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March 29, 2024

Kathryn Larson
Mineland Reclamation Supervisor
Minnesota DNR-LAM
1525 Third Avenue East
Hibbing, MN 55746

Reference: NorthMet Project Permit to Mine Project Update 2023

Dear Ms. Larson,

Please find attached the NorthMet Project Permit to Mine Project Update 2023 submitted on behalf of NewRange Copper Nickel LLC, in follow-up to your request dated March 1, 2024, and Minnesota Rules 6132.1300. Two hard copies of this report will be delivered in person to the DNR office in Hibbing this afternoon.

Thank you in advance for your efforts in review of this Project update. If any questions or concerns arise during the DNR's review of this documentation, please do not hesitate to contact me at 218-461-7746 or Christie.Kearney@NewRangeCopperNickel.com.

Sincerely,

A handwritten signature in blue ink that reads "Christie M. Kearney".

Christie M. Kearney, P.E.
Sustainability, Environmental, and Regulatory Affairs (SERA) Director
NewRange Copper Nickel LLC

Encl: NorthMet Project Permit to Mine Project Update 2023



NorthMet Project

Permit to Mine
Project Update 2023

Version 1

Issue Date: March 29, 2024

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Acronyms, Abbreviations, and Units

Acronym	Stands For
AOC	Area of Concern
DMR	Discharge Monitoring Report
DNR	Minnesota Department of Natural Resources
FTB	Flotation Tailings Basin
HRF	Hydrometallurgical Residue Facility
MPCA	Minnesota Pollution Control Agency
MPP	Mine to Plant Pipelines
MSFMF	Mine Site Fueling and Maintenance Facility
NPDES	National Pollutant Discharge Elimination System
OSLA	Overburden Storage and Laydown Area
PTM	Permit to Mine
SDS	State Disposal System
SPCC	Spill Prevention, Control, and Countermeasure
SWPPP	Stormwater Pollution Prevention Plan

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1.0 Introduction

The NorthMet Mining Project Nonferrous Permit to Mine (NorthMet PTM) was stayed by the Minnesota Court of Appeals in September 2019 pending the court’s decision on the merits. In January 2020, the Court of Appeals reversed the NorthMet PTM insofar as it failed to include a definite term and remanded the entire permit for a contested case hearing. The Minnesota Supreme Court granted review. On April 28, 2021, the Minnesota Supreme Court reversed the Court of Appeals’ decision in significant part, limiting the contested case hearing on remand to one issue and ordering that the Minnesota Department of Natural Resources (DNR) “determine and fix the appropriate definite term for the permit to mine as necessary.” The contested case hearing was held on March 27-31, 2023, with a recommendation from the Administrative Law Judge published Nov. 28, 2023. The contested case is now going through the exception/objection process, with the record set to be closed June 7, 2024, and a decision expected by the DNR Sept. 5, 2024. On March 11, 2024, Fond du Lac Band requested the DNR vacate the schedule for the exception/objection process. The DNR requested a response from all parties by March 26, 2024.

In addition to the above listed activities on the NorthMet PTM, litigation on other permits that have occurred restricts construction from starting, including the revocation of the 404 permit June 6, 2023, following a 401(a)(2) hearing. With the schedule of receipt of these permits somewhat uncertain, the timing of construction activities described in this report is uncertain due to these pending actions by the DNR and the Corps of Engineers.

Nonferrous Metallic Mineral Mining Rules (Minnesota Rule 6132.1300) require permittees to submit an annual report to the DNR. The purpose of the report is to document actual mining and reclamation completed in the past calendar year (2023), to describe the mining and reclamation activities planned for the upcoming year (2024), and to provide a contingency reclamation plan to be implemented if operations cease in the upcoming year. The NorthMet PTM was issued to PolyMet Mining Corp. and Poly Met Mining, Inc. (PolyMet) on November 1, 2018. Even though the NorthMet PTM has been remanded to the DNR, this Project update is being submitted with contents consistent with annual report requirements (Minnesota Rule 6132.1300).

