availability, tailings production rates, variability of the tailings density throughout the facility, final beach slopes, and the supernatant pond area and volume. The filling of the YDTI will be monitored throughout operations, and construction timing will be adjusted as required. A simplified lift schedule is shown on Figure 6.1, which is based on the filling schedule included in Appendix A, and the phased construction sequence is described in the sections that follow.

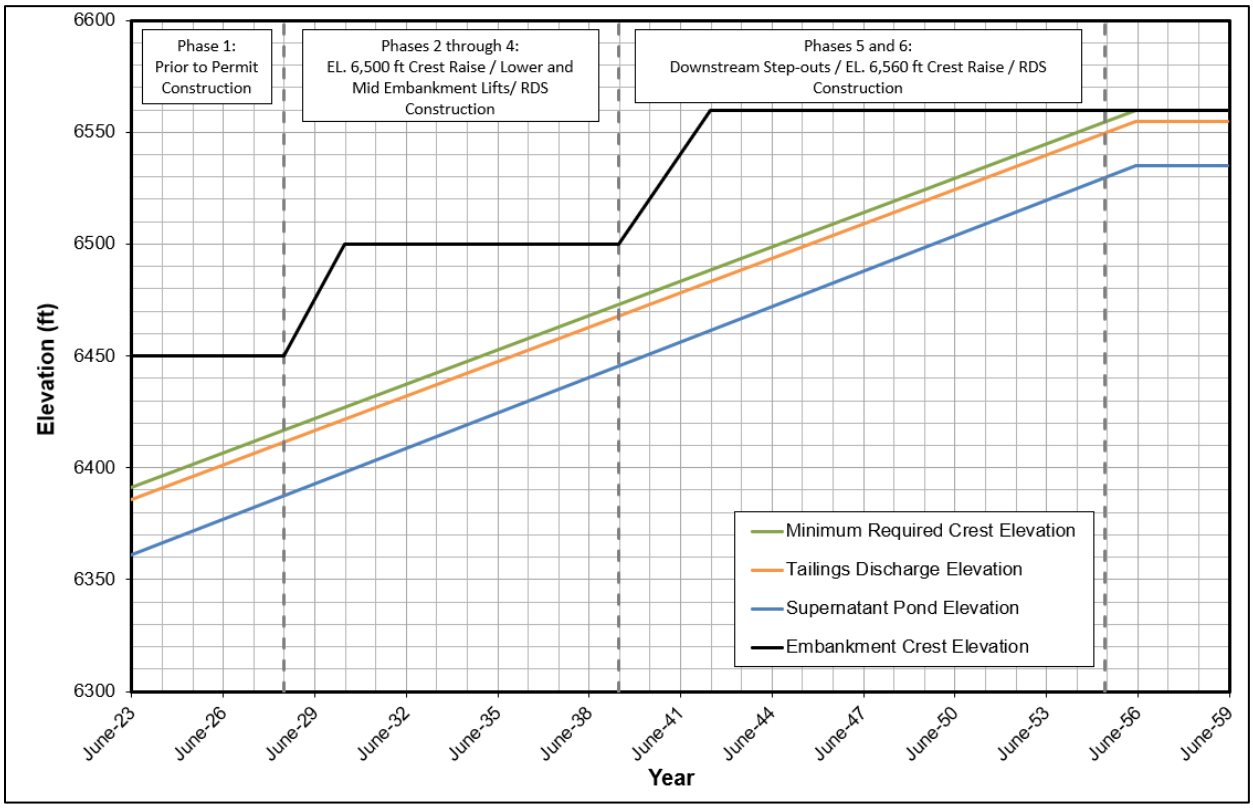


Figure 6.1 YDTI Embankment Lift Schedule

The development of the YDTI relies on various supporting activities to be undertaken by MR (or others) prior to select construction activities. This includes the following:

- Relocation of the high-voltage transmission line along the EL. 5,900 ft elevation bench (Seep 10 bench) of the East-West Embankment prior to construction of the lower embankment lifts in this area.
- Relocation of the truck shop and maintenance yard for continued HsB RDS development after Stage 1.

- Relocation of Tailings Booster Station No. 3 to facilitate raising of the embankment from EL. 6,500 ft to EL. 6,560 ft.

The timing of these supporting activities is described within the associated development phases below.

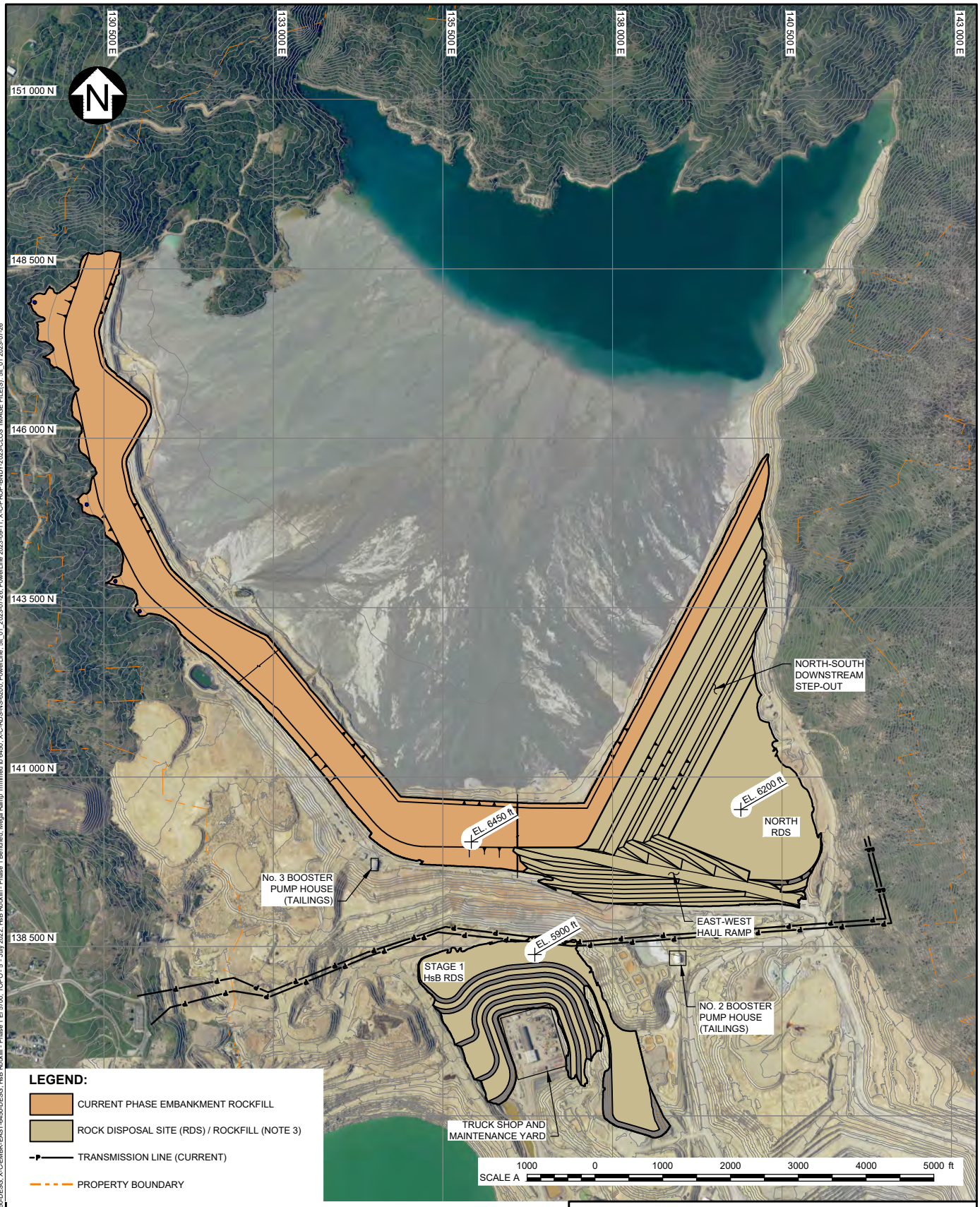
IFC designs for the various development stages will be progressively issued during ongoing mine development. The YDTI development sequence presented in this report will be updated as required for the IFC designs, and activities attributed to the phases in this report may be adjusted or combined in the future as part of the ongoing facility development process.

6.2 PHASE 1: PRIOR TO PERMIT

Phase 1 construction outlines the expected areas of construction that will be progressively developed below EL. 6,450 ft (currently permitted crest elevation) over the next several years prior to the requirement for storage expansion. This arrangement, shown on Figure 6.2, provides the base for future construction activities following the permit amendment. Construction activities assumed to be completed prior to the crest raise to EL. 6,500 ft include:

- Construction of the Stage 1 HsB drainage system and the Stage 1 HsB RDS to approximately EL. 5,900 ft.
- Construction of the new East-West Haul ramp to EL. 6,450 ft.
- Construction of downstream lifts of the North-South Embankment to achieve a downstream slope of approximately 3H:1V for the EL. 6,500 ft embankment crest raise.
- Construction of the North RDS along the downstream toe of the existing North-South Embankment to approximately EL. 6,200 ft.

Construction in these areas is ongoing at the time of this report. Construction practices are being completed as per the Amendment 10 YDTI CMP (KP, 2018), the HsB RDS CMP (KP, 2023b) and the KP letter outlining the construction practices for the RDS (KP, 2023c). MR will continue to develop these areas as rockfill is available, with the expectation that the permit amendment will be received with sufficient time to allow for raising of the YDTI embankments to EL. 6,500 ft by the early 2030s.



LEGEND:

- CURRENT PHASE EMBANKMENT ROCKFILL
- ROCK DISPOSAL SITE (RDS) / ROCKFILL (NOTE 3)
- TRANSMISSION LINE (CURRENT)
- PROPERTY BOUNDARY

NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS BASED ON ANACONDA MINE GRID.
2. AERIAL IMAGE PROVIDED BY MONTANA RESOURCES, LLC IN JULY 2023.
3. STAGE 1 HsB RDS, EAST-WEST HAUL RAMP, NORTH-SOUTH DOWNSTREAM STEP-OUT AND EL. 6,200 ft NORTH RDS CONSTRUCTION IS ONGOING AND IS EXPECTED TO BE COMPLETE PRIOR TO THE 6560 PERMIT AMENDMENT.
4. EL. 6450 FT EMBANKMENT LIFT SUBSTANTIALLY COMPLETED APRIL 2023.

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
GENERAL ARRANGEMENT
PHASE 1 - PRIOR TO PERMIT

Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF NO. 4

FIGURE 6.2

REV 0

6.3 PHASE 2: EL. 6,500 FT EMBANKMENT CREST RAISE

Phase 2 is the completion of the embankment crest raise to EL. 6,500 ft as shown on Figure 6.3. This phase will be completed by placement of a single 50 ft lift above the existing EL. 6,450 ft embankment crest and downstream lifts of the North-South Embankment completed during Phase 1.

The YDTI embankment geometry following this construction phase is summarized as follows:

- The downstream toe of the Stage 1 HsB RDS is set out with a projected slope of approximately 3H:1V from the crest of East-West Embankment when measured at Section 0+00. The Stage 1 HsB RDS has a downstream slope of 3H:1V and is assumed to be completed to enhance embankment stability prior to the crest raise. The upper portion of the East-West Embankment will have a downstream slope of approximately 2H:1V, when measured at Section 0+00 from the downstream edge of the embankment crest to the Seep 10 bench.
- The West Embankment will maintain an overall downstream slope of 3H:1V with a fixed downstream toe position aligned with the existing EL. 6,450 ft embankment. Foundation preparation will be required where the embankment alignment extends to the north.
- The North-South Embankment has an overall downstream slope of approximately 3H:1V in this phase, as measured at Section 33+00N.

The Phase 2 layout is estimated to be required for continued tailings storage by late 2034. The current rockfill schedule indicates sufficient material will be available to complete construction of this phase by approximately 2030 assuming construction commences in 2028. This crest elevation and arrangement provides tailings storage capacity through approximately 2044.

6.4 PHASE 3: EL. 6,500 FT LOWER EMBANKMENT LIFTS

Phase 3 includes rockfill placement along the downstream side of the East-West Embankment and modification of the mine haul ramp system to reach EL. 6,500 ft along the North-South Embankment. The Phase 3 activities may commence while Phase 2 is still in progress; however, relocation of a high-voltage transmission line along the Seep 10 bench is required prior to continuing construction of the downstream lifts of the East-West Embankment above the Seep 10 bench. Construction activities associated with Phase 3 are shown on Figure 6.4 and do not result in increased tailings storage for the facility. Construction activities during this phase are focused on continued slope flattening along the East-West Embankment and facility development in preparation for future raises. Activities during this phase include:

- Progressive construction of embankment lifts above the Seep 10 Bench and Stage 1 HsB RDS on the downstream side of the East-West Embankment. The lifts are set out to maintain a downstream slope of 3H:1V or flatter and will buttress the lower embankment slopes above the Seep 10 bench while avoiding the 7% ramp and HsB Capture System Booster Pump House #2. Embankment construction in this area requires the following preparatory activities:
  - Conversion of the SWD #10 to a rock drain prior to fill placement.
  - The relocation of the existing high-voltage transmission lines running along the Seep 10 bench. Preliminary routing, as determined by Northwest Energy, is included on the general arrangement.
- Widening of the EL. 6,335 ft bench downstream of the Number 3 Tailings Booster Pump House to provide an area for future relocation of the pump house if/when required (expected to be required for raising the embankment crest to EL. 6,560 ft).

- Construction of a new tailings pipeline ramp along the downstream side of the embankment. Relocation of the tailings pipelines onto this new pipeline ramp will be required prior to advancing lifts of the East-West Embankment above the existing pipeline ramp.
- Construction of a haul ramp along the North-South Embankment to EL. 6,500 ft to provide access from the East-West Haul Ramp to the embankment crest along the North-South Embankment.

Phase 3 construction activities are expected to occur between approximately 2030 and 2036 based on the estimated volumes and current rockfill mining schedule. Drawings presenting the combined embankment design for EL. 6,500 ft through Phase 3 are included as Appendix B.

Further expansion of the HsB RDS outside of the Stage 1 footprint may be required during development of the Phase 3 works to further enhance stability along the downstream toe of the embankment. The extent of additional buttressing will be determined during the IFC phase based on final design geometry for the downstream embankment lifts and new tailings pipeline ramp. Relocation of the truck maintenance workshop and updates to the drainage system design in the HsB area will be required before the HsB RDS can be expanded.

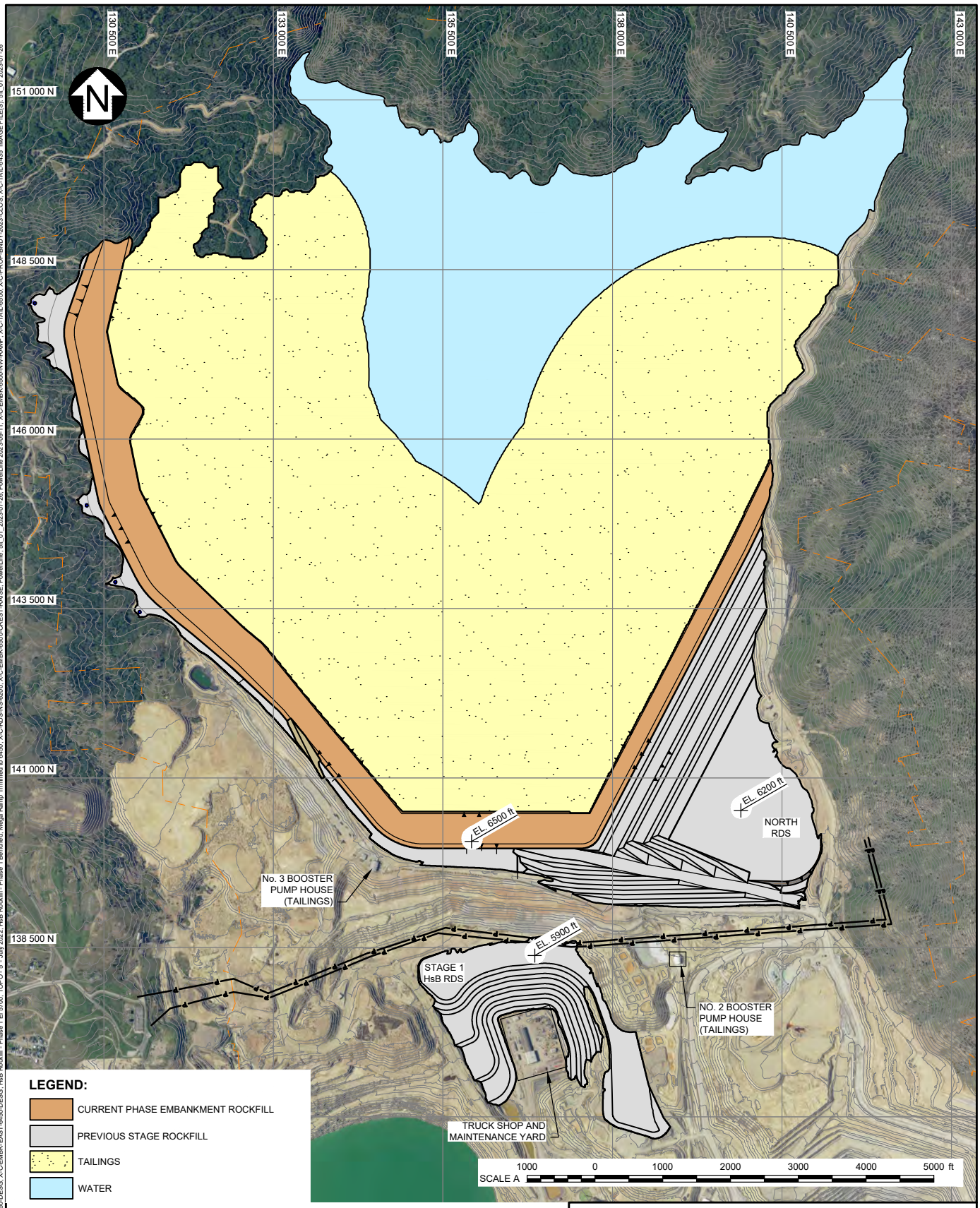
6.5 PHASE 4: EL. 6,500 FT EMBANKMENT LIFTS AND RDS EXPANSIONS

The Phase 4 construction activities described in the following section may commence while Phase 2 or 3 construction is still in progress. These activities are shown separately for illustration purposes in this report but may be adjusted or combined in the future. Phase 4 includes rockfill placement downstream of the East-West and North-South Embankments up to EL. 6,500 ft, construction of a haul ramp along the northwest trending limb of the East-West Embankment, and expansion of the HsB and North RDS as shown on Figure 6.5. Following completion of this phase the downstream step-out of EL. 6,500 ft embankment crest will be fully constructed in anticipation of any future crest raises. Subsequent lifts up to EL. 6,560 ft will be completed as capping lifts to increase storage capacity (i.e., no additional downstream step-outs are required).

Continued expansion of the North RDS to EL. 6,350 ft and the HsB RDS to EL. 6,200 will flatten the overall downstream slope of the embankments in these areas and provide additional buttressing to the YDTI. The maintenance yard and truck shop located within the HsB area will be relocated prior infilling of the U-shape of the Stage 1 HsB RDS.

The overall slope of the East-West Embankment from the toe of the HsB RDS to the downstream side of the embankment, measured at Section 0+00, will be approximately 4H:1V. The downstream slope of the upper portion of the East-West Embankment, measured at Section 8+00W, will be approximately 2H:1V between the toe of the mid-embankment lifts and the downstream side of the embankment crest. The overall downstream slope of the North-South Embankment and the North RDS will be 3H:1V.

This construction phase is projected to be complete by approximately 2039 based on the current rockfill mining schedule, to allow for construction of embankment lifts associated with Phase 5 prior to the requirement for additional tailings storage in 2044.



LEGEND:

- CURRENT PHASE EMBANKMENT ROCKFILL
- PREVIOUS STAGE ROCKFILL
- TAILINGS
- WATER
- TRANSMISSION LINE (CURRENT)
- PROPERTY BOUNDARY

NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS BASED ON ANACONDA MINE GRID.
2. AERIAL IMAGE PROVIDED BY MONTANA RESOURCES, LLC IN JULY 2023.

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
GENERAL ARRANGEMENT
PHASE 2 - EL 6,500 CREST RAISE

Knight Piésold CONSULTING

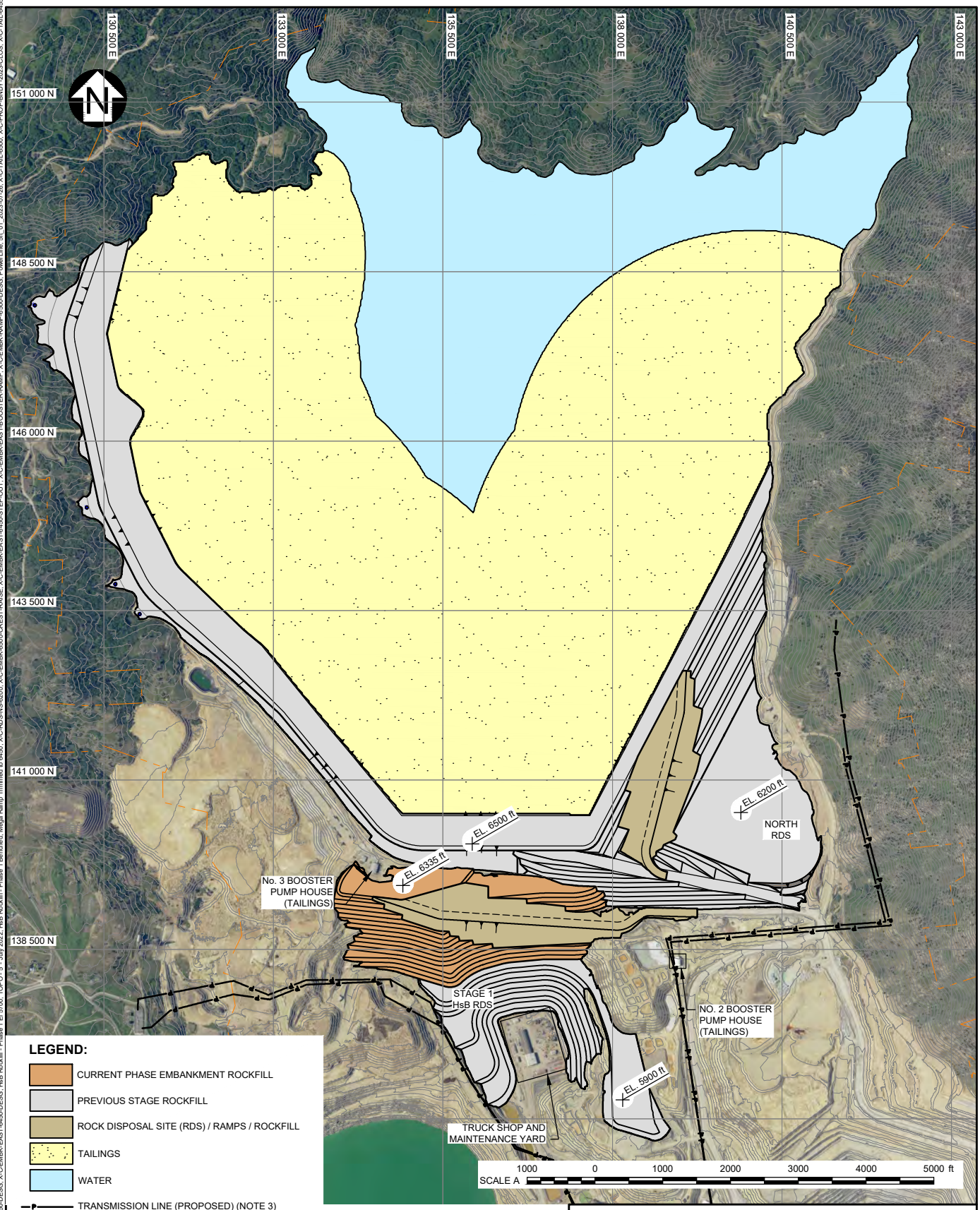
P/A NO. VA101-126/24

REF NO. 4

FIGURE 6.3

REV 0

SAVED: M:\1\101\00126\24\A\acad\FIGS\A18_6/26/2024 2:18:03 PM, RMCLELLAN PRINTED: 8/27/2024 9:53:47 AM, FIG 6.3, RMCLELLAN ACAD VERSION: 25.0S (LMS TECH)
XREF FILE(S): X-C-PROP-BNDY-2020; X-C-E-EMBK-WEST-6450-DESG; X-C-EMBK-EAST-6450-DESG; HsB Rockfill - Phase 1 El 6700; TOPO - 5' - July 2022; HsB Rockfill - Phase 1 Benched; Mega Ramp Trimmed to 6450; X-C-RDS-NS-6200; X-C-EMBK-6500-CREST-RAISE; PowerLine; 5ft_01, 2023-07-26; PowerLine 2023-08-11; X-C-EMBK-6500-NW-RAMP; X-C-TAIL-6500; X-C-PROP-BNDY-2023-CLOS; X-C-TAIL-6435 IMAGE FILE(S): 5ft_01 2023-07-26



LEGEND:

- CURRENT PHASE EMBANKMENT ROCKFILL
- PREVIOUS STAGE ROCKFILL
- ROCK DISPOSAL SITE (RDS) / RAMPS / ROCKFILL
- TAILINGS
- WATER
- TRANSMISSION LINE (PROPOSED) (NOTE 3)
- PROPERTY BOUNDARY

NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS BASED ON ANACONDA MINE GRID.
2. AERIAL IMAGE PROVIDED BY MONTANA RESOURCES, LLC IN JULY 2023.
3. HIGH VOLTAGE TRANSMISSION LINE IS APPROXIMATE AS PROVIDED BY MR IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
GENERAL ARRANGEMENT
PHASE 3 - EL 6,500 LOWER EMBANKMENT LIFTS

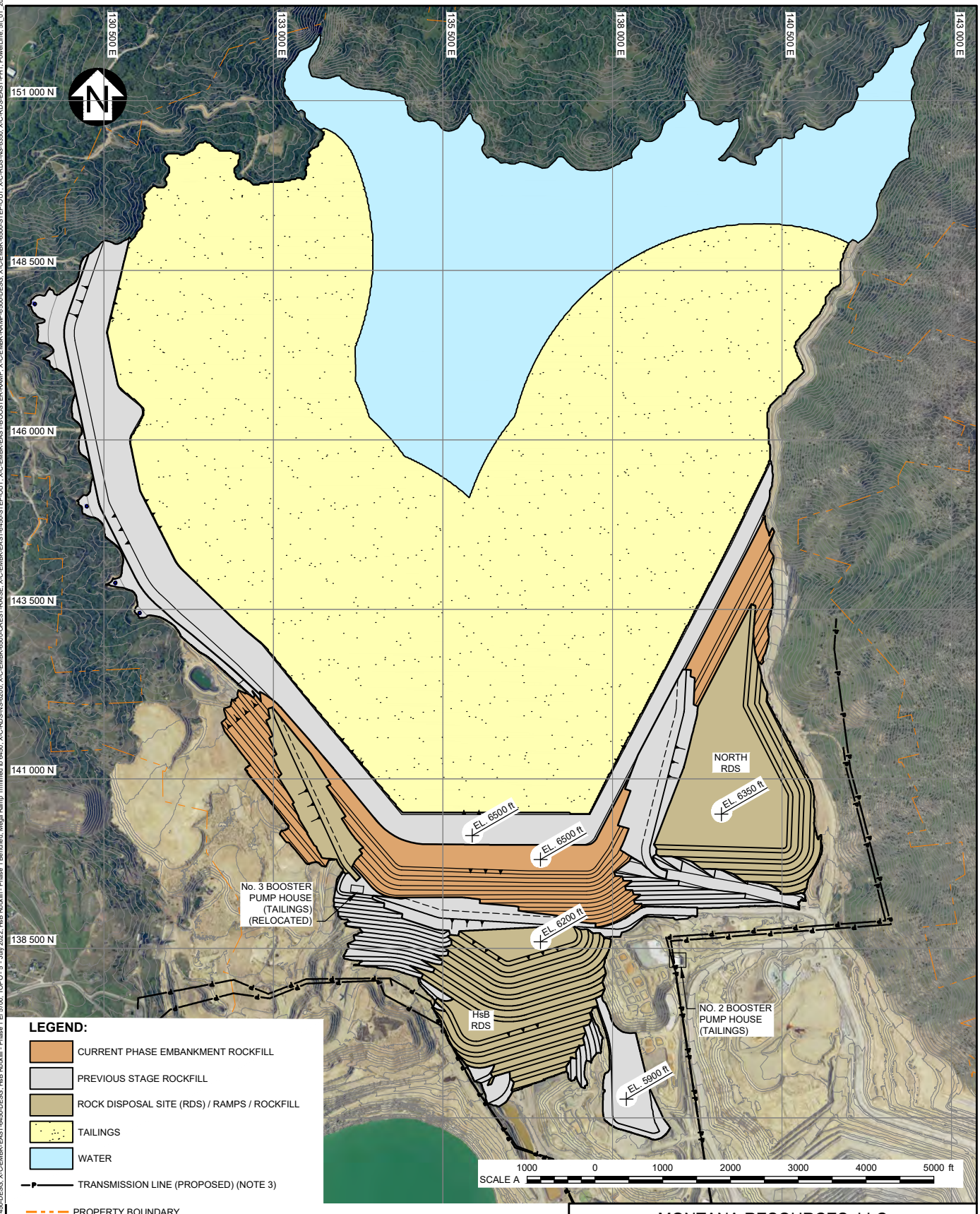
Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF NO. 4

FIGURE 6.4

REV 0



NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS BASED ON ANACONDA MINE GRID.
2. AERIAL IMAGE PROVIDED BY MONTANA RESOURCES, LLC IN JULY 2023.
3. HIGH VOLTAGE TRANSMISSION LINE IS APPROXIMATE AS PROVIDED BY MR IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
GENERAL ARRANGEMENT
PHASE 4 - EL 6,500 EMBANKMENT LIFTS & RDS

Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF NO. 4

FIGURE 6.5

REV 0

6.6 PHASE 5: EL. 6,560 FT EMBANKMENT CREST RAISE

Phase 5 is the completion of the embankment crest raising up to a maximum of EL. 6,560 ft (excluding the tailings distribution corridor, which may be locally higher to facilitate tailings distribution to the northern ends of the embankment), as shown on Figure 6.6. The maximum allowable lift thickness will be 50 ft; therefore, a minimum of two lifts will be required to reach EL. 6,560 ft. The crest raise will be completed with capping lifts over the previously constructed embankment, and do not require any additional downstream construction to meet target slope angles outlined in the QPPs.

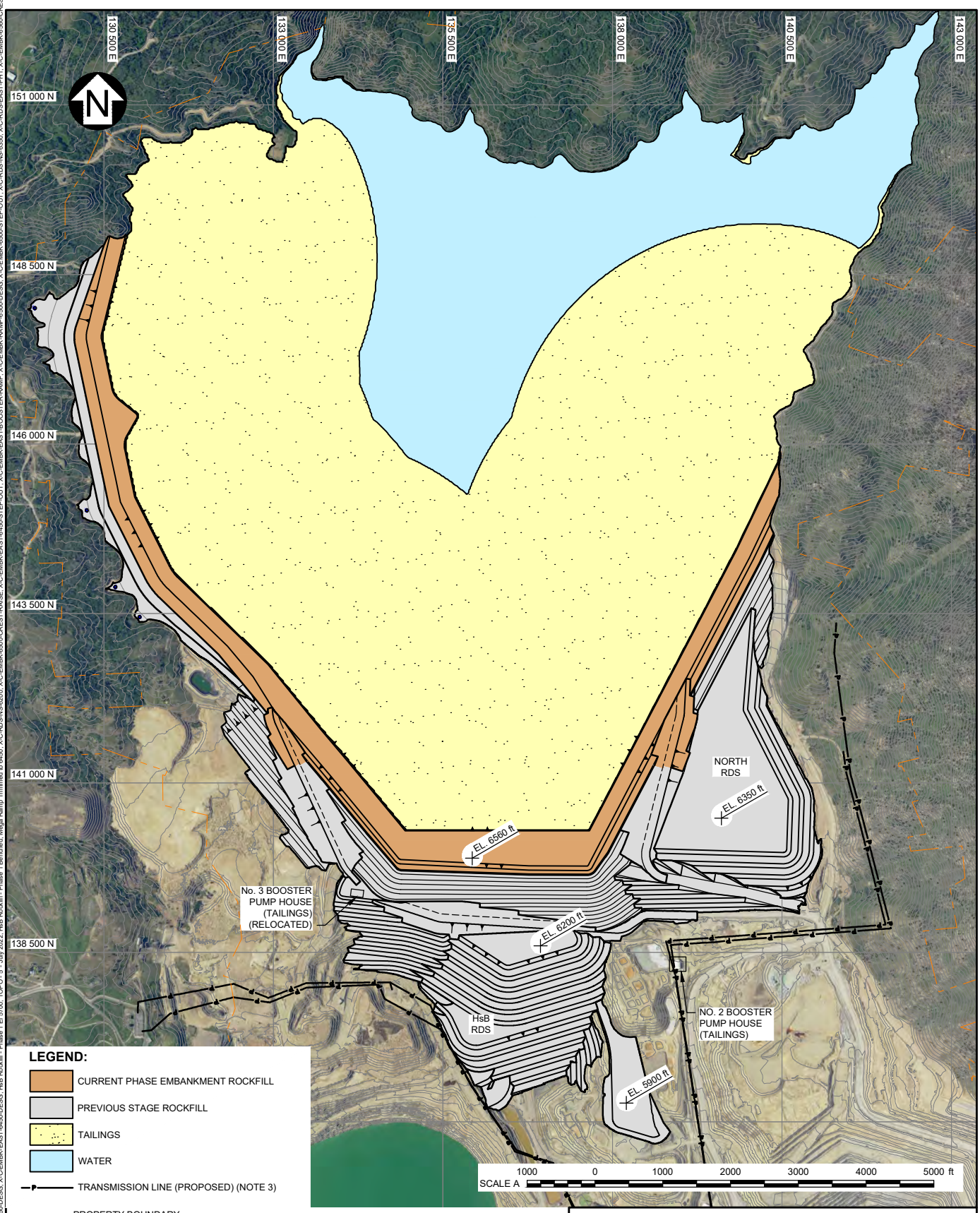
The overall downstream slope of the East-West Embankment will be approximately 3H:1V when measured at Section 0+00 from the toe of the HsB RDS to the downstream side of the embankment crest. The upper portion of the East-West Embankment has an overall downstream slope of 2H:1V, when measured at Section 0+00 from the upstream edge of the pipeline ramp to the downstream side embankment crest. The West Embankment and North-South Embankment will maintain an overall downstream slope of 3H:1V.

A crest raise above EL. 6,500 ft is estimated to be required for continued tailings storage by approximately 2044. The current rockfill schedule projects sufficient material will be available to complete this phase of construction to meet the storage requirements.

6.7 PHASE 6: LIFE OF MINE DESIGN (PRIOR TO CLOSURE)

The YDTI and supporting RDS will reach full build-out during Phase 6, shown on Figure 6.7, and reclamation and closure activities will be underway as practicable to transition the facility to achieve end land-use objectives. Design drawings presenting the life of mine design are included in Appendix C.

Rockfill placement in this phase is focused on the continued expansion of the HsB RDS, North RDS and development of the West RDS. The HsB RDS footprint is expanded at EL. 6,200 ft while additional lifts are added to the North RDS to reach an ultimate elevation of 6,560 ft. The West RDS is expanded to a maximum of EL. 6,500 ft, while maintaining access to the embankment crest from the access road parallel to the East-West Embankment. Continued expansions of the RDS, with minimum overall downstream slopes of 3H:1V, will result in a significantly flatter overall downstream slopes when measured from the downstream edge of the embankment to the toe of the RDS.



LEGEND:

- CURRENT PHASE EMBANKMENT ROCKFILL
- PREVIOUS STAGE ROCKFILL
- TAILINGS
- WATER
- TRANSMISSION LINE (PROPOSED) (NOTE 3)
- PROPERTY BOUNDARY

NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS BASED ON ANACONDA MINE GRID.
2. AERIAL IMAGE PROVIDED BY MONTANA RESOURCES, LLC IN JULY 2023.
3. HIGH VOLTAGE TRANSMISSION LINE IS APPROXIMATE AS PROVIDED BY MR IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	28AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
GENERAL ARRANGEMENT
PHASE 5 - EL 6,560 EMBANKMENT CREST RAISE

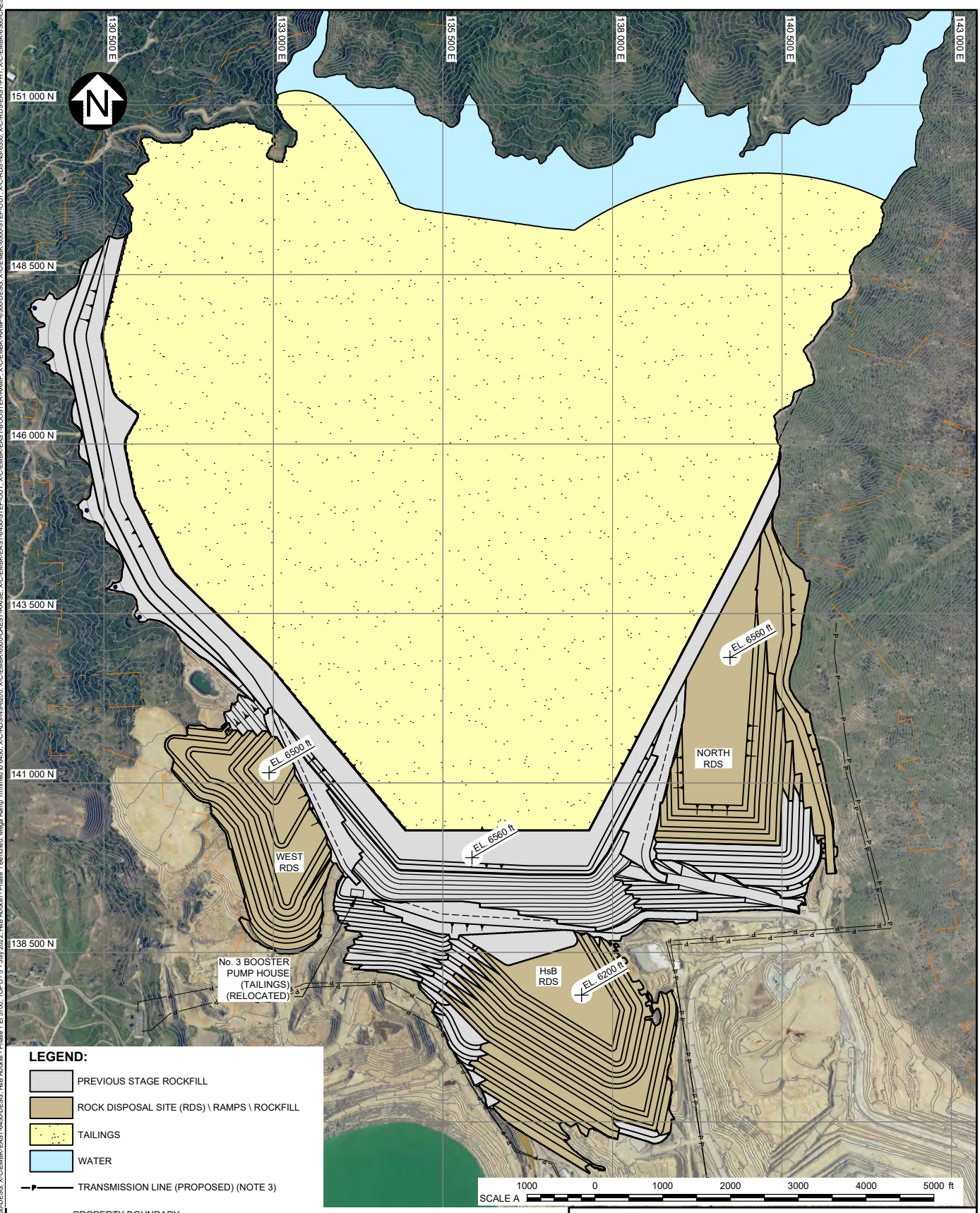
Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF NO. 4

FIGURE 6.6

REV 0



LEGEND:

- PREVIOUS STAGE ROCKFILL
- ROCK DISPOSAL SITE (RDS) \ RAMPS \ ROCKFILL
- TAILINGS
- WATER
- TRANSMISSION LINE (PROPOSED) (NOTE 3)
- PROPERTY BOUNDARY

NOTES:

1. COORDINATE SYSTEM AND ELEVATIONS BASED ON ANACONDA MINE GRID.
2. AERIAL IMAGE PROVIDED BY MONTANA RESOURCES, LLC IN JULY 2023.
3. HIGH VOLTAGE TRANSMISSION LINE IS APPROXIMATE AS PROVIDED BY MR IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED
0	27AUG'24	ISSUED WITH REPORT	JRG	RMM	DDF

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
GENERAL ARRANGEMENT
PHASE 6 - LIFE OF MINE DESIGN

Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF NO. 4

FIGURE 6.7

REV 0

7.0 INSTRUMENTATION AND MONITORING

7.1 GENERAL

KP and MR have progressively advanced characterization of the YDTI embankments, tailings mass and foundation materials, while developing a robust instrumentation network and associated monitoring programs. An initial 5-year phased site investigation and instrumentation plan was developed as part of the Amendment 10 permit application for continued use of the YDTI facilitated by continued construction of the embankment to a crest elevation of 6,450 ft (KP, 2017). The majority of the initial 5-year plan was implemented through a series of site investigation programs completed from 2017 through 2021. Modifications were made based on findings of preceding investigations, in response to feedback from the Independent Review Panel (IRP), and/or to achieve updated project objectives.

An updated 5-year site investigation, instrumentation, and monitoring plan for the YDTI covering the period of 2022 through 2026 was developed in late 2021 (KP, 2021). The objectives of the updated 5-year site investigation, instrumentation and monitoring plan include expanding spatial coverage of subsurface investigations from 2022 through 2026 to:

- Advance characterization of the nature and distribution of rockfill and foundation materials within the East-West and North-South Embankments.
- Further investigate rockfill saturation within the embankments including the influence of rockfill material properties and distribution on drainage within the embankment.
- Install additional pore water pressure and surface/subsurface deformation monitoring instrumentation to progressively supplement the operational instrumentation network within the East-West and North-South Embankments.

7.2 EXISTING MONITORING NETWORK

The YDTI monitoring network includes the active instrumentation to monitor piezometric conditions, displacements within the embankments, tailings, and foundation materials and seepage discharge. Available techniques include:

- Nested vibrating wire piezometers (VWPs) installed at over 60 locations to monitor embankment, tailings, and foundation pore water pressures and at 10 and 28 locations within the Horseshoe Bend and West Ridge areas, respectively.
- Instrumented and manually surveyed inclinometers to monitor subsurface deformations within embankment and foundation materials.
- Elexon Geo4Sight instrumentation (multi-node pore water pressure and angular deformation instruments) to monitor pore water pressures and subsurface angular deformations within tailings and embankment rockfill.
- Global Navigation Satellite System (GNSS) instrumented and manually surveyed survey-monuments to monitor embankment surface displacements.
- Geophysical casings to facilitate borehole nuclear magnetic resonance testing.
- Two seismic switches installed at Booster 3 and the Berkeley Garage to monitor for seismic event driven ground movements in proximity to the YDTI.

- Ultra-sonic seepage monitoring instruments to monitor seepage discharge to Seep 10 and the HsB area from the YDTI.

The active YDTI monitoring program also utilizes interferometric synthetic aperture radar (inSAR) remote sensing to monitor surface deformations throughout the embankments. These programs run during the snow-free season (approximately mid-April through November) and include Long-term, high resolution inSAR monitoring (SqueeSAR; 2-dimensional Terra-SAR-X) with reports typically completed monthly during the snow free season. Additional short-term, frequent inSAR monitoring (Bulletins; 1-dimensional Ascending Terra-SAR-X) with reports completed every 11-days and each covering a monitoring period of 22-days have been used previously during construction and may be reactivated during active YDTI construction phases.

The majority of instrumentation data are available to KP and MR via a remote monitoring system (RMS) that was installed in 2017 and has been progressively expanded thereafter. VWP, GNSS, and instrumented inclinometer data are available in near real time via the online Sensemetrics platform. InSAR data are not included in the system but are reported on by the provider (TRE-Altamira) and analyzed by KP. Elexon Geo4Sight instrumentation are incompatible with Sensemetrics and are downloaded by MR and analyzed by KP external to the RMS. The RMS will continue to operate during the next 5-year period (and beyond) and new instrumentation will be added following installation (as applicable).

7.3 EXPANSION OF MONITORING NETWORK

Maintenance and expansion of the instrumentation and monitoring network around the YDTI and within the RDS will continue throughout the development of the facility. The expansion of the network will initially use similar methods to those described above. It is anticipated that the available technology and state of practice will continue to evolve over the long design life presented in this report, and the methods used for monitoring will evolve to remain consistent with applicable, appropriate and current technologies and techniques practicable for the conditions at the mine.