As of February 2023, following a conversion and name change under Minnesota Statutes §§ 302A.682-.692, Poly Met Mining, Inc. is now NewRange Copper Nickel LLC (NewRange). NewRange is “for all purposes the same entity that existed before the conversion.” Minn. Stat. § 302A.691, subd. 1. Thereafter, PolyMet Mining Corp. and Teck American Inc. formed a joint venture, each owning 50% of NewRange.

In addition to the content requirements for the annual report defined in rule and in NewRange’s PTM, the following additional information is tabulated and attached as follows:

Table 1 Changes to the Contact Information of NewRange’s Leadership and Environmental Team Since the Last Annual Report

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Table 2 Permits Held and Permit Status as of March 2023

Table 3 Flotation Tailings Basin Dam Height Status through Year 2023 and Planned at the End of the Construction Phase

A March 1, 2024 letter from the DNR additionally requested the following information, which is provided below the request:

1. The 2022 update included information on scrapping activities from the non-ferrous mining area in the Annual Report. It is our understanding that demolition work occurred in the concentrator building including scrapping of rod and ball mills started sometime in 2023 and continued until February of 2024. Provide an update on all demolition or scrapping activities that occurred in the non-ferrous mining area.

The salvage and recycle activities that occurred in 2023 were focused within the concentrator and included:

- 6,000 tons of ferrous scrap were removed from the concentrator,
- 4,800 cubic yards of concrete were removed from the concentrator, and
- 36,000 cubic yards of crushed taconite ore were removed from the fine ore bins in the concentrator.

There is also significant a significant amount of work that has been taking place in 2024 within the concentrator, which is projected to include:

- Removal and salvage of 64 rod and ball mills (this has been completed),
- Removal of all mineral processing equipment from the building,
- Removal and salvage of an additional 14,000 tons of ferrous scrap, and
- Recycling of 45,000 cubic yards of concrete into engineered aggregate.

2. Provide an update on the ongoing waste characterization testing.

Due to the lateness of this request, this update is not available for this annual report. NewRange is working with Mineralogic to provide an update on its waste characterization program and will provide that update to the DNR under separate cover once it is available. This update will include the results of the humidity cell tests that were terminated in 2023, as approved by the DNR June 23, 2023, which we are just finishing up postmortem analysis on.

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2.0 Mining and Reclamation Completed in the Past Calendar Year (2023)

(Minnesota Rules, part 6132.1300, subpart 2 and NorthMet Mining Project PTM Special Condition 17)

This section describes any mining and reclamation activities conducted, corrective actions conducted, changes to the approved mining and reclamation plan¹ including how they were proactively addressed with the DNR, new rock types or formations encountered, changes in ownership or organizational structure, and wetland replacement activities that occurred during the past calendar year. It also describes monitoring activities and results. In future annual reports once operations begin, an updated GIS data package depicting the annual progression of the footprints of each mine feature will be included as a separate submittal with this Project update, as listed in PTM Special Condition 17.

2.1 Mining Activities

(Minnesota Rules, part 6132.1300, subpart 2, item A and NorthMet Mining Project PTM Special Conditions 4b, 72, and 91a)

2.1.1 Types, Amounts, Sequence, and Schedule of Mining

(Minnesota Rules, part 6132.1300, subpart 2, item A(1))

There was no mining nor stockpiling of materials associated with mining (ore, lean ore, or waste rock) conducted during the past calendar year.

In future annual reports once operations begin, this section will describe types, amounts, sequence, and schedule of mining the ore body and stockpiling materials. Future annual reports will also summarize the mining rates and schedule for the various materials mined and produced in Table 4, and provide additional waste rock stockpile and pit backfill activity information in Table 5; in this Project update, Table 4 and Table 5 are provided as placeholders.

2.1.2 Mine Management/Dispatch System

(NorthMet Mining Project PTM Special Condition 4b)

There was no mining or reclamation completed during the past calendar years and, the Mine Management/Dispatch System is not yet in place.

¹ The mining and reclamation plan approved with issuance of the NorthMet Mining Project PTM consisted of “Sections 7-11 and 15 along with related appendices of the Permit to Mine application” (Reference (2)). A standalone Mining and Reclamation Plan (Reference (1)) was created from these portions of the PTM Application and was submitted with the 2018 Annual Report.

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In future annual reports once operations begin, this section will present summary statistics and analysis of the performance of the tracking and success of material delivery to the correct destination from the Mine Management/Dispatch System.

2.1.3 Beneficiation Process

(Minnesota Rules, part 6132.1300, subpart 2, item A(2))

No beneficiation took place during the past calendar year.

In future annual reports, this section will describe any changes in the beneficiation process.

2.1.4 Flotation Tailings Management

(NorthMet Mining Project PTM Special Condition 91a)

No Flotation Tailings were produced, nor placed, during the past calendar year.

In future annual reports once operations begin, this section will document the sulfur content of the Flotation Tailings, the total tons of Flotation Tailings placed in the Flotation Tailings Basin (FTB) from the start of operations through the past calendar year and remaining planned capacity, and any changes to the Flotation Tailings waste characterization program.

2.1.5 Residue Management

(NorthMet Mining Project PTM Special Condition 91a)

No Residue was produced, nor placed, during the past calendar year.

In future annual reports once the Hydrometallurgical Plant is operational, this section will document current chemical characterization of the Residue, the total tons of Residue placed in the Hydrometallurgical Residue Facility (HRF) from the start of operations through the past calendar year and remaining planned capacity, and any planned changes in operations that could impact reclamation and postclosure.

2.1.6 Exploration and Drilling

(NorthMet Mining Project PTM Special Condition 72)

Twenty boreholes were drilled at the Mine Site in 2023 for exploration core samples, geotechnical core logging, packer testing, and televising; the locations of the boreholes are shown on Figure 9.

Ninety-nine exploratory boreholes were permanently sealed in 2023 and early 2024 at the Mine Site. Permanent sealing included the removal of casings and permanent sealing of the boring with grout. The permanent sealing campaign was conducted under the oversight of the

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Minnesota Department of Health and DNR. These exploratory boreholes were installed in 2005 and had been temporarily sealed since that time. The locations of the sealed exploratory boreholes are shown on Figure 10.

2.2 Reclamation Activities

(Minnesota Rules, part 6132.1300, subpart 2, item B and NorthMet Mining Project PTM Special Condition 60)

Reclamation conducted during 2023 included the removal of all waste from the on-site SW-619 industrial landfill. SW-619 was constructed on top of a private landfill SW-467, with waste placement from 2006 through 2010.

SW-619 waste removal activities were conducted as per an MPCA-approved workplan. The wastes that were removed consisted of demolition wastes, asbestos containing materials, and tires. Waste removal began on August 21, 2023 and were completed September 20, 2023. All waste removed from the SW-619 landfill was transported to and disposed of at General Waste and Recycling, LLC in Keewatin, MN apart from large tires, which were removed from the waste and stockpiled near the landfill to be removed later. A total of 520 trucks hauled approximately 9,805 tons to General Waste.

The SW-467 landfill remains, and repair of the SW-467 landfill cover was completed in Oct. 2023. Repairs included final grading and cover reestablishment. The SW-467 Construction Certification Report was submitted to the MPCA in January 2024 and is awaiting approval. Once approval is obtained, a post closure care summary report will be submitted to the MPCA to close out the SW-467 landfill, which was closed in 1995.

2.2.1 Reclamation Research

No reclamation research was conducted during the past calendar year and no grants were applied for, for such research.

2.2.2 Reclamation Methods and Sequence

No reclamation activities were conducted during the past calendar year.

In future annual reports, this section will describe reclamation methods applied and sequencing of such activities. Future annual reports will also provide a summary of reclamation activities in Table 7; in this Project update, Table 7 is provided as a placeholder.