Specific locations for ongoing monitoring, including pore pressures and deformation behavior (surface and subsurface), will be developed and updated as construction progresses. The practice of developing and following site investigation, instrumentation, and monitoring plans for the YDTI at regular intervals will continue during the development phases described in this report. It is anticipated that additional instrumentation will be installed within the embankments and RDS following completion of specific phases to limit the potential for damage or loss of instrumentation during construction. The instrumentation and monitoring plans, QPPs, and response plans will be progressively updated based on facility performance.

8.0 CLOSURE PLAN

8.1 GENERAL

Detailed information on the reclamation plan and closure of the facility is outlined in the Preliminary Closure Plan prepared by WESTECH Environmental Services, Inc. (WESTECH, 2024). A brief summary of the closure plan is included below for reference.

One of the principal design objectives for ongoing YDTI development was to progressively improve the surface reclamation potential of the YDTI and surrounding facilities. The design presented in this report achieves this objective through gradual slope flattening of overall slope angles and progressive buttressing of the facility embankments. These progressive improvements are made possible by continued mining at the site.

Most embankment and RDS slopes are proposed to be developed with a benched arrangement at overall slope angles of approximately 3H:1V, except in few areas where incorporating these flatter slopes was not practicable. Overall embankment downstream slopes are specified and will be achieved by incorporating benches between successive 50 to 100 ft high angle of repose slopes. Angle of repose slopes would be graded to 3H:1V and intervening benches would be obliterated during reclamation (or progressively during mine operations once final footprints are set) to create the final slope arrangement for closure. The crest, benches, and final slopes will be covered by soil and revegetated as specified in the closure plan. Drainage features will be incorporated to control runoff and keep water from ponding.

The tailings beaches are not expected to require substantial regrading following closure except where undesirable settlement is observed. Selective tailings distribution near the end of operations may be used to develop some topographic diversity. The upland beach areas will be capped and vegetated as specified in the closure plan. Transition zones developing as the water inventory in the closure pond is drawn down from approximately 15,000 acre-feet (ac-ft) to 5,000 ac-ft can be progressively reclaimed during active closure. The water inventory in the final closure pond is expected to continue to reduce below 5,000 ac-ft thereafter but may experience some seasonal and interannual fluctuation depending on prevailing climate conditions in the long-term following closure. A wetland area is anticipated to form near the edge of the final closure pond with wetland plans naturally establishing over time.

The closure arrangement incorporates a closure spillway to be constructed following cessation of operations to integrate a closure plan that enhances dam safety. The objective of the closure spillway is an emergency water management system designed primarily to prevent overtopping of the embankment, but which also serves to prevent pooling of water adjacent to the embankment if severe flooding were to occur. The spillway configuration is presented at a conceptual level, with further detail and evaluation required to develop the detailed design and the construction strategy. The final design details will depend on the final elevation and configuration of the facility at closure.

Water management at the site in the long-term following closure is anticipated to be part of the Butte Mine Flooding Operable Unit (BMFOU) remedy. Any water retention at the YDTI contemplated as part of the BMFOU long-term strategy for post-closure water management should be reviewed and approved by the YDTI Engineer of Record (EOR) unless the facility is declassified and an EOR is determine not to be required.

8.2 MONITORING, INSPECTION AND REVIEW REQUIREMENTS

8.2.1 GENERAL

A detailed closure monitoring plan identifying site-specific needs for monitoring, inspection and review will be prepared prior to closure. The plan will include details such as the monitoring requirements, monitoring frequency and minimum qualifications of monitoring personnel. The plan will include a section describing monitoring and mitigation measures for response to unusual occurrences or emergency conditions.

The reclaimed YDTI facilities initially will be inspected and maintained regularly following closure to verify that any changes to site conditions and facility performance do not compromise the integrity and safety of the impoundment. The performance of the reclamation aspects not directly related to dam safety (i.e. dust generation, revegetation coverage, and surface drainage etc.) is under the jurisdiction of the Montana Department of Environmental Quality (MDEQ) or Environmental Protection Agency (EPA) and are not included in this conceptual plan.

8.2.2 QUANTITATIVE PERFORMANCE PARAMETERS (CLOSURE)

Preliminary QPPs for closure for the end of mine life layout are summarized in Table 8.1. QPPs will be monitored and revised based on the performance of the facility and will be integrated into the final closure monitoring plan for the facility. Updates may be required in the future depending on the final geometry of the facility at closure.

Table 8.1 Preliminary QPPs – Closure

Stage	Embankment Limb	Layout QPP	Value
Embankment (at Closure)	North-South	Downstream Overall Slope	No steeper than 3H:1V
		Minimum Crest Width	> 200 ft
	East-West	Downstream Overall Slope	No steeper than 3H:1V
		Downstream Upper Slope[1]	No steeper than 2H:1V
		Minimum Crest Width	> 200 ft
	West	Downstream Overall Slope	No steeper than 3H:1V
		Minimum Crest Width	> 200 ft
Supernatant Pond	Volume (Active Closure)[2]		< 18,000 acre-ft
	Volume (Passive Closure)[2]		< 5,000 acre-ft
Tailings Beach	Minimum Beach Length[3]		No ponded water within 800 ft of the embankment crest
Spillway	Geometry		Consistent with specifications
	Condition and Integrity		Potential flow not obstructed
Rock Disposal Sites	All	Downstream Overall Slope	No steeper than 3H:1V

Note(s):

1. Upper Slope measured from the relocated tailings pipeline ramp upstream edge to the downstream embankment crest.
2. The pond volume requirement is for maximum normal conditions during active and passive closure. Active closure is defined as a period of 20 years following permanent cessation of mine operations, and passive closure considers the long-term closure condition thereafter.
3. The minimum beach length of 800 ft allows time to respond and mitigate water approaching the embankment. The spillway should be positioned to passively maintain the minimum beach length criteria.

8.2.3 MONITORING FREQUENCY

The frequency of monitoring for the reclaimed YDTI will vary depending on the final reclamation plan implemented and the required functionality of each facility component. A post-closure monitoring program and schedule will be prepared following completion of the YDTI reclamation program.

The initial monitoring frequency will be higher following reclamation, while the regraded slopes stabilize, tailings consolidate, and vegetation establishes. Monitoring frequencies and reporting protocols will initially follow the latest version of the TOMS Manual with consideration for changes that may be made annually as part of the normal review processes for this document.

Amendment of the monitoring schedule may be considered once closure monitoring baselines have been established and the reclamation system performance is demonstrated. The YDTI monitoring components that may be included in the post-closure monitoring program are summarized in Table 8.2. The routine inspections and monitoring of the reclaimed facility will be undertaken by personnel familiar with the reclamation objectives and expectations.

Table 8.2 Post-Closure Monitoring Considerations

Location	Inspection	Frequency[1]
Capped Surfaces (Embankment and Beach)	Inspect for cracking, slumping/deformation, erosion, slope failure, and any other changes in the embankment shape and tailings surface. Inspect the upstream slope, downstream slope and embankment crest.	Quarterly
	Inspect for daylighting seeps on the downstream embankment slope/benches, water pooling/ponding, soft/wet areas	Monthly
	Inspect beach surface for dusting risk/potential[2]	Monthly[2]
	Measure water levels in the monitoring wells and piezometers	Monthly
	Reclaimed beach slope/settlement survey[2]	Annually[2]
	Vegetation survey for noxious weeds, die-off and disease[2]	Annually[2]
Pond and Wetland Areas	Measure pond water level[2]	Monthly[2]
	Evaluate pond water storage volume[2]	Annually[2]
	Inspect wetland plants for noxious weeds, die-off and disease[2]	Annually[2]
Spillway	Inspect spillway intake, channel base and side slopes for erosion, blockage, damage, slope failure, and any other changes in the shape and surface of the spillway.	Quarterly and after large storm events
HsB Seepage Collection System[3]	Record the HsB Weir flowrate[3]	Monthly[3]
West Embankment Drain	Record WED flowrate	Monthly[3]
Site Wide Water Management	Inspect surface drainage ditches and culverts for erosion, blockage, damage[2]	Quarterly and after large storm events[2]

Note(s):

1. The frequency of monitoring may be reduced once the reclamation system performance has been established and a monitoring baseline has been established.
2. Inspection requirements and inspection frequency are under the jurisdiction of the MDEQ, this component has been included in the table for completeness.
3. Inspection requirements and inspection frequency are under the jurisdiction of the EPA, this component has been included in the table for completeness.

8.2.4 INSPECTION AND REVIEWS

8.2.4.1 ENGINEER OF RECORD

The EOR role for the YDTI will be retained following closure. The role and required qualifications for the post-closure EOR will be consistent with those of the EOR as defined in MCA 82-4-375. The post-closure EOR will be responsible for reviewing new documents and design features pertaining to the YDTI, conducting annual inspections and notifying the relevant owner and government authorities (e.g. MDEQ and EPA) if the facility is not performing as intended or poses a threat to human health or the environment.

The EOR will conduct an Annual Inspection, which considers both the geotechnical and reclamation performance of the closed facility. The EOR will prepare a report describing the scope of the inspection and actions recommended to document the closed facility is being properly maintained. The EOR will submit the report to the facility owner and MDEQ and immediately notify the MDEQ if the facility presents an imminent threat or when there is the potential for an imminent threat to human health or the environment.

The EOR will conduct Annual Inspections of the YDTI until reclamation is complete and the IRP is convened for a Periodic Review. The frequency of inspections and future involvement of the EOR and IRP thereafter will be discussed during the first Periodic Review following closure and will be incorporated into the detailed closure monitoring plan.

The EOR may be required to conduct additional inspections or monitoring following any unusual event (e.g., earthquake or extreme rainfall event) or as a result of observations made during a routine inspection or monitoring.

8.2.4.2 INDEPENDENT REVIEW PANEL

The IRP will be convened within five years of closure to evaluate the performance of the facility relative to dam safety standards of practice. The frequency of inspections and future involvement of the EOR and IRP thereafter will be discussed during the first Periodic Review following closure and will be incorporated into the detailed post-closure monitoring plan.

9.0 REFERENCES

Knight Piésold (KP, 2017). Design Basis Report, Rev 2, KP Ref. No. VA101-126/12-1, June 30, 2017. Vancouver, BC.

Knight Piésold Ltd. (KP, 2018). Yankee Doodle Tailings Impoundment: Construction Management Plan (KP Reference No. VA101-126/12-5 Rev. 3), May 1, 2018.

Knight Piésold (KP, 2021). 5-Year Site Investigation, Instrumentation and Monitoring Plan for Yankee Doodle Tailings Impoundment. KP Ref. VA21-02063. December 22, 2021. Vancouver, BC.

Knight Piésold Ltd. (KP, 2023a). Horseshoe Bend Rock Disposal Site – Stage 1 Drainage System Report (KP Reference No. VA101-126/25-3 Rev. 0), December 7, 2023.

Knight Piésold Ltd. (KP, 2023b). Horseshoe Bend Rock Disposal Site – Construction Management Plan (KP Reference No. VA101-126/25-8 Rev. 0), March 3, 2023.

Knight Piésold Ltd. (KP, 2023c). Construction Practices for the rock disposal site at the toe of the North-South Embankment (KP Reference No. VA23-00542), dated May 10, 2023.

Knight Piésold Ltd. (KP), 2024a. Yankee Doodle Tailings Impoundment – Stability Assessment Report for 6,560 Amendment Design Document. KP Ref. No. VA101-126/24-5 Rev. A, dated TBD.

Knight Piésold Ltd. (KP), 2024b. Yankee Doodle Tailings Impoundment – Construction Management Plan for 6,560 Amendment Design Document, KP Ref. No. VA101-126/24-6 Rev. A, dated TBD.

Montana Resources, LLC. (MR), 2023. Letter to: Jack Standa, Montana Resources LLC. RE: *Montana Resources – Ore Reserves as of December 31, 2022*. January 17, 2023.

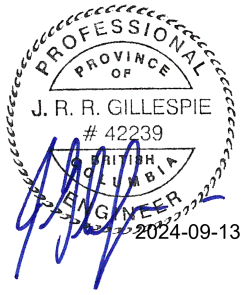
Montana Code Annotated (MCA), 2023. *Title 82: Minerals, Oil, and Gas, Chapter 4: Reclamation, Part 3: Metal Mine Reclamation*. Available at: https://leg.mt.gov/bills/mca/title_0820/chapter_0040/part_0030/sections_index.html

WESTECH Environmental Services, Inc. (WESTECH), 2024. Preliminary Closure Plan Yankee Doodle Tailings Impoundment 6,560 ft Embankment Elevation. Draft. January 17, 2024. Helena, MT.

10.0 CERTIFICATION

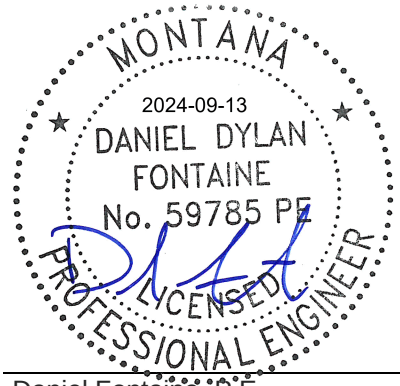
This report was prepared and reviewed by the undersigned.

KNIGHT PIÉSOLD LTD.
PERMIT NUMBER
1001011
EGBC PERMIT TO PRACTICE



Prepared:

Jason Gillespie, P.Eng.
Senior Engineer



Reviewed:

Daniel Fontaine, P.E.
Specialist Engineer | Associate
YDTI Engineer of Record

Approval that this document adheres to the Knight Piésold Quality System: DDF

APPENDIX A

Tailings Deposition Modelling and Storage Capacity Evaluation

(Pages A-1 to A-17)

MEMORANDUM

Date:	September 3, 2024	**File No.:**	VA101-00126/24-A.01
		Cont. No.:	VA23-02116
To:	Mr. Daniel Fontaine		
Copy To:	Mr. Jason Gillespie		
From:	Nicanor Villarreal, Roanna Dalton		
Re:	**Yankee Doodle Tailings Impoundment – EL. 6,560 ft Tailings Deposition Modelling and Storage Capacity Evaluation**		

1.0 INTRODUCTION

Montana Resources, LLC (MR) is preparing a permit amendment application (6,560 Amendment Application) for continued use of the Yankee Doodle Tailings Impoundment (YDTI). The proposed amendment considers raising the crest elevation (EL.) of the YDTI embankments to a maximum elevation (EL.) of 6,560 ft in two or more lifts to facilitate continued mining until the mid-2050s. This memorandum provides a summary of the tailings deposition modelling and storage capacity evaluation that was undertaken to support the 6560 Amendment Application.

The design of the YDTI references the site coordinate system known as the 'Anaconda Mine Grid' established by The Anaconda Company in 1957. The Anaconda Mine Grid is based on the Anaconda Copper Company (ACC) Datum established in 1915. All elevations are stated in Anaconda Mine Grid coordinates with respect to the ACC Vertical Datum unless specifically indicated otherwise.

The purposes of the tailings deposition modelling and storage capacity evaluation were to:

- Develop a filling schedule for the YDTI to support mine rockfill scheduling for construction of future embankment lifts.
- Develop a conceptual tailings deposition strategy that results in a configuration of the beach and supernatant pond that creates hydraulic connectivity between the water reclaim system, supernatant pond and freshwater inflows from the Yankee Doodle Creek, Dixie Creek, and Silver Bow Creek.

2.0 TAILINGS DEPOSITION MODEL INPUTS

2.1 3D MODEL STAGING AND BASE TOPOGRAPHY

A three-dimensional (3D) tailings deposition model was prepared using the Muk3D computer software package (MineBridge Software Inc., 2023). The software was used to model tailings deposition and beach development using specified tailings volumes, tailings beach slopes, tailings discharge points, and pond volumes.

The model was developed using eight stages of tailings storage within the YDTI. Each stage creates approximately a 20 ft raise of the tailings beach surface. Stage 'Existing' is generally consistent with conditions in July 2023 with an embankment crest elevation of 6,450 ft. Stage 8 is representative of the

facility constructed with an embankment crest elevation of 6,560 ft and filled with tailings to a maximum discharge elevation of 6,555 ft.

The base topographic surface was developed using the 2023 end of year embankment surface provided by MR and the tailings beach topography and pond bathymetry as surveyed in July 2023 (MR, 2023b). The approximate EL. 6,500 ft and EL. 6,560 ft embankment configurations were included as required to increase storage capacity in the model.

2.2 TAILINGS TONNAGE AND PRODUCTION RATE

The 2022 Ore Reserves Report (MR, 2023a) identified approximately 570 million tons (Mt) of proven and probable reserves remaining as of December 31, 2022. The amendment application contemplates providing sufficient storage capacity for at least 570 Mt of tailings corresponding to the remaining reserves.

The mill ore throughput at MR has ranged between approximately 15.6 and 18.4 Mt per year since 2004. The average, minimum and maximum annual estimates of ore throughput at the mine since 2004 are summarized in Table 2.1.

Table 2.1 Historical Ore Production Summary

Annual Dry Ore Tons Milled (2004 through 2023)	Throughput (Mt)
Average	17.2
Minimum	15.6
Maximum	18.4

Approximately 99% of the ore throughput is discharged as tailings from the Concentrator and conveyed to the YDTI. An assumption that ore throughput equals tailings production rate was made for the purpose of the deposition model, and a tailings production rate of 18 Mt per year was assumed for development of the filling schedule. The tailings production rate was chosen to have a representative but conservative value to account for any years that production is near or higher than the maximum recorded throughput.

2.3 TAILINGS CHARACTERISTICS

Seismic Cone Penetration Testing (SCPT) was performed in 2021 to determine the characteristics of consolidated tailings near the embankment crest. Analysis of the SCPT data indicates the settled dry density of the consolidated tailings in the upper 170 ft of tailings beach ranges between 75 pounds per cubic foot (pcf) to 121 pcf, and the mean dry density was estimated to be approximately 98 to 102 pcf.

The deposition model adopted an initial settled dry density of 85 pcf (1.15 tons/yd^3) for the tailings deposited in the YDTI. This density is equivalent to a saturated bulk density of approximately 115 pcf. This dry density provides a reasonably conservative estimate of storage capacity and subsequent filling rate for the YDTI. Tailings consolidation was not considered in the modelling undertaken for this study. Long-term consolidation will increase the dry density of the tailings above the initial settled density thereby increasing the available storage capacity of the facility.

The existing beach slopes were assessed using the 2023 aerial imagery and pond bathymetry to establish tailings beach slope criteria for modelling the storage capacity. The estimated beach slope criteria used in the 3D model were as follows:

- Sub-aerial tailings beach – 0.5%
- Sub-aqueous tailings beach – 4%

2.4 TAILINGS DEPOSITION STRATEGY AND DISCHARGE LOCATIONS

The tailings beach is progressively developed as the tailing slurry is discharged from locations along the YDTI embankments. The tailings solids from the slurry settle and accumulate within the impoundment. The deposition strategy adopted in the tailings deposition model is consistent with the requirement to promote development of extensive drained tailings beaches between the embankment and supernatant pond. The supernatant pond was maintained on the northeast side of the facility in the modelling. The position and shape of the pond is directly controlled by the deposition strategy and the natural topography to the north and east sides of the facility. A nominal operating supernatant pond of 15,000 acre-feet (ac-ft) was considered in each model stage, which is equivalent to the current target nominal operating pond volume for ongoing mine operations.

The tailings discharge spigot plan incorporated in the model consists of discharge points uniformly spaced around the upstream face of the embankments at approximately 500 ft intervals. This spacing is comparable to the spacing implemented around the YDTI in 2023. The spigot plan for the facility was adjusted for the final modelling phase to include targeted tailings deposition in the centre of the facility (the south-west extent of the pond). The infilling is proposed in preparation for closure to promote enhanced hydraulic connectivity between the Yankee Doodle, Dixie and Silver Bow Creeks that discharge into the YDTI from the north and to increase the beach length between the pond and the embankments at closure.

The tailings deposition model applied uniform discharge elevations 5 ft below the embankment crest elevation for all modelling phases. The 5 ft elevation difference was included to provide a practical minimum “dry’ operational freeboard allowance between the tailings discharge elevation and the embankment crest elevation for tailings management purposes.

2.5 MODEL INPUT SUMMARY

A summary of the inputs and assumptions for the deposition model is presented in Table 2.2.

Table 2.2 Tailings Deposition Model – Summary of Inputs

Criteria	Units	Value
Nominal Milling Rate (Yearly)	Mt/yr	18
Total Tonnage in Reserves[1]	Mt	570
Average Initial Settled Tailings Dry Density	pcf	85
Tailings Beach Slope - Above Water	%	0.5
Tailings Beach Slope - Below Water	%	4.0
Operating Pond Volume	ac-ft	15,000
Minimum Dry Freeboard	ft	5

Note(s):

1. Estimated reserves tonnage as of December 31, 2022 (MR, 2023a).

3.0 DEPOSITION MODEL RESULTS

3.1 GENERAL

The eight stages of YDTI filling evaluated in the deposition model are the following:

- Two stages with YDTI constructed to EL. 6,450 ft (currently constructed)
- Three stages with YDTI constructed to EL. 6,500 ft (proposed)
- Three stages with YDTI constructed to EL. 6,560 ft (proposed)

The elevations of the embankment crest, tailings discharge and the pond elevation at the end of each of the eight modelling stages are summarized in Table 3.1. Figures demonstrating the deposition modelling results for each of the stages are included in Appendix A.

Table 3.1 Deposition Model – Stage Summary

Stage	Permit	Embankment Crest Elevation (ft)	Tailing Discharge Elevation (ft)	Pond Elevation (ft)
Existing	Existing	6,450	6,395	6,360
1	Existing	6,450	6,415	6,398
2	Existing	6,450	6,435	6,418
3	6,560 ft Amendment	6,500	6,455	6,437
4	6,560 ft Amendment	6,500	6,475	6,456
5	6,560 ft Amendment	6,500	6,495	6,476
6	6,560 ft Amendment	6,560	6,515	6,496
7	6,560 ft Amendment	6,560	6,535	6,516
8	6,560 ft Amendment	6,560	6,555	6,535

3.2 ELEVATION-AREA-CAPACITY CURVES

The YDTI elevation-area-capacity curves developed from the tailings deposition model results are shown on Figure 3.1. The curves show the relationships between the elevation of the tailings and the capacity and surface area of the facility. The capacity curve incorporates the estimated 880 Mt (775 million cubic yards (Myd^3)) of historical tailings previously placed in the facility between 1963 and June 2023.

The tailings deposition model and curves indicate that approximately 235 Myd^3 of tailings and water storage capacity exists above the July 2023 tailings surface with the YDTI constructed to El. 6,450 ft and filled with tailings to a discharge elevation of 6,445 ft. Continued construction of the YDTI to an embankment crest of EL. 6,560 ft and filling to a discharge elevation of 6,555 ft results in additional tailings and water storage capacity of approximately 350 Myd^3. The total estimated capacity of the YDTI constructed to El. 6,560 ft would therefore be approximately 1,350 Myd^3.

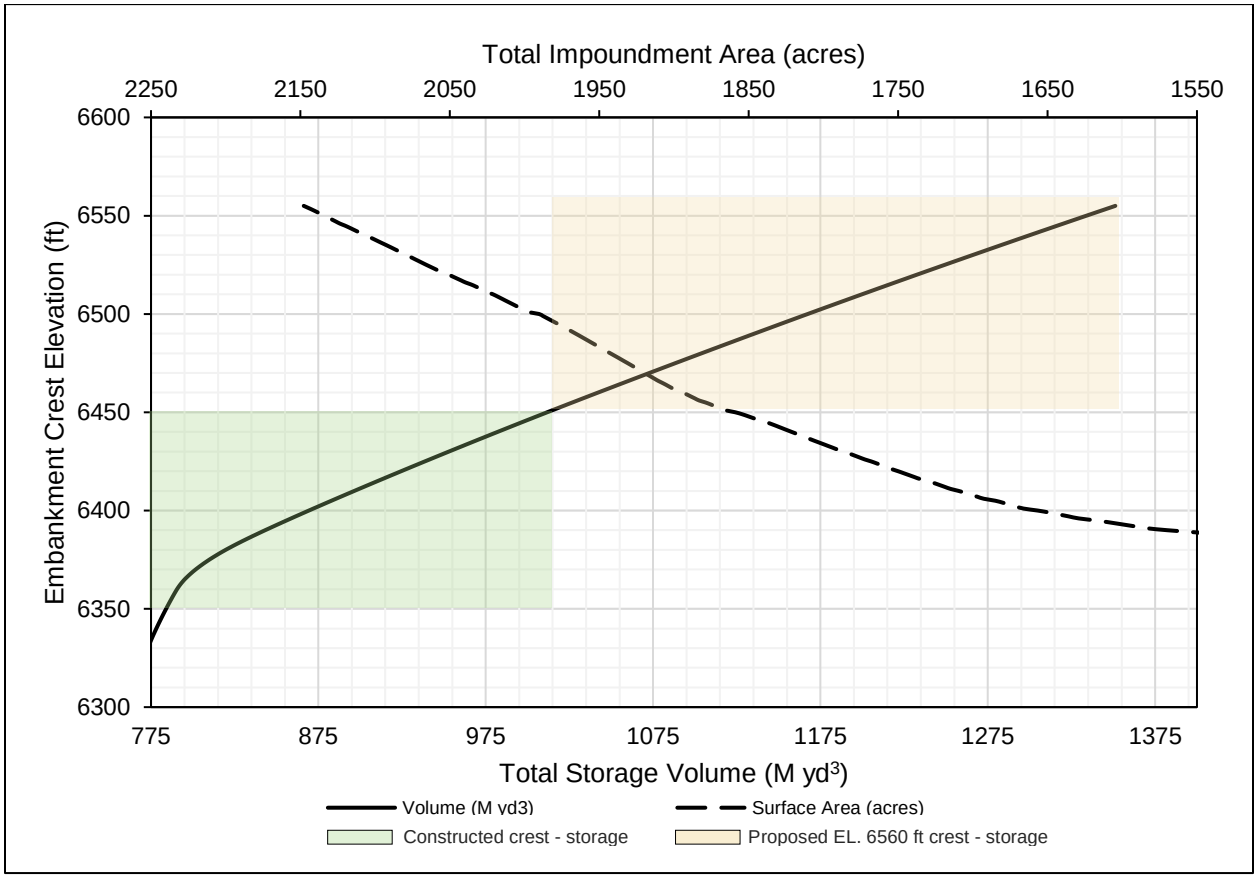


Figure 3.1 YDTI Elevation-Area-Capacity Curves

3.3 TAILINGS FILLING SCHEDULE

The results of the tailings deposition modelling were used to develop the estimated YDTI tailings filling schedule and filling curve as shown in Table 3.2 and Figure 3.2, respectively. The tailings filling schedule presents the modelled tailings storage volume for each of the eight deposition stages, the cumulative storage volume of the facility and an estimate of the approximate year the stage of filling is complete. The tailings storage capacity in the first deposition stage is higher than subsequent stages due to 'infilling' of the 2023 'base' tailings beach surface to establish the 'uniform elevation' discharge spigot configuration for modelling purposes.

The supernatant pond elevation was also estimated from the deposition modelling results. The minimum required crest elevation associated with each filing stage was established based on maintaining a 5 ft minimum "dry" freeboard between the tailings discharge elevation and the crest elevation.

Table 3.2 Filling Schedule

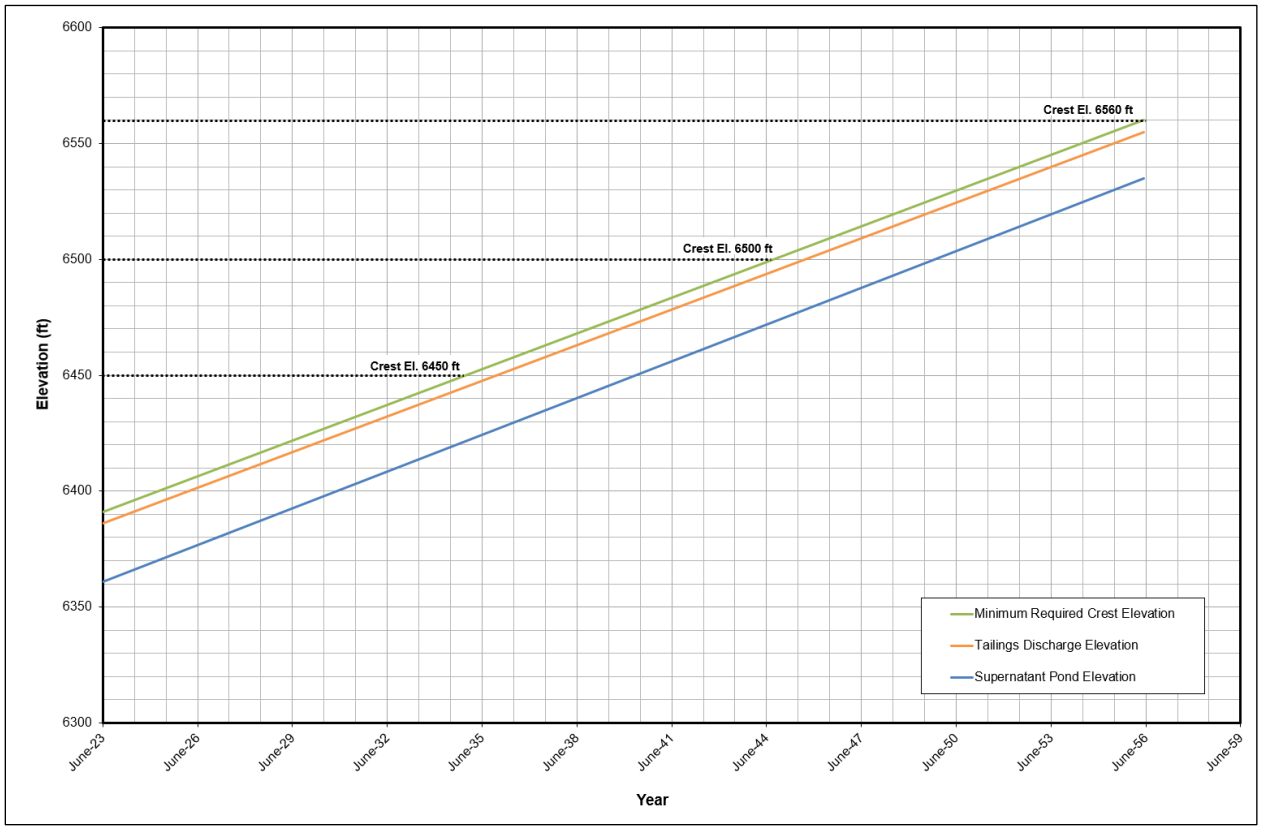
Stage	Discharge Elevation	Minimum Required Crest Elevation [1]	Incremental Tailings Storage (per Stage)	Cumulative Tailings Storage	Pond Elevation	Approx. Year [2]
	(ft)	(ft)	(Mt)	(Mt)	(ft)	
Existing	6,386	6,391	0	0	6,361	2023
1	6,415	6,420	107[3]	107	6,398	2029
2	6,435	6,440	64	171	6,418	2033
3	6,455	6,460	65	236	6,437	2036
4	6,475	6,480	69	305	6,456	2040
5	6,495	**6,500**	72	377	6,476	**2044**
6	6,515	6,520	71	448	6,496	2048
7	6,535	6,540	75	523	6,516	2052
8	6,555	**6,560**	80	603	6,535	**2056**

Note(s):

1. The minimum required crest elevation is estimated based on a nominal 5 ft dry freeboard between the embankment crest elevation and the discharge elevation of the tailings spigots.
2. The calendar year for each modelled filling stage is estimated based on the assumption of 18 Mt of tailings being produced annually.
3. The tailings storage capacity in the first deposition stage is higher than subsequent stages due to 'infilling' of the tailings beach surface to establish the 'uniform elevation' discharge spigot configuration for modelling purposes.

The tailings filling curve indicates the existing YDTI constructed with a crest elevation of 6,450 ft will provide tailings storage capacity approximately until approximately December 2034. The YDTI constructed to the proposed crest elevation of 6,560 ft will provide tailings storage capacity until approximately June 2056. The proposed crest raise to EL. 6,560 ft from EL. 6,450 ft therefore provides for approximately 400 Mt of tailings deposition, which is equivalent to approximately 22 years of mine operations.

The rate of rise of the tailings surface is estimated to be approximately 5 ft per year, which is consistent with historical operations at the YDTI. The difference between the tailings discharge and supernatant pond elevations is modelled to be approximately 20 ft during future normal operating conditions. Freeboard during operations would be expected to variable since the discharge elevations at all spigots may not be maintained as uniformly as modelled.



Note(s):

1. The tailings discharge elevation rate of rise assumes production of 18 Mt of tailings annually.
2. The minimum required crest elevation was estimated based on a nominal 5 ft minimum “dry” freeboard between the embankment crest elevation and the discharge elevation of the tailings spigots.

Figure 3.2 YDTI - Tailings Filling Curve

4.0 EMBANKMENT CREST RAISE SCHEDULE

The embankment crest raise schedule is dictated by the required tailings storage capacity and the availability and timing of rockfill for embankment construction. The results of the tailings deposition model will be used to inform the embankment raise construction schedule.

The following key embankment crest raise milestones were identified based on the results of the tailings deposition model:

- Construction of the EL. 6,500 ft embankment raise is required to be completed by approximately December 2034.
- Construction of the EL. 6,560 ft embankment raise is required to be completed by approximately June 2044.

The proposed schedule and sequencing for the construction of the YDTI, considering the tailings storage capacity and the availability of rockfill, will be presented in subsequent reports.

5.0 CLOSING

The tailings deposition model was developed to support the application process for the 6,560 Amendment Application. The deposition model identified the following:

1. The continued construction of the YDTI embankment to raise the crest elevation raise from 6,450 ft to 6,560 ft will provide additional tailings storage capacity of approximately 400 Mt (or approximately 22 years of mine operation).
2. The tailings discharge spigot configuration proposed will help development of a supernatant pond shape and position that promotes positive hydraulic connectivity between Yankee Doodle Creek, Dixie Creek, Silver Bow Creek, and the water reclaim pump barges.

The tailings deposition modelling provides an estimate of the tailings discharge and storage management behaviour that is expected to occur during continued use of the YDTI for tailings storage. MR will need to continue to employ the observational approach to monitor the tailings beach development and management of the tailings discharge spigots in order to manage the position of the pond and meet tailings beach development objectives.

We hope this meets your requirements at this time. Please do not hesitate to contact the undersigned with any questions or comments.

Yours truly,
Knight Piésold Ltd.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
R. S. DALTON
35849
2024-09-03

Prepared: Nicanor Villarreal, EIT
Project Engineer

Reviewed: Roanna Dalton, P.Eng.
Specialist Engineer | Associate

KNIGHT PIÉSOLD LTD.
PERMIT NUMBER
1001011
EGBC PERMIT TO PRACTICE

Approval that this document adheres to the Knight Piésold Quality System:

Attachments:
Appendix A YDTI Tailings Deposition and Capacity Evaluation Modelling Results

References:

MineBridge Software Inc. 2023. Muk3D Mine Modelling Software. Version V2022.1.8

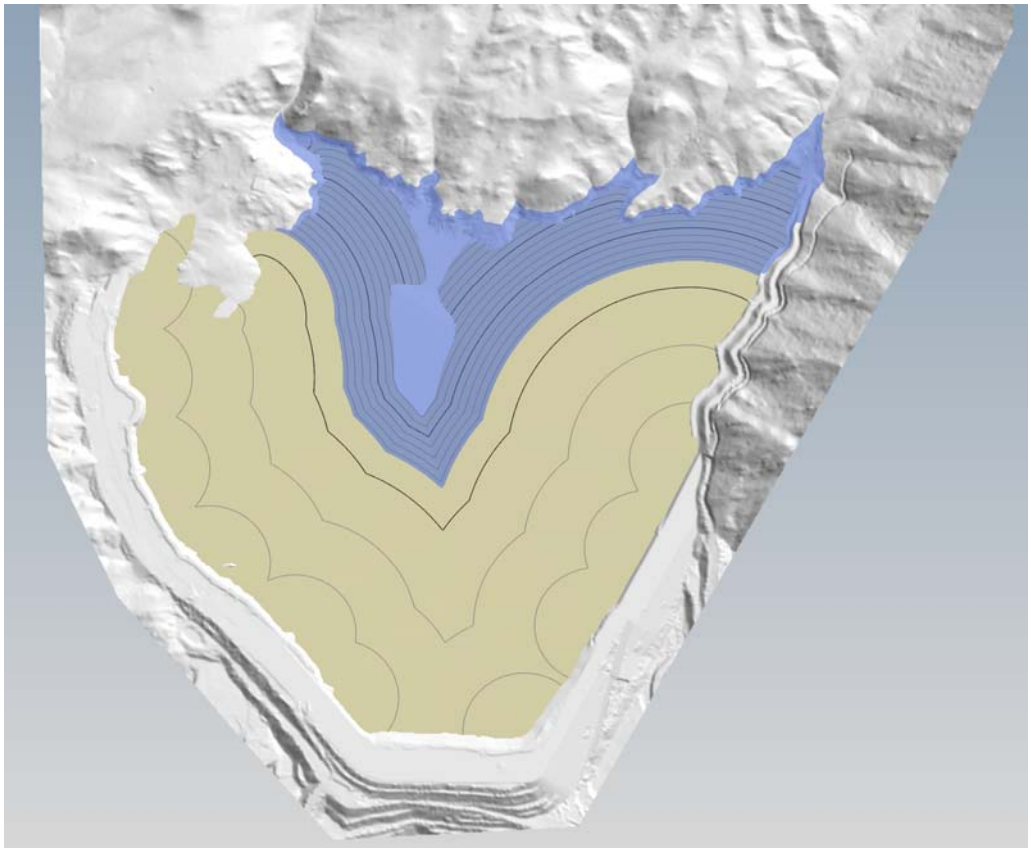
Montana Resources, LLC. (MR), 2023a. Letter to: Jack Standa, Montana Resources LLC. RE: Montana Resources – Ore Reserves as of December 31, 2022. January 17, 2023.

Montana Resources, LLC. (MR), 2023b. Memo to: Daniel Janney, Montana Resources LLC. RE: Bathymetric Survey - 2023. August 8, 2023.