2.2.2.1 Areas of Concern

(NorthMet Mining Project PTM Special Condition 60)

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Section 2.2 Reclamation Activities discusses the removal of waste from the SW-619 industrial landfill conducted during late 2023. This landfill was constructed on top of SW-467, also an industrial landfill known as the Private Landfill, beginning in 2006. The Private Landfill was documented as Area of Concern (AOC)-8 in a 2002 Phase I Environmental Site Assessment (Phase I) prepared for Cliffs Erie on the former LTVSMC site. Demolition activities were conducted within the interior of Concentrator during 2023 and are further described in Section 1 – Introduction. The Concentrator is part of AOC-46 Plant Site Proper that was identified in the Phase 1 as an AOC. Demolition materials, including scrap metal, concrete, and taconite ore, removed from the Concentrator were stockpiled outside of the Concentrator for later disposition. Metal scrap was processed further to reduce the size for transport offsite for recycle.

There were no other changes to AOCs within the PTM are during the past calendar year.

2.2.3 Corrective Actions

There were no corrective actions conducted during the past calendar year.

2.3 Status of Ongoing Postclosure Maintenance Activities

(Minnesota Rules, part 6132.1300, subpart 2, item C and NorthMet Mining Project PTM Special Condition 20a)

No postclosure maintenance activities were conducted during the past calendar years.

2.4 Scope and Schedule Changes from the Approved Mining and Reclamation Plan

(Minnesota Rules, part 6132.1300, subpart 2, item D and NorthMet Mining Project PTM Special Conditions 22 and 60 (as applicable))

2.4.1 Changes to the Approved Mining Plan

No changes to the approved mining plan (Reference (1)) occurred during the past calendar year.

2.4.2 Changes to Approved Reclamation Plan

No changes to the approved reclamation plan (Reference (1)) occurred during the past calendar year.

2.4.2.1 New Areas of Concern

(NorthMet Mining Project PTM Special Condition 60)

No new AOCs were identified within the mining area during the past calendar year.

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2.5 Characterization of New Rock Types or Formations

(Minnesota Rules, part 6132.1300, subpart 2, item E and NorthMet Mining Project PTM Special Condition 45)

No new rock types or formations were encountered during the past calendar years.

2.6 Ownership or Organizational Structure Changes

(Minnesota Rules, part 6132.1300, subpart 2, item F)

Following a conversion and name change under Minnesota Statutes §§ 302A.682-692 in February 2023, Poly Met Mining, Inc. is now NewRange Copper Nickel LLC (NewRange). NewRange is “for all purposes the same entity that existed before the conversion.” Minn. Stat § 302A.691, subd.1.

NewRange submitted a letter to Joe Henderson on March 3, 2023, notifying the DNR of this conversion and name change, as well as the closing of the combination agreement resulting in NewRange being owned equally by Teck American Inc. and PolyMet US, Inc., which was a wholly owned subsidiary of PolyMet Mining Corp. This joint venture transaction that closed Feb. 14, 2023 did not make any change to the ownership of PolyMet Mining Corp. at the time. On Nov. 7, 2023, PolyMet Mining Corp. became a wholly owned subsidiary of Glencore.

2.7 Land Control Changes

(NorthMet Mining Project PTM Special Condition 5b)

No changes to land control were made in in the non-ferrous mining area during the past calendar year.

2.8 Wetland Replacement Activities

(Minnesota Rules, part 6132.1300, subpart 2, item G)

No wetland impact activities nor wetland replacement activities associated with impacts from the approved Wetland Replacement Plan occurred during the past calendar year.

In future annual reports, a summary of wetland impacts and wetland replacement activities will be provided on Table 8 and Table 9; in this Project update, Table 8 and Table 9 are provided as placeholders. The approved Wetland Replacement Plan for these impacts is included as Appendix 1 of the Mining and Reclamation Plan (Reference (1)).

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2.9 Annual Monitoring Summary

(NorthMet PTM Application Section 14.2 and NorthMet Mining Project PTM Special Conditions 16 and 57)

A summary of the annual monitoring listed in the PTM is summarized below. No related appendices are provided for 2023; however, in future annual reports, additional details may be provided in appendices.

No monitoring activities were conducted during the past calendar year for the following topics:

- Mine pit monitoring (not applicable because mine pits do not yet exist)
- Stockpile monitoring (not applicable because stockpiles do not yet exist)
- Transportation and Utility Corridors monitoring (not applicable because Project ore is not being moved via the corridor)
- FTB monitoring (not applicable because the FTB does not yet exist)
- HRF monitoring (not applicable because the HRF does not yet exist)
- Flotation Tailings monitoring (not applicable because Flotation Tailings have not yet been produced)
- Dust control and the Fugitive Emission Control Plans (not applicable until commencement of operations under the Air Individual Permit 13700345-101)

Pertaining to the requirement to provide surface water or groundwater quality data as required by other permits in accordance with NorthMet Mining Project PTM Special Condition 16:

- The NorthMet Project’s National Pollutant Discharge Elimination System (NPDES)/ State Disposal System (SDS) Permit No. MN0071013, which requires Discharge Monitoring Reports (DMR), was stayed by the Minnesota Court of Appeals in June 2019, remanded to the MPCA January 24, 2022, with further remand by the Minnesota Supreme Court on August 2, 2023. This permit has not yet been reissued by the MPCA as of the date of this submittal.
- Legacy NPDES/SDS Permit No. MN0054089 for the Hoyt Lakes Tailings Basin Area was transferred from Cliffs Erie to PolyMet (now NewRange) on November 1, 2018. Submittal of associated surface water and groundwater quality data collected during

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the past calendar year to the DNR has been satisfied through submittal of this data via the MPCA’s DMR system for that permit.

- The NorthMet Project’s Section 401 Water Quality Certification 1999-55528-JKA includes conditions requiring monitoring of wetland water quality (monthly from May to October) and stream water quality (quarterly). This certification was issued on December 20, 2018, with the first annual report due the year after construction activities begin. Construction activities have not yet started; therefore, reporting has not yet begun.
- Based on the “Monitoring Plan for Potential Indirect Wetland Impacts,” annual wetland baseline hydrology monitoring was only required through 2019. Monitoring continued through 2020, with 16 years of baseline wetland hydrology data collected.

Dam stability monitoring has been provided to the DNR as part of Dam Safety Permit requirements.

2.10 Additional Reports, Documents, and As-built Drawings (if necessary)

(NorthMet Mining Project PTM Special Condition 36, 37, 56, 70, 83b)

NewRange submitted three industrial Stormwater Pollution Prevention Plans (SWPPPs) to the MPCA on August 31, 2018; these SWPPPs were submitted to the DNR with the 2018 Annual Report. The new Industrial Stormwater General Permit became valid April 1, 2020, and NewRange obtained coverage under the new permit March 27, 2020. NorthMet Mining Project PTM Special Condition 36 requires that NewRange submit any revisions to these plans to the DNR with the annual report. There were no updates to the Industrial Stormwater SWPPPs this past calendar year.

NewRange’s most recently updated Spill Prevention, Control, and Countermeasure (SPCC) Plan was submitted to the DNR with the 2020 Annual Report. NorthMet Mining Project PTM Special Condition 37 requires NewRange to submit any revisions to this plan with the annual report. No changes to the SPCC plan were made this past calendar year.

In future annual reports, this section will describe any Project-related documents that were developed or updated and are required to be provided to the DNR as a result, as required by NorthMet Mining Project PTM Special Conditions 36, 37, 56, 70, and 83b. Such documents include industrial SWPPPs, SPCC plans, as-built drawings for facilities listed in PTM Application Table 3-2 (Reference (2)), a report on pit shell contours and pit slope stability for any mine pit that has reached its final pit shell contour, and, at least one year prior to the anticipated start of the East Pit backfill, a plan to amend the backfill for the East Pit.

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3.0 Operating Plan – Mining and Reclamation Planned for the Upcoming Year (2024)

(Minnesota Rules, part 6132.1300, subpart 3)

This section describes any planned mining and reclamation activities, intention to close a mining area or portion of an area, changes to the approved mining and reclamation plan² including how they will be proactively addressed with the DNR, anticipated changes in ownership or organizational structure, and planned wetland replacement activities for the upcoming year as well as evidence of liability insurance.