APPENDIX A

YDTI Tailings Deposition and Capacity Evaluation Modelling Results

(Figures A.1 to A.8)



Tailings Inputs	Units	Value
Tailings Discharge Elevation	ft	6,415
Operating Pond Volume	ac-ft	15,000

Tailings Storage Facility Outputs	Units	Value
Tonnage of Tailings Stored Between Discharge at 6,395 ft and 6,415 ft	Mt	107
Cumulative Tonnage of Tailings Stored above 6,395 ft	Mt	107
Embankment Elevation	ft	6,450
Pond Elevation	ft	6,398
Estimated Year Discharge Elevation is Reached	-	2029

NOTES:

1. TAILINGS DEPOSITION MODELLED WITH MUK3D SOFTWARE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	3SEP'24	ISSUED WITH MEMO	CAT	RSD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

TAILINGS DEPOSITION EVALUATION
STAGE 1
EL. 6415 ft TAILINGS DISCHARGE ELEVATION

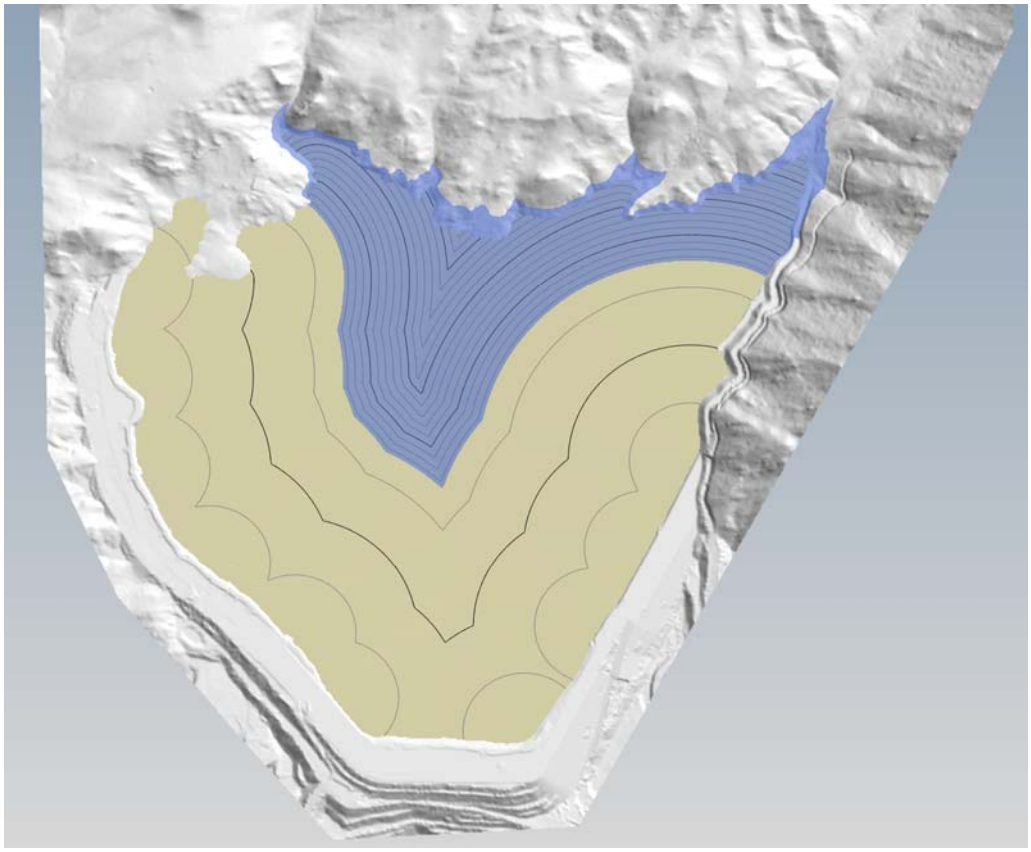
Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF. NO. VA23-02116

FIGURE A.1

REV 0



Tailings Inputs	Units	Value
Tailings Discharge Elevation	ft	6,435
Operating Pond Volume	ac-ft	15,000

Tailings Storage Facility Outputs	Units	Value
Tonnage of Tailings Stored Between Discharge at 6,415 ft and 6,435 ft	Mt	64
Cumulative Tonnage of Tailings Stored above 6,395 ft	Mt	171
Embankment Elevation	ft	6,450
Pond Elevation	ft	6,418
Estimated Year Discharge Elevation is Reached	-	2033

NOTES:

1. TAILINGS DEPOSITION MODELLED WITH MUK3D SOFTWARE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	3SEP'24	ISSUED WITH MEMO	CAT	RSD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

TAILINGS DEPOSITION EVALUATION
STAGE 2
EL. 6,435 ft TAILINGS DISCHARGE ELEVATION

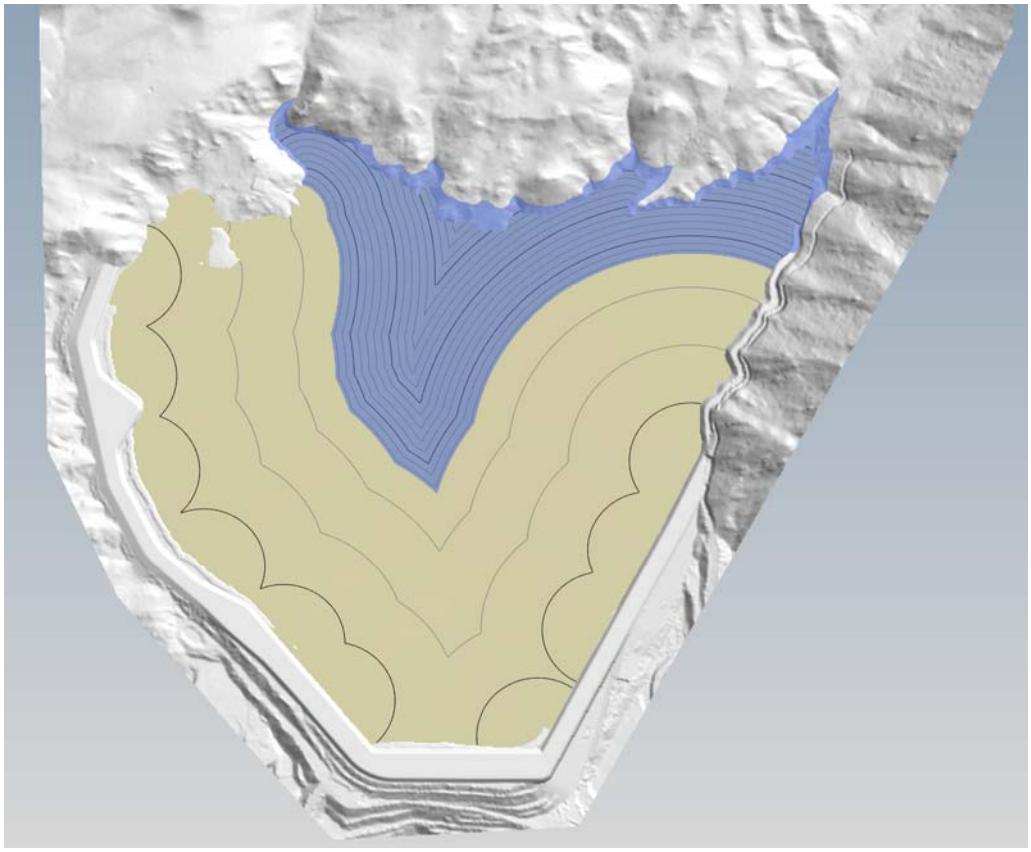
Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF. NO. VA23-02116

FIGURE A.2

REV 0



Tailings Inputs	Units	Value
Tailings Discharge Elevation	ft	6,455
Operating Pond Volume	ac-ft	15,000

Tailings Storage Facility Outputs	Units	Value
Tonnage of Tailings Stored Between Discharge at 6,435 ft and 6,455 ft	Mt	65
Cumulative Tonnage of Tailings Stored above 6,395 ft	Mt	236
Embankment Elevation	ft	6,500
Pond Elevation	ft	6,437
Estimated Year Discharge Elevation is Reached	-	2036

NOTES:

1. TAILINGS DEPOSITION MODELLED WITH MUK3D SOFTWARE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	3SEP'24	ISSUED WITH MEMO	CAT	RSD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

TAILINGS DEPOSITION EVALUATION
STAGE 3
EL. 6,455 ft TAILINGS DISCHARGE ELEVATION

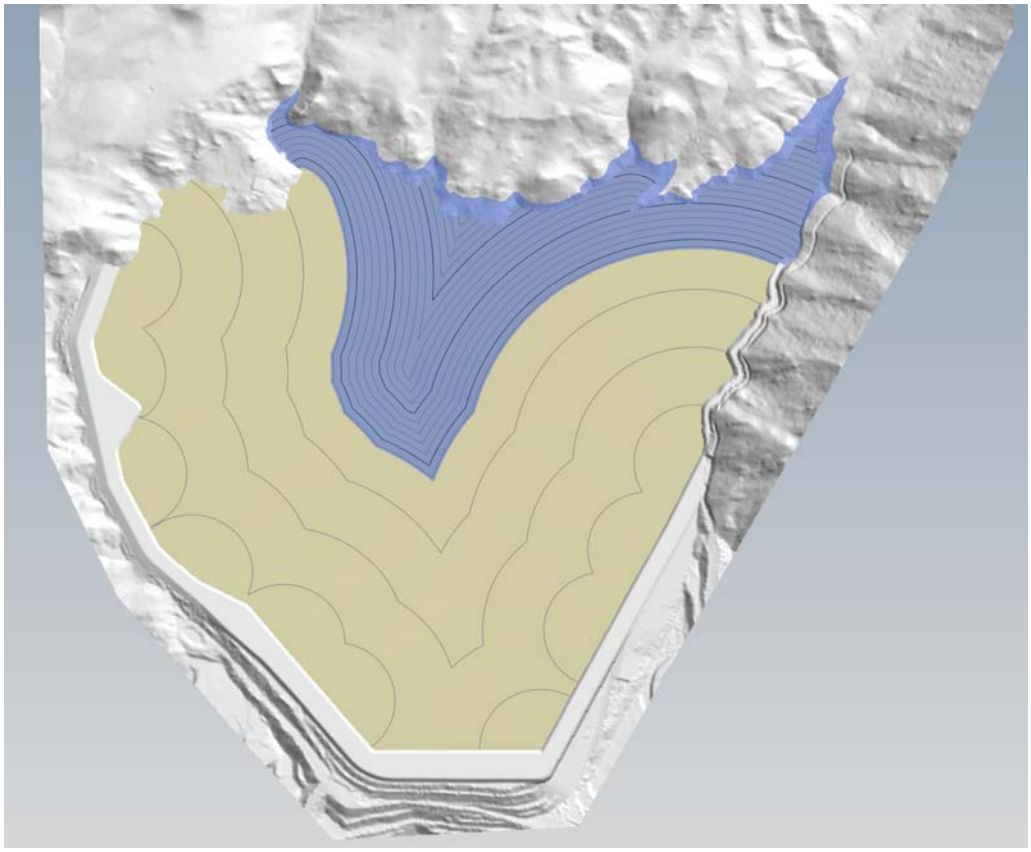
Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF. NO. VA23-02116

FIGURE A.3

REV 0



Tailings Inputs	Units	Value
Tailings Discharge Elevation	ft	6,475
Operating Pond Volume	ac-ft	15,000

Tailings Storage Facility Outputs	Units	Value
Tonnage of Tailings Stored Between Discharge at 6,455 ft and 6,475 ft	Mt	69
Cumulative Tonnage of Tailings Stored above 6,395 ft	Mt	305
Embankment Elevation	ft	6,500
Pond Elevation	ft	6,456
Estimated Year Discharge Elevation is Reached	-	2040

NOTES:

1. TAILINGS DEPOSITION MODELLED WITH MUK3D SOFTWARE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	3SEP'24	ISSUED WITH MEMO	CAT	RSD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

TAILINGS DEPOSITION EVALUATION
STAGE 4
EL. 6,475 ft TAILINGS DISCHARGE ELEVATION

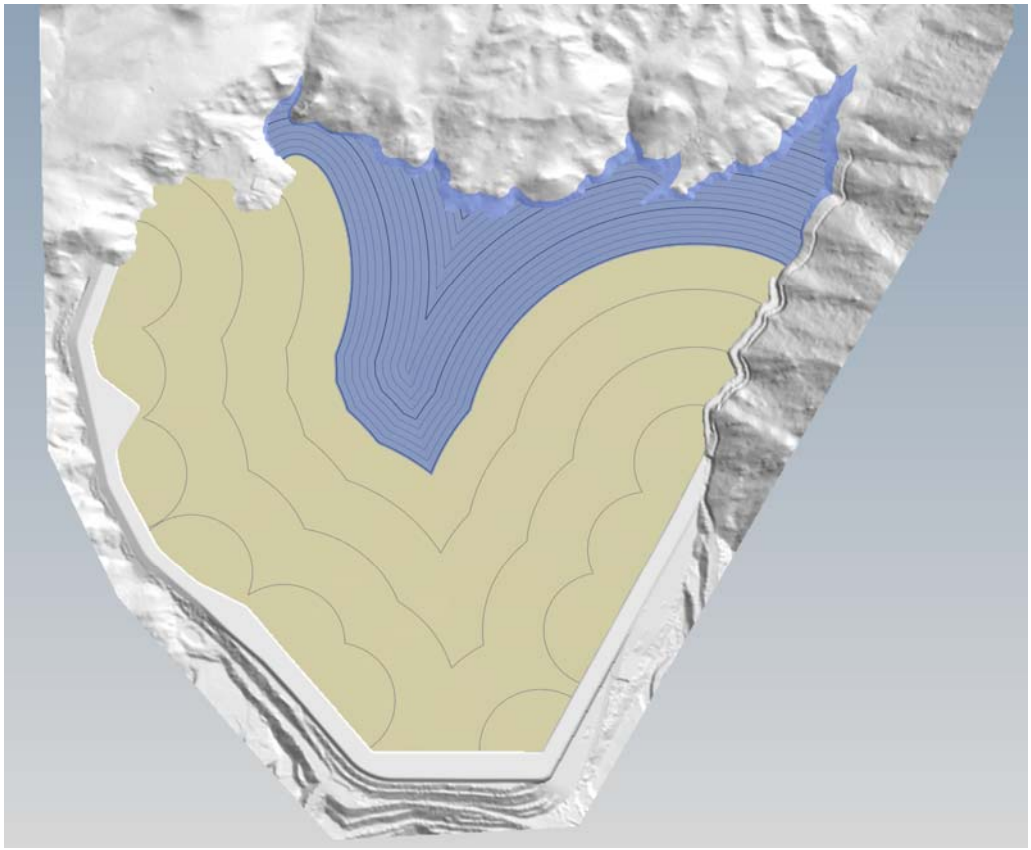
Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF. NO. VA23-02116

FIGURE A.4

REV 0



Tailings Inputs	Units	Value
Tailings Discharge Elevation	ft	6,495
Operating Pond Volume	ac-ft	15,000

Tailings Storage Facility Outputs	Units	Value
Tonnage of Tailings Stored Between Discharge at 6,475 ft and 6,495 ft	Mt	72
Cumulative Tonnage of Tailings Stored above 6,395 ft	Mt	377
Embankment Elevation	ft	6,500
Pond Elevation	ft	6,476
Estimated Year Discharge Elevation is Reached	-	2044

NOTES:

1. TAILINGS DEPOSITION MODELLED WITH MUK3D SOFTWARE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	3SEP'24	ISSUED WITH MEMO	CAT	RSD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

TAILINGS DEPOSITION EVALUATION
STAGE 5
EL. 6,495 ft TAILINGS DISCHARGE ELEVATION

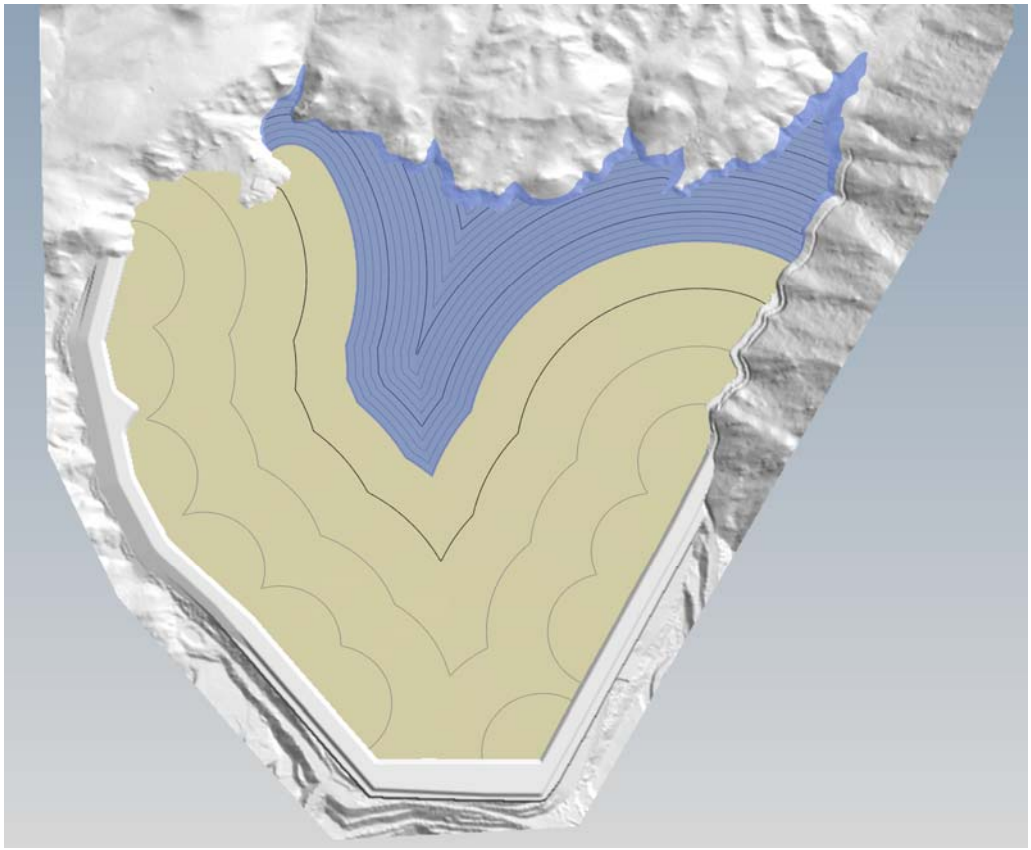
Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF. NO. VA23-02116

FIGURE A.5

REV 0



Tailings Inputs	Units	Value
Tailings Discharge Elevation	ft	6,515
Operating Pond Volume	ac-ft	15,000

Tailings Storage Facility Outputs	Units	Value
Tonnage of Tailings Stored Between Discharge at 6,495 ft and 6,515 ft	Mt	71
Cumulative Tonnage of Tailings Stored above 6,395 ft	Mt	448
Embankment Elevation	ft	6,560
Pond Elevation	ft	6,496
Estimated Year Discharge Elevation is Reached	-	2048

NOTES:

1. TAILINGS DEPOSITION MODELLED WITH MUK3D SOFTWARE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	3SEP'24	ISSUED WITH MEMO	CAT	RSD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

TAILINGS DEPOSITION EVALUATION
STAGE 6
EL. 6,515 ft TAILINGS DISCHARGE ELEVATION

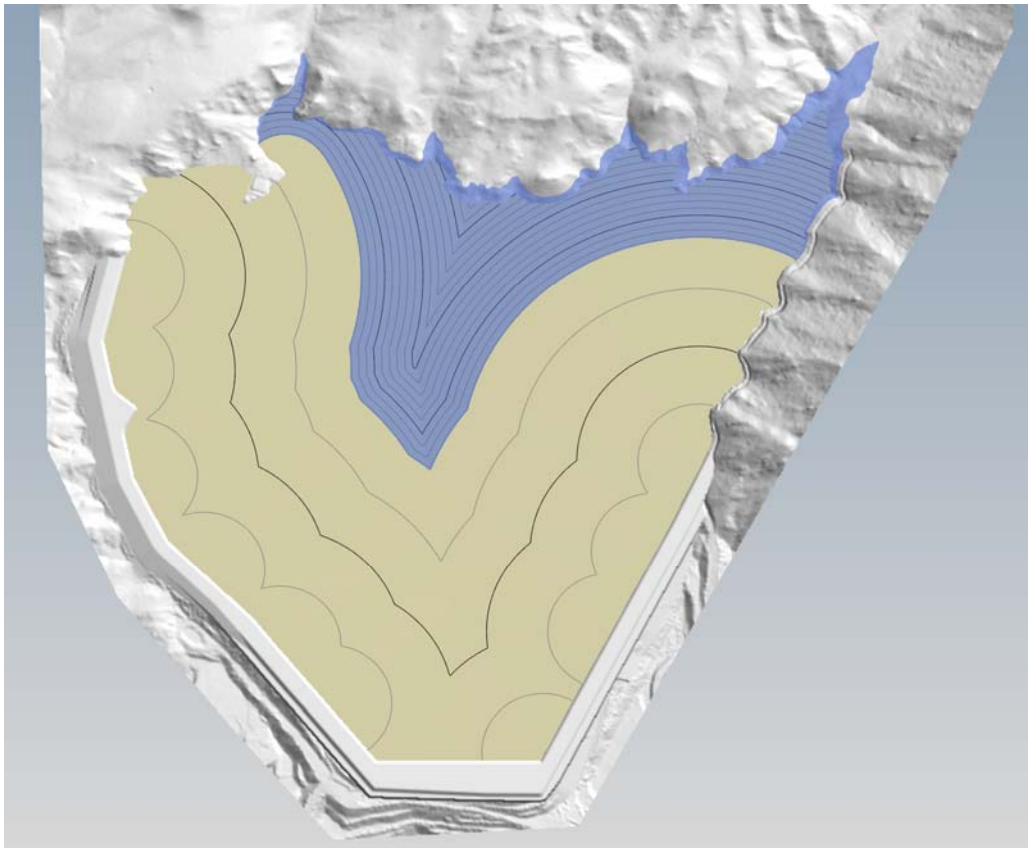
Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF. NO. VA23-02116

FIGURE A.6

REV 0



Tailings Inputs	Units	Value
Tailings Discharge Elevation	ft	6,535
Operating Pond Volume	ac-ft	15,000

Tailings Storage Facility Outputs	Units	Value
Tonnage of Tailings Stored Between Discharge at 6,515 ft and 6,535 ft	Mt	75
Cumulative Tonnage of Tailings Stored above 6,395 ft	Mt	523
Embankment Elevation	ft	6,560
Pond Elevation	ft	6,516
Estimated Year Discharge Elevation is Reached	-	2052

NOTES:

1. TAILINGS DEPOSITION MODELLED WITH MUK3D SOFTWARE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	3SEP'24	ISSUED WITH MEMO	CAT	RSD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

TAILINGS DEPOSITION EVALUATION
STAGE 7
EL. 6,535 ft TAILINGS DISCHARGE ELEVATION

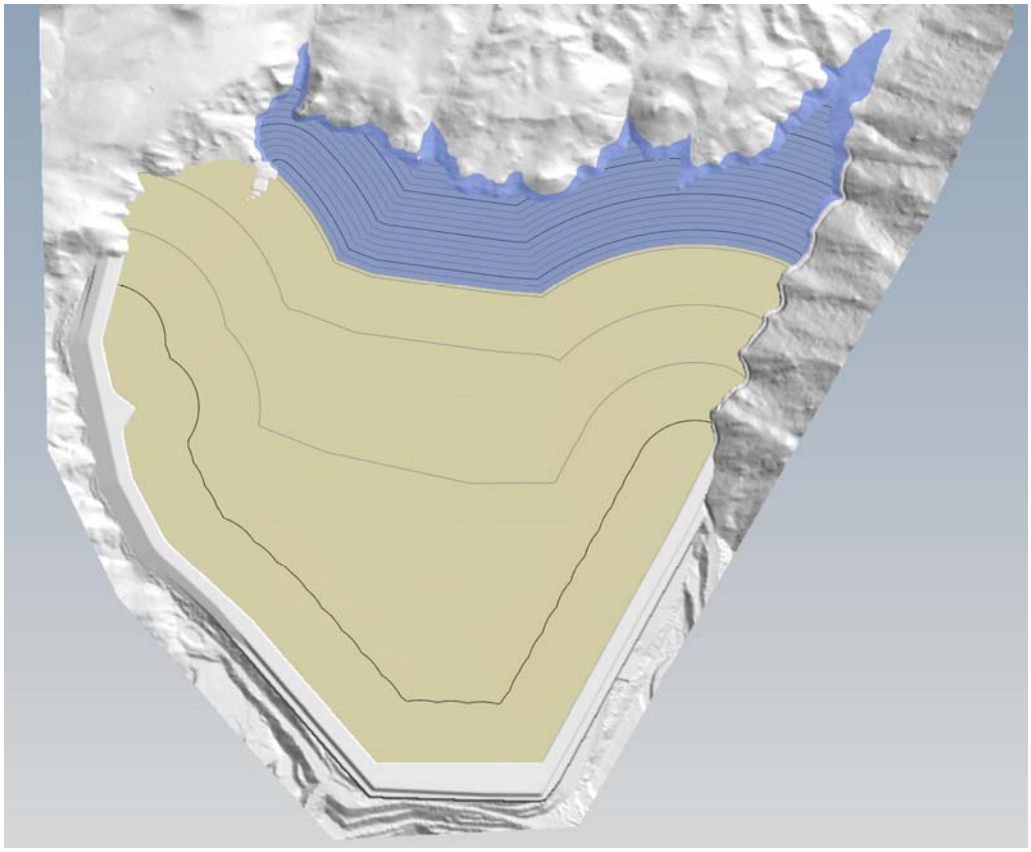
Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF. NO. VA23-02116

FIGURE A.7

REV 0



Tailings Inputs	Units	Value
Tailings Discharge Elevation	ft	6,555
Operating Pond Volume	ac-ft	15,000

Tailings Storage Facility Outputs	Units	Value
Tonnage of Tailings Stored Between Discharge at 6,535 ft and 6,555 ft	Mt	80
Cumulative Tonnage of Tailings Stored above 6,395 ft	Mt	603
Embankment Elevation	ft	6,550
Pond Elevation	ft	6,535
Estimated Year Discharge Elevation is Reached	-	2056

NOTES:

1. TAILINGS DEPOSITION MODELLED WITH MUK3D SOFTWARE.

REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	3SEP'24	ISSUED WITH MEMO	CAT	RSD

MONTANA RESOURCES, LLC

MONTANA RESOURCES

TAILINGS DEPOSITION EVALUATION
STAGE 8
EL. 6,555 ft TAILINGS DISCHARGE ELEVATION

Knight Piésold CONSULTING

P/A NO. VA101-126/24

REF. NO. VA23-02116

FIGURE A.8

REV 0

APPENDIX B

Design Drawing Package - 6,500 ft Embankment Crest

Table B.1

MR-C4011 Rev B	MR-C4310 Rev B	MR-C4336 Rev B	MR-C4443 Rev B
MR-C4020 Rev B	MR-C4311 Rev B	MR-C4337 Rev B	MR-C4444 Rev B
MR-C4110 Rev B	MR-C4330 Rev B	MR-C4338 Rev B	MR-C4445 Rev B
MR-C4111 Rev B	MR-C4331 Rev B	MR-C4410 Rev B	MR-C4446 Rev B
MR-C4129 Rev B	MR-C4332 Rev B	MR-C4411 Rev B	MR-C4447 Rev B
MR-C4130 Rev B	MR-C4333 Rev B	MR-C4440 Rev B	
MR-C4131 Rev B	MR-C4334 Rev B	MR-C4441 Rev B	
MR-C4132 Rev B	MR-C4335 Rev B	MR-C4442 Rev B	

Knight Piésold CONSULTING

TABLE B.1

MONTANA RESOURCES, LLC
MONTANA RESOURCES

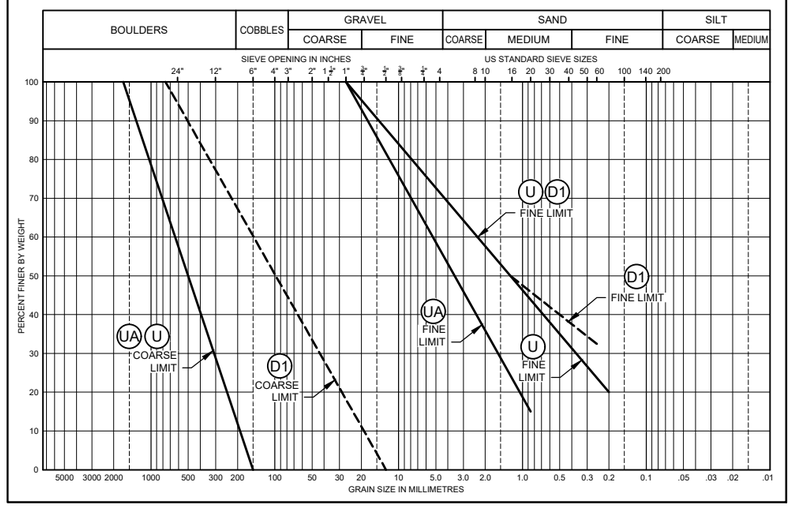
YANKEE DOODLE TAILINGS IMPOUNDMENT
LIFE OF MINE DESIGN REPORT
6500 CREST DRAWING LIST

Print Sep/13/24 13:58:38

Drawing Number	Rev.	Revision Date	Drawing Status	Drawing Title
MR-C4011	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - Fill Material Specifications
MR-C4020	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - 6500 Crest - General Arrangement
MR-C4110	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6500 Crest - Plan
MR-C4111	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6500 Crest - Setting Out Details
MR-C4129	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6500 Crest - Sections 53+00 NW and 58+00 NW
MR-C4130	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6500 Crest - Sections 60+00 W and 69+50 W
MR-C4131	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6500 Crest - Sections 78+50 W and 82+80 W
MR-C4132	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6500 Crest - Sections 95+00 W and 108+40 W
MR-C4310	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Plan
MR-C4311	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Setting Out Details
MR-C4330	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Section 0+00
MR-C4331	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Section 03+00 W
MR-C4332	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Section 08+00 W
MR-C4333	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Section 12+00 W
MR-C4334	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Section 18+00 NW
MR-C4335	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Section 23+00 NW
MR-C4336	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Section 28+00 NW
MR-C4337	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Sections 33+00 NW and 38+00 NW
MR-C4338	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6500 Crest - Sections 43+00 NW and 48+00 NW
MR-C4410	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Plan
MR-C4411	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Setting Out Details
MR-C4440	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Section 3+00 N
MR-C4441	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Section 08+00 N
MR-C4442	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Section 13+00 N
MR-C4443	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Section 18+00 N and 23+00 N
MR-C4444	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Section 28+00 N and 33+00 N
MR-C4445	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Section 38+00 N and 43+00 N
MR-C4446	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Section 48+00 N and 53+00 N
MR-C4447	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6500 Crest - Section 58+00 N and 63+00 N

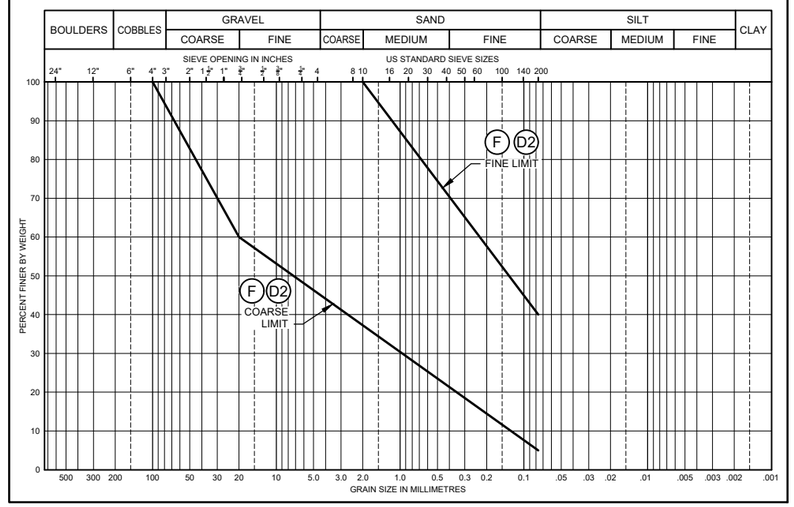
REV	DATE	DESCRIPTION	PREP'D	RVW'D
0	13SEP'24	ISSUED WITH REPORT VA101-126/24-4	JRG	DDF

UNIFIED SOIL CLASSIFICATION SYSTEM



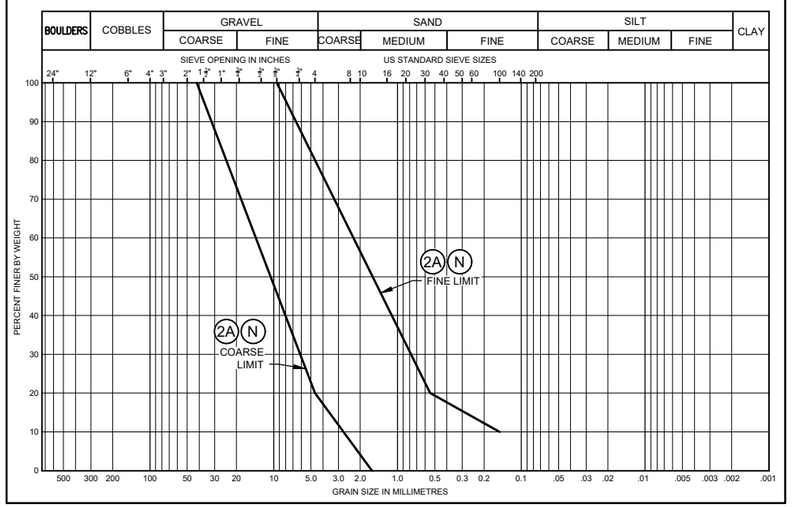
ZONE U / ZONE D1 / ZONE UA

UNIFIED SOIL CLASSIFICATION SYSTEM



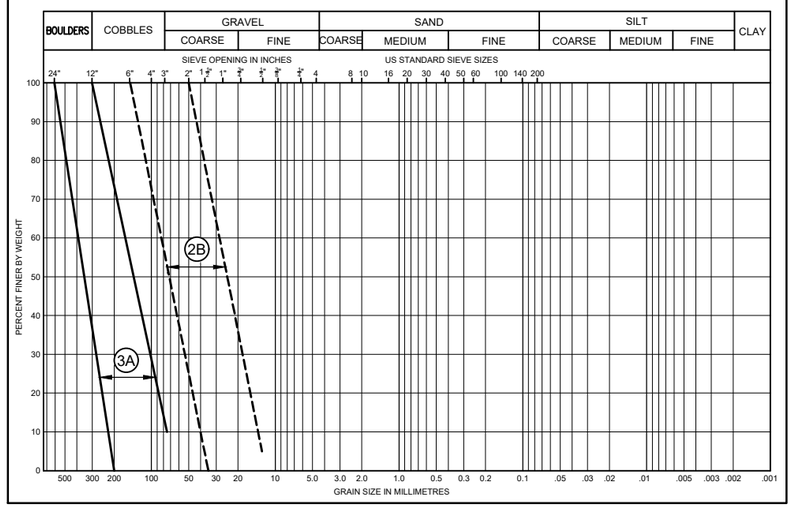
ZONE F / ZONE D2

UNIFIED SOIL CLASSIFICATION SYSTEM



ZONE N - INSTRUMENTATION BEDDING /
ZONE 2A - FILTER

UNIFIED SOIL CLASSIFICATION SYSTEM



ZONE 2B - TRANSITION /
ZONE 3A - DRAIN ROCK

MATERIAL PLACEMENT AND COMPACTION REQUIREMENTS

ZONE AND MATERIAL TYPE	PLACING AND COMPACTION REQUIREMENTS
ZONE F - UPSTREAM EARTHFILL	FILL MATERIAL SHALL CONSIST OF ALLUVIUM, FREE OF LOAM, TREE STUMPS, ROOTS, AND OTHER DELETERIOUS OR ORGANIC MATTER. THE MATERIAL SHALL BE END-DUMPED AND SPREAD ALONG THE UPSTREAM SLOPE OF EACH LIFT TO CREATE A CONTINUOUS ZONE CONNECTING TO THE LAYER ALONG THE PREVIOUS LIFT. THE FINAL FILL SURFACE WILL BE SHAPED BY DOZERS WITH THE SURFACE TRACK COMPACTED DURING SPREADING. THE MATERIAL SHALL CONTAIN A BROAD RANGE OF WELL-GRADED SOILS ACROSS THE ENTIRE SPECIFIED GRAIN SIZE ENVELOPE.
ZONE U - UPSTREAM ROCKFILL	FILL MATERIAL SHALL CONSIST OF HARD, DURABLE, FRESH TO MODERATELY WEATHERED ROCKFILL MATERIAL AND SHALL BE END DUMPED IN UP TO 50 ft LIFTS . FILL MATERIAL WILL BE TRAFFIC COMPACTED BY THE MINE HAUL FLEET, EQUALLY DISTRIBUTED OVER THE ENTIRE LAYER WIDTH. THE MATERIAL SHALL CONTAIN A BROAD RANGE OF WELL-GRADED SOILS ACROSS THE ENTIRE SPECIFIED GRAIN SIZE ENVELOPE. COMPACTED RUNNING SURFACES WILL BE CROSS RIPPED PRIOR TO PLACING SUCCESSIVE LIFTS.
ZONE UA - PROTECTIVE CAP	FILL MATERIAL SHALL CONSIST OF HARD, DURABLE, FRESH TO MODERATELY WEATHERED ROCKFILL MATERIAL AND SHALL BE PLACED AND SPREAD IN UP TO 5 ft LIFTS. FILL MATERIAL WILL BE DOZER COMPACTED. THE MATERIAL SHALL CONTAIN A BROAD RANGE OF WELL-GRADED SOILS ACROSS THE ENTIRE SPECIFIED GRAIN SIZE ENVELOPE. COMPACTED RUNNING SURFACES WILL BE CROSS RIPPED PRIOR TO PLACING SUCCESSIVE LIFTS.
ZONE D1 - DOWNSTREAM ROCKFILL	FILL MATERIAL SHALL CONSIST OF HARD, DURABLE, FRESH TO MODERATELY-WEATHERED ROCKFILL WITH A RELATIVELY LOW ACID GENERATING POTENTIAL. FILL MATERIAL SHALL CONTAIN AS LITTLE POTENTIALLY ACID GENERATING MATERIAL AS PRACTICABLE. THE FILL SHALL BE PLACED IN A MANNER TO PREVENT SEGREGATION. MATERIAL SHALL CONTAIN A BROAD RANGE OF WELL-GRADED SOILS ACROSS THE ENTIRE SPECIFIED GRAIN SIZE ENVELOPE. MATERIAL SHALL BE PLACED AND COMPACTED USING ONE THE FOLLOWING APPROVED METHODS: 1. MATERIALS SHALL BE PLACED IN MAXIMUM 3 ft LIFTS PRIOR TO COMPACTION. FILL MATERIALS SHALL BE TRAFFIC COMPACTED DURING PLACEMENT WITH 40-ton (CAT740 OR SIMILAR) HAUL FLEET, EQUALLY DISTRIBUTED OVER THE ENTIRE LIFT WIDTH, AND SUBSEQUENTLY COMPACTED USING 6 PASSES OF A SMOOTH DRUM VIBRATORY ROLLER WITH A DRUM WEIGHT OF 12.5 TONNES (13.8 US TONS). 2. MATERIALS SHALL BE PLACED AND TRAFFIC COMPACTED BY THE 240 TON (CAT 793D) MINE HAUL FLEET IN APPROXIMATELY 5 ft THICK LIFTS, WITH COMPACTION EFFORT EQUALLY DISTRIBUTED OVER THE ENTIRE LIFT WIDTH. COMPACTED MATERIAL LIFTS MAY VARY BY +/- 1 ft THROUGHOUT THE LIFT AREA, PROVIDED THAT LESS THAN 10% OF THE LIFT AREA EXCEEDS THE LIFT TOLERANCE (i.e. IS GREATER THAN 6 ft IN THICKNESS). ADDITIONAL METHOD SPECIFICATIONS CAN BE CONSIDERED, INCLUDING DIFFERENT COMPACTION TECHNIQUES OR LIFT THICKNESSES. ANY POTENTIAL REVISIONS TO THE APPROVED METHOD SPECIFICATIONS MAY REQUIRE VERIFICATION BY COMPLETING A TEST FILL AT THE DIRECTION OF THE ENGINEER.
ZONE D2 - DOWNSTREAM EARTHFILL	FILL MATERIAL SHALL CONSIST OF NON-ACID GENERATING ALLUVIUM FREE OF LOAM, TREE STUMPS, ROOTS AND OTHER DELETERIOUS OR ORGANIC MATTER. MATERIAL SHALL BE PLACED AND SPREAD IN 3 ft LIFTS WITH 2 PASSES OF THE SPECIFIED SMOOTH DRUM VIBRATORY ROLLER
ZONE N - INSTRUMENTATION BEDDING	FILL MATERIAL SHALL CONSIST OF HARD, DURABLE, FRESH OR NON-WEATHERED MATERIAL. BEDDING TO BE PLACED AND SPREAD IN 1 ft THICK LIFTS WITH NOMINAL COMPACTION.
ZONE 2A - FILTER MATERIAL	FILTER MATERIAL SHALL CONSIST OF HARD, DURABLE, FRESH OR NON-WEATHERED MATERIAL. FILTER MATERIAL TO BE PLACED AND SPREAD IN MAXIMUM 2 ft THICK LIFTS AND COMPACTED WITH 2 PASSES OF THE SPECIFIED SMOOTH DRUM VIBRATORY ROLLER OR AS DIRECTED BY THE ENGINEER.
ZONE 2B - TRANSITION MATERIAL	TRANSITION MATERIAL SHALL CONSIST OF HARD, DURABLE, FRESH OR NON-WEATHERED MATERIAL. TRANSITION MATERIAL TO BE PLACED AND SPREAD IN MAXIMUM 2 ft THICK LIFTS AND COMPACTED WITH 2 PASSES OF THE SPECIFICED SMOOTH DRUM VIBRATORY ROLLER OR AS DIRECTED BY THE ENGINEER.
ZONE 3A - DRAIN ROCK	DRAIN ROCK SHALL CONSIST OF HARD, DURABLE, FRESH OR NON-WEATHERED ROCK FILL. DRAIN ROCK TO BE PLACED AND SPREAD IN MAXIMUM 3 ft THICK LIFTS AND COMPACTED WITH 2 PASSES OF THE SPECIFIED SMOOTH DRUM VIBRATORY ROLLER OR AS DIRECTED BY THE ENGINEER.

NOTES:

1. THESE MATERIAL PLACEMENT AND COMPACTION REQUIREMENTS APPLY TO ALL COMPONENTS OF THE WORKS EXCEPT WHERE NOTED OTHERWISE.
2. THE MAXIMUM DIMENSION OF ANY PARTICLE SHALL NOT EXCEED 2/3 OF THE MAXIMUM LIFT THICKNESS.
3. THIS DRAWING SHALL BE READ WITH ACCOMPANYING DRAWINGS INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4)

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
FILL MATERIAL SPECIFICATIONS

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4011	B

REFERENCE DRAWINGS

DRG. NO.	DESCRIPTION
-	-

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

LEGEND:

- SETTING OUT LINE (SOL)
- DOWNSTREAM STEP-OUT / ROCK DISPOSAL SITE / HAUL RAMP (PRIOR TO PERMIT) (NOTE 6)
- 6500 EMBANKMENT AND SUPPORTING ROCKFILL (NOTE 7)
- EL. XXX ft — SPOT ELEVATION
- P — TRANSMISSION LINE (PROPOSED) (NOTE 8)

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. COORDINATE GRID IS ANACONDA MINE GRID.
4. APRIL 2024 TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
5. GROUND CONTOUR IS 25 FEET.
6. STAGE 1 HsB RDS, EAST-WEST HAUL RAMP, NORTH-SOUTH DOWNSTREAM STEP-OUT AND EL. 6,200 FT NORTH RDS ASSUMED TO BE COMPLETE PRIOR TO EL. 6,500 CREST RAISE.
7. EAST-WEST DOWNSTREAM STEP-OUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL. 6,500 CREST RAISE.
8. TRANSMISSION LINE ROUTING IS APPROXIMATE AS PROVIDED BY MONTANA RESOURCES, LLC IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 500 0 500 1000 1500 2000 2500 3000 ft

DRG. NO.	DESCRIPTION
MR-C4410	NORTH - SOUTH EMBANKMENT 6500 CREST - PLAN
MR-C4310	EAST - WEST EMBANKMENT 6500 CREST - PLAN
MR-C4110	WEST EMBANKMENT 6500 CREST - PLAN

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

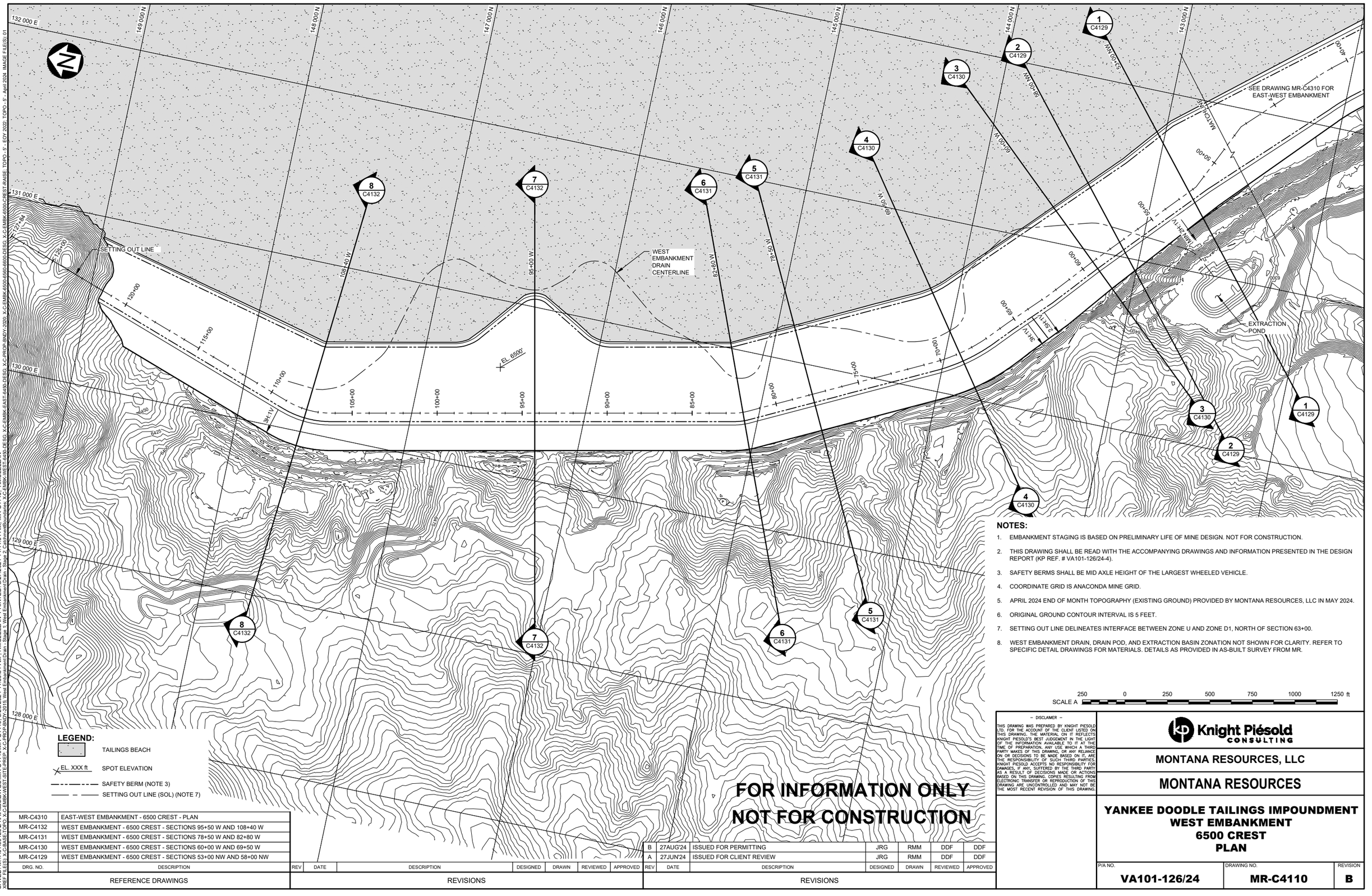
MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT GENERAL ARRANGEMENT 6500 EMBANKMENT CREST AND ROCK DISPOSAL SITES

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4020	B

SAVED: M:\1\101\126\24\AAcad\DWGS\MR-C4020\MR-C4020_6/27/2024 8:16:33 AM_RMCLELLAN_PRINTED: 8/27/2024 11:10:34 AM_RMCLELLAN
XREF FILE(S): X-C-EMBK-WEST-6450-DESG; X-C-EMBK-EAST-6450-DESG; TOPO_15 - EOY 2022; X-C-EMBK-EAST-6450-STEP-OUT; X-C-EMBK-6500-CREST-RAISE; Mega Ramp Trimmed to 6450; X-C-EMBK-EAST-BOOSTER-RAMP; X-C-RDS-NS-6200; HsB Rockfill - Phase 1 El 5700; X-C-PROP-BNDY-2020; X-C-EMBK-6500-NW-RAMP; X-C-RDS-HsB-5900; TOPO - 5' - April 2024; PowerLine IMAGE FILE(S):



LEGEND:

- TAILINGS BEACH
- EL. XXX ft — SPOT ELEVATION
- SAFETY BERM (NOTE 3)
- SETTING OUT LINE (SOL) (NOTE 7)

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. ORIGINAL GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. WEST EMBANKMENT DRAIN, DRAIN POD, AND EXTRACTION BASIN ZONATION NOT SHOWN FOR CLARITY. REFER TO SPECIFIC DETAIL DRAWINGS FOR MATERIALS. DETAILS AS PROVIDED IN AS-BUILT SURVEY FROM MR.

SCALE A 250 0 250 500 750 1000 1250 ft

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4132	WEST EMBANKMENT - 6500 CREST - SECTIONS 95+50 W AND 108+40 W
MR-C4131	WEST EMBANKMENT - 6500 CREST - SECTIONS 78+50 W AND 82+80 W
MR-C4130	WEST EMBANKMENT - 6500 CREST - SECTIONS 60+00 W AND 69+50 W
MR-C4129	WEST EMBANKMENT - 6500 CREST - SECTIONS 53+00 NW AND 58+00 NW

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6500 CREST
PLAN

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4110	B

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XREF FILE(S): X-C-BASE-TOPO, X-C-EMBK-WEST-SITE-PREP, X-C-PROP-BNDY-2020, X-C-EMBK-6500-6560-6600-DESG, X-C-EMBK-6500-CREST-RAISE, TOPO - 5' - EOY 2022, TOPO - 5' - April 2024, IMAGE FILE(S) 01
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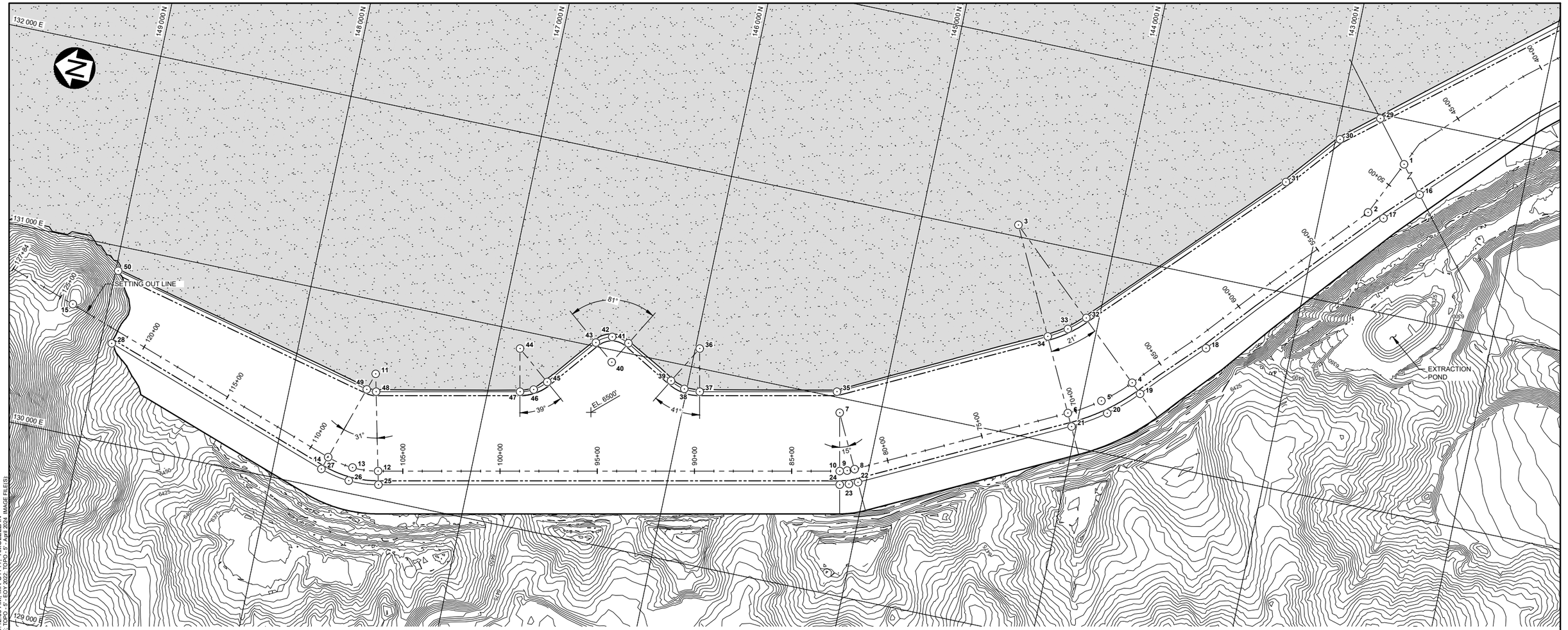


SETTING OUT LINE SETTING OUT POINTS

POINT	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
1	142629	132772	6500
2	142759	132492	6500
3	144505	132059	-
4	143766	131385	6500
5	143902	131262	6500
6	144058	131165	6500
7	145206	130925	6500
8	145072	130657	6500
9	145107	130642	6500
10	145144	130631	6500
11	147582	130629	-
12	147468	130143	6500
13	147600	130133	6500
14	147733	130160	6500
15	149181	130659	-

WEST CREST SETTING OUT POINTS

POINT	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
16	142518	132636	6500
17	142676	132479	6500
18	143431	131637	6500
19	143714	131338	6500
20	143859	131206	6500
21	144025	131101	6500
22	145040	130594	6500
23	145084	130576	6500
24	145130	130563	6500
25	147452	130074	6500
26	147605	130063	6500
27	147755	130093	6500
28	148943	130503	6500

EAST CREST SETTING OUT POINTS

POINT	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
29	142796	132978	6500
30	142978	132830	6500
31	143205	132558	6500
32	144065	131663	6500
33	144147	131588	6500
34	144240	131529	6500
35	145242	131028	6500
36	145979	131099	-
37	145933	130882	6500
38	146013	130880	6500
39	146088	130906	6500
40	146407	130938	6500
41	146343	131051	6500
42	146431	131065	6500
43	146508	131019	6500

EAST CREST SETTING OUT POINTS

POINT	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
44	146883	130909	-
45	146710	130770	6500
46	146771	130718	6500
47	146837	130692	6500
48	147561	130540	6500
49	147611	130542	6500
50	148987	130875	6500

LEGEND:

- TAILINGS BEACH
- EL. XXX ft — SPOT ELEVATION
- SETTING OUT LINE (SOL) (NOTE 7)
- SETTING OUT POINT (NOTE 8)

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4)..
3. SAFETY BERMS SHALL BE MID HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. ORIGINAL GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. SETTING OUT POINTS ARE BASED ON THE APRIL 2024 TOPOGRAPHY AND DO NOT CONSIDER ANY ADDITIONAL SURFACE PREPARATION COMPLETED PRIOR TO CONSTRUCTION.

250 0 250 500 750 1000 1250 ft
SCALE A

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

DRG. NO.	DESCRIPTION

REFERENCE DRAWINGS

Knight Piésold CONSULTING

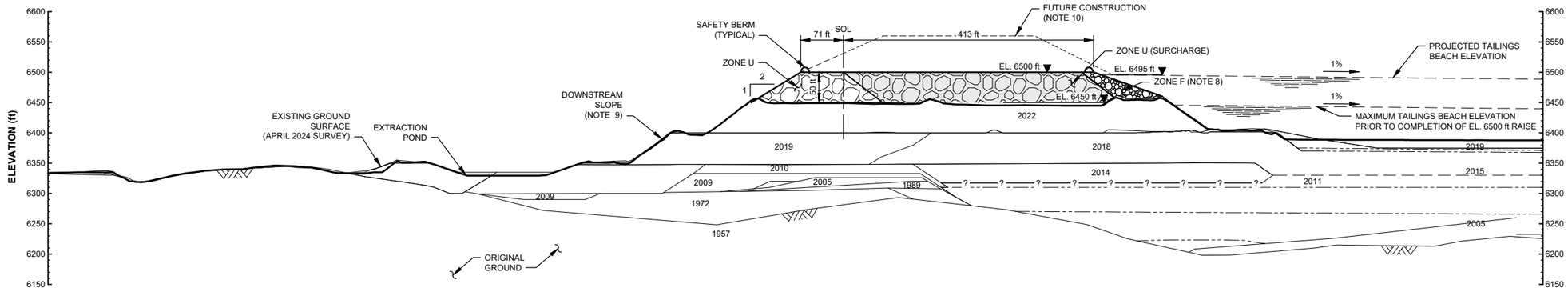
MONTANA RESOURCES, LLC

MONTANA RESOURCES

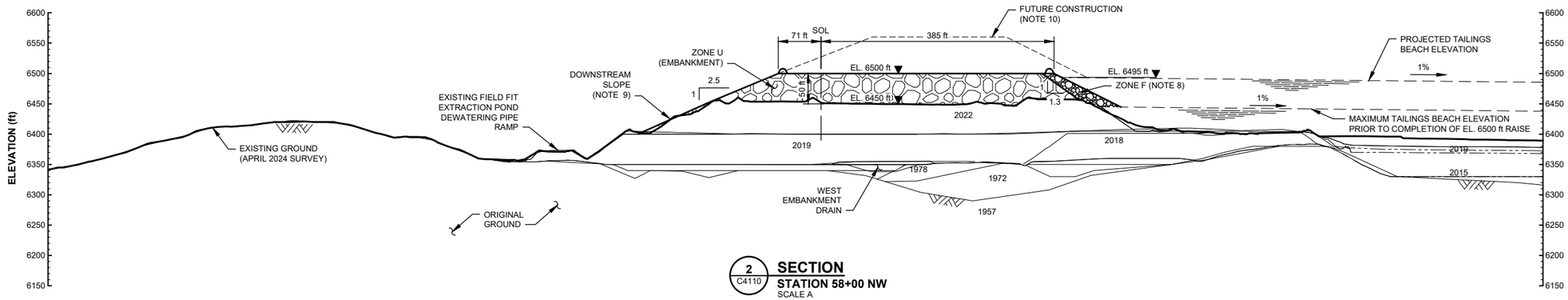
YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6500 CREST
SETTING OUT DETAILS

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4111	B

SAVED: M:\101\00126\A\Acad\DWGS\MR-C4111\MR-C4111_6/26/2024 11:33:56 AM, RMCLELLAN PRINTED: 8/27/2024 11:12:00 AM, MR-C4111, RMCLELLAN
XREF FILE(S): X-C-PROP-BNDY-2016; X-C-EMBK-WEST-0450-DESG; X-C-EMBK-EAST-0450-DESG; X-C-PROP-BNDY-2020; X-C-EMBK-6500-CREST-RAISE; TOPO - 5' - EOY 2022; TOPO - 5' - April 2024; IMAGE FILE(S):



1 C4110 **SECTION**
STATION 53+00 NW
SCALE A



2 C4110 **SECTION**
STATION 58+00 NW
SCALE A

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM SLOPES TO BE CONCURRENTLY RECLAIMED WHEN AND WHERE PRACTICAL.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 100 0 100 200 300 400 500 ft

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6500 CREST
SECTIONS 53+00 NW AND 58+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4129	B

DRG. NO.	DESCRIPTION
MR-C4110	WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

SAVED: M:\101\00126\24\AA\acad\DWGS\MR-C4129\MR-C4129, 6/26/2024 11:36:50 AM, , RMCLELLAN PRINTED: 8/27/2024 11:12:36 AM, MR-C4129, RMCLELLAN
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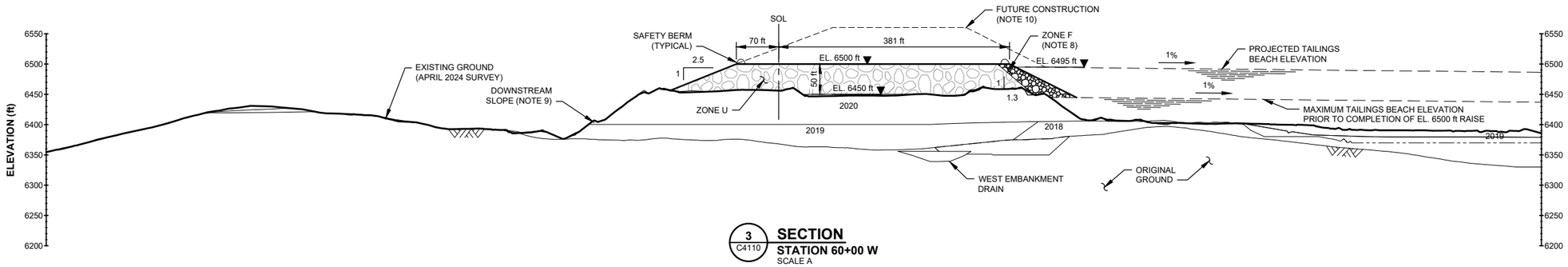
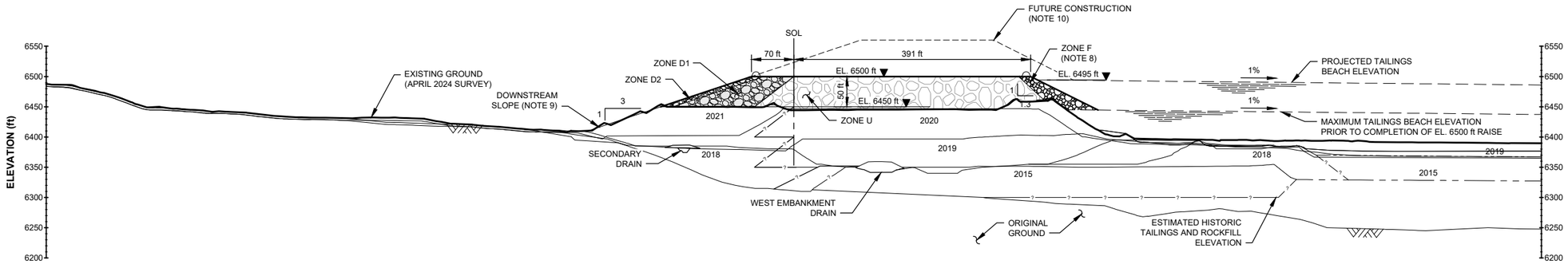


3 / C4110 SECTION
STATION 60+00 W
SCALE A



4 / C4110 SECTION
STATION 69+50 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE D1 - ROCKFILL
- ZONE D2 - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM SLOPES TO BE CONCURRENTLY RECLAIMED WHEN AND WHERE PRACTICAL.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C4110	WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6500 CREST
SECTIONS 60+00 W AND 69+50 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4130	B

SAVED: M:\1\101\00126\24\A\Acad\DWGS\MR-C4130\MR-C4130, 6/26/2024 11:43:34 AM , RMCLELLAN PRINTED: 8/27/2024 11:13:22 AM, MR-C4130, RMCLELLAN
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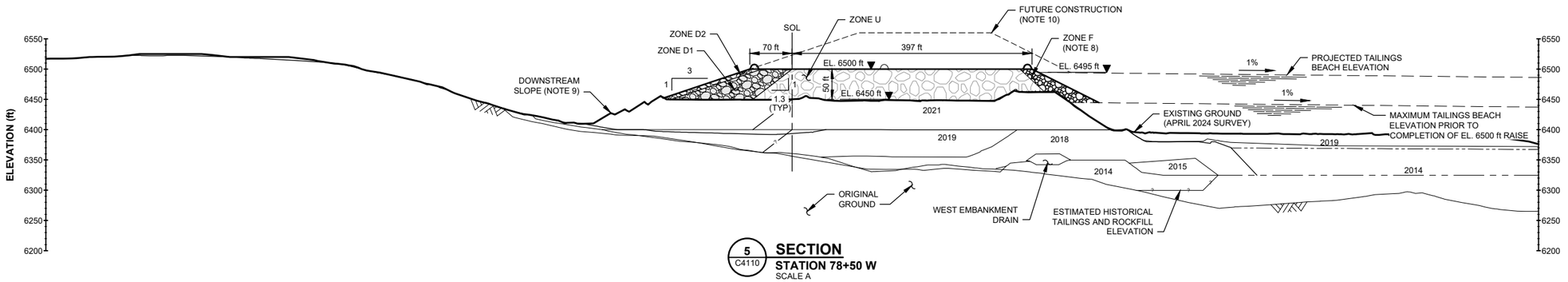
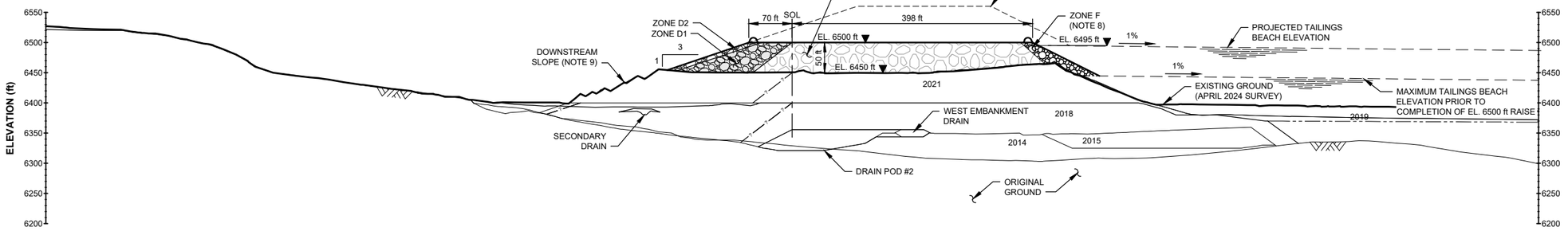


5 / C4110 SECTION
STATION 78+50 W
SCALE A



6 / C4110 SECTION
STATION 82+80 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE D1 - ROCKFILL
- ZONE D2 - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM SLOPES TO BE CONCURRENTLY RECLAIMED WHEN AND WHERE PRACTICAL.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C4110	WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

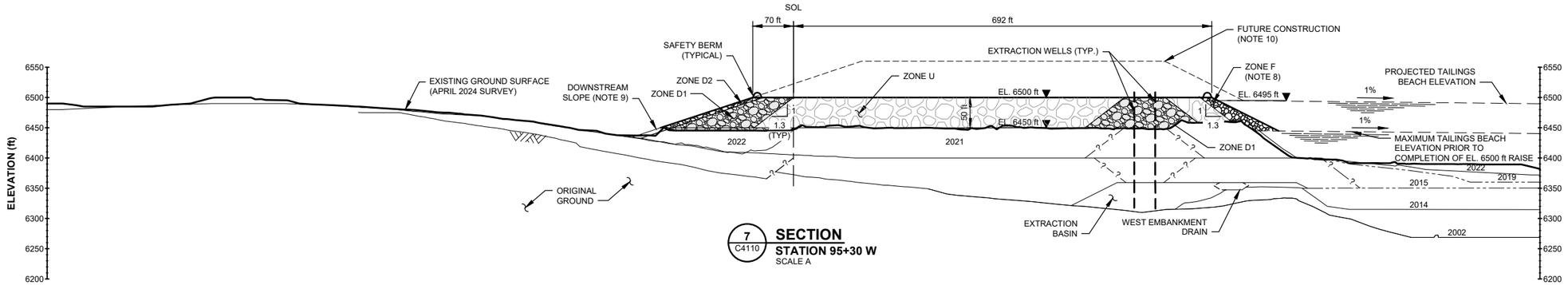
Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

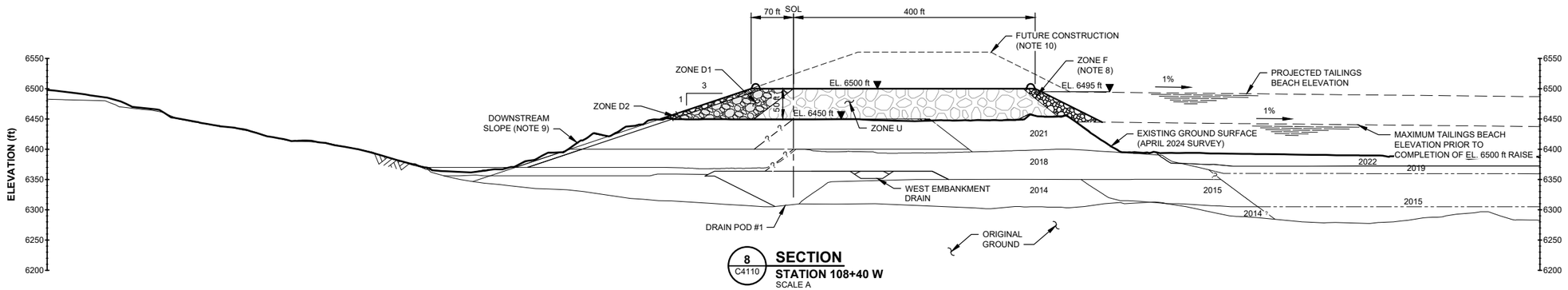
MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6500 CREST
SECTIONS 78+50 W AND 82+80 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4131	B



7 C4110 **SECTION**
STATION 95+30 W
SCALE A



8 C4110 **SECTION**
STATION 108+40 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE D1 - ROCKFILL
- ZONE D2 - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
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6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM SLOPES TO BE CONCURRENTLY RECLAIMED WHEN AND WHERE PRACTICAL.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

100 0 100 200 300 400 500 ft
SCALE A

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6500 CREST
SECTIONS 95+30 W AND 108+40 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4132	B

DRG. NO.	DESCRIPTION
MR-C4110	WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

SAVED: M:\101\00126\24\AAcad\DWGS\MR-C4132\MR-C4132. 6/26/2024 11:48:28 AM , RMCLELLAN PRINTED: 8/27/2024 11:14:21 AM, MR-C4132, RMCLELLAN
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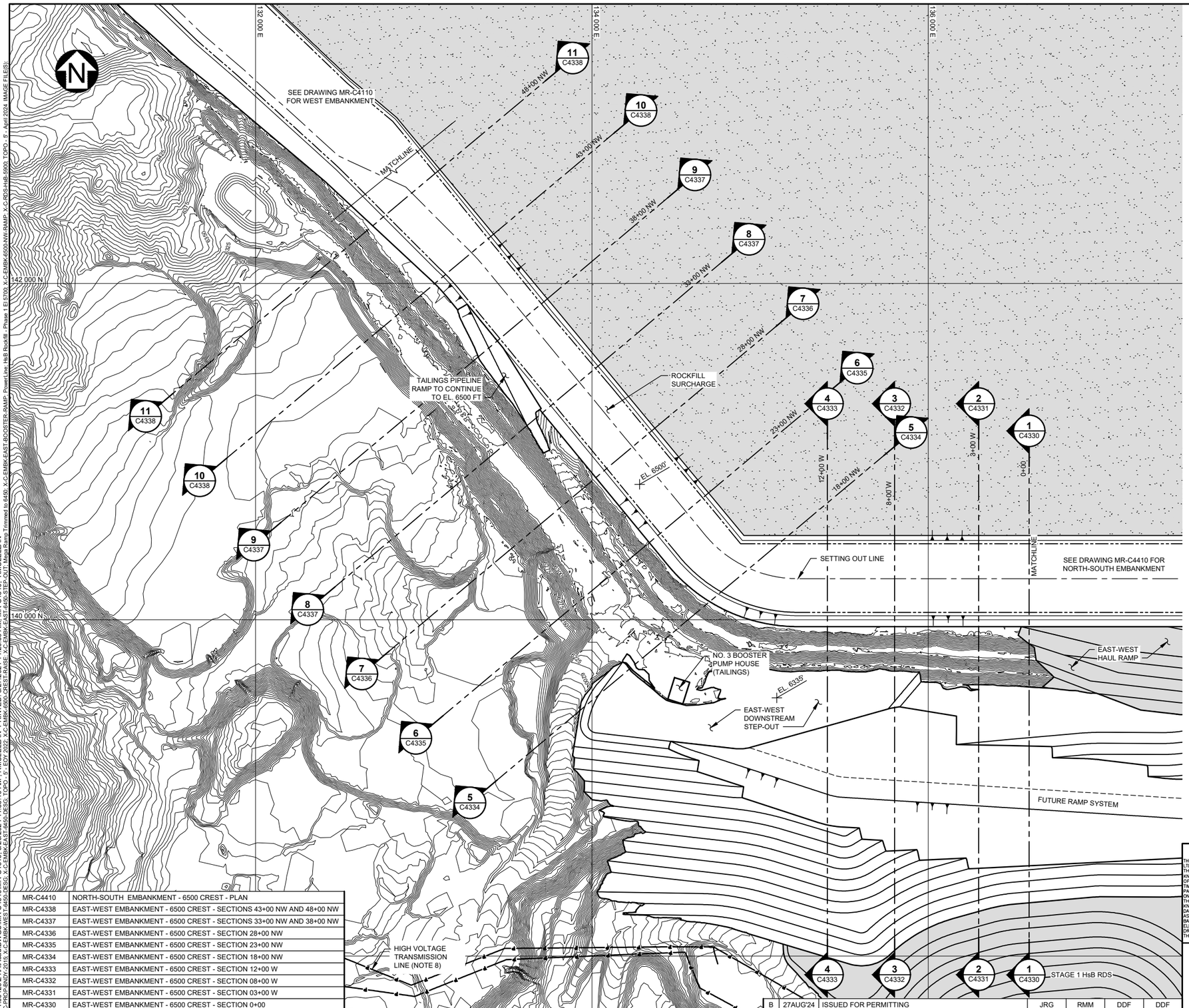

LEGEND:

- TAILINGS BEACH
- ROCK DISPOSAL SITE / HAUL RAMP (PRIOR TO PERMIT) (NOTE 9)
- 6500 EMBANKMENT AND SUPPORTING ROCKFILL (NOTE 10)
- SAFETY BERM (NOTE 3)
- TRANSMISSION LINE (PROPOSED) (NOTE 8)
- SETTING OUT LINE (SOL) (NOTE 7)
- EL. XXX ft — SPOT ELEVATION

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT 220 FT FROM THE SETTING OUT LINE AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. TRANSMISSION LINE ROUTING IS APPROXIMATE AS PROVIDED BY MONTANA RESOURCES, LLC IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.
9. STAGE 1 HsB RDS AND EAST-WEST HAUL RAMP ASSUMED TO BE COMPLETE PRIOR TO EL. 6,500 CREST RAISE.
10. EAST-WEST DOWNSTREAM STEP-OUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL. 6,500 CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 300 0 300 600 900 1200 1500 ft

DRG. NO.	DESCRIPTION
MR-C4410	NORTH-SOUTH EMBANKMENT - 6500 CREST - PLAN
MR-C4338	EAST-WEST EMBANKMENT - 6500 CREST - SECTIONS 43+00 NW AND 48+00 NW
MR-C4337	EAST-WEST EMBANKMENT - 6500 CREST - SECTIONS 33+00 NW AND 38+00 NW
MR-C4336	EAST-WEST EMBANKMENT - 6500 CREST - SECTION 28+00 NW
MR-C4335	EAST-WEST EMBANKMENT - 6500 CREST - SECTION 23+00 NW
MR-C4334	EAST-WEST EMBANKMENT - 6500 CREST - SECTION 18+00 NW
MR-C4333	EAST-WEST EMBANKMENT - 6500 CREST - SECTION 12+00 W
MR-C4332	EAST-WEST EMBANKMENT - 6500 CREST - SECTION 08+00 W
MR-C4331	EAST-WEST EMBANKMENT - 6500 CREST - SECTION 03+00 W
MR-C4330	EAST-WEST EMBANKMENT - 6500 CREST - SECTION 0+00
MR-C4110	WEST EMBANKMENT - 6500 CREST - PLAN

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
PLAN

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4310	B

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XREF FILE(S): X-C-PRO-BNDY-2015, X-C-EMBK-WEST-6450-DESG, X-C-EMBK-EAST-6450-DESG, TOPO - 5' - EOY 2022, X-C-EMBK-6500-CREST-RAISE, X-C-EMBK-EAST-6450-STEP-OUT, Mega Ramp Trimmed to 6450, X-C-EMBK-EAST-BOOSTER-RAMP, PowerLine, HsB Rockfill - Phase 1 El 5700, X-C-EMBK-6500-NW-RAMP, X-C-RDS-HsB-5900, TOPO - 5' - April 2024 IMAGE FILE(S):
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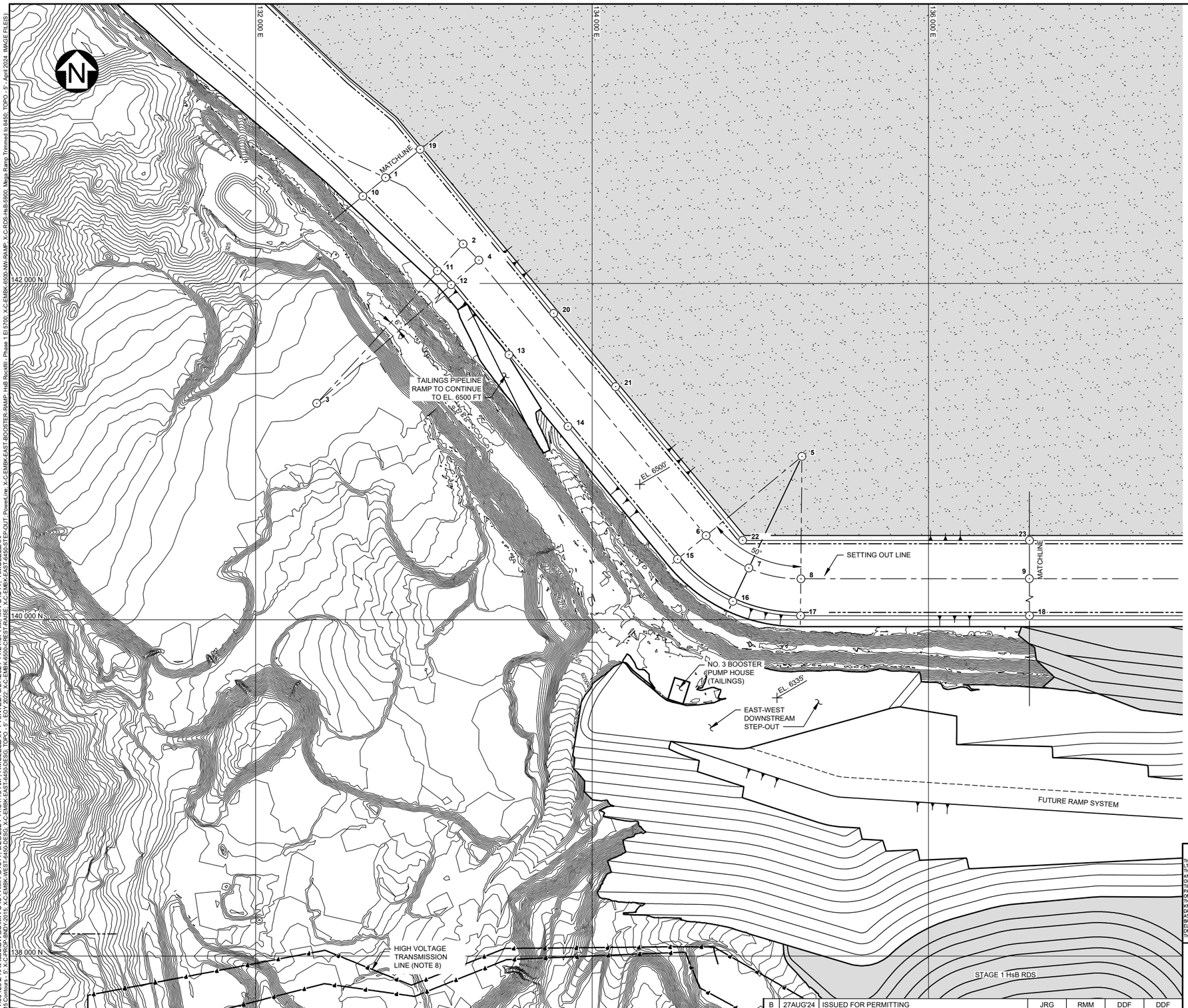


SETTING OUT LINE SETTING OUT POINTS

ID	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
1	142629	132772	6500
2	142233	133232	6500
3	141287	132363	-
4	142138	133326	6500
5	140971	135247	-
6	140500	134677	6500
7	140307	134931	6500
8	140243	135240	6500
9	140244	136599	6500

DOWNSTREAM CREST SETTING OUT POINTS

ID	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
10	142518	132636	6500
11	142075	133080	6500
12	141992	133161	6500
13	141576	133505	6500
14	141149	133856	6500
15	140360	134507	6500
16	140109	134836	6500
17	140024	135239	6500
18	140024	136600	6500

UPSTREAM CREST SETTING OUT POINTS

ID	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
19	142796	132978	6500
20	141822	133771	6500
21	141386	134140	6500
22	140472	134894	6500
23	140472	136600	6500

LEGEND:

- TAILINGS BEACH
- ROCK DISPOSAL SITE / HAUL RAMP (PRIOR TO PERMIT) (NOTE 9)
- 6500 EMBANKMENT AND SUPPORTING ROCKFILL (NOTE 10)
- TRANSMISSION LINE (PROPOSED) (NOTE 8)
- SETTING OUT LINE (SOL) (NOTE 7)
- SETTING OUT POINT
- EL. XXX ft — SPOT ELEVATION

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT 220 FT FROM THE SETTING OUT LINE AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. TRANSMISSION LINE ROUTING IS APPROXIMATE AS PROVIDED BY MONTANA RESOURCES, LLC IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.
9. STAGE 1 HsB RDS AND EAST-WEST HAUL RAMP ASSUMED TO BE COMPLETE PRIOR TO EL. 6,500 CREST RAISE.
10. EAST-WEST DOWNSTREAM STEP-OUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL. 6,500 CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 300 0 300 600 900 1200 1500 ft

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SETTING OUT DETAILS

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4311	B

MR-C4310	EAST - WEST EMBANKMENT - 6500 CREST - PLAN
DRG. NO.	DESCRIPTION

REFERENCE DRAWINGS

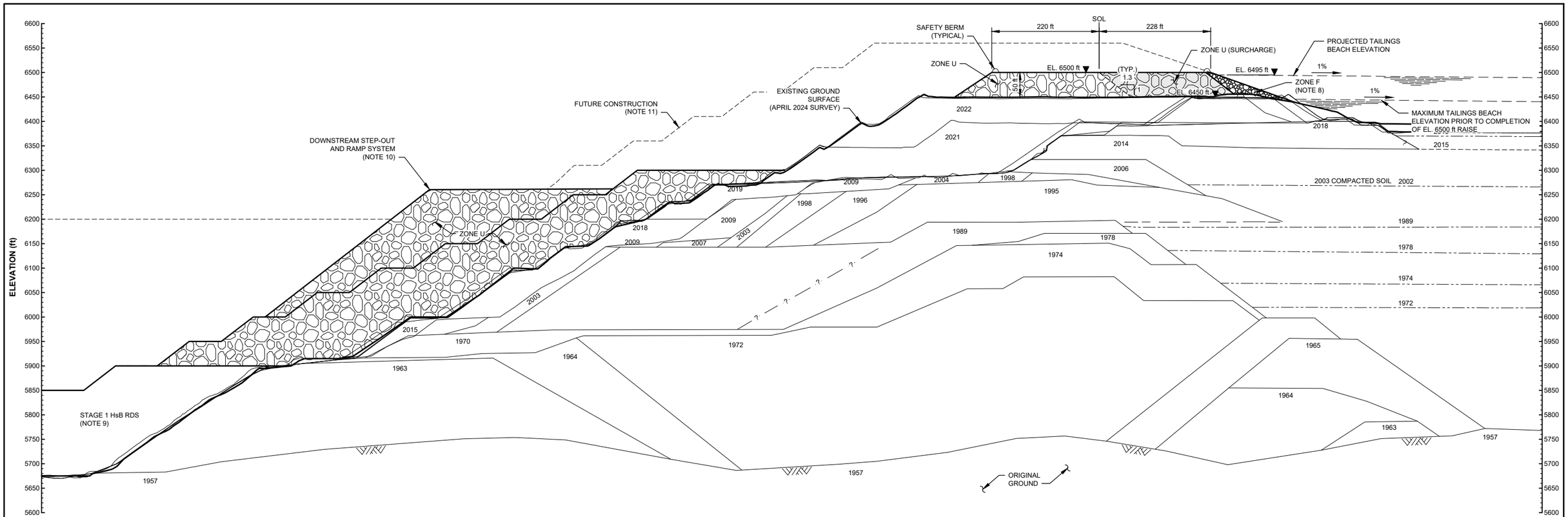
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

SAVED: M:\1\101\00126\24\A\acad\DWGS\MR-C4311\MR-C4311_6/26/2024 11:54:48 AM, RMCLELLAN PRINTED: 8/27/2024 11:21:37 AM, RMCLELLAN
XREF FILE(S): 2015 Contours - 5'; XC-PROP-BNDY-2015; X-C-EMBK-WEST-6450-DESG; X-C-EMBK-EAST-6450-DESG; TOPO - 5' EOY 2022; X-C-EMBK-6500-CREST-RAISE; X-C-EMBK-EAST-6450-STEP-OUT; PowerLine; X-C-EMBK-EAST-BOOSTER-RAMP- HsB Rockfill - Phase 1 El 6700; X-C-EMBK-6500-NW-RAMP; X-C-RDS-HsB-5900; Mega Ramp Trimmed to 6450; TOPO - 5' - April 2024 IMAGE FILE(S):



1 C4310 **SECTION**
STATION 0+00
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
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9. STAGE 1 HsB RDS ASSUMED TO BE COMPLETED PRIOR TO EL. 6500 FT CREST RAISE.
10. DOWNSTREAM STEP-OUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL. 6500 FT CREST RAISE.
11. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SECTION 0+00

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4330	B

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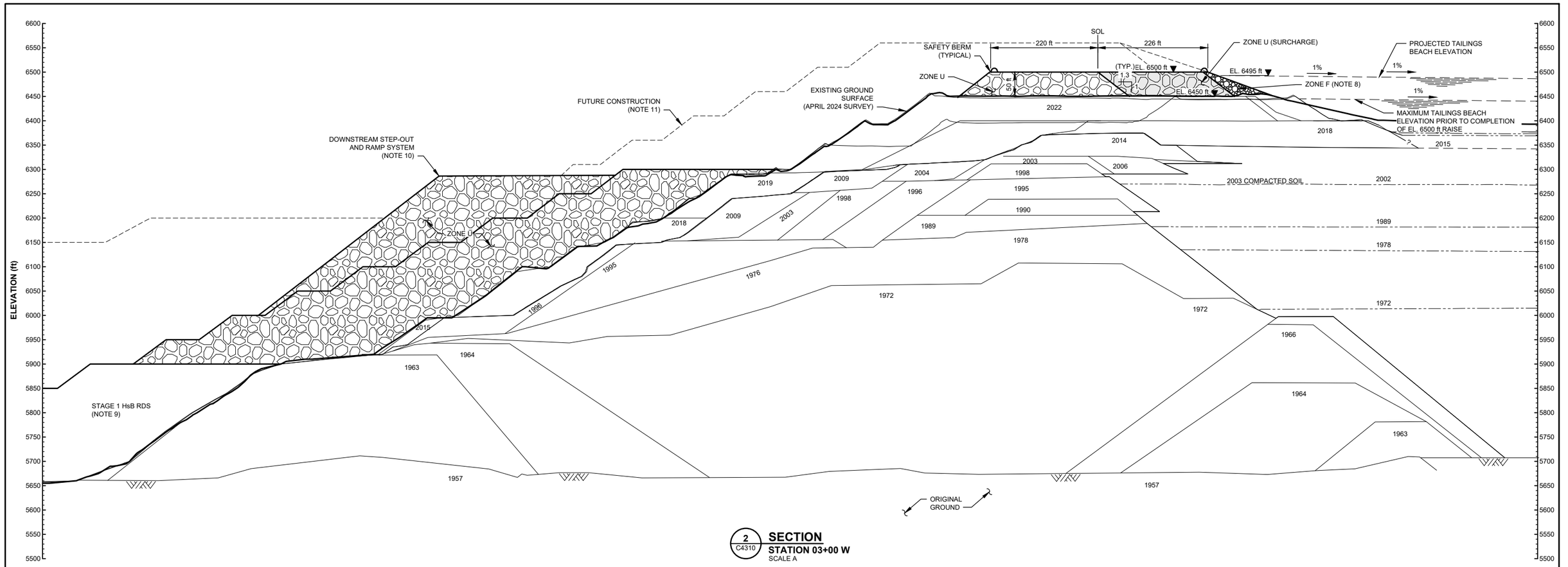

2 C4310 **SECTION**
STATION 03+00 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
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6. GROUND CONTOUR INTERVAL IS 5 FEET.
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9. STAGE 1 HsB RDS ASSUMED TO BE COMPLETE PRIOR TO EL 6500 FT CREST RAISE.
10. DOWNSTREAM STEP-OUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL 6500 FT CREST RAISE.
11. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

100 0 100 200 300 400 500 ft
SCALE A

DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SECTION 03+00 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4331	B

SAVED: M:\101\101126\24\A\acad\DWGS\MR-C4331\MR-C4331_8/26/2024 12:56:41 PM , RMCLELLAN PRINTED: 8/27/2024 11:23:22 AM, MR-C4331 , RMCLELLAN
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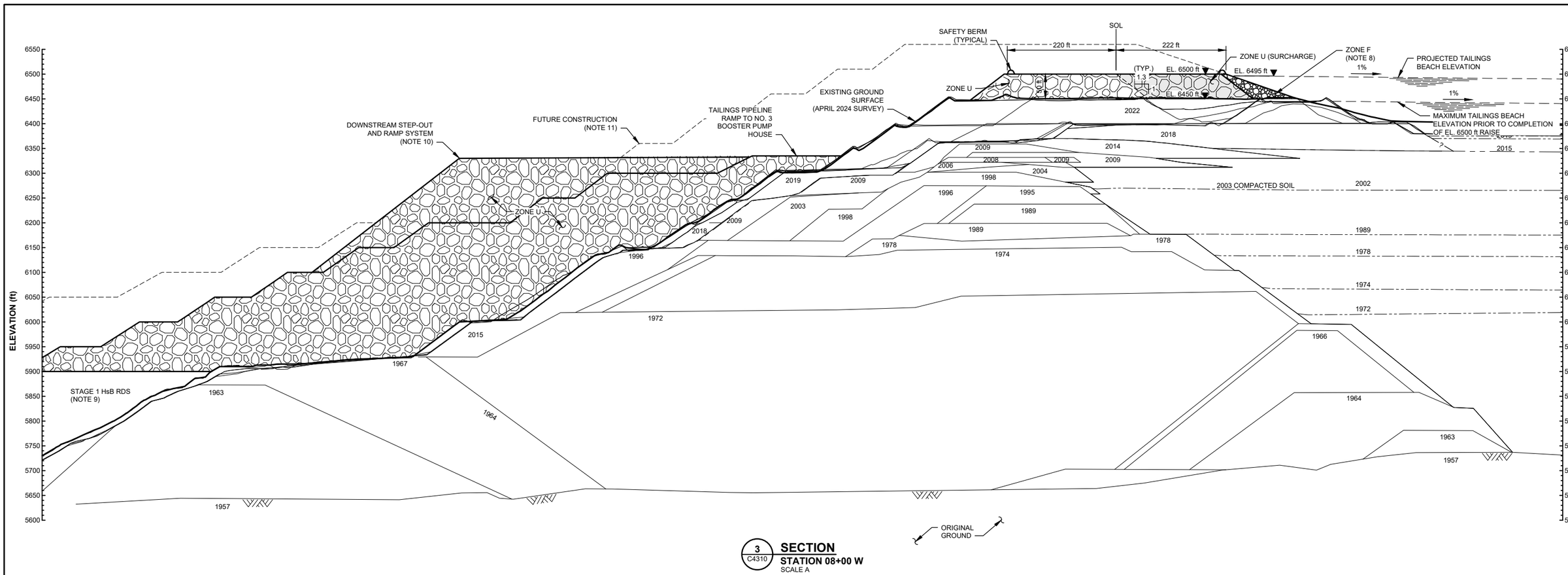

3 C4310 **SECTION**
STATION 08+00 W
SCALE A

ORIGINAL GROUND

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT 220 FT FROM THE SETTING OUT LINE AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. STAGE 1 HsB RDS ASSUMED TO BE COMPLETE PRIOR TO EL 6500 FT CREST RAISE.
10. DOWNSTREAM STEP-OUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL 6500 FT CREST RAISE.
11. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SECTION 08+00 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4332	B

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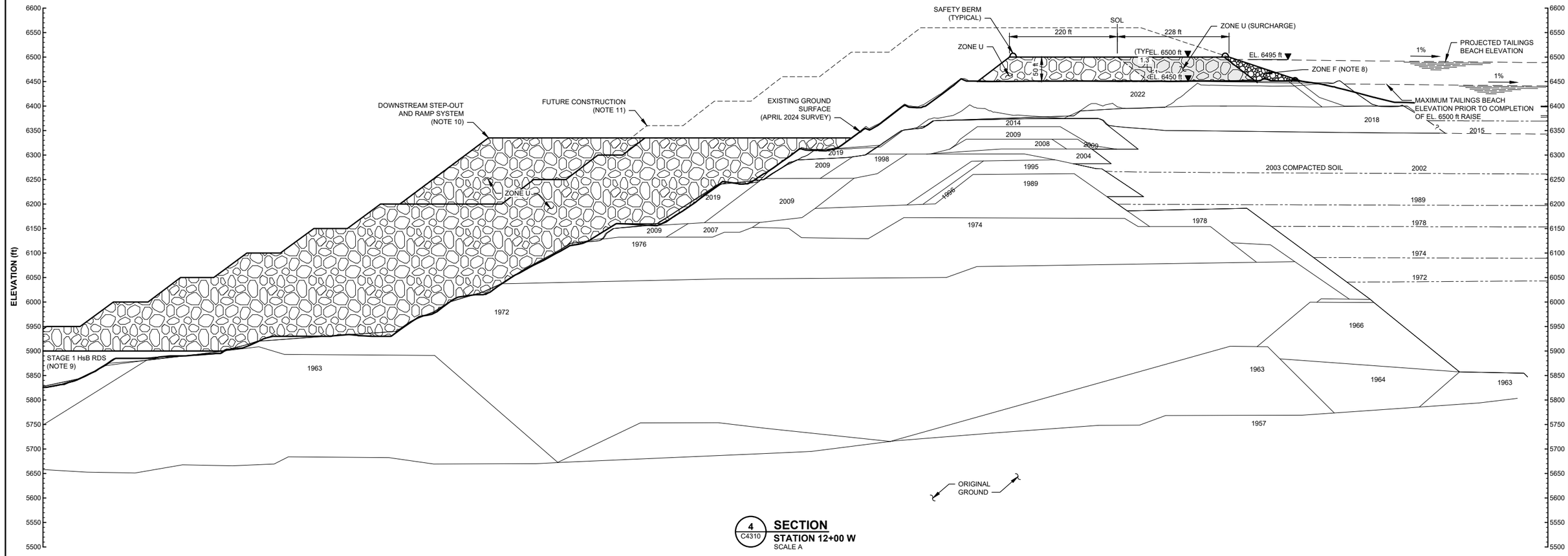