As described in Section 1.0, NewRange is currently in ongoing litigation on the PTM and has its Section 404 permit revoked. These actions restrict construction from starting. The final construction schedule will take into account the outcome of this litigation and any changes to the 404 permit. Although the reporting for this Project update is through 2024, for ease of reporting, this Project update describes the anticipated development through the end of the construction phase, at a date yet to be determined. Once NewRange has a more defined schedule for construction, this schedule will be provided to the DNR for review and discussion.

There is no change from the GIS data package depicting the anticipated progression of the footprints of each mine feature that was submitted with the 2018 Annual Report; this GIS data package is included again as a separate submittal with this Project update, as listed in PTM Special Condition 17.

3.1 Anticipated Rate of Mining and Mining Activities

(Minnesota Rules, part 6132.1300, subpart 3, items A and B and NorthMet Mining Project PTM Special Conditions 91a)

The focus of the work associated with the construction phase will be development of the Mining Area at the Mine Site, Plant Site, Transportation and Utility Corridors, and Colby Lake Pipeline Corridor. There will be no Duluth Complex or Virginia Formation rock blasted within the mine pits. Beneficiation processing will not begin at the Plant Site, and therefore no nonferrous tailings will be deposited in the FTB.

The following provides an overview of anticipated site development activities within the Mine Site, Plant Site, Transportation and Utility Corridors, and Colby Lake Pipeline Corridor through the end of construction.

² The mining and reclamation plan approved with issuance of the NorthMet Mining Project PTM consisted of “Sections 7-11 and 15 along with related appendices of the Permit to Mine application” (Reference (2)). A standalone Mining and Reclamation Plan (Reference (1)) was created from these portions of the PTM Application and was submitted with the 2018 Annual Report.

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3.1.1 Mine Site Development

Mine Site development is anticipated to include the clearing of trees and woody vegetation and the construction of:

- approximately 22,000 feet of the haul roads
- the Overburden Storage and Laydown Area (OSLA)
- the stockpile footprints:
 - approximately 13 acres of Category 1 Waste Rock Stockpile foundation and Groundwater Containment System
 - approximately 63 acres of Category 2/3 Waste Rock Stockpile foundation, underdrain system, if necessary, liner system, and overliner drainage system
 - approximately 29 acres of Category 4 Waste Rock Stockpile foundation, underdrain system, if necessary, liner system, and overliner drainage system
 - approximately 32 acres of Ore Surge Pile foundation, underdrain system, if necessary, liner system, and overliner drainage system
- stormwater ponds A, B, C-East, and D and related ditches and dikes
- the Equalization Basin Area, including the Construction Mine Water Basin, High Concentration Equalization Basin, Low Concentration Equalization Basins, the Central Pumping Station, and Construction Mine Water Pumping Station
- mine water management system infrastructure, including sumps, ponds, pipelines, and pumping systems
- approximately 127,000 linear feet of Mine to Plant Pipelines (MPP) and associated mechanical and electrical controls
- stripping of approximately 95 acres of overburden from the East Pit footprint
- the Mine Site power distribution system
- the Mine Site Fueling and Maintenance Facility (MSFMF)
- the Railroad Spur

These features are shown on Figure 1. Table 4 summarizes the planned handling of blasted rock (outside of the mine pit footprints) and saturated mineral overburden at the Mine Site

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for these activities. Table 5 provides additional anticipated waste rock stockpile and pit backfill activity.

3.1.2 Plant Site Development

Plant Site development is anticipated to include the clearing of trees and woody vegetation as well as the following construction and refurbishment (repair/upgrade of existing infrastructure) activities:

- construction of the Waste Water Treatment System and Lined Pretreatment Basin
- refurbishment of the existing buildings to accommodate Project ore beneficiation processes and production schedule
- construction of the Beneficiation Plant Flotation and Reagent Buildings
- construction of the Concentrate Dewatering, Concentrate Storage, Concentrate Loadout, and Limestone Preparation Buildings
- refurbishment of maintenance and shop buildings in the Process Plant and at Areas 1 and 2 Shops
- construction of the first lift of the FTB buttress and dams and associated underdrain and emergency overflow
- construction of the Flotation Tailings discharge system and return water system installation and refurbishment
- construction of approximately 24,000 linear feet of FTB Seepage Containment System, including access road, cutoff wall, piping, valves, pumps, and other mechanical and electrical systems
- construction of stormwater management system (ponds, ditches, culverts, and dikes)
- construction of the Sewage Treatment System
- refurbishment of raw water, potable water, and fire water systems and Plant Reservoir for plant operations
- refurbishment of power distribution systems across the Plant Site
- refurbishment and construction of rail line and roads

These features are shown on Figure 2.