4 C4310 **SECTION**
STATION 12+00 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT 220 FT FROM THE SETTING OUT LINE AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. STAGE 1 HsB RDS ASSUMED TO BE COMPLETE PRIOR TO EL 6500 FT CREST RAISE.
10. DOWNSTREAM STEP-OUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL 6500 FT CREST RAISE.
11. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SECTION 12+00 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4333	B

REFERENCE DRAWINGS

DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

SAVED: M:\101\01\126\24\AA\cad\DWGS\MR-C4333\MR-C4333_6/26/2024 12:59:15 PM , RMCLELLAN PRINTED: 8/27/2024 11:24:23 AM, MR-C4333, RMCLELLAN
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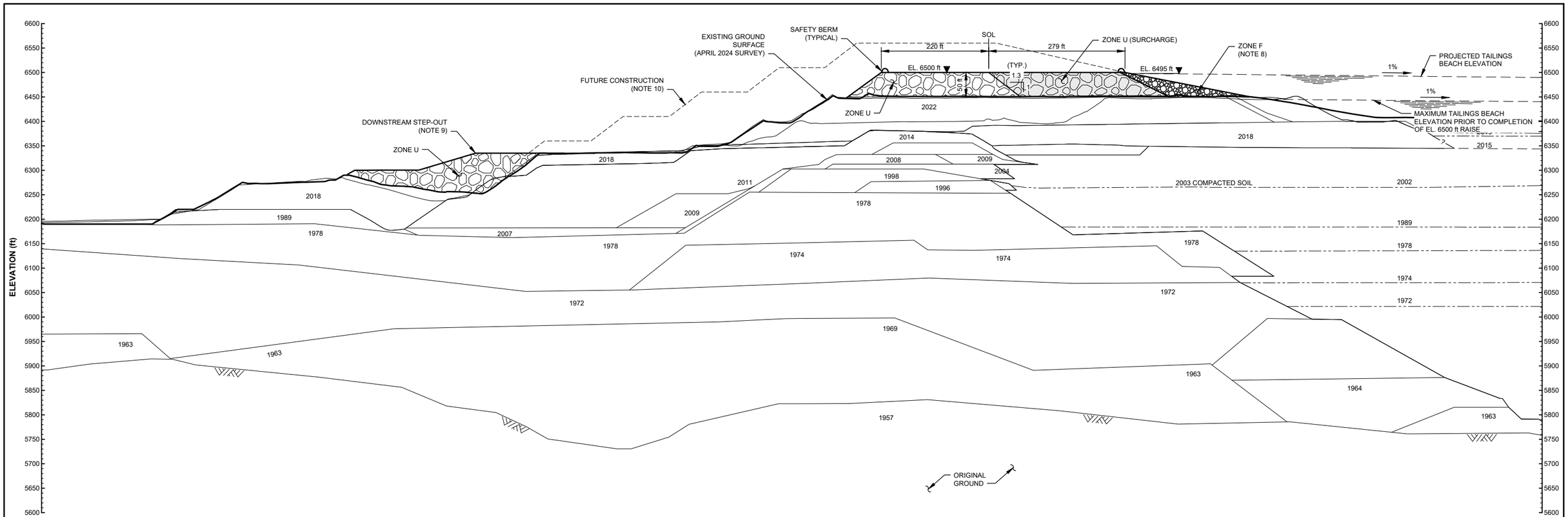

5 C4310 **SECTION**
STATION 18+00 NW
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT 220 FT FROM THE SETTING OUT LINE AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL 6500 FT CREST RAISE.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 100 0 100 200 300 400 500 ft

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SECTION 18+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4334	B

DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

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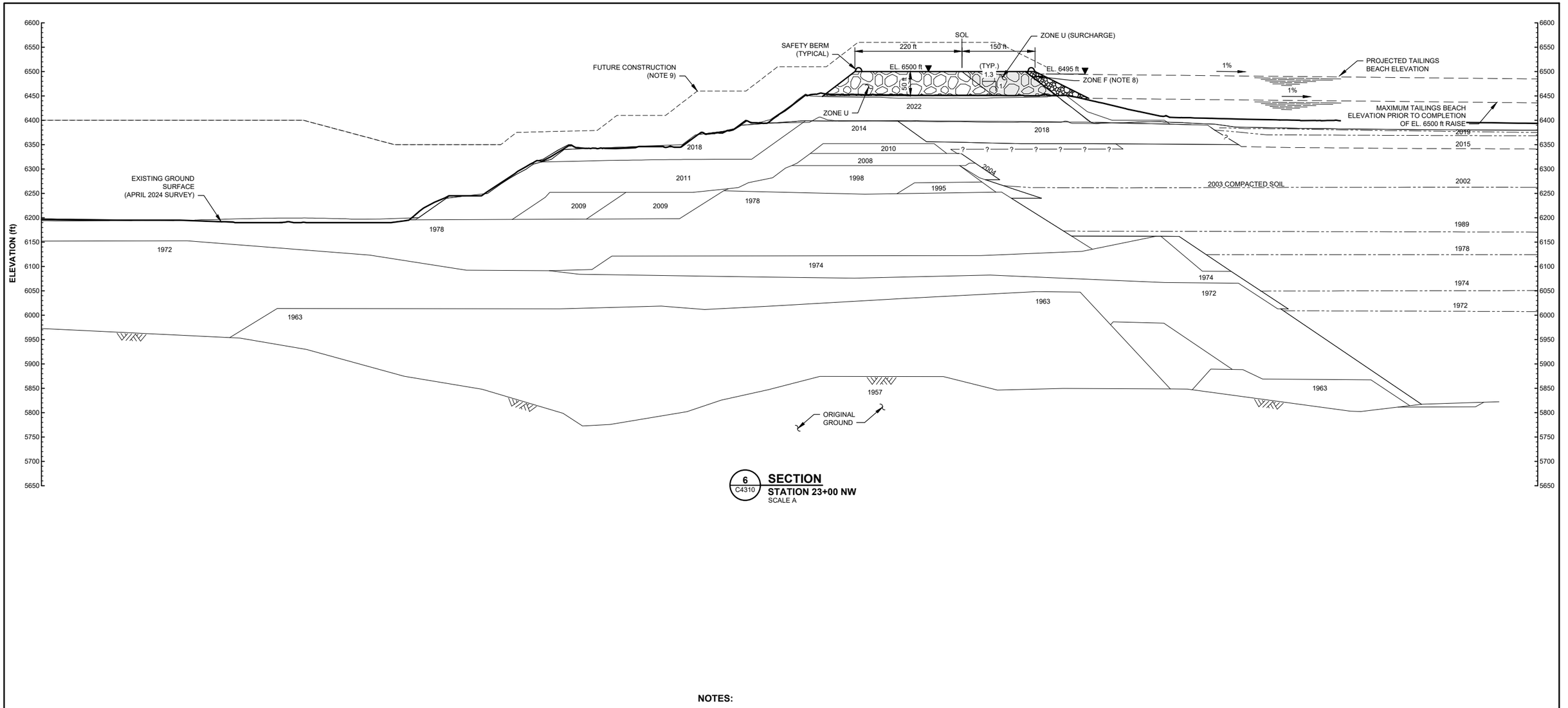

6 C4310 SECTION
STATION 23+00 NW
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT 220 FT FROM THE SETTING OUT LINE AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SECTION 23+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4335	B

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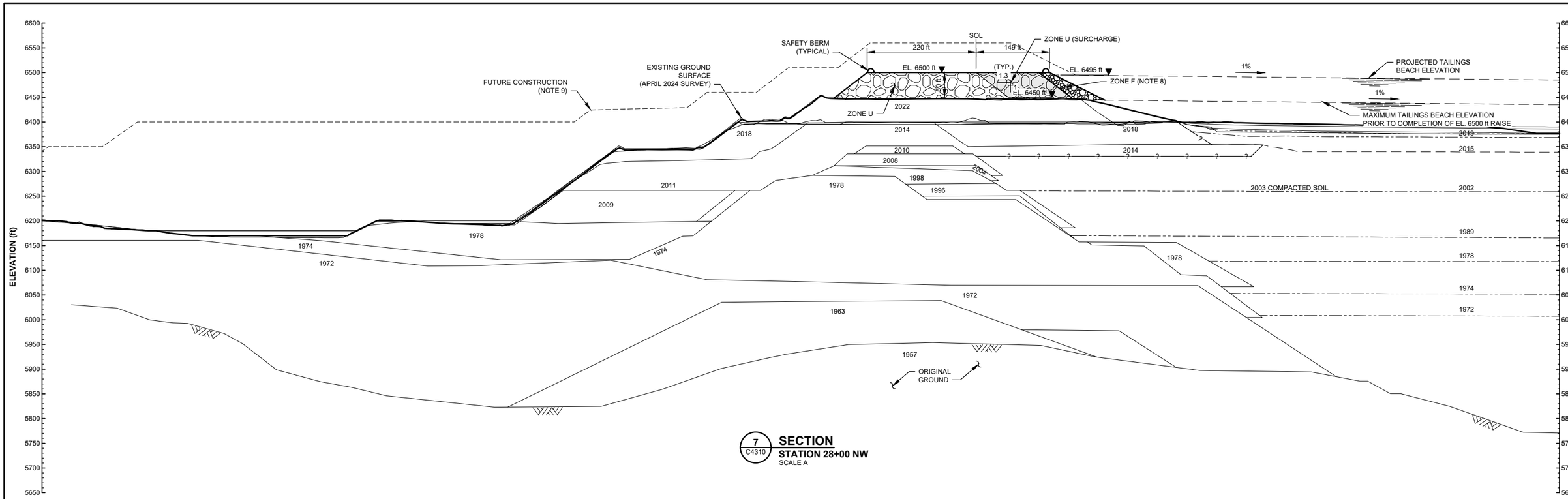

7 / C4310 SECTION
STATION 28+00 NW
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT 220 FT FROM THE SETTING OUT LINE AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SECTION 28+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4336	B

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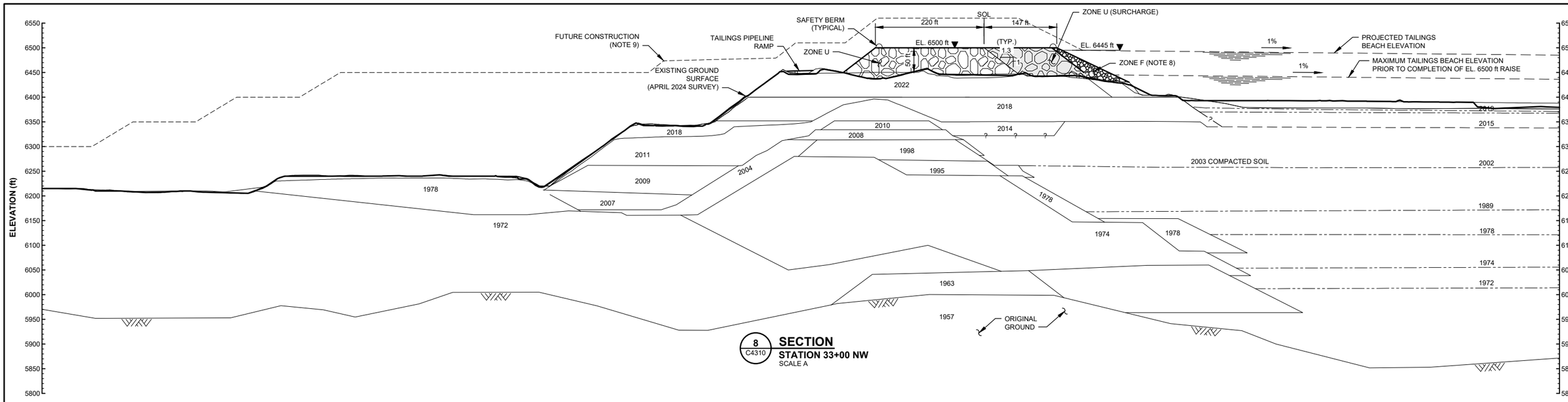
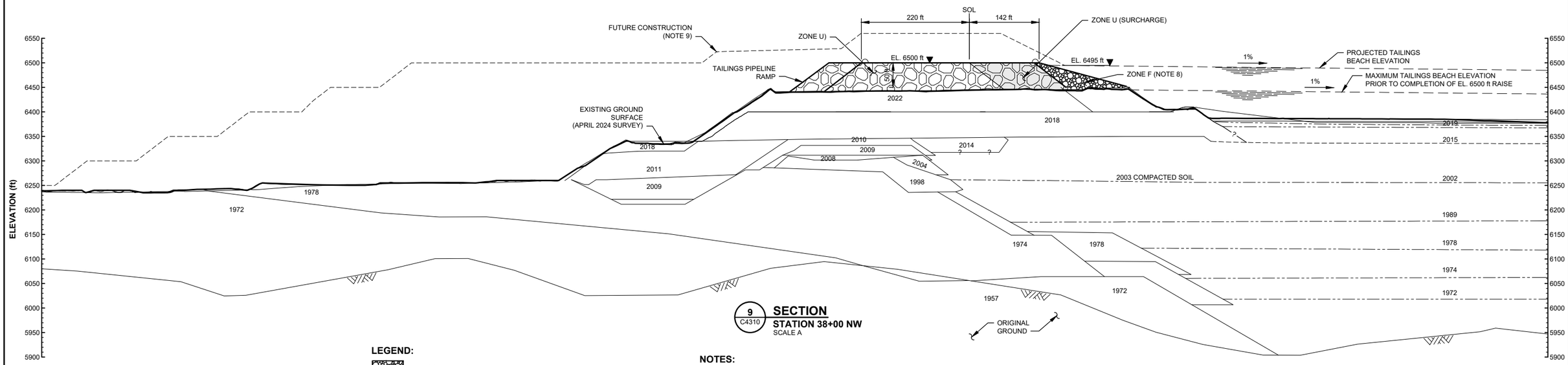


8 C4310 SECTION
STATION 33+00 NW
SCALE A



9 C4310 SECTION
STATION 38+00 NW
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT 220 FT FROM THE SETTING OUT LINE AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

SCALE A: 100 0 100 200 300 400 500 ft

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SECTIONS 33+00 NW AND 38+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4337	B

SAVED: M:\1\101\00126\24\A\acad\DWGS\MR-C4337\MR-C4337_6/26/2024 4:06:15 PM , RMCLELLAN PRINTED: 8/27/2024 11:27:30 AM, MR-C4337, RMCLELLAN
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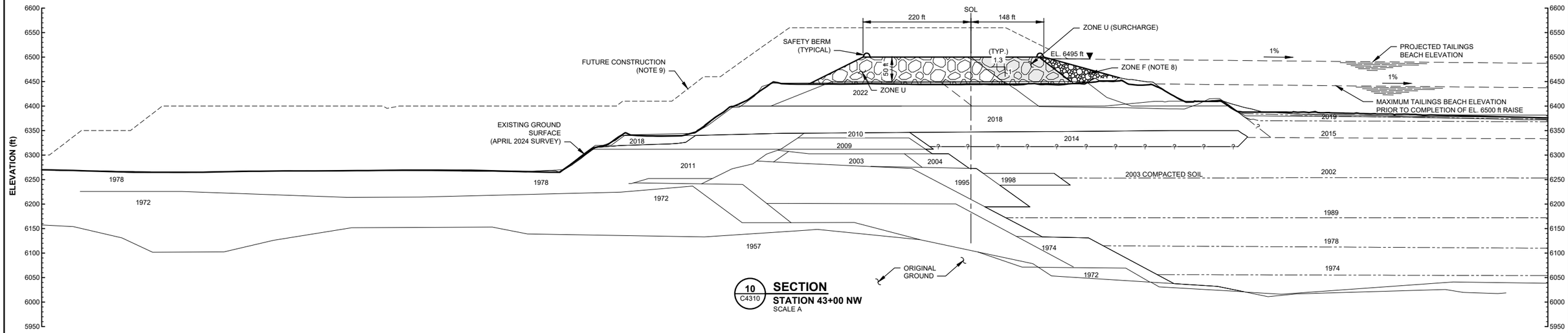
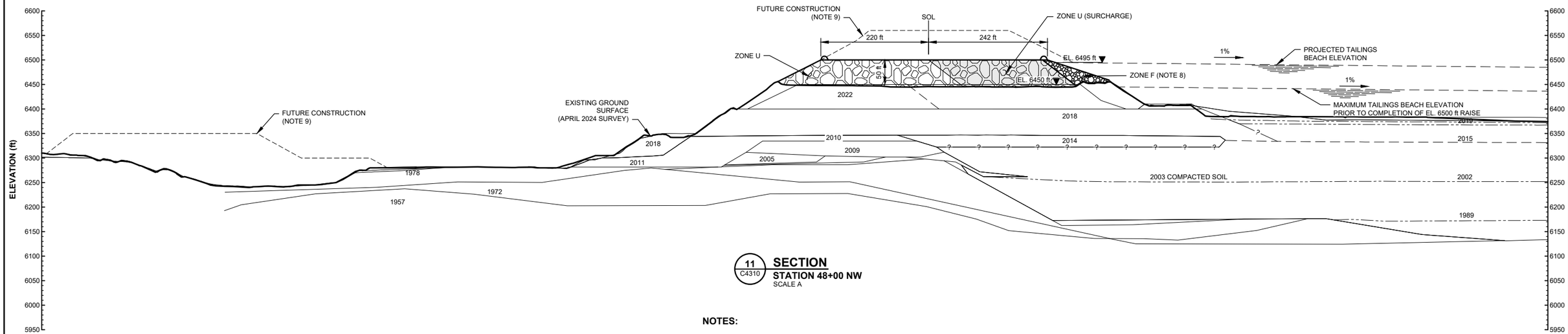


10 C4310 **SECTION**
STATION 43+00 NW
SCALE A



11 C4310 **SECTION**
STATION 48+00 NW
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
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6. GROUND CONTOUR INTERVAL IS 5 FEET.
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8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

REFERENCE DRAWINGS	
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS
DRG. NO.	DESCRIPTION

REVISIONS							
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6500 CREST
SECTIONS 43+00 NW AND 48+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4338	B

SAVED: M:\1\101\00126\24\A\acad\DWGS\MR-C4338\MR-C4338, 6/26/2024 4:09:10 PM, , RMC.LELLAN PRINTED: 8/27/2024 11:27:57 AM, MR-C4338, RMC.LELLAN
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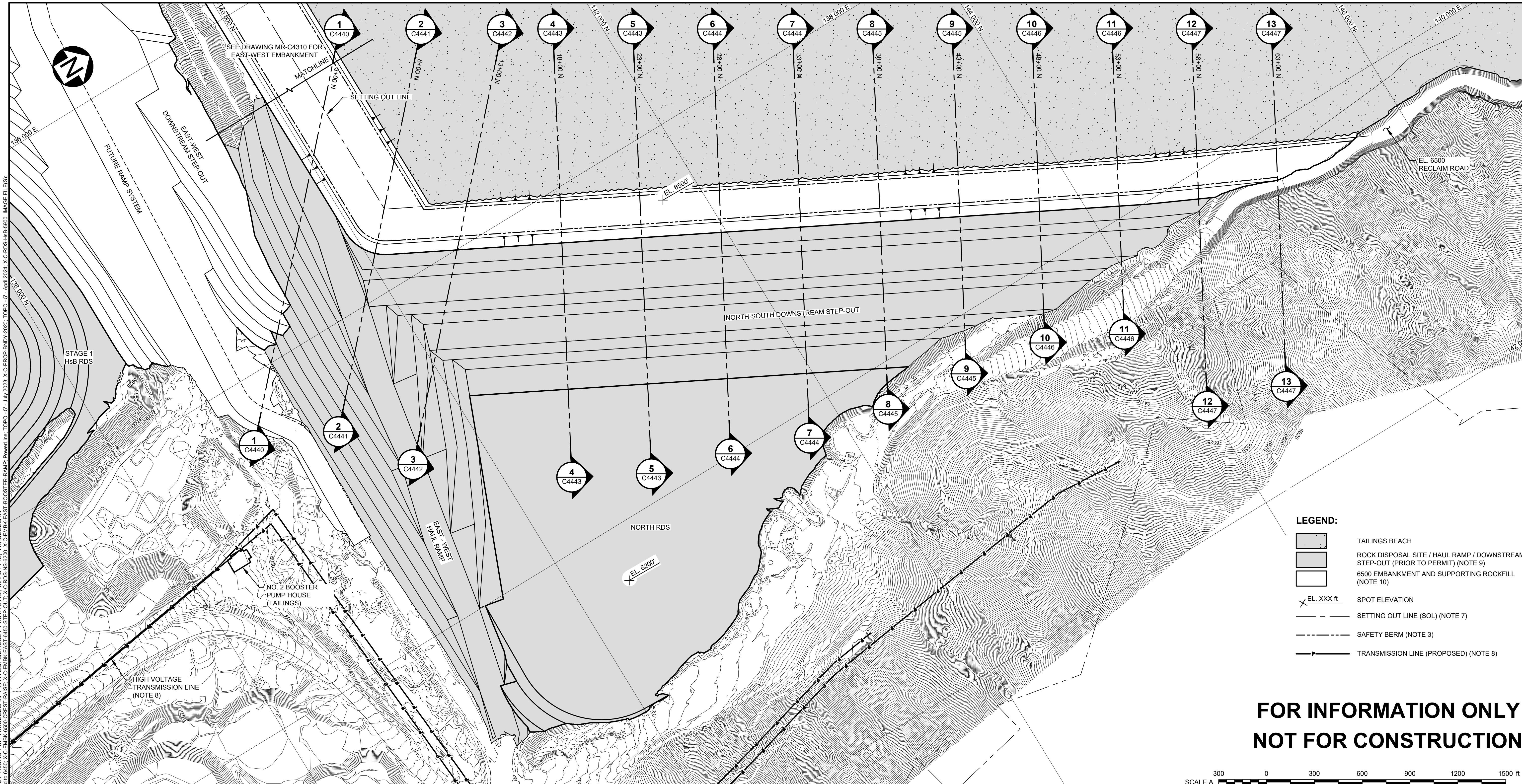


FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. NORTH OF SECTION 13+00 N THE SETTING OUT LINE IS LOCATED ALONG THE UPSTREAM EDGE OF THE EMBANKMENT CREST. SETTING OUT LINE BETWEEN SECTION 3+00 N AND 8+00 N IS LAID OUT 220 FT FROM THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. TRANSMISSION LINE ROUTING IS APPROXIMATE AS PROVIDED BY MONTANA RESOURCES, LLC IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.
9. STAGE 1 HsB RDS, EAST-WEST HAUL RAMP, NORTH-SOUTH DOWNSTREAM STEP-OUT AND EL. 6,200 FT NORTH RDS ASSUMED TO BE COMPLETE PRIOR TO EL. 6,500 CREST RAISE.
10. EAST-WEST DOWNSTREAM STEP-OUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL. 6,500 CREST RAISE.

REFERENCE DRAWINGS

DRG. NO.	DESCRIPTION
MR-C4447	NORTH-SOUTH EMBANKMENT - 6500 CREST - SECTION 58+00 N AND 63+00 N
MR-C4446	NORTH-SOUTH EMBANKMENT - 6500 CREST - SECTION 48+00 N AND 53+00 N
MR-C4445	NORTH-SOUTH EMBANKMENT - 6500 CREST - SECTION 38+00 N AND 43+00 N
MR-C4444	NORTH-SOUTH EMBANKMENT - 6500 CREST - SECTION 28+00 N AND 33+00 N
MR-C4443	NORTH-SOUTH EMBANKMENT - 6500 CREST - SECTION 18+00 N AND 23+00 N
MR-C4442	NORTH-SOUTH EMBANKMENT - 6500 CREST - SECTION 13+00 N
MR-C4441	NORTH-SOUTH EMBANKMENT - 6500 CREST - SECTION 08+00 N
MR-C4440	NORTH-SOUTH EMBANKMENT - 6500 CREST - SECTION 03+00 N
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

Knight Piésold CONSULTING

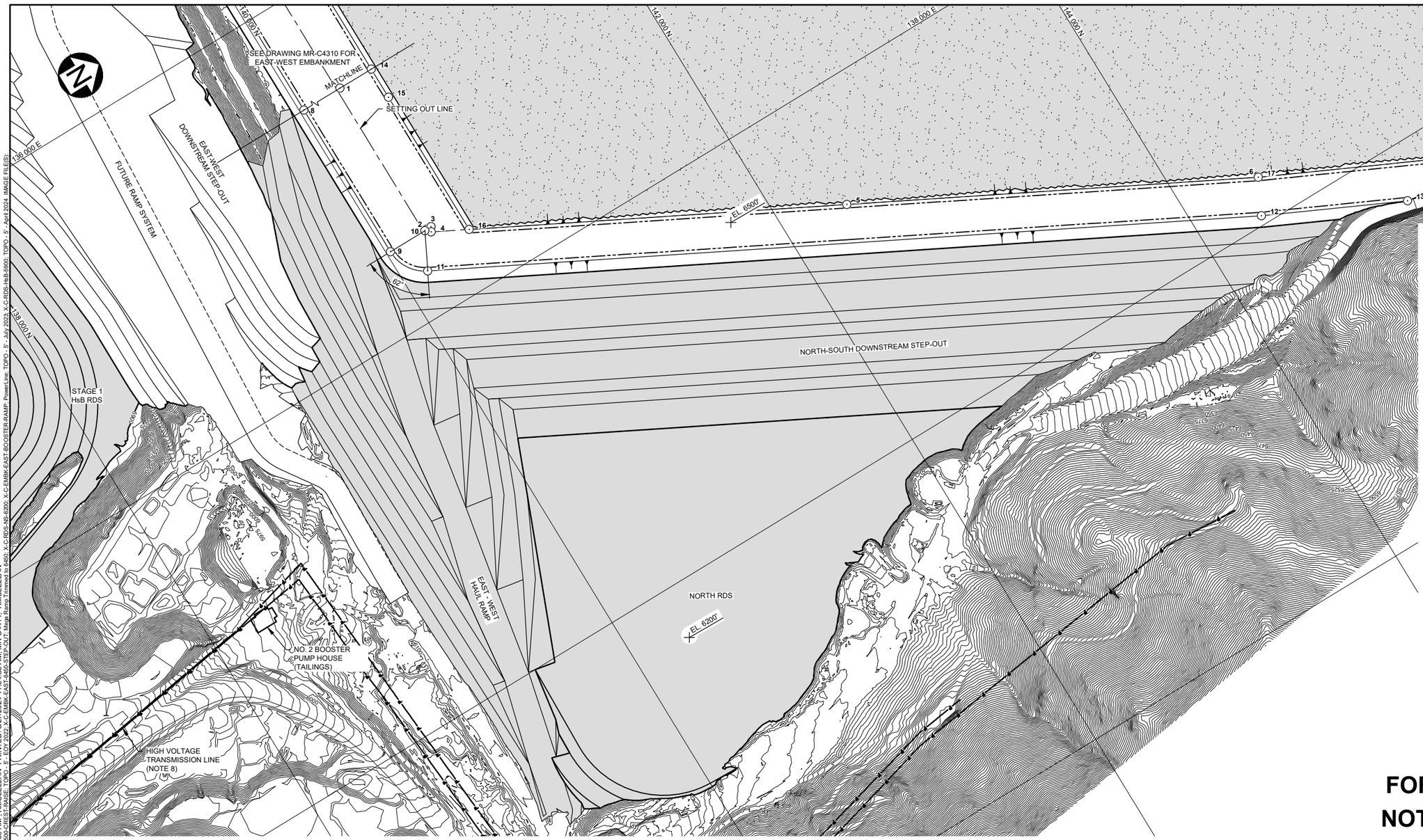
MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6500 CREST
PLAN

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4410	B

SAVED: M:\1\01\00126\24\A\Acad\DWGS\MR-C4410\MR-C4410, 6/26/2024 1:09:16 PM, RMCLELLAN PRINTED: 8/27/2024 11:34:18 AM, MR-C4410, RMCLELLAN



SETTING OUT LINE SETTING OUT POINTS			
ID	NORTHING	EASTING	ELEVATION (ft)
1	140264	136599	6500
2	140264	137541	6500
3	140295	137541	6500
4	140280	137567	6500
5	142379	138666	6500
6	144457	139753	6500
7	145680	140340	6500

DOWNSTREAM CREST SETTING OUT POINTS			
ID	NORTHING	EASTING	ELEVATION (ft)
8	140024	136598	6500
9	140024	137603	6500
10	140209	137603	6500
11	140123	137767	6500
12	144345	139977	6500
13	144913	140249	6500

UPSTREAM CREST SETTING OUT POINTS			
ID	NORTHING	EASTING	ELEVATION (ft)
14	140472	136599	6500
15	140472	136787	6500
16	140472	137668	6500
17	144457	139753	6500
18	145661	140330	6500

LEGEND:

- TAILINGS BEACH
- ROCK DISPOSAL SITE / HAUL RAMP/ DOWNSTREAM STEP-OUT (PRIOR TO PERMIT) (NOTE 9)
- 6500 EMBANKMENT AND SUPPORTING ROCKFILL (NOTE 10)
- SETTING OUT LINE (SOL) (NOTE 7)
- TRANSMISSION LINE (PROPOSED)
- SETTING OUT POINT

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 300 0 300 600 900 1200 1500 ft

NOTES:

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3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. NORTH OF SECTION 13+00 N THE SETTING OUT LINE IS LOCATED ALONG THE UPSTREAM EDGE OF THE EMBANKMENT CREST. SETTING OUT LINE BETWEEN SECTION 3+00 N AND 8+00 N IS LAID OUT 220 FT FROM THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST AND ROUGHLY DELINEATES THE INTERFACE BETWEEN ZONE U EMBANKMENT AND ZONE U SURCHARGE.
8. TRANSMISSION LINE ROUTING IS APPROXIMATE AS PROVIDED BY MONTANA RESOURCES, LLC IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.
9. STAGE 1 HsB RDS, EAST-WEST HAUL RAMP, NORTH-SOUTH DOWNSTREAM STEP-OUT AND EL. 6,200 FT NORTH RDS ASSUMED TO BE COMPLETE PRIOR TO EL. 6,500 CREST RAISE.
10. EAST-WEST DOWNSTREAM STEP-OUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL. 6,500 CREST RAISE.

REFERENCE DRAWINGS	
DRG. NO.	DESCRIPTION
MR-C4310	EAST-WEST EMBANKMENT - 6500 CREST - PLAN

REVISIONS						
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS						
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

Knight Piésold CONSULTING

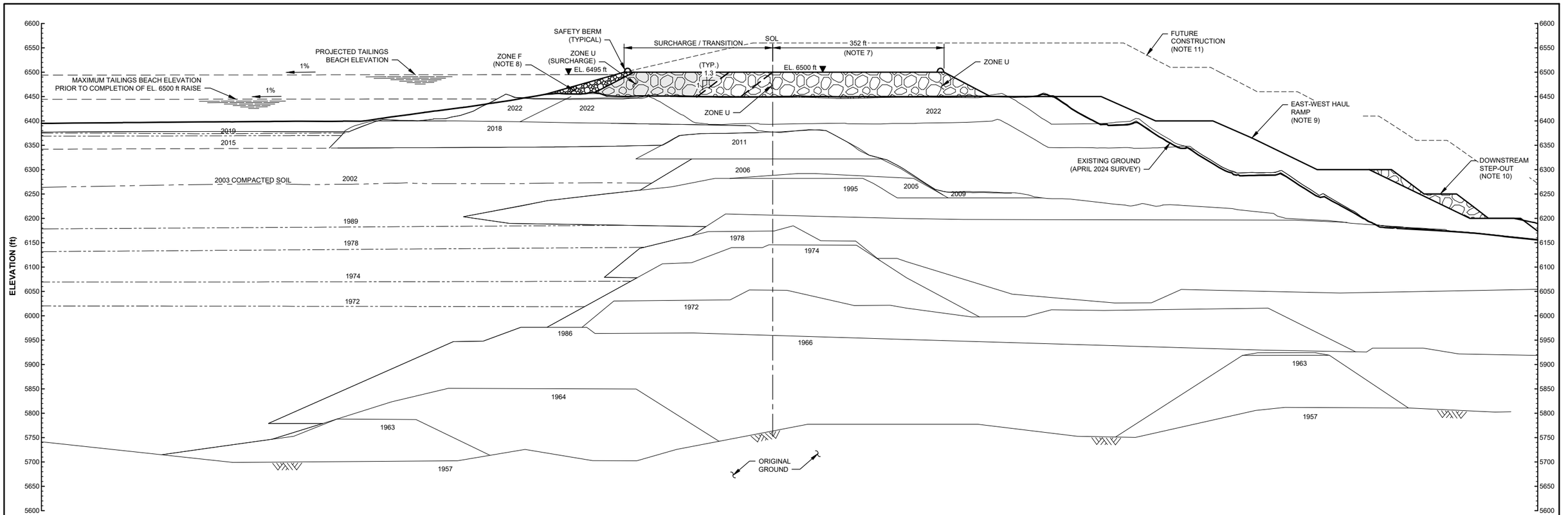
MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6500 CREST
SETTING OUT DETAILS

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4411	B

SAVED: M:\101\001\26\24\Acad\DWGS\MR-C4411\MR-C4411_6/27/2024 8:18:39 AM_RMCLELLAN PRINTED: 8/27/2024 11:34:55 AM_MR-C4411_RMCLELLAN
XREF FILE(S): X-C-EMBK-EAST-6450-DESG; X-C-EMBK-NS-6450-ADDN-FILL-DESG; X-C-EMBK-6500-CREST-RAISE_TOPO - 5' - EOY 2022; X-C-EMBK-EAST-6450-STEP-OUT; Mega Ramp Trimmed to 6460; X-C-RDS-NS-6200; X-C-EMBK-EAST-6450-DESG; X-C-EMBK-NS-6450-ADDN-FILL-DESG; X-C-EMBK-6500-CREST-RAISE_TOPO - 5' - July 2023; X-C-RDS-HsB-5900; TOPO - 5' - April 2024_IMAGE FILE(S):



1 C4410 **SECTION**
STATION 03+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. EAST-WEST HAUL RAMP IS UNDER CONSTRUCTION AND IS ASSUMED TO BE COMPLETE PRIOR TO EL. 6500 FT CREST RAISE.
10. DOWNSTREAM STEPOUT AND RAMP SYSTEM TO BE PROGRESSIVELY CONSTRUCTED FOLLOWING EL 6500 FT CREST RAISE.
11. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A
100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C4410	NORTH-SOUTH EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6500 CREST
SECTION 3+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4440	B

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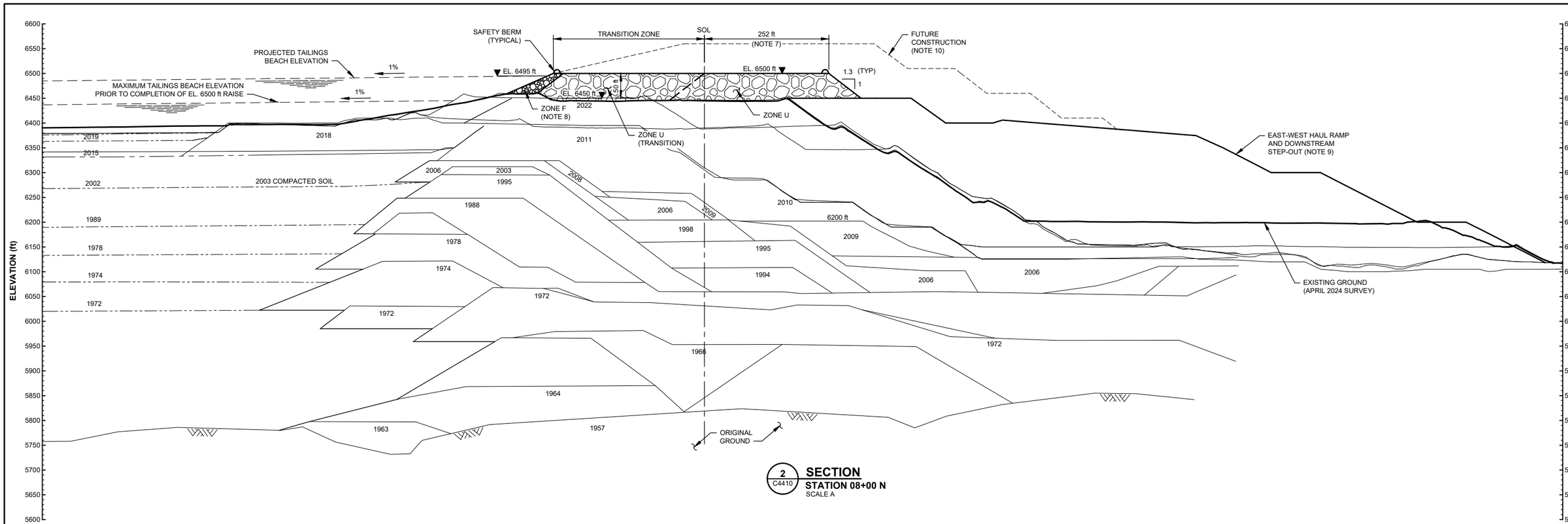

2 C4410 SECTION
STATION 08+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. EAST-WEST HAUL RAMP AND DOWNSTREAM STEP-OUT ARE UNDER CONSTRUCTION AND ARE ASSUMED TO BE COMPLETE PRIOR TO EL. 6500 FT CREST RAISE.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6500 CREST
SECTION 8+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4441	B

DRG. NO.	DESCRIPTION
MR-C4410	NORTH-SOUTH EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

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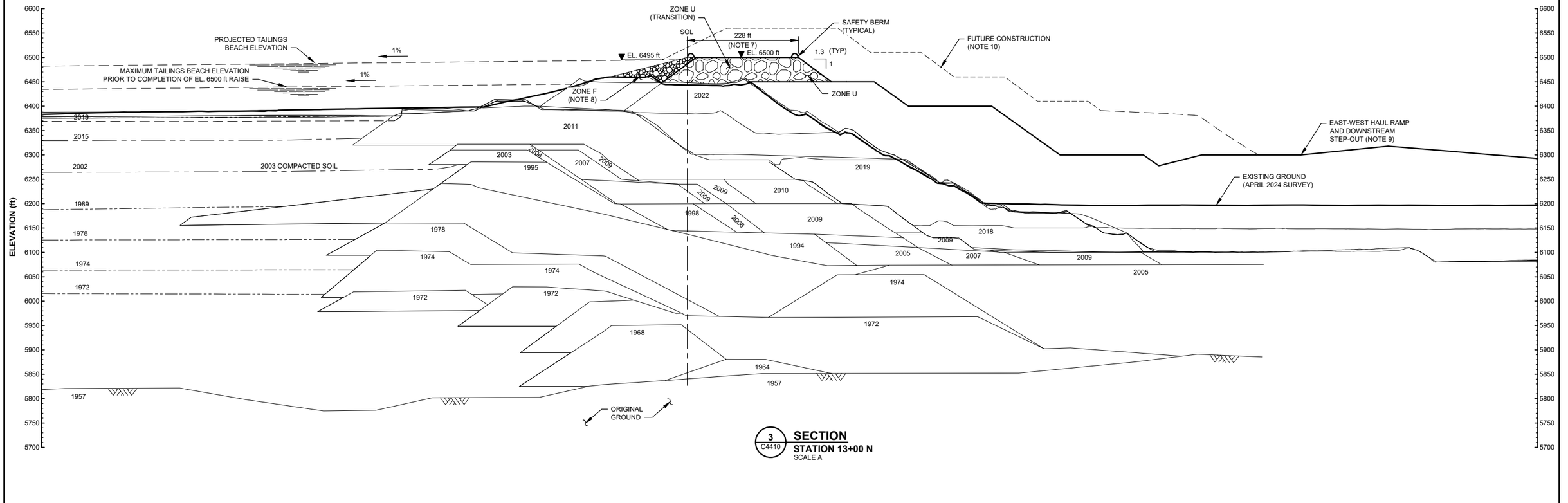

3 / C4410 SECTION
STATION 13+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. EAST-WEST HAUL RAMP AND DOWNSTREAM STEP-OUT ARE UNDER CONSTRUCTION AND ARE ASSUMED TO BE COMPLETE PRIOR TO EL. 6500 FT CREST RAISE.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C4410	NORTH-SOUTH EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6500 CREST
SECTION 13+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4442	B

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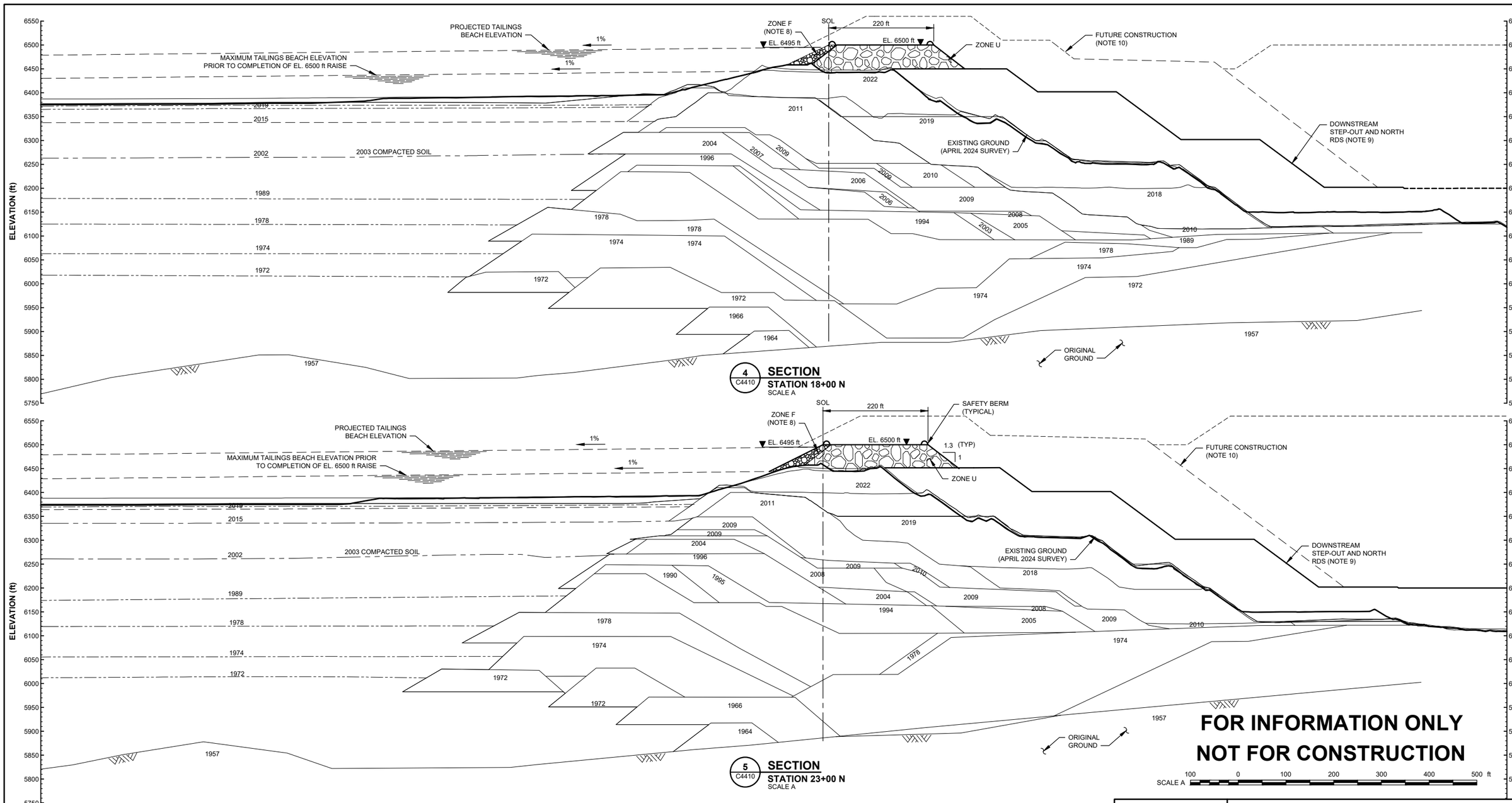

4 C4410 **SECTION**
STATION 18+00 N
SCALE A

5 C4410 **SECTION**
STATION 23+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
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3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT AND NORTH RDS ARE UNDER CONSTRUCTION AND ARE ASSUMED TO BE COMPLETE PRIOR TO EL. 6500 FT CREST RAISE.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

DRG. NO.	DESCRIPTION
MR-C4410	NORTH-SOUTH EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

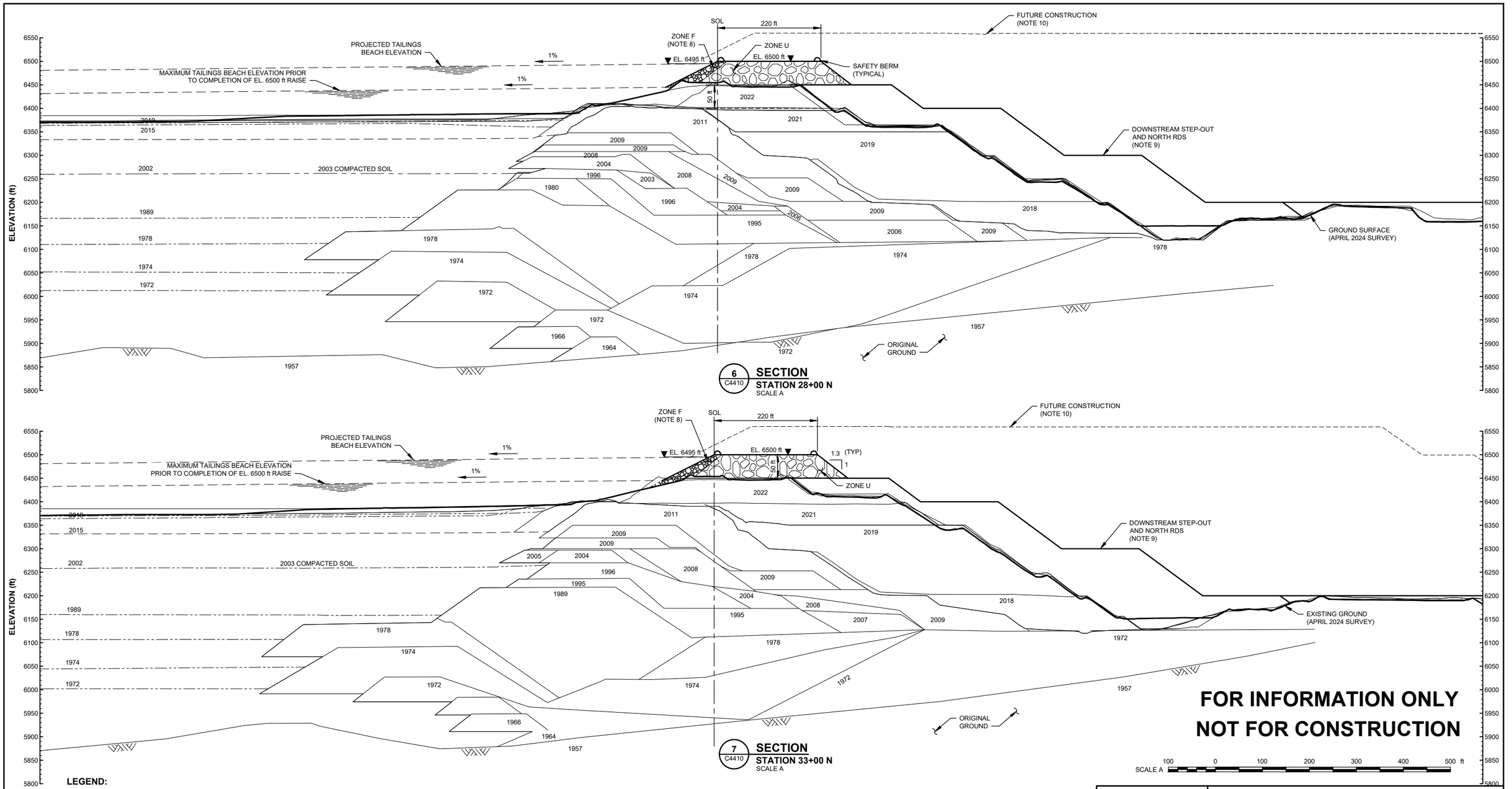
Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6500 CREST
SECTIONS 18+00 N AND 23+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4443	B



6 / C4410 SECTION
STATION 28+00 N
SCALE A

7 / C4410 SECTION
STATION 33+00 N
SCALE A

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 100 0 100 200 300 400 500 ft

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
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9. DOWNSTREAM STEP-OUT AND NORTH RDS ARE UNDER CONSTRUCTION AND ARE ASSUMED TO BE COMPLETE PRIOR TO EL. 6500 FT CREST RAISE.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

DRG. NO.	DESCRIPTION
MR-C4410	NORTH-SOUTH EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6500 CREST
SECTIONS 28+00 N AND 33+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4444	B

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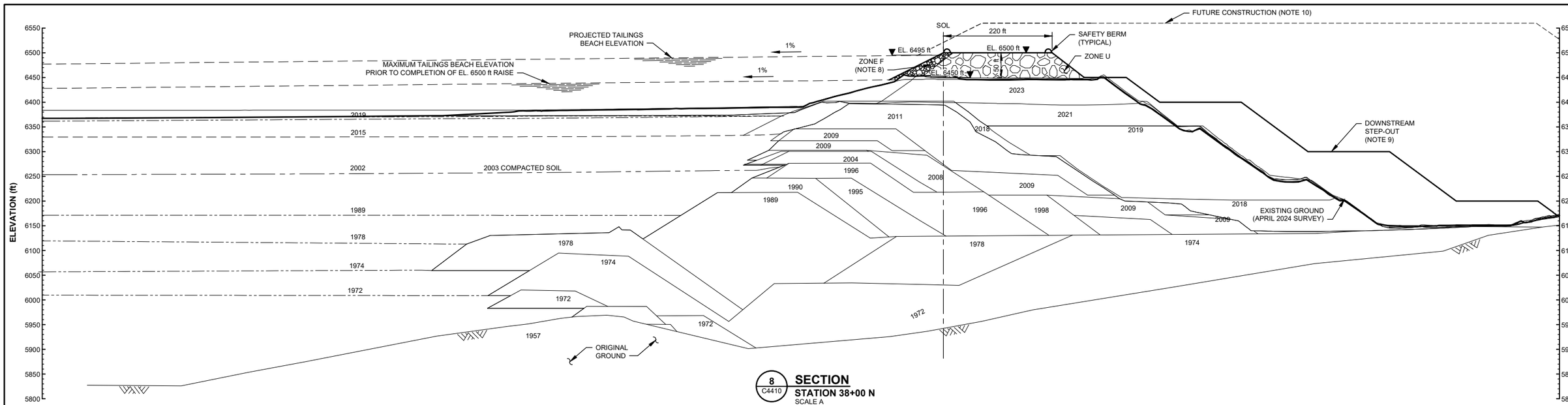

8 C4410 **SECTION**
STATION 38+00 N
SCALE A

9 C4410 **SECTION**
STATION 43+00 N
SCALE A

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 100 0 100 200 300 400 500 ft

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT AND NORTH RDS ARE UNDER CONSTRUCTION AND ARE ASSUMED TO BE COMPLETE PRIOR TO EL. 6500 FT CREST RAISE.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

DRG. NO.	DESCRIPTION
MR-C4410	NORTH-SOUTH EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT NORTH-SOUTH EMBANKMENT 6500 CREST SECTIONS 38+00 N AND 43+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4445	B

SAVED: M:\101\100\126\24\A\acad\DWGS\MR-C4445\MR-C4445_6/27/2024 8:48:51 AM , RMCLELLAN PRINTED: 8/27/2024 11:38:14 AM, MR-C4445, RMCLELLAN
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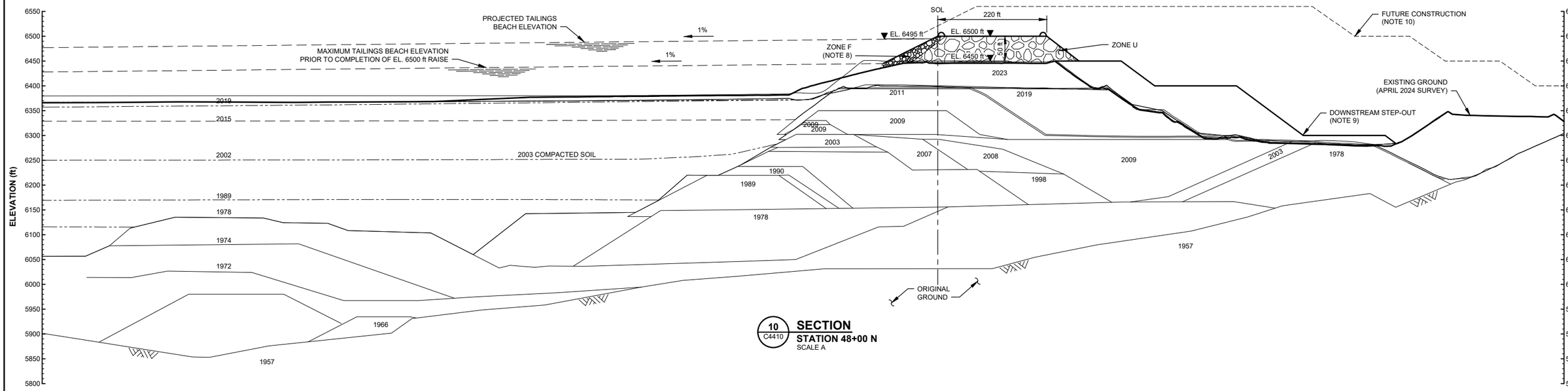
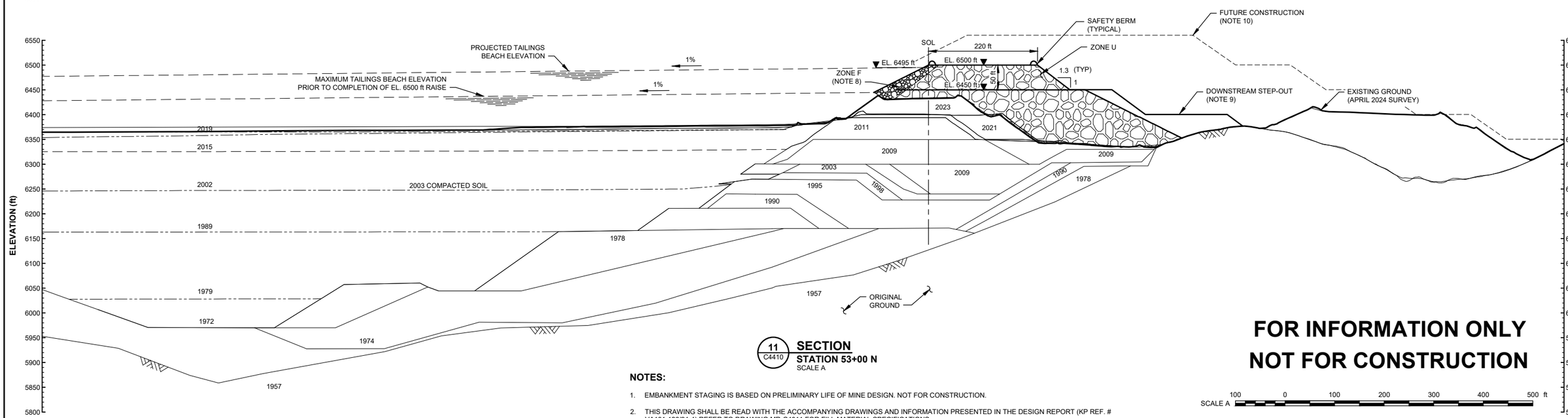


10 / C4410 SECTION
STATION 48+00 N
SCALE A



11 / C4410 SECTION
STATION 53+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- SOL — SETTING OUT LINE (SOL) (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT AND NORTH RDS ARE UNDER CONSTRUCTION AND ARE ASSUMED TO BE COMPLETE PRIOR TO EL. 6500 FT CREST RAISE.
10. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A
100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C4410	NORTH-SOUTH EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6500 CREST
SECTIONS 48+00 N AND 53+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4446	B

SAVED: M:\101\126\24\A\Acad\DWGS\MR-C4446\MR-C4446, 8/27/2024 8:50:43 AM, , RMCLELLAN PRINTED: 8/27/2024 11:39:04 AM, MR-C4446, RMCLELLAN
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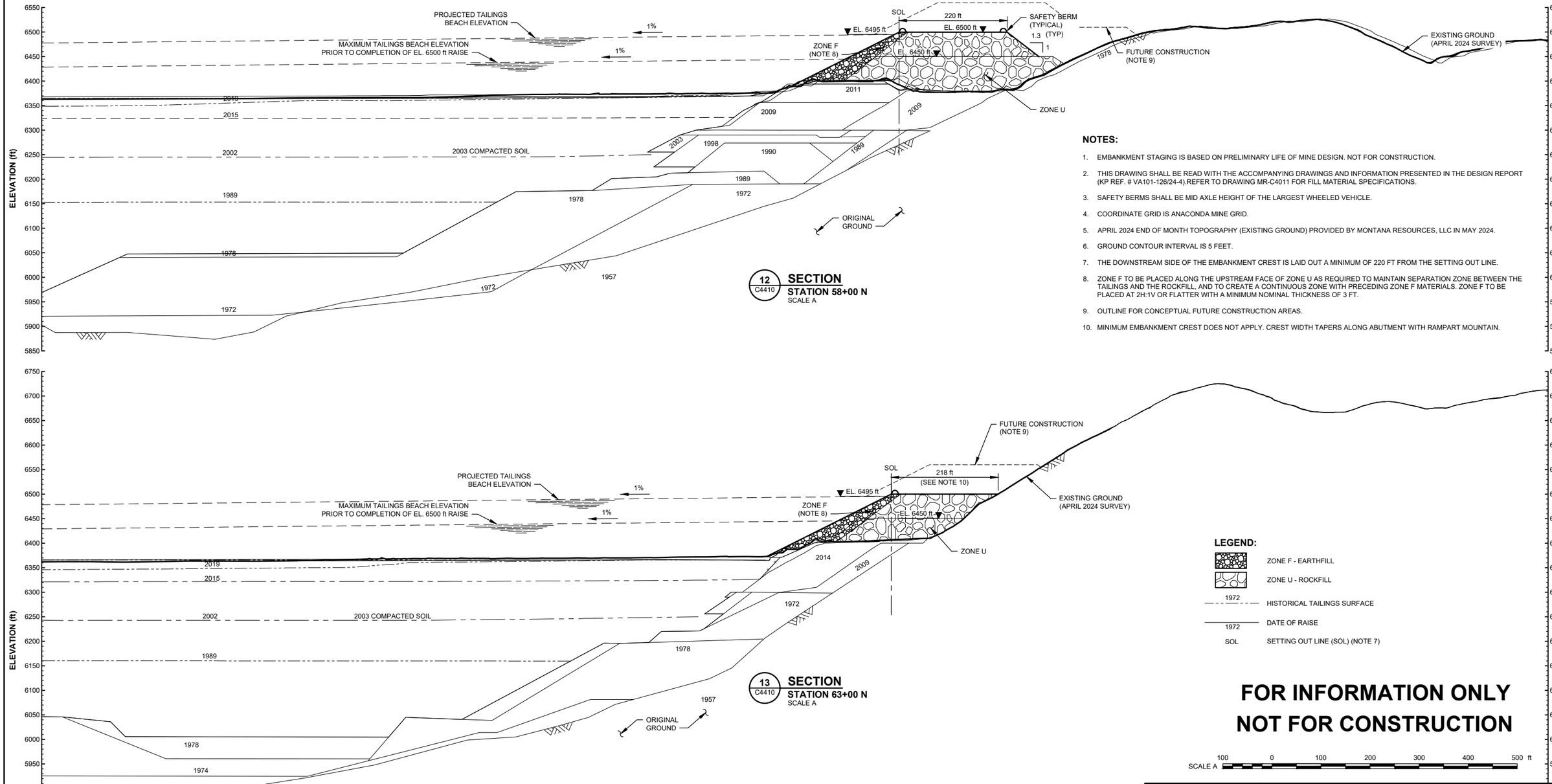

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. OUTLINE FOR CONCEPTUAL FUTURE CONSTRUCTION AREAS.
10. MINIMUM EMBANKMENT CREST DOES NOT APPLY. CREST WIDTH TAPERS ALONG ABUTMENT WITH RAMPART MOUNTAIN.

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF RAISE
- SOL — SETTING OUT LINE (SOL) (NOTE 7)

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6500 CREST
SECTIONS 58+00 N AND 63+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C4447	B

DRG. NO.	DESCRIPTION
MR-C4410	NORTH-SOUTH EMBANKMENT - 6500 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

SAVED: M:\1\101\126\24\AA-cad\DWG\SNR-C4447\MR-C4447, 6/27/2024 8:52:36 AM , RMCLELLAN PRINTED: 8/27/2024 11:39:30 AM, MR-C4447, RMCLELLAN
XREF FILE(S): Sections IMAGE FILE(S):

APPENDIX C

Design Drawing Package - 6,560 ft Embankment Crest

Table C.1

MR-C5020 Rev B	MR-C5310 Rev B	MR-C5335 Rev B	MR-C5441 Rev B
MR-C5110 Rev B	MR-C5311 Rev B	MR-C5336 Rev B	MR-C5442 Rev B
MR-C5111 Rev B	MR-C5330 Rev B	MR-C5337 Rev B	MR-C5443 Rev B
MR-C5129 Rev B	MR-C5331 Rev B	MR-C5338 Rev B	MR-C5444 Rev B
MR-C5130 Rev B	MR-C5332 Rev B	MR-C5410 Rev B	MR-C5445 Rev B
MR-C5131 Rev B	MR-C5333 Rev B	MR-C5411 Rev B	MR-C5446 Rev B
MR-C5132 Rev B	MR-C5334 Rev B	MR-C5440 Rev B	MR-C5447 Rev B

Knight Piésold CONSULTING

TABLE C.1

MONTANA RESOURCES, LLC
MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
LIFE OF MINE DESIGN REPORT
6560 CREST DRAWING LIST

Print Sep/13/24 13:58:38

Drawing Number	Rev.	Revision Date	Drawing Status	Drawing Title
MR-C5020	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - 6560 Crest - General Arrangement
MR-C5110	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6560 Crest - Plan
MR-C5111	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6560 Crest - Setting Out Details
MR-C5129	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6560 Crest - Sections 53+00 NW and 58+00 NW
MR-C5130	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6560 Crest - Sections 60+00 W and 69+50 W
MR-C5131	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6560 Crest - Sections 78+50 W and 82+80 W
MR-C5132	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - West Embankment - 6560 Crest - Sections 95+00 W and 108+40 W
MR-C5310	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Plan
MR-C5311	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Setting Out Details
MR-C5330	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Section 0+00
MR-C5331	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Section 03+00 W
MR-C5332	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Section 08+00 W
MR-C5333	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Section 12+00 W
MR-C5334	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Section 18+00 NW
MR-C5335	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Section 23+00 NW
MR-C5336	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Section 28+00 NW
MR-C5337	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Sections 33+00 NW and 38+00 NW
MR-C5338	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - East-West Embankment - 6560 Crest - Sections 43+00 NW and 48+00 NW
MR-C5410	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Plan
MR-C5411	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Setting Out Details
MR-C5440	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Section 3+00 N
MR-C5441	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Section 08+00 N
MR-C5442	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Section 13+00 N
MR-C5443	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Section 18+00 N and 23+00 N
MR-C5444	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Section 28+00 N and 33+00 N
MR-C5445	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Section 38+00 N and 43+00 N
MR-C5446	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Section 48+00 N and 53+00 N
MR-C5447	B	27-Aug-24	Issued for Permitting	Yankee Doodle Tailings Impoundment - North-South Embankment - 6560 Crest - Section 58+00 N and 63+00 N

REV	DATE	DESCRIPTION	PREP'D	RVW'D
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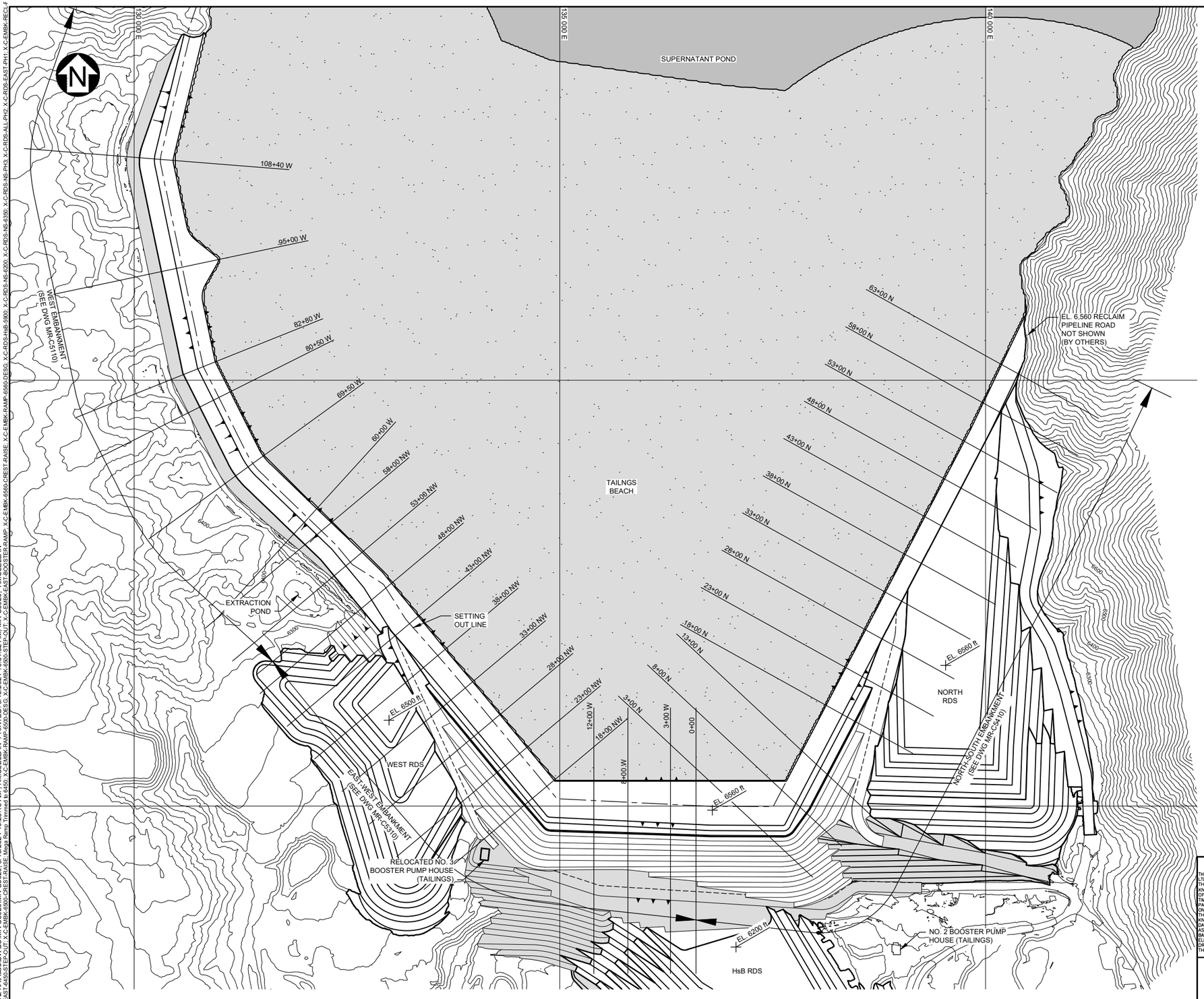

LEGEND:

- SETTING OUT LINE (SOL)
- EL. 6500 CONSTRUCTION AREAS (NOTE 6)
- EL. 6560 CONSTRUCTION AREAS (NOTE 7)
- EL. XXX ft — SPOT ELEVATION

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. COORDINATE GRID IS ANACONDA MINE GRID.
4. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
5. ORIGINAL GROUND CONTOUR INTERVAL IS 25 FEET.
6. EL. 6,500 FT CREST RAISE AND OTHER CONSTRUCTION AREAS ASSUMED TO BE COMPLETED PRIOR TO CONSTRUCTION ACTIVITIES PRESENTED IN THIS DRAWING PACKAGE.
7. CONSTRUCTION TIMING OF CREST RAISES, DOWNSTREAM STEP-OUTS, AND RDS DEVELOPMENT TO BE CONFIRMED DURING FUTURE OPERATIONS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 500 0 500 1000 1500 2000 2500 3000 ft

DRG. NO.	DESCRIPTION
MR-C5410	NORTH - SOUTH EMBANKMENT 6560 CREST - PLAN
MR-C5310	EAST - WEST EMBANKMENT 6560 CREST - PLAN
MR-C5110	WEST EMBANKMENT 6560 CREST - PLAN

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT GENERAL ARRANGEMENT 6560 EMBANKMENT CREST AND ROCK DISPOSAL SITES

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5020	B

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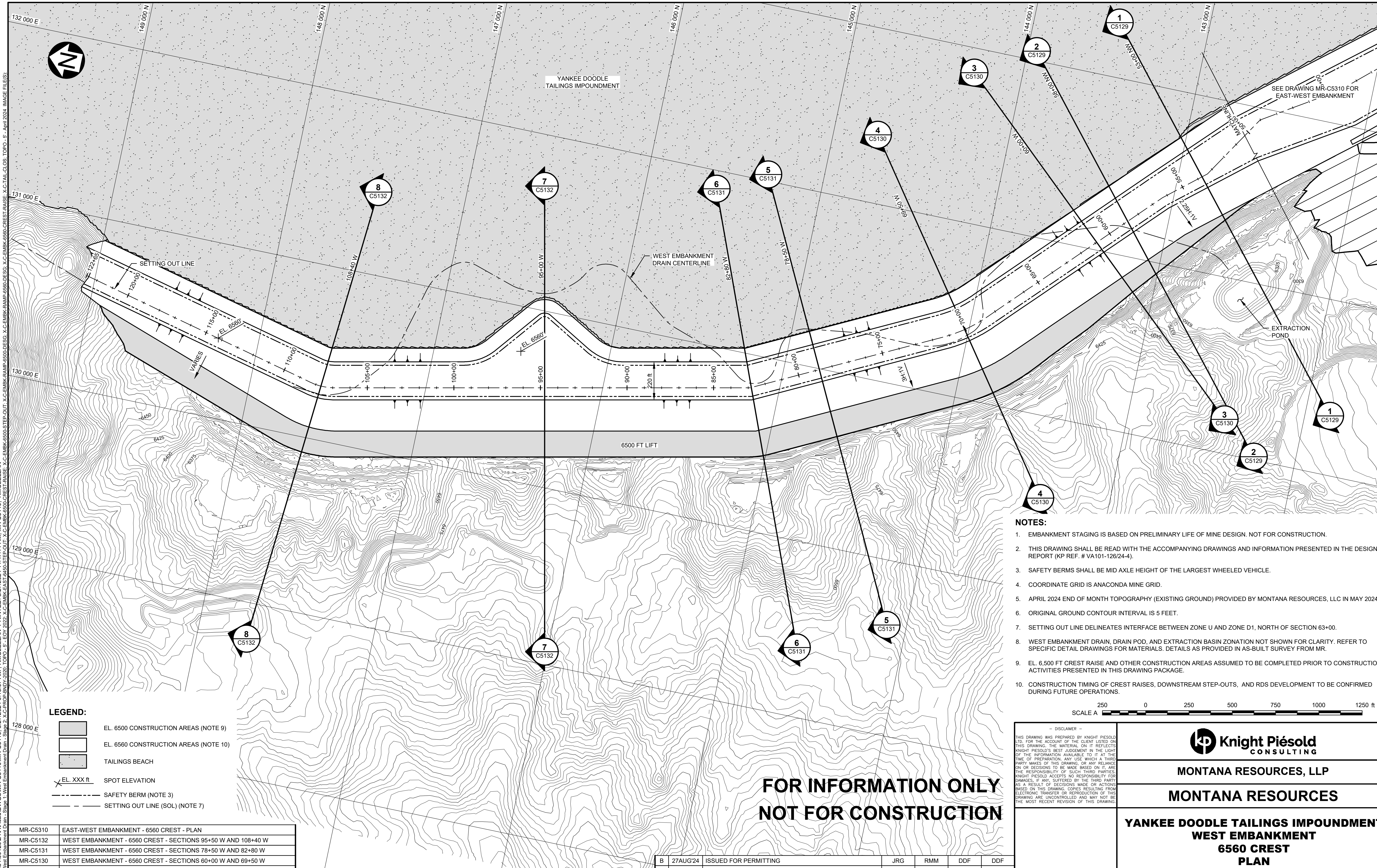
XREF FILE(S): X-C-EMBK-6560-CREST-RAISE; X-C-EMBK-RAMP-6560-DESG; X-C-RDS+H&B-5900; X-C-RDS-NS-6200; X-C-RDS-NS-6350; X-C-RDS-NS-PH3; X-C-RDS-ALL-PH2; X-C-RDS-EAST-PH1; X-C-EMBK-RECLAIM-6560; X-C-EMBK-6560-CREST-RAISE; X-C-EMBK-EAST-6450-STEP-OUT; X-C-EMBK-6560-STEP-OUT; X-C-EMBK-EAST-BOOSTER-RAMP; X-C-EMBK-6560-STEP-OUT; X-C-EMBK-RAMP-6500-DESG; X-C-EMBK-EAST-6450-STEP-OUT; X-C-EMBK-RAMP-6560-DESG; X-C-EMBK-6560-CREST-RAISE; Mega Ramp Trimmed to 6450



LEGEND:

- EL. 6500 CONSTRUCTION AREAS (NOTE 9)
- EL. 6560 CONSTRUCTION AREAS (NOTE 10)
- TAILINGS BEACH
- EL. XXX ft — SPOT ELEVATION
- SAFETY BERM (NOTE 3)
- SETTING OUT LINE (SOL) (NOTE 7)

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. ORIGINAL GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. WEST EMBANKMENT DRAIN, DRAIN POD, AND EXTRACTION BASIN ZONATION NOT SHOWN FOR CLARITY. REFER TO SPECIFIC DETAIL DRAWINGS FOR MATERIALS. DETAILS AS PROVIDED IN AS-BUILT SURVEY FROM MR.
9. EL. 6,500 FT CREST RAISE AND OTHER CONSTRUCTION AREAS ASSUMED TO BE COMPLETED PRIOR TO CONSTRUCTION ACTIVITIES PRESENTED IN THIS DRAWING PACKAGE.
10. CONSTRUCTION TIMING OF CREST RAISES, DOWNSTREAM STEP-OUTS, AND RDS DEVELOPMENT TO BE CONFIRMED DURING FUTURE OPERATIONS.

SCALE A: 250 0 250 500 750 1000 1250 ft

REFERENCE DRAWINGS

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C5132	WEST EMBANKMENT - 6560 CREST - SECTIONS 95+50 W AND 108+40 W
MR-C5131	WEST EMBANKMENT - 6560 CREST - SECTIONS 78+50 W AND 82+80 W
MR-C5130	WEST EMBANKMENT - 6560 CREST - SECTIONS 60+00 W AND 69+50 W
MR-C5129	WEST EMBANKMENT - 6560 CREST - SECTIONS 53+00 NW AND 58+00 NW

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

Knight Piésold CONSULTING

MONTANA RESOURCES, LLP

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6560 CREST
PLAN

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5110	B

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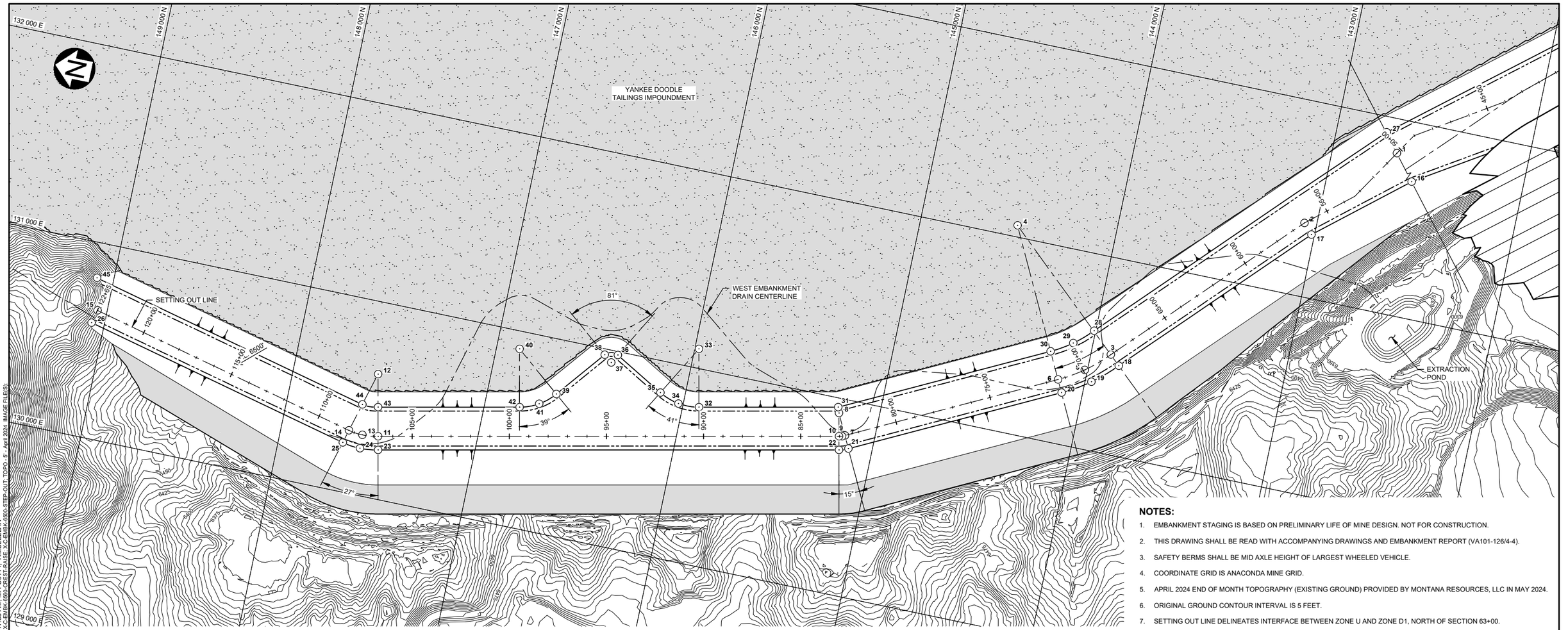

LEGEND:

- EL. 6500 CONSTRUCTION AREAS (NOTE 9)
- EL. 6560 CONSTRUCTION AREAS (NOTE 10)
- TAILINGS BEACH
- EL. XXX ft — SPOT ELEVATION
- SAFETY BERM (NOTE 3)
- SETTING OUT LINE (SOL) (NOTE 7)
- SETTING OUT POINT

SETTING OUT LINE
SETTING OUT POINTS

POINT	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
1	142674	132824	6560
2	142946	132353	6560
3	144505	132059	6560
4	143766	131385	-
5	143902	131262	6560
6	144058	131165	6560
7	145206	130925	6560
8	145072	130657	6560
9	145107	130642	6560
10	145144	130631	6560
11	147569	130632	6560
12	147466	130143	-
13	147600	130133	6560
14	147732	130160	6560
15	149181	130659	6560

WEST CREST
SETTING OUT POINTS

POINT	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
16	142567	132696	6560
17	143015	132324	6560
18	143847	131459	6560
19	143968	131349	6560
20	144107	131263	6560
21	145121	130755	6560
22	145167	130739	6560
23	147489	130251	6560
24	147582	130239	6560
25	147674	130250	6560
26	149066	130588	6560

EAST CREST
SETTING OUT POINTS

POINT	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
27	142745	132919	6560
28	144009	131609	6560
29	144100	131525	6560
30	144205	131460	6560
31	145216	130953	6560
32	145917	130806	6560
33	145979	131099	-
34	146025	130802	6560
35	146127	130839	6560
36	146381	130983	6560
37	146407	130938	6560
38	146447	130970	6560
39	146650	130721	6560
40	146883	130909	-
41	146726	130654	6560
42	146821	130616	6560
43	147534	130466	6560
44	147616	130463	6560
45	149086	130819	6560

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH ACCOMPANYING DRAWINGS AND EMBANKMENT REPORT (VA101-126/4-4).
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. ORIGINAL GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. WEST EMBANKMENT DRAIN, DRAIN POD, AND EXTRACTION BASIN ZONATION NOT SHOWN FOR CLARITY. REFER TO SPECIFIC DETAIL DRAWINGS FOR MATERIALS. DETAILS AS PROVIDED IN AS-BUILT SURVEY FROM MR.
9. EL. 6,500 FT CREST RAISE AND OTHER CONSTRUCTION AREAS ASSUMED TO BE COMPLETED PRIOR TO CONSTRUCTION ACTIVITIES PRESENTED IN THIS DRAWING PACKAGE.
10. CONSTRUCTION TIMING OF CREST RAISES, DOWNSTREAM STEP-OUTS, AND RDS DEVELOPMENT TO BE CONFIRMED DURING FUTURE OPERATIONS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

250 0 250 500 750 1000 1250 ft
SCALE A

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6560 CREST
SETTING OUT DETAILS

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5111	B

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

DRG. NO.	DESCRIPTION

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

SAVED: M:\101\00126\24\A\acad\DWGS\MR-C5111\MR-C5111_8/27/2024 9:12:47 AM_RMCLELLAN PRINTED: 8/27/2024 11:47:55 AM, MR-C5111, RMCLELLAN
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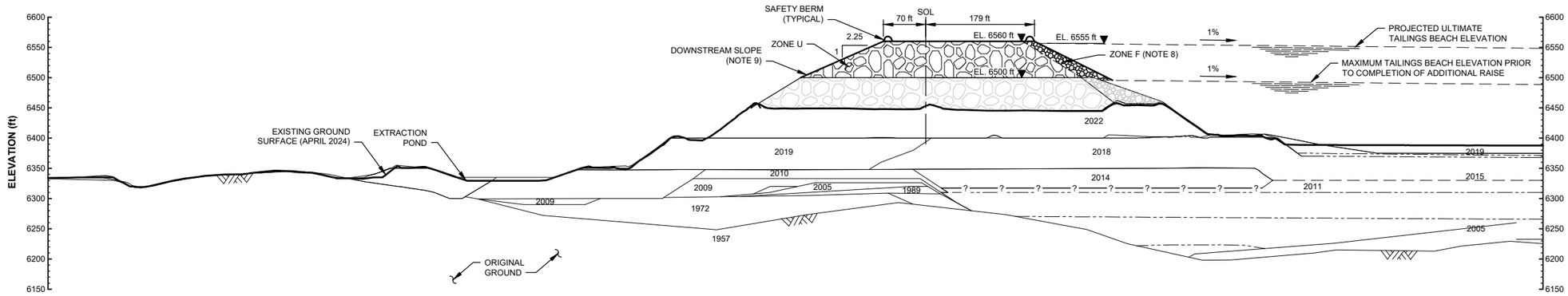
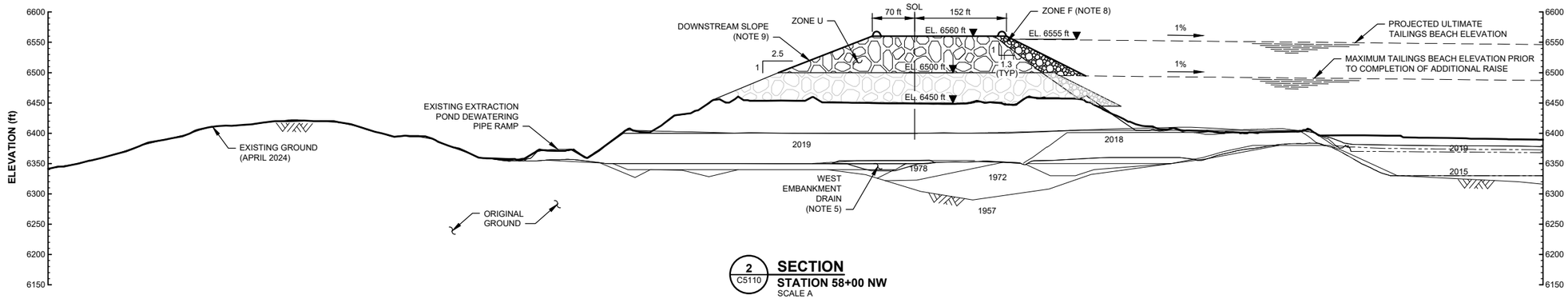


1 / C5110 SECTION
STATION 53+00 NW
SCALE A



2 / C5110 SECTION
STATION 58+00 NW
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE U - ROCKFILL (6500 LIFT)
- ZONE F - EARTHFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACES AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM SLOPES TO BE CONCURRENTLY RECLAIMED WHEN AND WHERE PRACTICAL.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 100 0 100 200 300 400 500 ft

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6560 CREST
SECTIONS 53+00 NW AND 58+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5129	B

DRG. NO.	DESCRIPTION
MR-C5110	WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

SAVED: M:\1\101001263\24\AA\acad\DWGS\MR-C5129\MR-C5129, 9/13/2024 10:17:11 AM, RMCLELLAN PRINTED: 9/13/2024 10:18:34 AM, MR-C5129, RMCLELLAN
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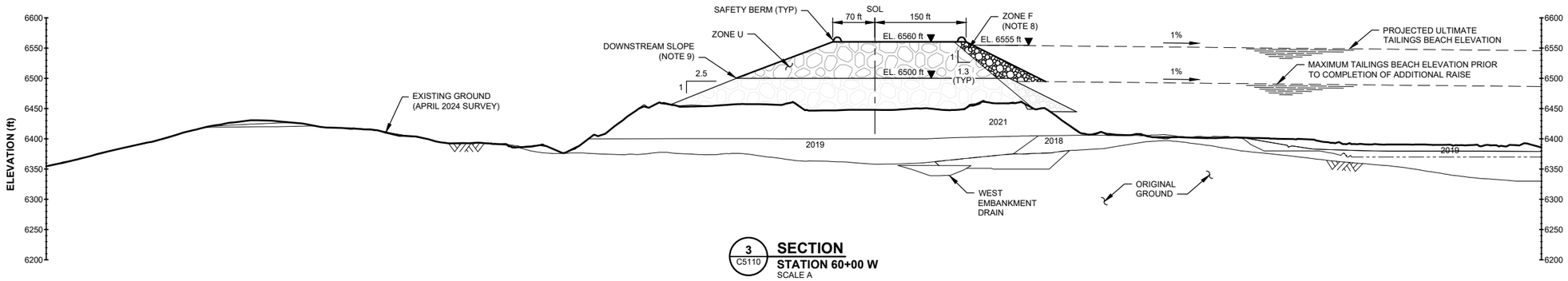
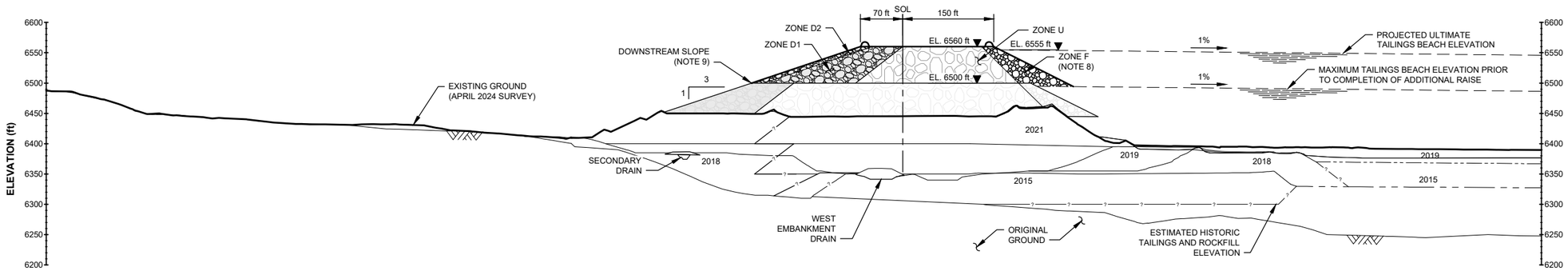


3 C5110 **SECTION**
STATION 60+00 W
SCALE A



4 C5110 **SECTION**
STATION 69+50 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE D1 - ROCKFILL
- ZONE D2 - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- ZONE D1 / D2 - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM SLOPES TO BE CONCURRENTLY RECLAIMED WHEN AND WHERE PRACTICAL.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C5110	WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6560 CREST
SECTIONS 60+00 W AND 69+50 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5130	B

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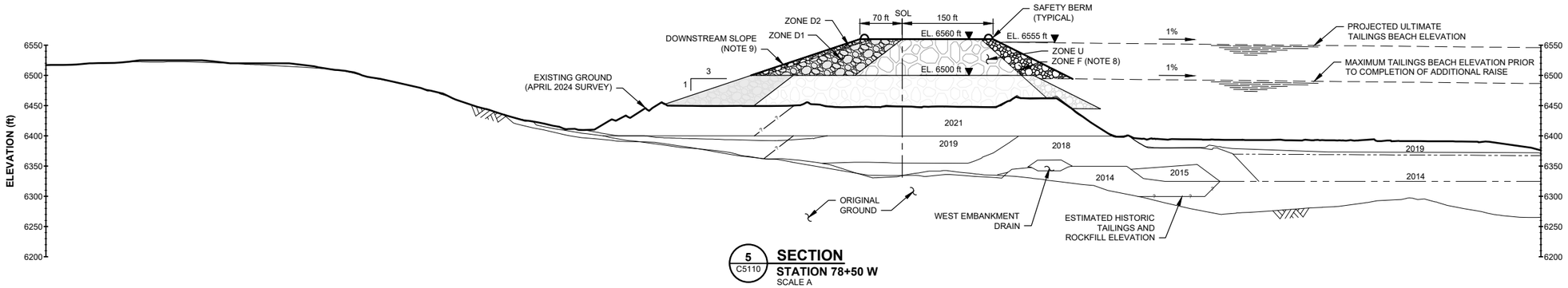
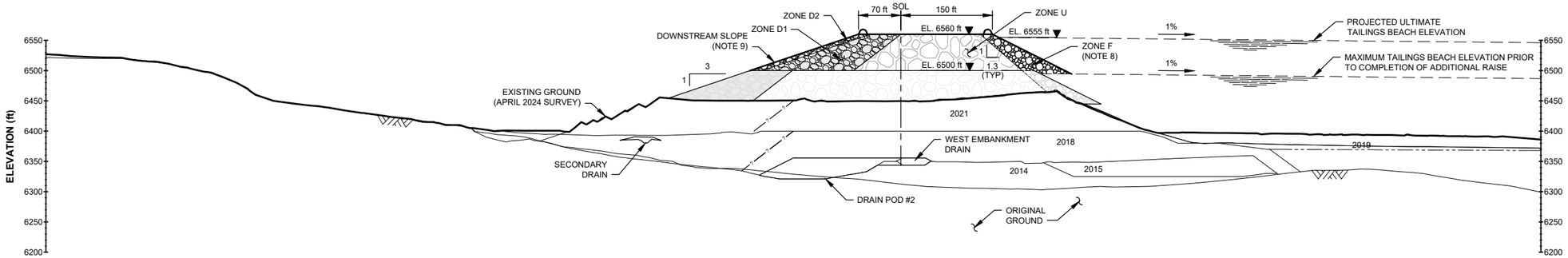