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3.1.3 Transportation and Utility Corridors Development

Transportation and Utility Corridors infrastructure construction is anticipated to occur during the construction phase, including construction of approximately 11,000 linear feet of new rail (Connection Track) and power distribution system between the Mine and Plant Sites, and refurbishment of the railroad track along the Railroad Corridor (mainline railroad), as needed. The MPP will also be constructed and upgrades to Dunka Road will commence.

These features are shown on Figure 3.

3.1.4 Colby Lake Pipeline Corridor Development

The Colby Lake Pipeline infrastructure refurbishment is anticipated to occur during the construction phase and will include the refurbishment of the pipeline and Colby Lake Pumphouse.

3.1.5 Types, Amount, Sequence, and Schedule of Mining

No mining nor stockpiling of materials associated with mining (ore, lean ore, or waste rock) is anticipated to be conducted during the upcoming year.

In future annual reports, this section will describe types, amounts, sequence, and schedule of mining the ore body and stockpiling materials. Future annual reports will also summarize the anticipated mining rates and schedule for the various materials mined and produced in Table 4, and provide additional anticipated waste rock stockpile and pit backfill activity information in Table 6; in this Project update, Table 4 and Table 6 are provided as placeholders.

3.1.6 Beneficiation Process

No beneficiation is anticipated to occur during the upcoming year.

3.1.7 Flotation Tailings Management

(NorthMet Mining Project PTM Special Condition 91a)

No Flotation Tailings are anticipated to be produced or placed during the upcoming year.

3.1.8 Residue Management

(NorthMet Mining Project PTM Special Condition 91a)

No Residue is anticipated to be produced or placed during the upcoming year.

3.2 Anticipated Reclamation Activities

(Minnesota Rules, part 6132.1300, subpart 3, item C)

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Reclamation during the construction phase will generally include restoring areas disturbed during construction and temporary laydown areas associated with site development that are no longer needed. Reclamation methods and sequencing are described further in Section 3.2.2.

3.2.1 Reclamation Research

No reclamation research is currently planned during the upcoming year.

3.2.2 Reclamation Methods and Sequence

Reclamation will be progressively completed as construction of site features advances. Areas disturbed by construction and temporary laydown areas will be graded, scarified, and seeded according to the Reclamation Seeding and Mulching Plan (Attachment 1 of Appendix 14 of Reference (2)). During construction of FTB dams, the exterior face of the dams will be amended with a bentonite layer to limit oxygen infiltration into the Flotation Tailings as indicated on Drawing FTB-024 of Appendix 6 of Reference (1). The bentonite amendment will entail addition of granulated bentonite (approximately 3% by dry weight) to an 18-inch-thick layer of the dam construction material, overlain by an additional 30-inch layer of dam construction material. The exterior dam faces will be permanently vegetated by a qualified reclamation contractor according to Minnesota Rules, part 6132.2700, and requirements of the Reclamation Seeding and Mulching Procedure (Attachment 1 of Appendix 14 of Reference (2)). In addition, the pit rim overburden backslopes and associated pit rim berms and exclusion dikes will be reclaimed once portions reach their final extents. The overburden portions of the pit walls will be sloped and graded (refer to Drawing EW-008 of Appendix 3 of Reference (1)). The sloped areas and other areas disturbed will be vegetated to conform to Minnesota Rules, part 6132.2700.

Not all locations that will require reclamation during the construction phase are known at this time, as these will be determined during final design and construction. However, anticipated areas for reclamation are shown on Figure 4 and Figure 5.

3.3 Notification of Intent to Close a Mining Area or Portion of a Mining Area

(Minnesota Rules, part 6132.1300, subpart 3, item D)

No portions of the Mining Area are planned to be closed during the upcoming year.