5 C5110 SECTION
STATION 78+50 W
SCALE A



6 C5110 SECTION
STATION 82+80 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE D1 - ROCKFILL
- ZONE D2 - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- ZONE D1 / D2 - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM SLOPES TO BE CONCURRENTLY RECLAIMED WHEN AND WHERE PRACTICAL.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A
100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C5110	WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6560 CREST
SECTIONS 78+50 W AND 82+80 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5131	B

SAVED: M:\1\101\00126\24\A\Acad\DWGS\MR-C5131\MR-C5131_8/27/2024 11:50:21 AM , RMCLELLAN PRINTED: 9/13/2024 10:24:29 AM, MR-C5131, RMCLELLAN
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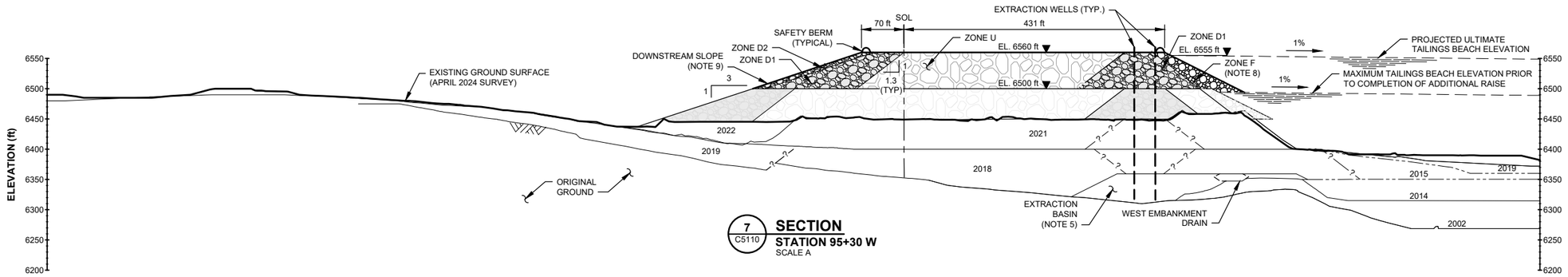
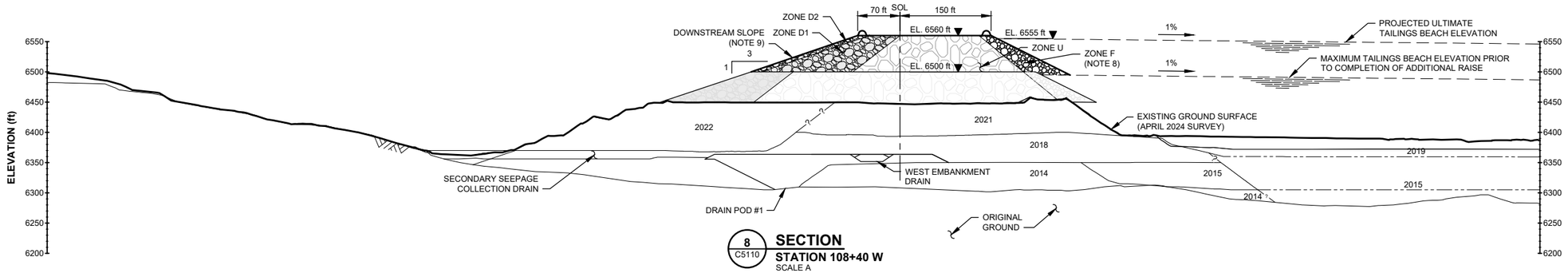


7 C5110 **SECTION**
STATION 95+30 W
SCALE A



8 C5110 **SECTION**
STATION 108+40 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE D1 - ROCKFILL
- ZONE D2 - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- ZONE D1 / D2 - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES INTERFACE BETWEEN ZONE U AND ZONE D1, NORTH OF SECTION 63+00.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM SLOPES TO BE CONCURRENTLY RECLAIMED WHEN AND WHERE PRACTICAL.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

100 0 100 200 300 400 500 ft
SCALE A

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
WEST EMBANKMENT
6560 CREST
SECTIONS 95+30 W AND 108+40 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5132	B

DRG. NO.	DESCRIPTION
MR-C5110	WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

SAVED: M:\101\001\26\24\AAcad\DWGS\MR-C5132\MR-C5132. 6/27/2024 9:18:34 AM . RMCLELLAN PRINTED: 8/27/2024 11:49:51 AM, MR-C5132, RMCLELLAN
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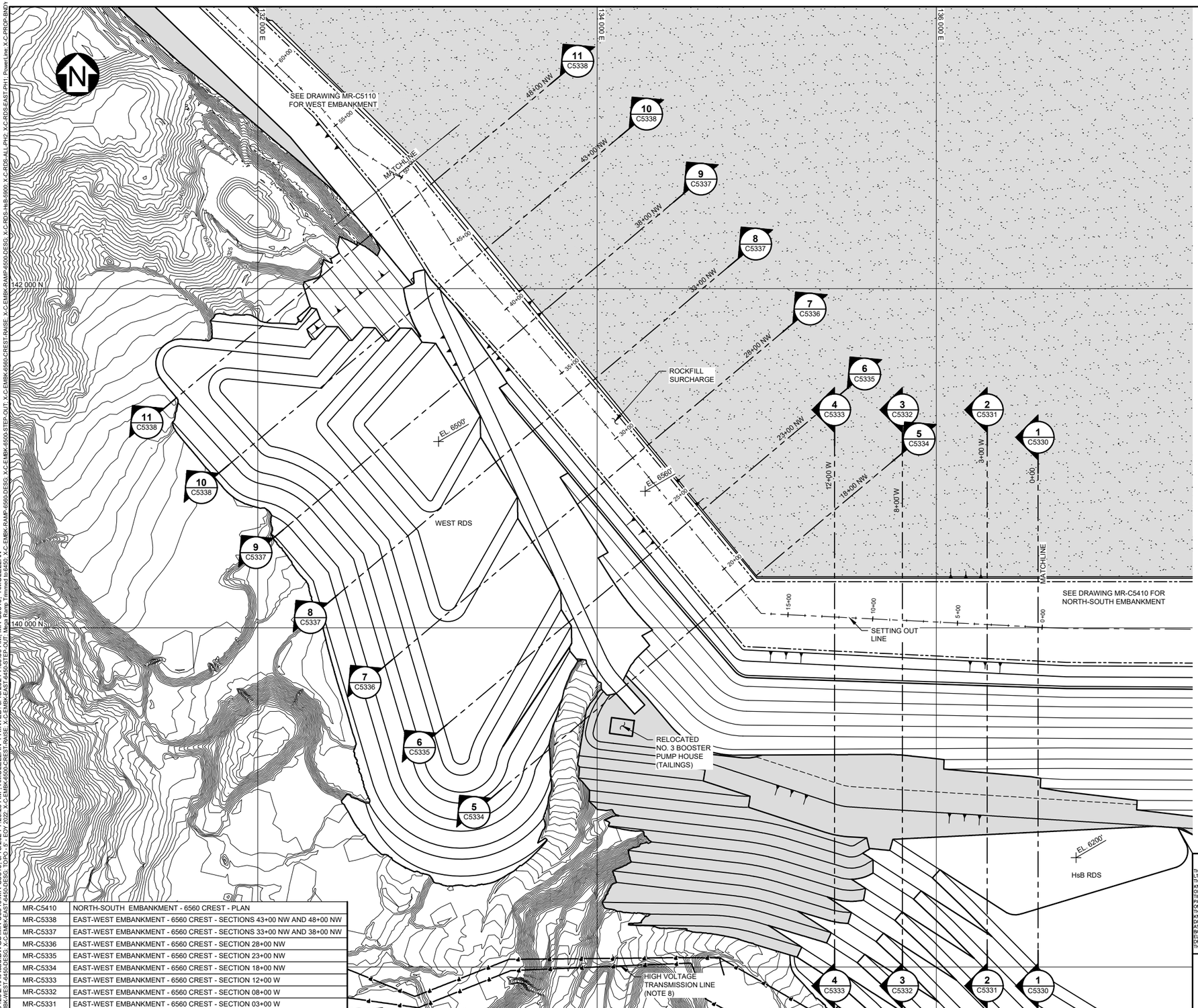

LEGEND:

- TAILINGS BEACH
- 6500 LIFT CONSTRUCTION AREAS (NOTE 9)
- EL. 6560 CONSTRUCTION AREAS (NOTE 10)
- SAFETY BERM (NOTE 3)
- TRANSMISSION LINE (PROPOSED)
- SETTING OUT LINE (SOL) (NOTE 7)
- EL. xxxx' SPOT ELEVATION

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES MINIMUM 220 FT WIDTH OF ZONE U EMBANKMENT ROCKFILL.
8. TRANSMISSION LINE ROUTING IS APPROXIMATE AS PROVIDED BY MONTANA RESOURCES, LLC IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.
9. EL. 6,500 FT CREST RAISE AND OTHER CONSTRUCTION AREAS ASSUMED TO BE COMPLETED PRIOR TO CONSTRUCTION ACTIVITIES PRESENTED IN THIS DRAWING PACKAGE.
10. CONSTRUCTION TIMING OF CREST RAISE, DOWNSTREAM STEP-OUT, AND RDS DEVELOPMENT TO BE CONFIRMED DURING FUTURE OPERATIONS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 300 0 300 600 900 1200 1500 ft

DRG. NO.	DESCRIPTION
MR-C5410	NORTH-SOUTH EMBANKMENT - 6560 CREST - PLAN
MR-C5338	EAST-WEST EMBANKMENT - 6560 CREST - SECTIONS 43+00 NW AND 48+00 NW
MR-C5337	EAST-WEST EMBANKMENT - 6560 CREST - SECTIONS 33+00 NW AND 38+00 NW
MR-C5336	EAST-WEST EMBANKMENT - 6560 CREST - SECTION 28+00 NW
MR-C5335	EAST-WEST EMBANKMENT - 6560 CREST - SECTION 23+00 NW
MR-C5334	EAST-WEST EMBANKMENT - 6560 CREST - SECTION 18+00 NW
MR-C5333	EAST-WEST EMBANKMENT - 6560 CREST - SECTION 12+00 W
MR-C5332	EAST-WEST EMBANKMENT - 6560 CREST - SECTION 08+00 W
MR-C5331	EAST-WEST EMBANKMENT - 6560 CREST - SECTION 03+00 W
MR-C5330	EAST-WEST EMBANKMENT - 6560 CREST - SECTION 0+00
MR-C5110	WEST EMBANKMENT - 6560 CREST - PLAN

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
PLAN

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5310	B

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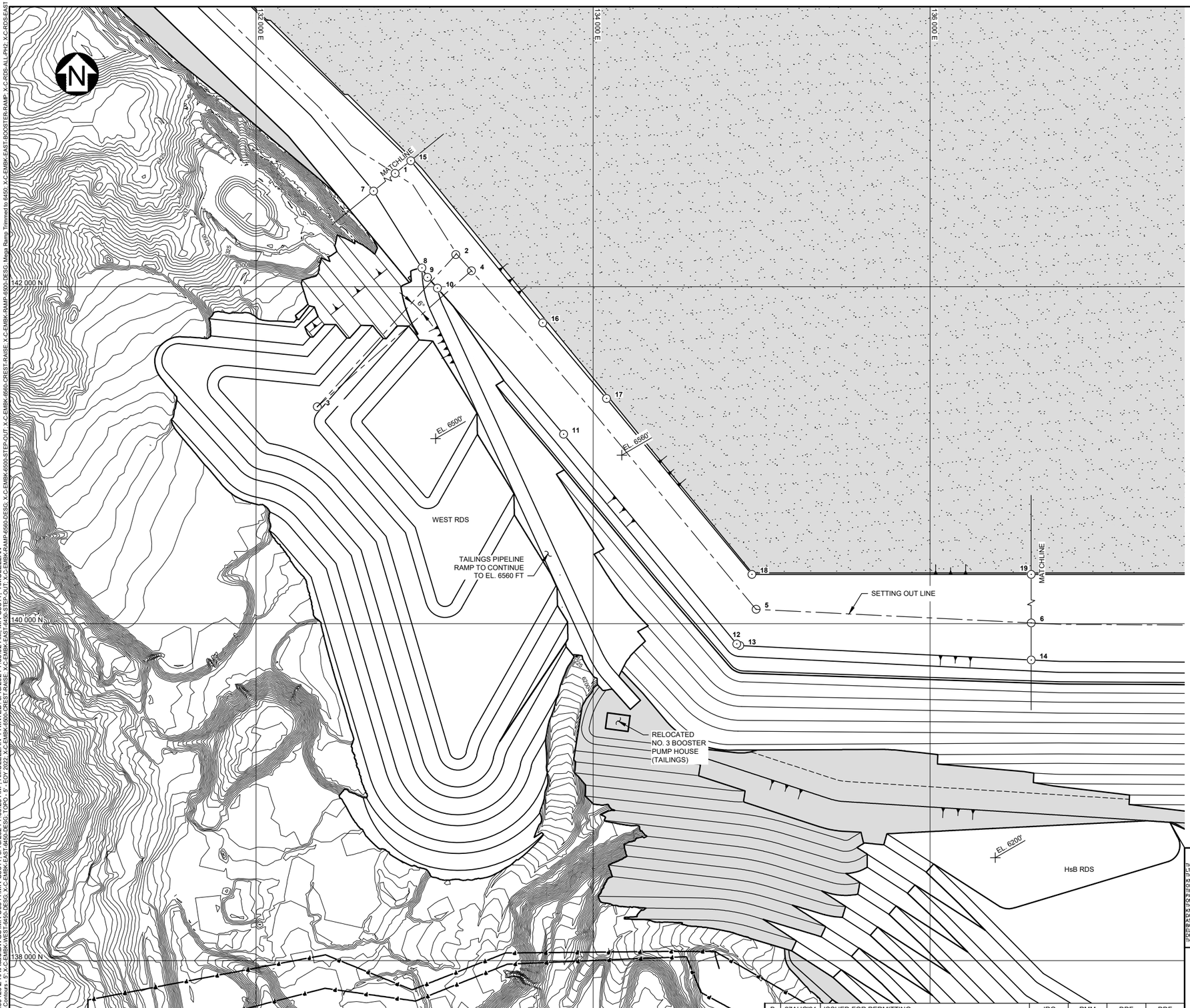

SETTING OUT LINE
SETTING OUT POINTS

ID	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
1	142671	132824	6560
2	142189	133184	6560
3	141287	132363	-
4	142094	133278	6560
5	140085	134967	6560
6	140004	136600	6560

DOWNSTREAM CREST
SETTING OUT POINTS

ID	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
7	142567	132696	6560
8	142111	132983	6560
9	142054	133016	6560
10	141990	133076	6560
11	141124	133824	6560
12	139879	134852	6560
13	139870	134870	6560
14	139784	136600	6560

UPSTREAM CREST
SETTING OUT POINTS

ID	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
15	142747	132917	6560
16	141785	133700	6560
17	141336	134079	6560
18	140291	134942	6560
19	140291	136600	6560

LEGEND:

- TAILINGS BEACH
- 6500 LIFT CONSTRUCTION AREAS (NOTE 9)
- EL. 6560 CONSTRUCTION AREAS (NOTE 10)
- SAFETY BERM (NOTE 3)
- TRANSMISSION LINE (PROPOSED)
- SETTING OUT LINE (SOL) (NOTE 7)
- EL. xxxx' SPOT ELEVATION

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
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5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES MINIMUM 220 FT WIDTH OF ZONE U EMBANKMENT ROCKFILL.
8. TRANSMISSION LINE ROUTING IS APPROXIMATE AS PROVIDED BY MONTANA RESOURCES, LLC IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.
9. EL. 6,500 FT CREST RAISE AND OTHER CONSTRUCTION AREAS ASSUMED TO BE COMPLETED PRIOR TO CONSTRUCTION ACTIVITIES PRESENTED IN THIS DRAWING PACKAGE.
10. CONSTRUCTION TIMING OF CREST RAISE, DOWNSTREAM STEP-OUT, AND RDS DEVELOPMENT TO BE CONFIRMED DURING FUTURE OPERATIONS.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 300 0 300 600 900 1200 1500 ft

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SETTING OUT DETAILS

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5311	B

MR-C5310	EAST - WEST EMBANKMENT - 6560 CREST - PLAN
DRG. NO.	DESCRIPTION

REFERENCE DRAWINGS

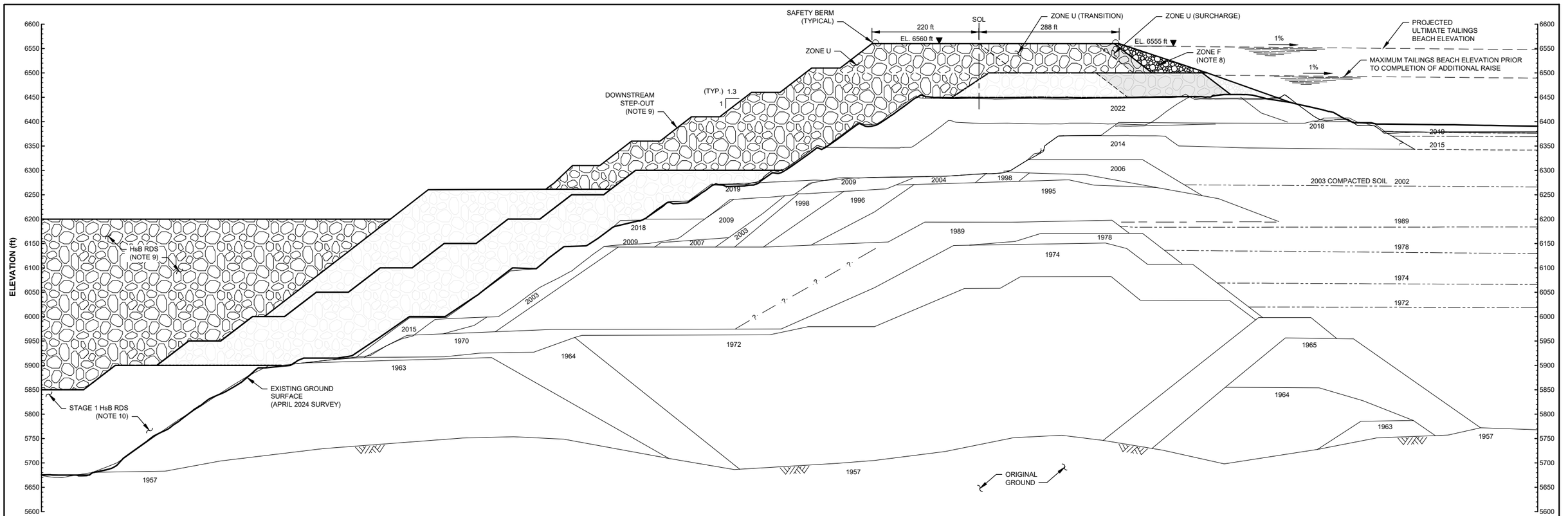
REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

SAVED: M:\1101\01\26\24\AA\acad\DWGS\MR-C5311\MR-C5311_9\13\2024 7:30:25 AM_RMCLELLAN_PRINTED: 9/13/2024 7:56:02 AM_MR-C5311_RMCLELLAN
XREF FILE(S): 2015 Contours - 5'; X-C-EMBK-WEST-6450-DESG; X-C-EMBK-EAST-6450-DESG; TOPO - 5' - EOY 2022; X-C-EMBK-6500-CREST-RAISE; X-C-EMBK-EAST-6440-STEP-OUT; X-C-EMBK-RAMP-6560-DESG; X-C-EMBK-6500-STEP-OUT; X-C-EMBK-6560-CREST-RAISE; X-C-EMBK-RAMP-6500-DESG; Mega Ramp Trimmed to 6450; X-C-EMBK-EAST-BOOSTER-RAMP; X-C-RDS-ALL-PH2; X-C-RDS-EAST



1 C5310 **SECTION**
STATION 0+00
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 SURCHARGE)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES MINIMUM 220 FT WIDTH OF ZONE U EMBANKMENT ROCKFILL..
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT AND HsB RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. STAGE 1 HsB RDS ASSUMED TO BE COMPLETED PRIOR TO EL. 6500 FT CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

100 0 100 200 300 400 500 ft
SCALE A

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SECTION 0+00

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5330	B

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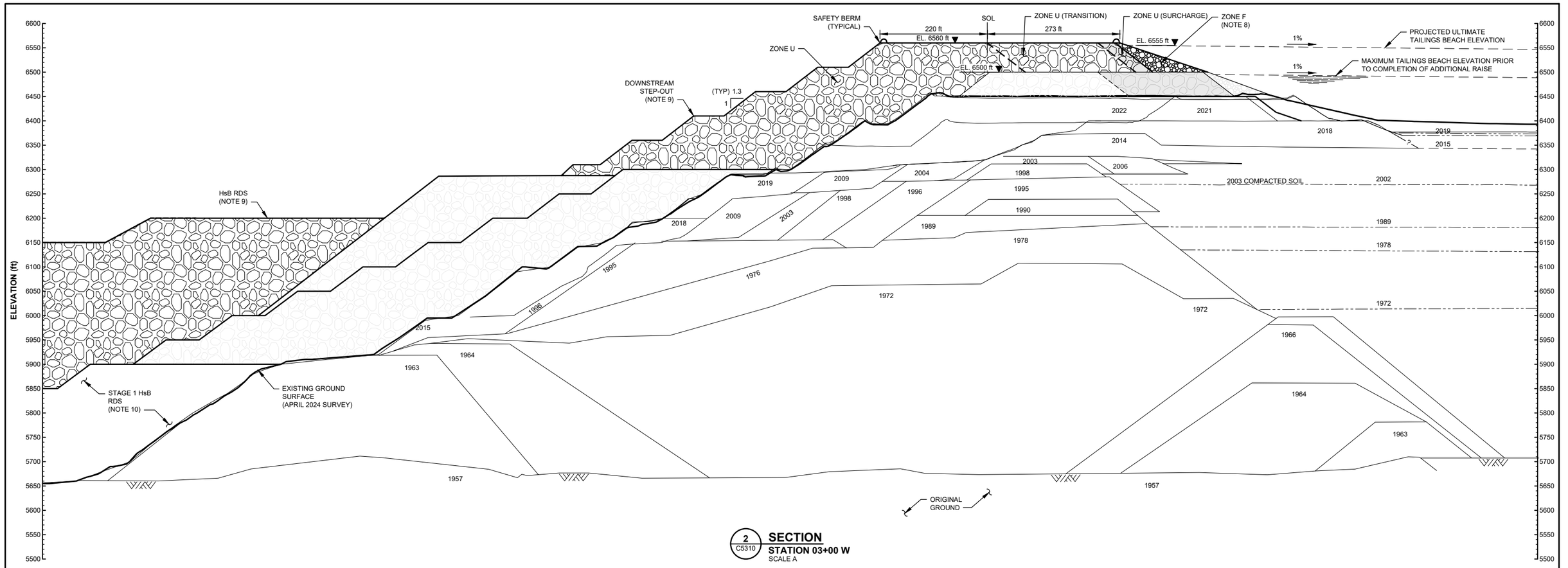

2 C5310 **SECTION**
STATION 03+00 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 SURCHARGE)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
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8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT AND HsB RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. STAGE 1 HsB RDS ASSUMED TO BE COMPLETED PRIOR TO EL. 6500 FT CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

100 0 100 200 300 400 500 ft
SCALE A

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SECTION 03+00 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5331	B

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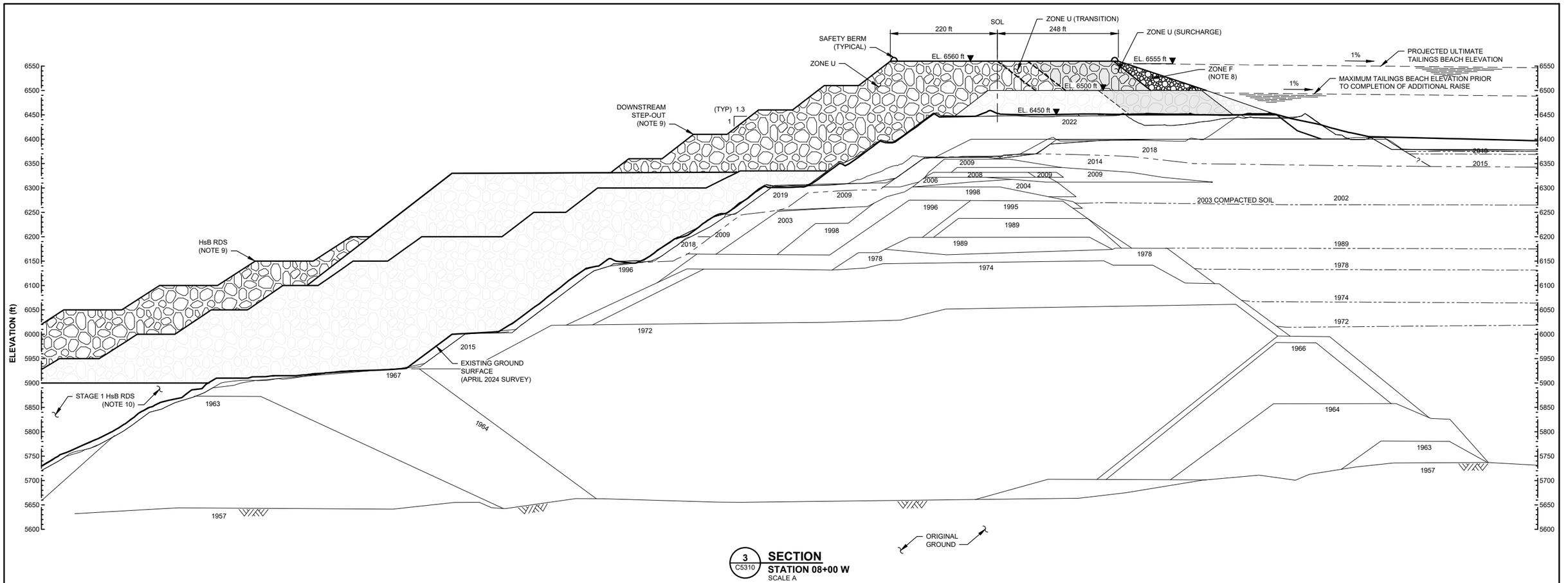

3 C5310 SECTION
STATION 08+00 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 SURCHARGE)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
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8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT AND HsB RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. STAGE 1 HsB RDS ASSUMED TO BE COMPLETED PRIOR TO EL. 6500 FT CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SECTION 08+00 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5332	B

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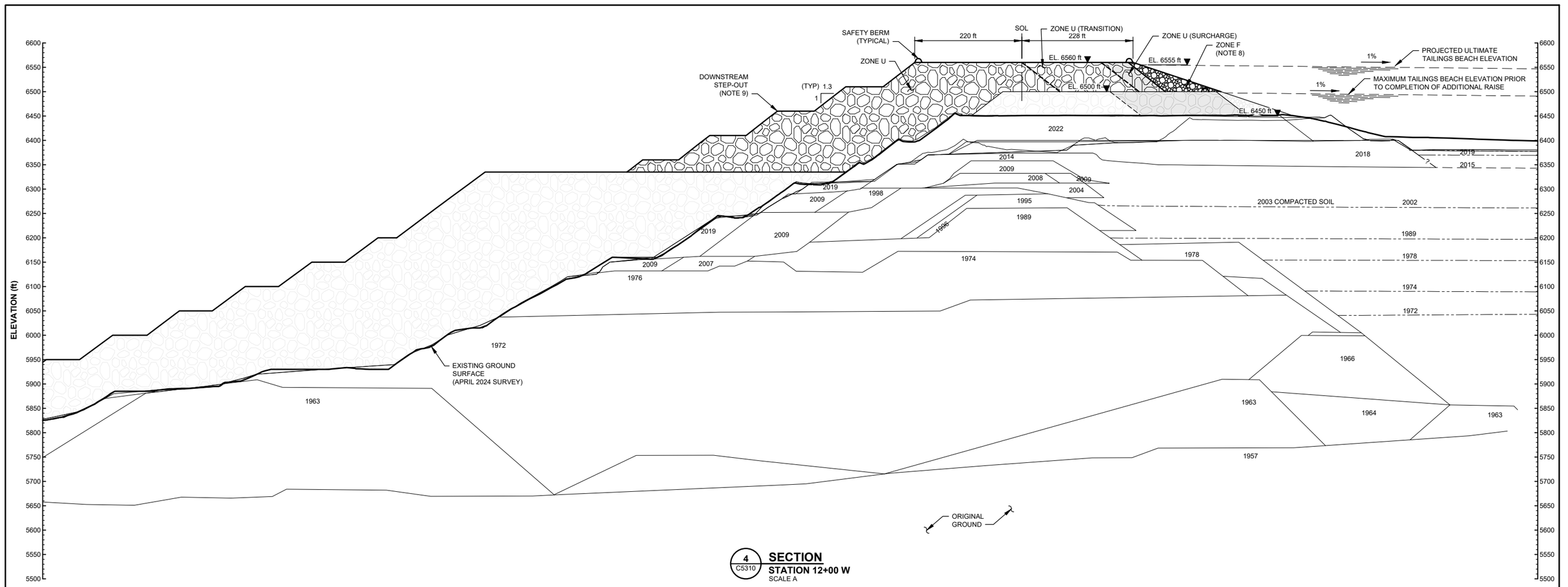

4 C5310 **SECTION**
STATION 12+00 W
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 SURCHARGE)
- ZONE F - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
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9. DOWNSTREAM STEP-OUT TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT RAISES.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SECTION 12+00 W

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5333	B

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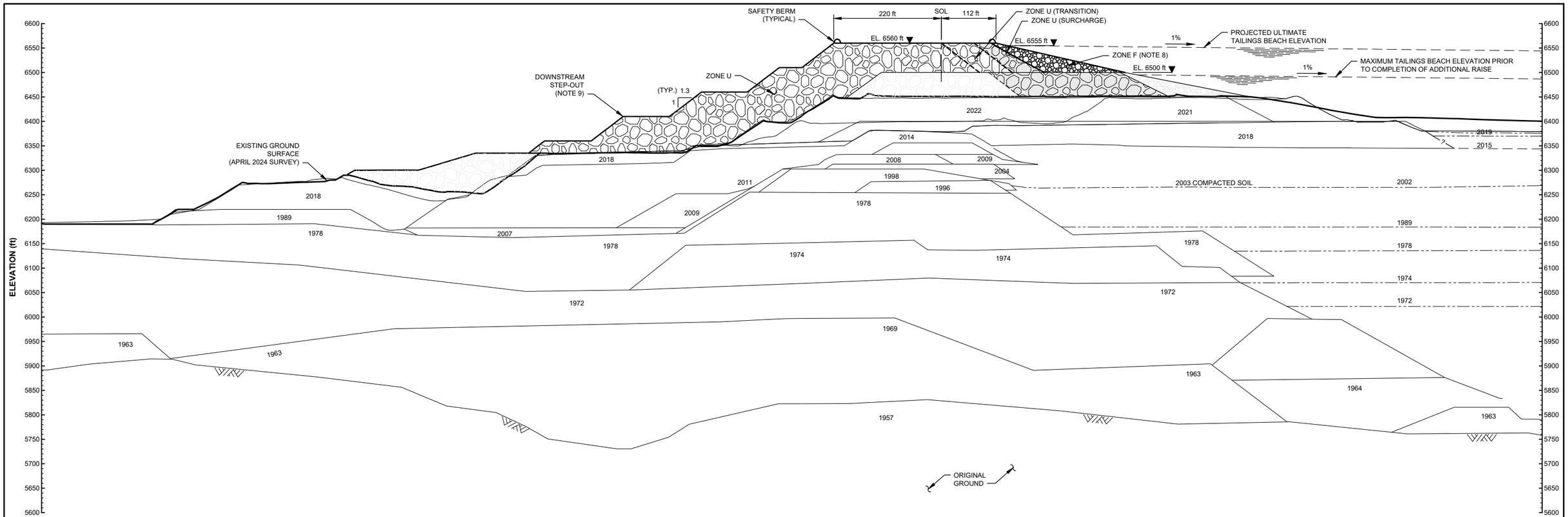

ORIGINAL GROUND

5 C5310 **SECTION**
STATION 18+00 NW
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 SURCHARGE)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
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3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES MINIMUM 220 FT WIDTH OF ZONE U EMBANKMENT ROCKFILL.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT RAISES.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SECTION 18+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5334	B

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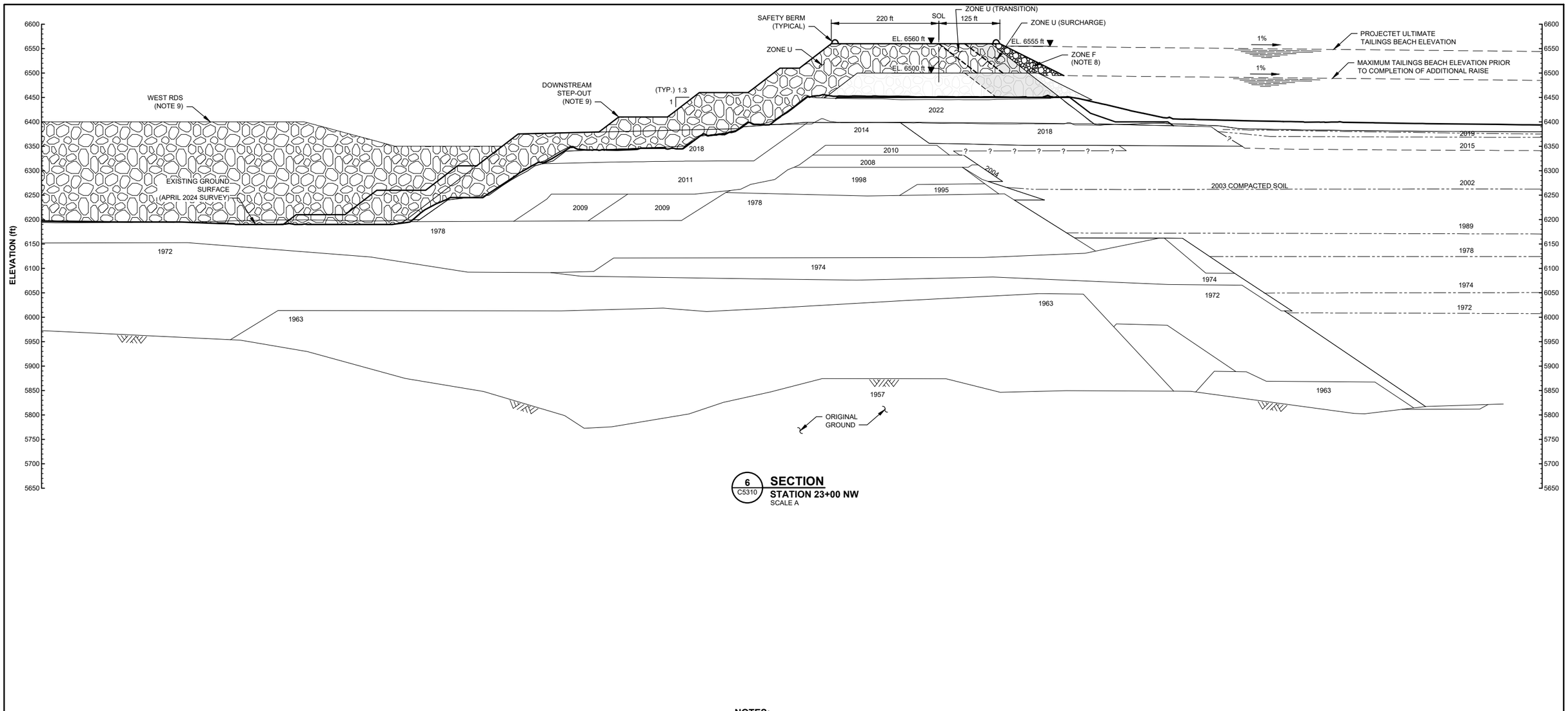

6 C5310 SECTION
STATION 23+00 NW
SCALE A

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
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9. DOWNSTREAM STEP-OUT, ACCESS RAMP, AND WEST RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT RAISES.

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 SURCHARGE)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

100 0 100 200 300 400 500 ft
SCALE A

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SECTION 23+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5335	B

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

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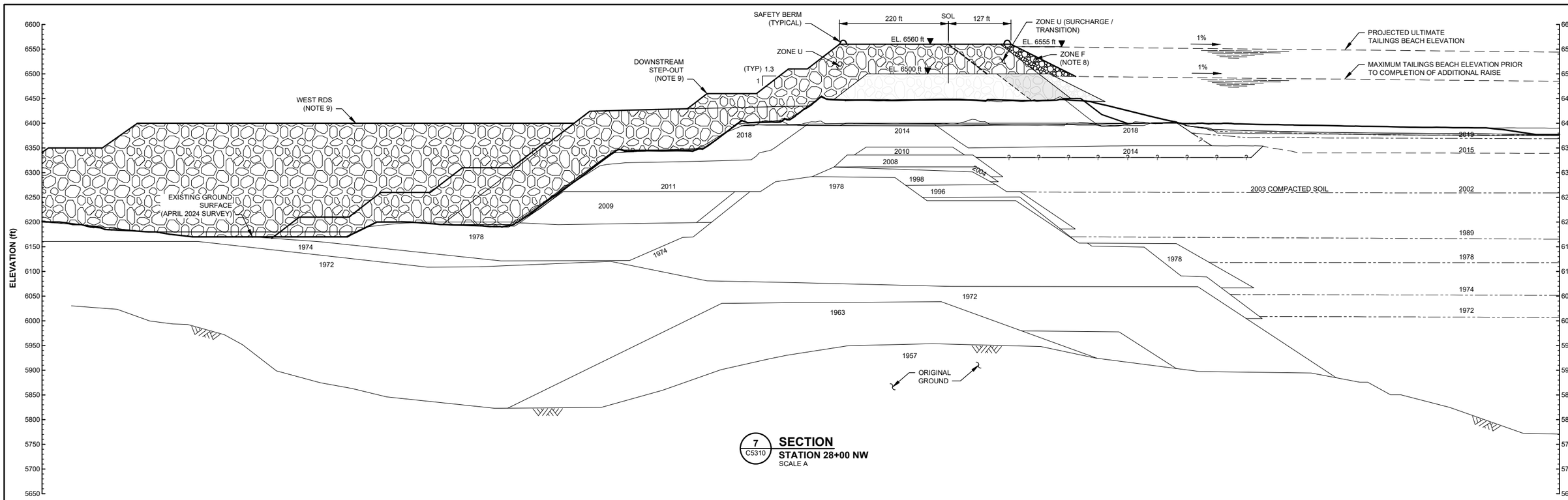

7 / C5310 **SECTION**
STATION 28+00 NW
SCALE A

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
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9. DOWNSTREAM STEP-OUT, ACCESS RAMP, AND HsB RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 SURCHARGE)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

100 0 100 200 300 400 500 ft
SCALE A

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SECTION 28+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5336	B

REFERENCE DRAWINGS

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

SAVED: M:\1\101\00126\24\A\Acad\DWGS\MR-C5336\MR-C5336, 8/27/2024 1:13:13 PM , RMCLELLAN PRINTED: 9/13/2024 10:35:28 AM, MR-C5336, RMCLELLAN
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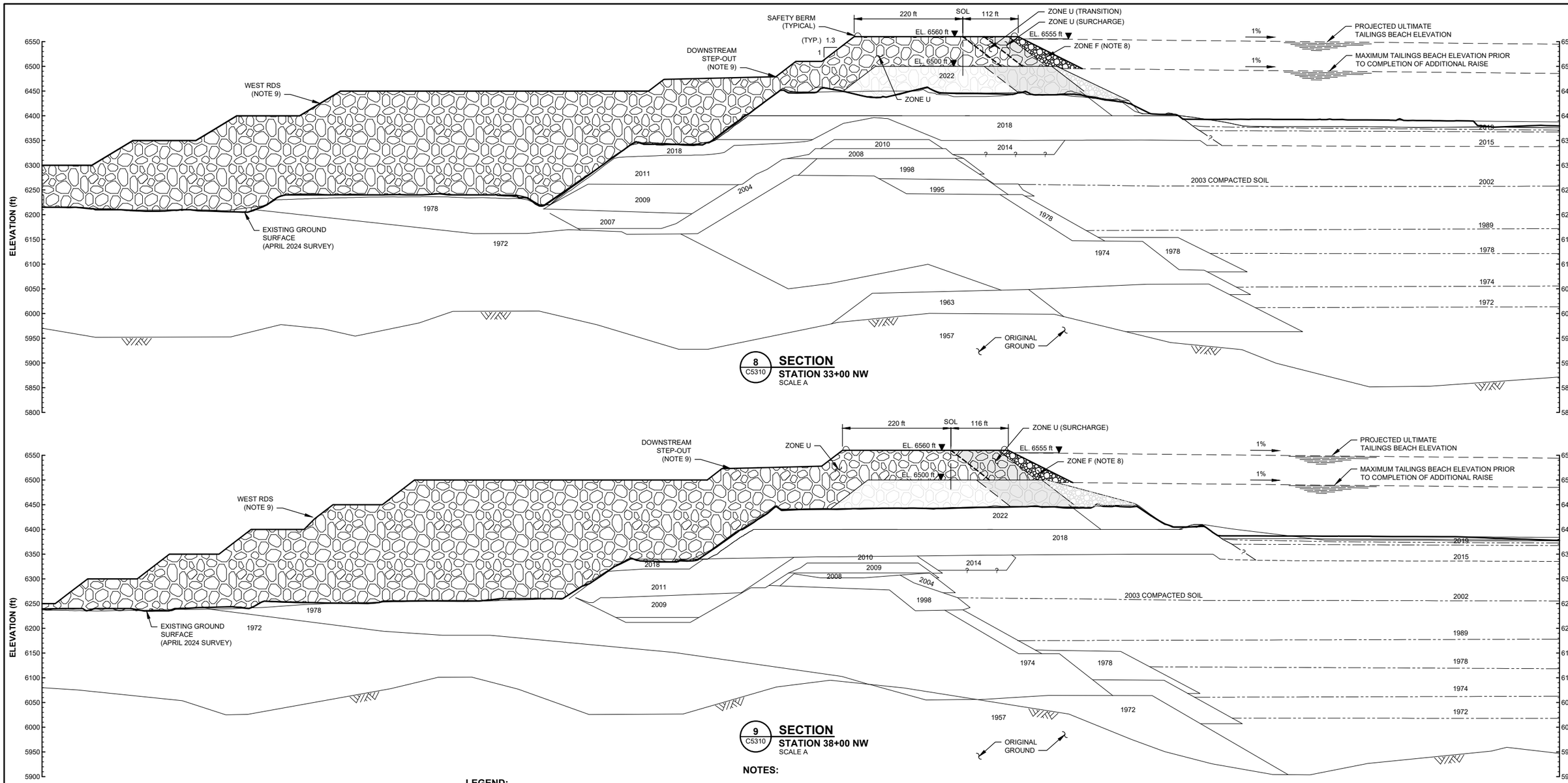

8 C5310 **SECTION**
STATION 33+00 NW
SCALE A

9 C5310 **SECTION**
STATION 38+00 NW
SCALE A

SCALE A: 100 0 100 200 300 400 500 ft

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 SURCHARGE)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES MINIMUM 220 FT WIDTH OF ZONE U EMBANKMENT ROCKFILL.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F IS TO PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT, ACCESS RAMP, AND RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SECTIONS 33+00 NW AND 38+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5337	B

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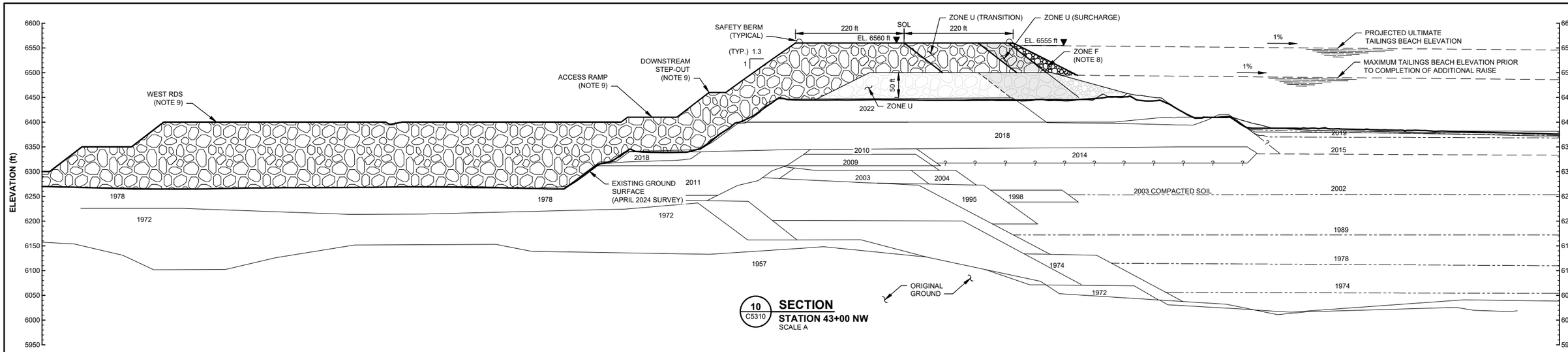
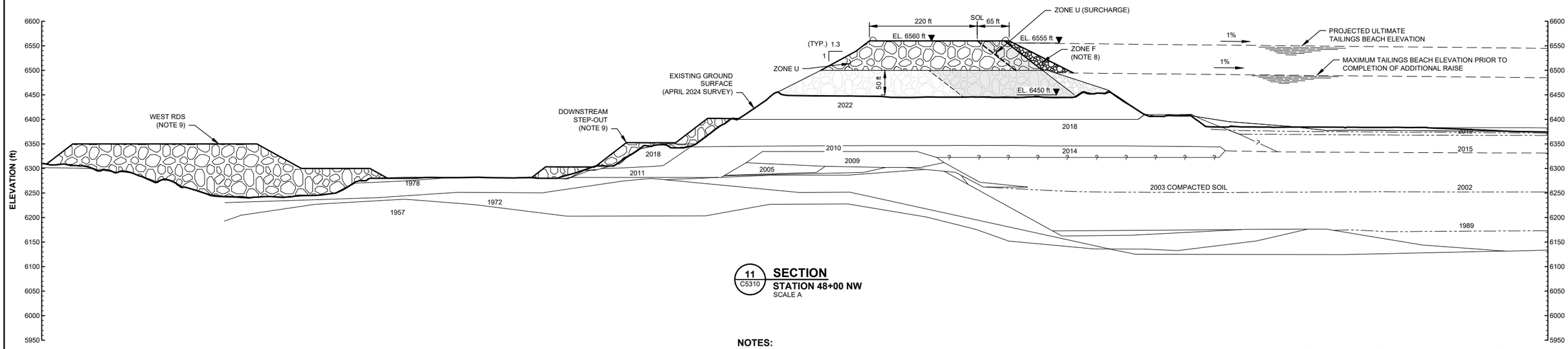


10 / C5310 SECTION
STATION 43+00 NW
SCALE A



11 / C5310 SECTION
STATION 48+00 NW
SCALE A

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4),REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. SETTING OUT LINE DELINEATES MINIMUM 220 FT WIDTH OF ZONE U EMBANKMENT ROCKFILL.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT, ACCESS RAMP, AND RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 SURCHARGE)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
EAST-WEST EMBANKMENT
6560 CREST
SECTIONS 43+00 NW AND 48+00 NW

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5338	B

SAVED: M:\1\101\00126\24\AA-cad\DWGS\MR-C5338\MR-C5338, 9/13/2024 7:35:25 AM , RMCLELLAN PRINTED: 9/13/2024 7:56:34 AM, MR-C5338, RMCLELLAN
XREF FILE(S): Sections IMAGE FILE(S):

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 300 0 300 600 900 1200 1500 ft

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. NORTH OF SECTION 13+00 N THE SETTING OUT LINE IS LOCATED ALONG THE UPSTREAM EDGE OF THE EMBANKMENT CREST. SETTING OUT LINE BETWEEN SECTION 3+00 N AND 8+00 N DELINEATES MINIMUM 220 FT WIDTH OF ZONE U EMBANKMENT ROCKFILL.
8. TRANSMISSION LINE ROUTING IS APPROXIMATE AS PROVIDED BY MONTANA RESOURCES, LLC IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.
9. EL. 6,500 FT CREST RAISE AND OTHER CONSTRUCTION AREAS ASSUMED TO BE COMPLETED PRIOR TO CONSTRUCTION ACTIVITIES PRESENTED IN THIS DRAWING PACKAGE.
10. CONSTRUCTION TIMING OF CREST RAISE, DOWNSTREAM STEP-OUT, AND RDS DEVELOPMENT TO BE CONFIRMED DURING FUTURE OPERATIONS.

DRG. NO.	DESCRIPTION
MR-C5447	NORTH-SOUTH EMBANKMENT - 6560 CREST - SECTION 58+00 N AND 63+00 N
MR-C5446	NORTH-SOUTH EMBANKMENT - 6560 CREST - SECTION 48+00 N AND 53+00 N
MR-C5445	NORTH-SOUTH EMBANKMENT - 6560 CREST - SECTION 38+00 N AND 43+00 N
MR-C5444	NORTH-SOUTH EMBANKMENT - 6560 CREST - SECTION 28+00 N AND 33+00 N
MR-C5443	NORTH-SOUTH EMBANKMENT - 6560 CREST - SECTION 18+00 N AND 23+00 N
MR-C5442	NORTH-SOUTH EMBANKMENT - 6560 CREST - SECTION 13+00 N
MR-C5441	NORTH-SOUTH EMBANKMENT - 6560 CREST - SECTION 08+00 N
MR-C5440	NORTH-SOUTH EMBANKMENT - 6560 CREST - SECTION 03+00 N
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

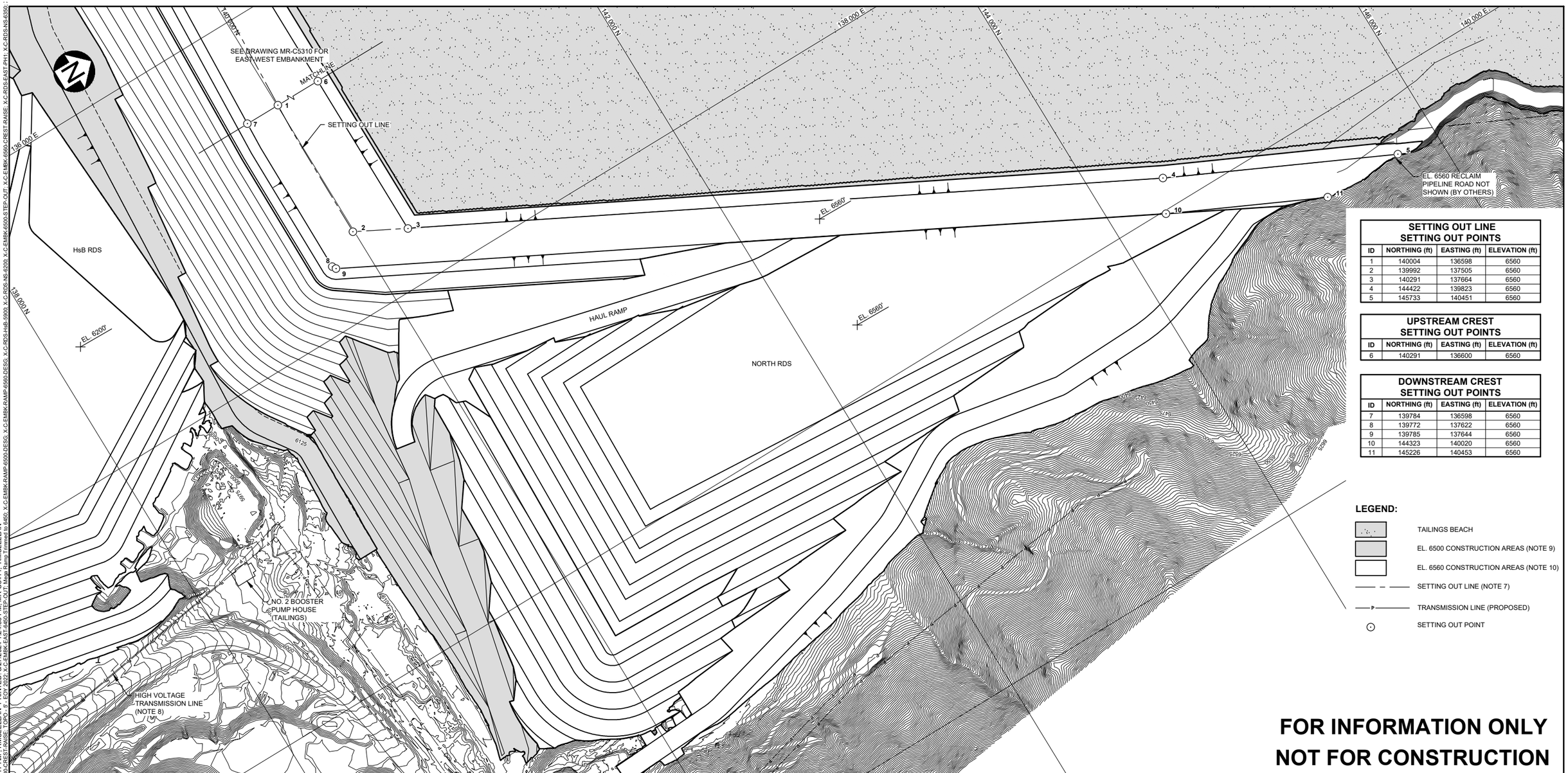
MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6560 CREST
PLAN

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5410	B

SAVED: M:\1101\126\24\Acad\DWGS\MR-C5410.MR-C5410, 6/27/2024 10:02:50 AM, RMCLELLAN PRINTED: 8/27/2024 1:24:03 PM, MR-C5410, RMCLELLAN
XREF FILE(S): X-C-EMBK-RAMP-6560-DESG, X-C-EMBK-RAMP-6560-DESG, X-C-EMBK-6560-CREST-RAISE, X-C-RDS-NS-6200, X-C-RDS-NS-6350, X-C-RDS-NS-PH3, X-C-RDS-HsB-5900, X-C-RDS-ALL-PH2, X-C-RDS-EAST-PH1, P
X-C-EMBK-6560-CREST-RAISE, X-C-EMBK-EAST-6450-DESG, TOPO_5' - EOY 2022, Mega Ramp Trimmed to 6450, X-C-EMBK-6500-CREST-RAISE, X-C-EMBK-EAST-6450-STEP-OUT, X-C-EMBK-6500-STEP-OUT, X-C-EMBK-RAMP-6



SETTING OUT LINE SETTING OUT POINTS

ID	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
1	140004	136598	6560
2	139992	137505	6560
3	140291	137664	6560
4	144422	139823	6560
5	145733	140451	6560

UPSTREAM CREST SETTING OUT POINTS

ID	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
6	140291	136600	6560

DOWNSTREAM CREST SETTING OUT POINTS

ID	NORTHING (ft)	EASTING (ft)	ELEVATION (ft)
7	139784	136598	6560
8	139772	137622	6560
9	139785	137644	6560
10	144323	140020	6560
11	145226	140453	6560

LEGEND:

- TAILINGS BEACH
- EL. 6500 CONSTRUCTION AREAS (NOTE 9)
- EL. 6560 CONSTRUCTION AREAS (NOTE 10)
- SETTING OUT LINE (NOTE 7)
- TRANSMISSION LINE (PROPOSED)
- SETTING OUT POINT

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A 300 0 300 600 900 1200 1500 ft

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. NORTH OF SECTION 13+00 N THE SETTING OUT LINE IS LOCATED ALONG THE UPSTREAM EDGE OF THE EMBANKMENT CREST. SETTING OUT LINE BETWEEN SECTION 3+00 N AND 8+00 N DELINEATES MINIMUM 220 FT WIDTH OF ZONE U EMBANKMENT ROCKFILL.
8. TRANSMISSION LINE ROUTING IS APPROXIMATE AS PROVIDED BY MONTANA RESOURCES, LLC IN SEPTEMBER 2023. LAYOUT BY NORTHWEST ENERGY.
9. EL. 6,500 FT CREST RAISE AND OTHER CONSTRUCTION AREAS ASSUMED TO BE COMPLETED PRIOR TO CONSTRUCTION ACTIVITIES PRESENTED IN THIS DRAWING PACKAGE.
10. CONSTRUCTION TIMING OF CREST RAISE, DOWNSTREAM STEP-OUT, AND RDS DEVELOPMENT TO BE CONFIRMED DURING FUTURE OPERATIONS.

DRG. NO.	DESCRIPTION
MR-C5310	EAST-WEST EMBANKMENT - 6560 CREST - PLAN

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6560 CREST
SETTING OUT DETAILS

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5411	B

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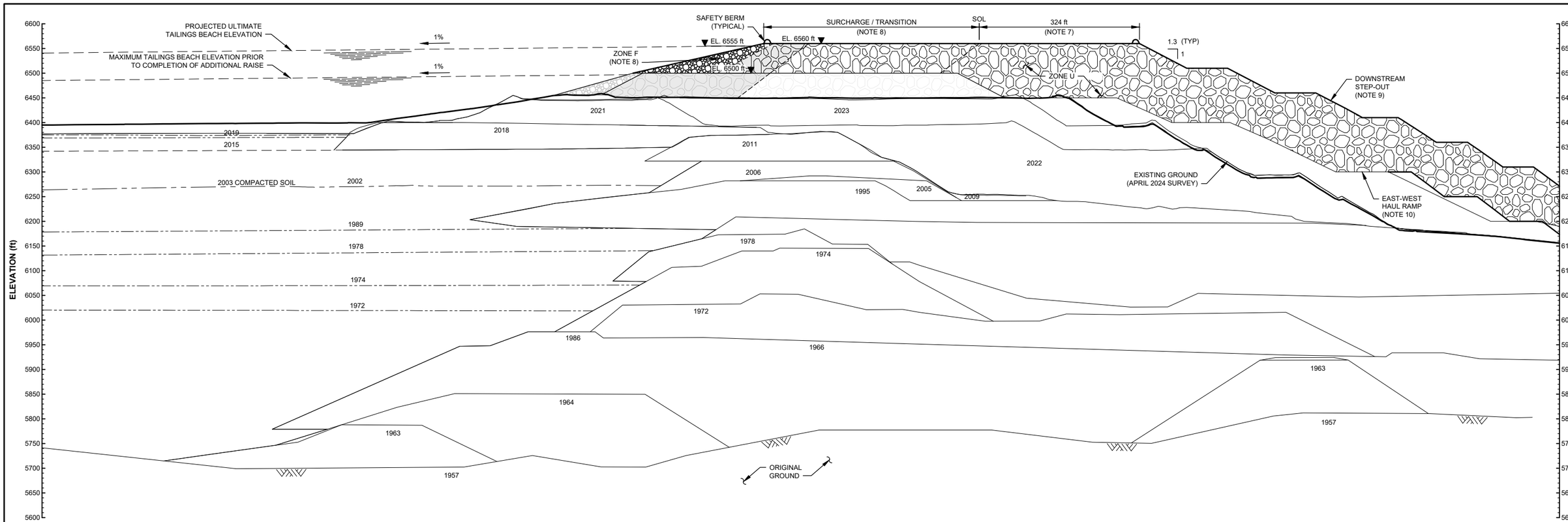

1 C5410 **SECTION**
STATION 03+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL (SURCHARGE / TRANSITION)
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (SURCHARGE 6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. EAST-WEST HAUL RAMP COMPLETED PRIOR TO EL. 6500 CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

100 0 100 200 300 400 500 ft
SCALE A

DRG. NO.	DESCRIPTION
MR-C5410	NORTH-SOUTH EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6560 CREST
SECTION 3+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5440	B

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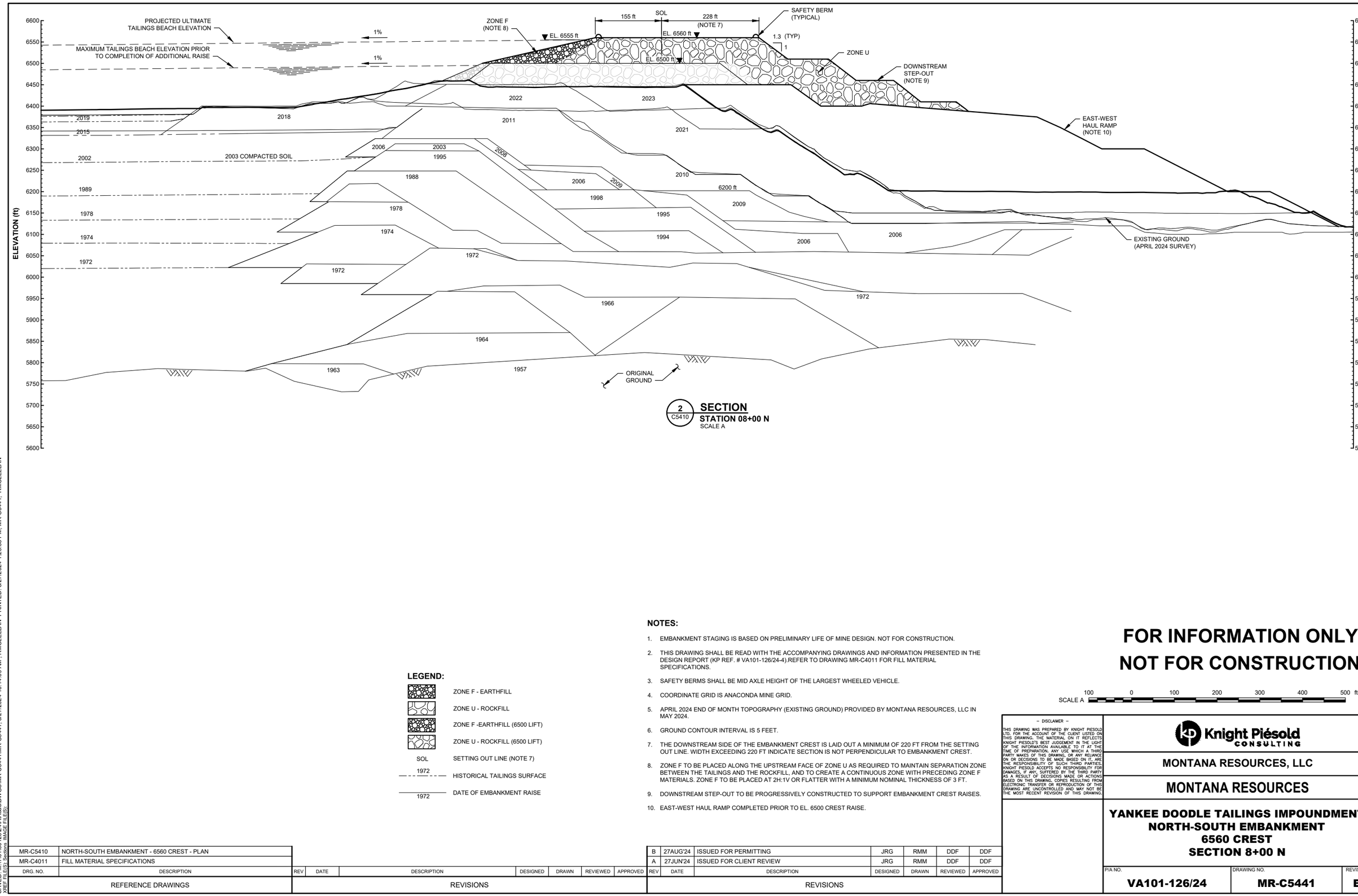

2 C5410 **SECTION**
STATION 08+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE F -EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4),REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. EAST-WEST HAUL RAMP COMPLETED PRIOR TO EL. 6500 CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C5410	NORTH-SOUTH EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6560 CREST
SECTION 8+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5441	B

SAVED: M:\1\101\126\24\AA\acad\DWG\SMR-C5441\MR-C5441, 6/27/2024 10:14:09 AM, RMCLELLAN PRINTED: 8/27/2024 1:25:55 PM, MR-C5441, RMCLELLAN
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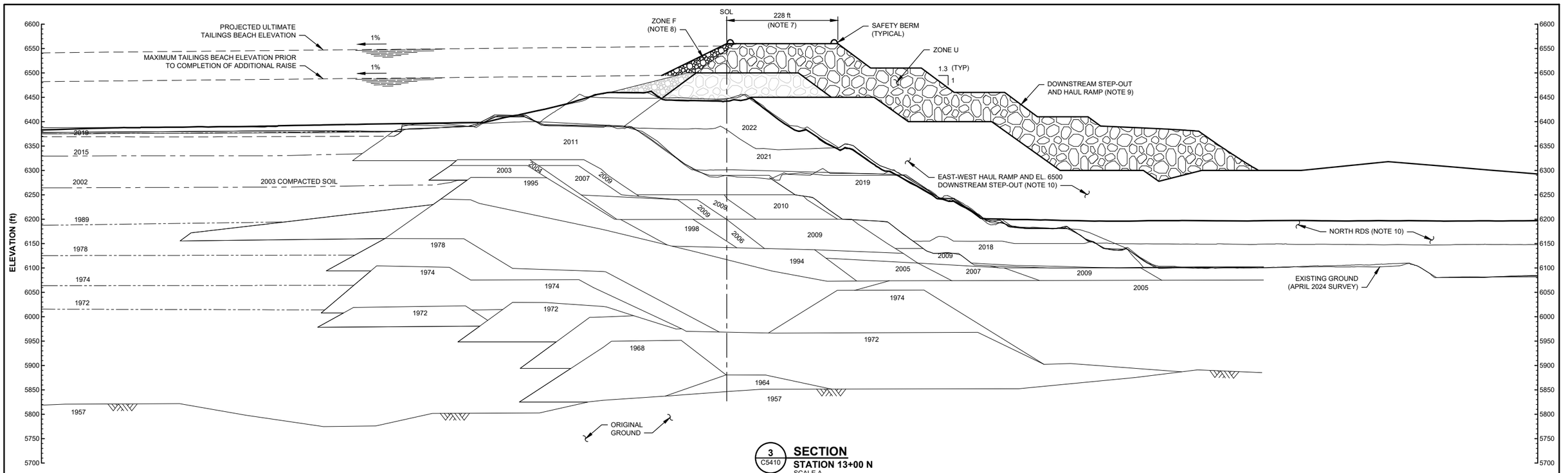

3 C5410 **SECTION**
STATION 13+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE U - ROCKFILL (6500 LIFT)
- ZONE F - EARTHFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT AND HAUL RAMP TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. EAST-WEST HAUL RAMP AND EL. 6500 DOWNSTREAM STEP-OUT, AND NORTH RDS (EL. 6200) TO BE COMPLETED PRIOR TO EL. 6500 CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

100 0 100 200 300 400 500 ft
SCALE A

DRG. NO.	DESCRIPTION
MR-C5410	NORTH-SOUTH EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6560 CREST
SECTION 13+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5442	B

SAVED: M:\1\101\00126\24\A\Acad\DWGS\MR-C5442\MR-C5442, 6/27/2024 10:17:48 AM, RMCLELLAN PRINTED: 8/27/2024 1:26:26 PM, MR-C5442, RMCLELLAN
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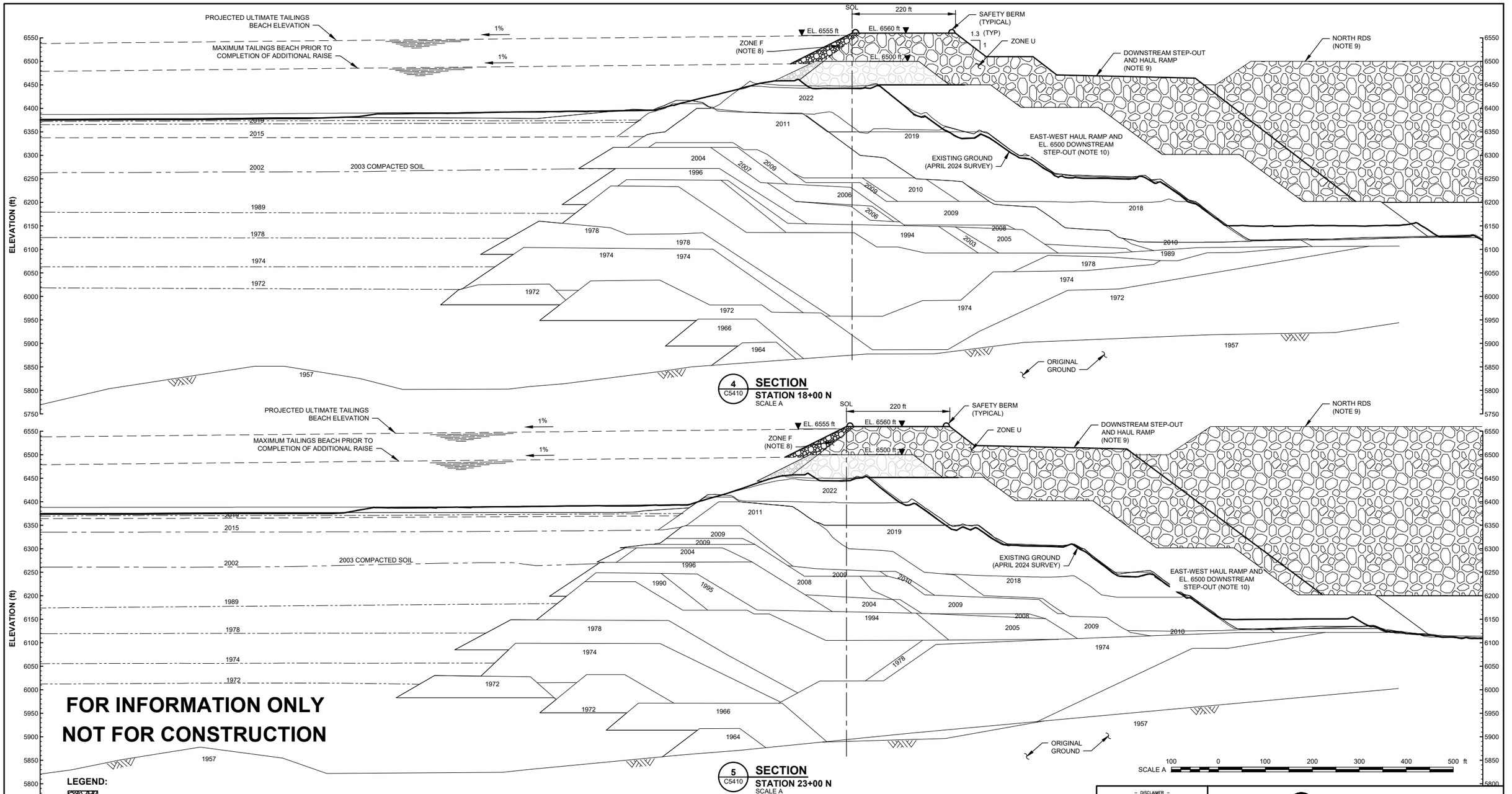

4 C5410 **SECTION**
STATION 18+00 N
SCALE A

5 C5410 **SECTION**
STATION 23+00 N
SCALE A

SCALE A: 100 0 100 200 300 400 500 ft

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT, HAUL RAMP, AND NORTH RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. EAST-WEST HAUL RAMP, AND NORTH RDS (EL. 6200) COMPLETED PRIOR TO EL. 6500 CREST RAISE.

DRG. NO.	DESCRIPTION
MR-C5410	NORTH-SOUTH EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

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MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6560 CREST
SECTIONS 18+00 N AND 23+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5443	B

SAVED: M:\1\101\00126\24\A\Acad\DWGS\MR-C5443\MR-C5443, 6/27/2024 10:20:08 AM , RMCLELLAN PRINTED: 8/27/2024 1:27:05 PM, MR-C5443, RMCLELLAN
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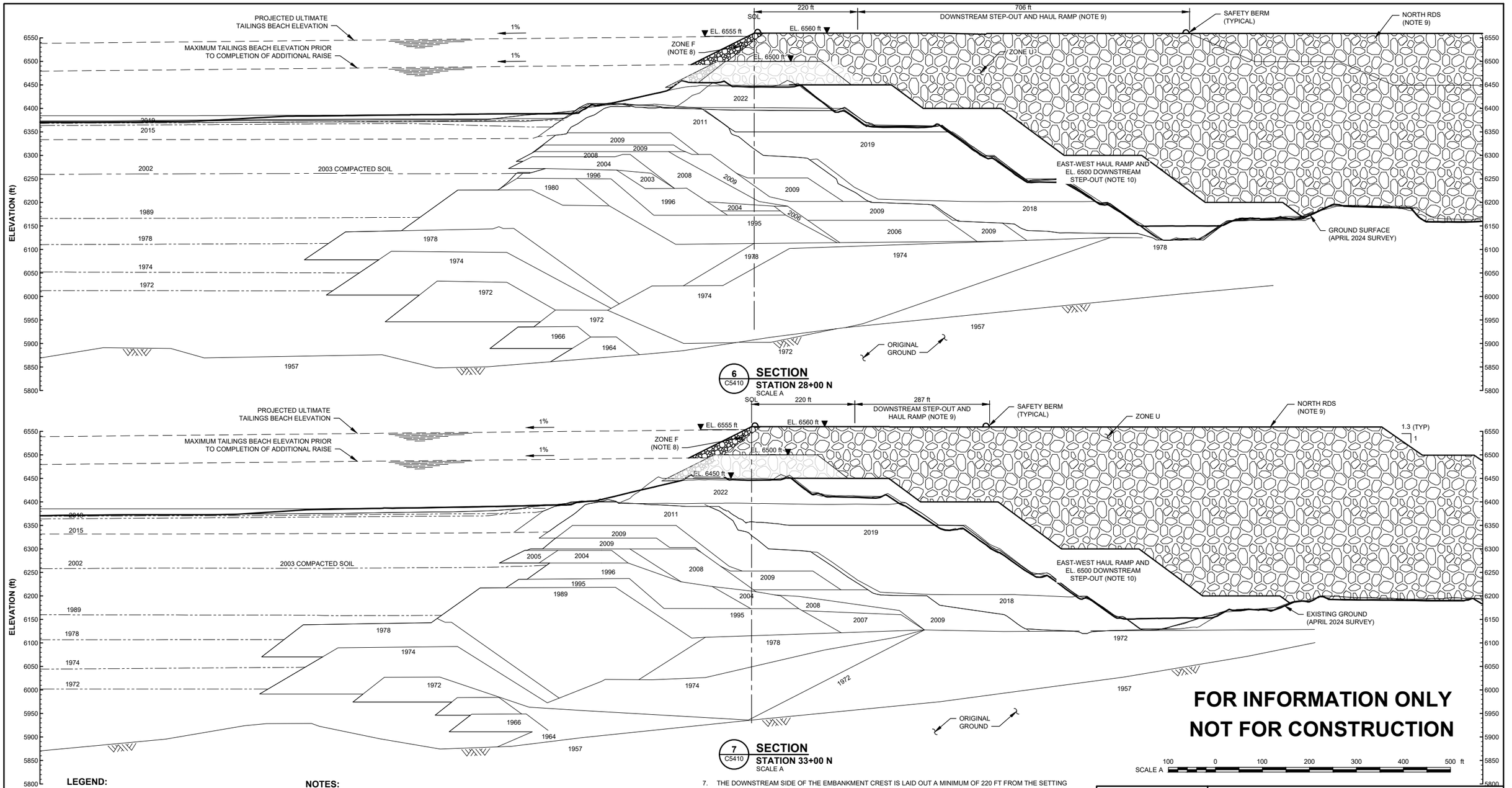

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF EMBANKMENT RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST, OR INCLUDES THE ROCK DISPOSAL SITE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT, HAUL RAMP, AND NORTH RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. EAST-WEST HAUL RAMP, EL. 6500 DOWNSTREAM STEP-OUT, AND NORTH RDS (EL. 6200) TO BE COMPLETED PRIOR TO EL. 6500 CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C5410	NORTH-SOUTH EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6560 CREST
SECTIONS 28+00 N AND 33+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5444	B

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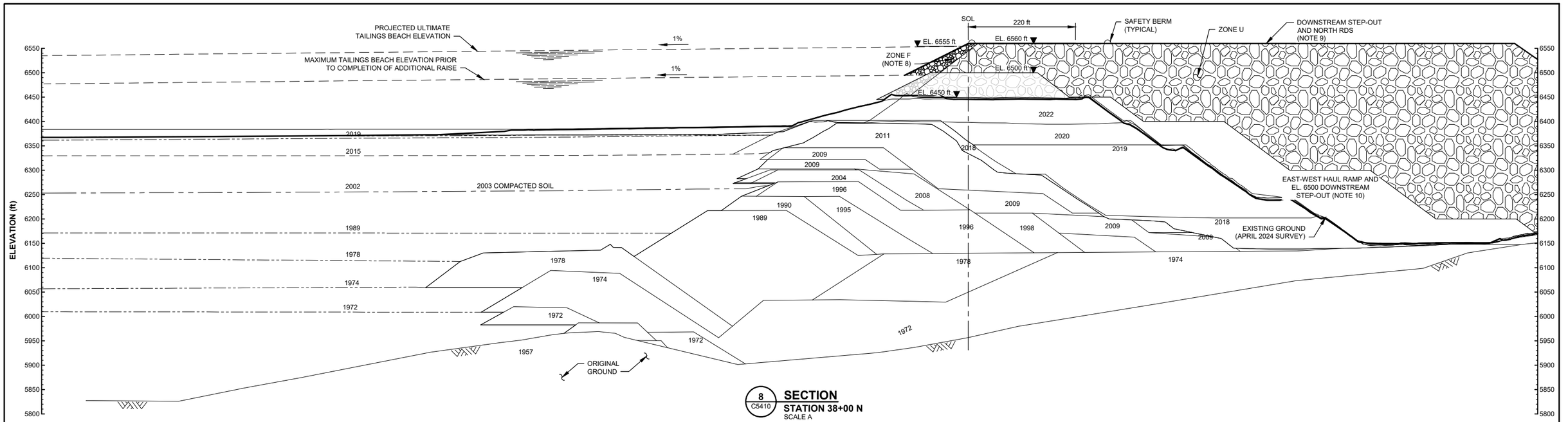

8 C5410 **SECTION**
STATION 38+00 N
SCALE A

9 C5410 **SECTION**
STATION 43+00 N
SCALE A

1.3 (TYP) : 1

SCALE A 100 0 100 200 300 400 500 ft

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT AND NORTH RDS TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. EAST-WEST HAUL RAMP, EL. 6500 DOWNSTREAM STEP-OUT, AND NORTH RDS (EL. 6200) TO BE COMPLETED PRIOR TO EL. 6500 CREST RAISE.

DRG. NO.	DESCRIPTION
MR-C5410	NORTH-SOUTH EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT NORTH-SOUTH EMBANKMENT 6560 CREST SECTIONS 38+00 N AND 43+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5445	B

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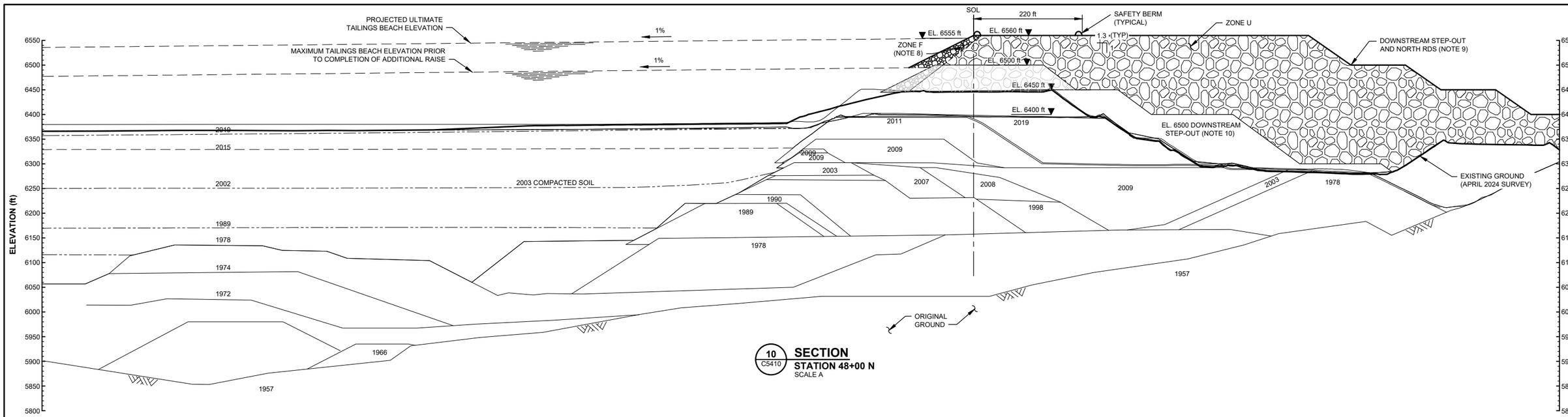

10 / C5410 SECTION
STATION 48+00 N
SCALE A

11 / C5410 SECTION
STATION 53+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE F - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF RAISE

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL END OF MONTH 2024 TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.
10. EL. 6500 DOWNSTREAM STEP-OUT TO BE COMPLETED PRIOR TO EL. 6560 CREST RAISE.

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

DRG. NO.	DESCRIPTION
MR-C5410	NORTH-SOUTH EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6560 CREST
SECTIONS 48+00 N AND 53+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5446	B

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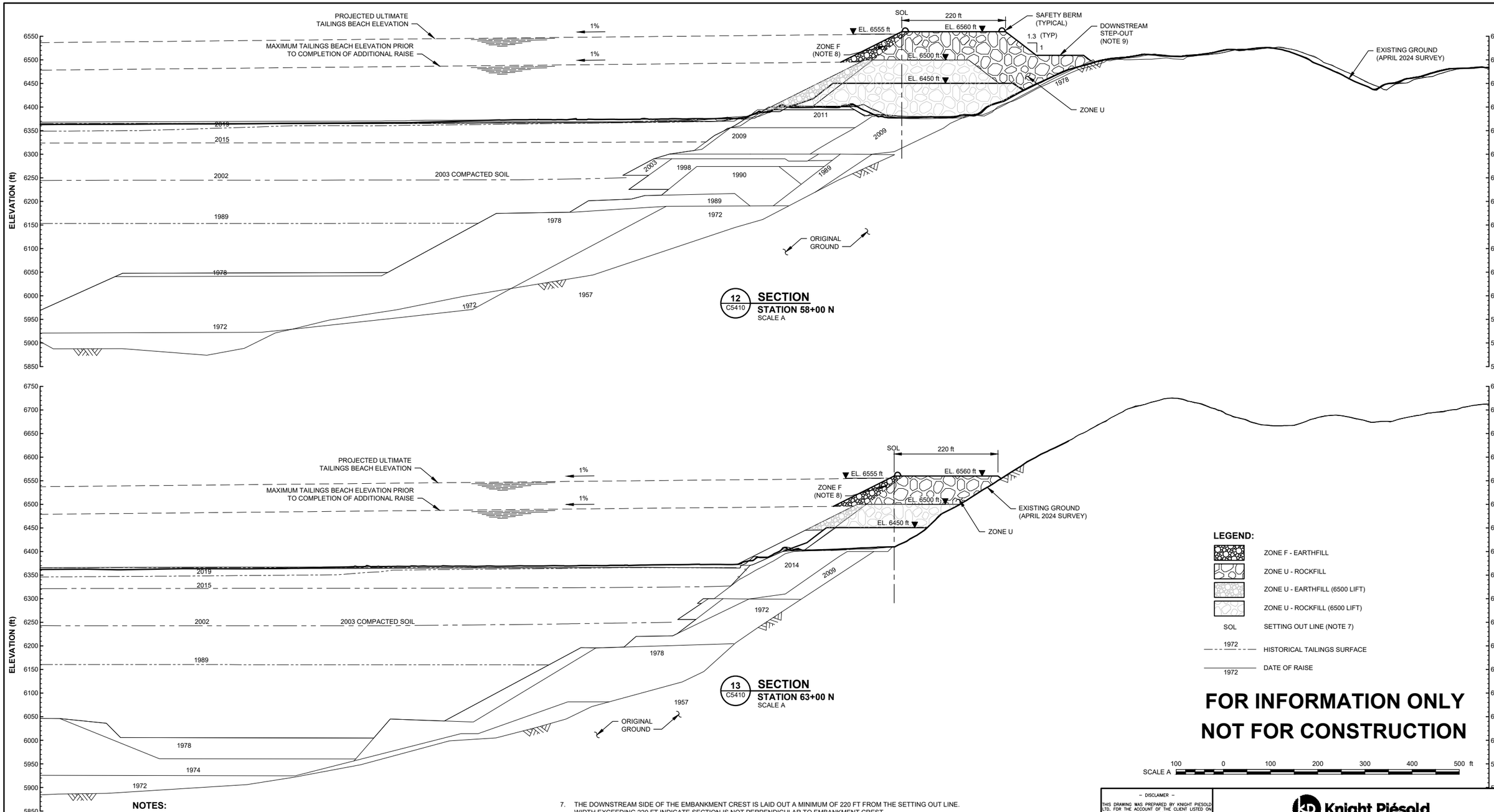

12 / C5410 SECTION
STATION 58+00 N
SCALE A

13 / C5410 SECTION
STATION 63+00 N
SCALE A

LEGEND:

- ZONE F - EARTHFILL
- ZONE U - ROCKFILL
- ZONE U - EARTHFILL (6500 LIFT)
- ZONE U - ROCKFILL (6500 LIFT)
- SOL — SETTING OUT LINE (NOTE 7)
- 1972 — HISTORICAL TAILINGS SURFACE
- 1972 — DATE OF RAISE

FOR INFORMATION ONLY
NOT FOR CONSTRUCTION

SCALE A: 100 0 100 200 300 400 500 ft

NOTES:

1. EMBANKMENT STAGING IS BASED ON PRELIMINARY LIFE OF MINE DESIGN. NOT FOR CONSTRUCTION.
2. THIS DRAWING SHALL BE READ WITH THE ACCOMPANYING DRAWINGS AND INFORMATION PRESENTED IN THE DESIGN REPORT (KP REF. # VA101-126/24-4).REFER TO DRAWING MR-C4011 FOR FILL MATERIAL SPECIFICATIONS.
3. SAFETY BERMS SHALL BE MID AXLE HEIGHT OF THE LARGEST WHEELED VEHICLE.
4. COORDINATE GRID IS ANACONDA MINE GRID.
5. APRIL 2024 END OF MONTH TOPOGRAPHY (EXISTING GROUND) PROVIDED BY MONTANA RESOURCES, LLC IN MAY 2024.
6. GROUND CONTOUR INTERVAL IS 5 FEET.
7. THE DOWNSTREAM SIDE OF THE EMBANKMENT CREST IS LAID OUT A MINIMUM OF 220 FT FROM THE SETTING OUT LINE. WIDTH EXCEEDING 220 FT INDICATE SECTION IS NOT PERPENDICULAR TO EMBANKMENT CREST.
8. ZONE F TO BE PLACED ALONG THE UPSTREAM FACE OF ZONE U AS REQUIRED TO MAINTAIN SEPARATION ZONE BETWEEN THE TAILINGS AND THE ROCKFILL, AND TO CREATE A CONTINUOUS ZONE WITH PRECEDING ZONE F MATERIALS. ZONE F TO BE PLACED AT 2H:1V OR FLATTER WITH A MINIMUM NOMINAL THICKNESS OF 3 FT.
9. DOWNSTREAM STEP-OUT TO BE PROGRESSIVELY CONSTRUCTED TO SUPPORT EMBANKMENT CREST RAISES.

DRG. NO.	DESCRIPTION
MR-C5410	NORTH-SOUTH EMBANKMENT - 6560 CREST - PLAN
MR-C4011	FILL MATERIAL SPECIFICATIONS

REFERENCE DRAWINGS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED

REVISIONS

REV	DATE	DESCRIPTION	DESIGNED	DRAWN	REVIEWED	APPROVED
B	27AUG'24	ISSUED FOR PERMITTING	JRG	RMM	DDF	DDF
A	27JUN'24	ISSUED FOR CLIENT REVIEW	JRG	RMM	DDF	DDF

REVISIONS

Knight Piésold CONSULTING

MONTANA RESOURCES, LLC

MONTANA RESOURCES

YANKEE DOODLE TAILINGS IMPOUNDMENT
NORTH-SOUTH EMBANKMENT
6560 CREST
SECTIONS 58+00 N AND 63+00 N

P/A NO.	DRAWING NO.	REVISION
VA101-126/24	MR-C5447	B

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