3.4 Anticipated Scope and Schedule Changes from the Approved Mining and Reclamation Plan for the Upcoming Year.

(Minnesota Rules, part 6132.1300, subpart 3, item E)

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3.4.1 Anticipated Changes to the Approved Mining Plan

No changes to the approved mining plan (Reference (1)) are planned to occur during the upcoming year.

3.4.2 Anticipated Changes to the Approved Reclamation Plan

No changes to the approved reclamation plan (Reference (1)) are planned to occur during the upcoming year.

3.5 Category 1 Waste Rock Stockpile Cover Analysis (if applicable)

(NorthMet Mining Project PTM Special Condition 71)

Not applicable; the upcoming year is neither five years after the first waste rock is placed in the Category 1 Waste Rock Stockpile nor the year when 75 million tons of rock will have been placed in the stockpile. When one of the aforementioned milestones is anticipated to be reached, the applicable future annual report will include a required analysis of the size of the stockpile.

3.6 Environmental Liability Insurance

(Minnesota Rules, part 6132.1300, subpart 3, item F and NorthMet Mining Project PTM Attachment 1, Special Condition 8)

Evidence that NewRange’s environmental liability insurance policy remains in force is provided in [Appendix A](#).

3.6.1 Analysis of Potential Environmental Liabilities

(NorthMet Mining Project PTM Attachment 1, Special Condition 8)

Current environmental liabilities to the NorthMet Project are described in the Legacy Closure Plan (Appendix 15.1 of Reference (2)). Because there has been no construction, no mining, no stockpiling of materials, nor production or deposition of tailings, there is no change in the potential environmental liabilities in the mining area from the time of permit issuance when \$10,000,000 of environmental liability insurance was purchased, as directed by the DNR. Thus, no additional analysis was performed of potential environmental liabilities.

3.6.2 Analysis of Potential Future Environmental Liabilities (if applicable)

(NorthMet Mining Project PTM Attachment 1, Special Condition 9)

Not applicable; the upcoming year will not be one year after tailings are first deposited in the FTB. When the aforementioned milestone is anticipated to be reached, the applicable future annual report will include evaluation and report on the future environmental liability

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insurance premium costs that the State of Minnesota could incur in the event of unplanned closure of the Project.

3.7 Anticipated Changes in Ownership or Organizational Structure

(Minnesota Rules, part 6132.1300, subpart 3, item G)

There are no anticipated changes to ownership or organizational structure in 2024.

Rory Oberhelman transferred from the environmental team to an operations position in 2023. NewRange hired a new environmental specialist (Bryan Harp) in March 2024. NewRange also anticipates hiring a new compliance lead in 2024 as Cam Trembath left the company in March 2024. Contact information for the NewRange General Manager and the environmental staff are included in Table 1.

3.8 Anticipated Changes in Land Control

(NorthMet Mining Project PTM Special Condition 5b)

No changes are anticipated in the upcoming year to land control for the lands within the mining area that could result in changes to closure.

3.9 Wetland Replacement Plan

(Minnesota Rules, part 6132.1300, subpart 3, item H)

No changes to the Wetland Replacement Plan are anticipated for the upcoming year. Minor changes to the approved Wetland Replacement Plan (Appendix 1 of Reference (1)) were documented in 2019 due to revisions to the wetland delineations by the U.S. Army Corps of Engineers (as noted in the NorthMet Project – Wetland Conservation Act Notice of Decision Condition 3). These revised delineations were provided to the DNR July 2, 2019. NewRange has not yet received confirmation from the DNR in response to the July 2, 2019 letter. In future annual reports, this section will provide a description of any changes anticipated to the Wetland Replacement Plan or activities.

Table 10 provides a summary of anticipated wetland impacts, and Table 11 provides a summary of anticipated wetland replacement activities.

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4.0 Contingency Reclamation Plan

(Minnesota Rules, part 6132.1300, subpart 4)

The goal of the Legacy Closure Plan and Construction Contingency Reclamation Plan, as provided in Appendix 15.1 and 15.2 of Reference (2), respectively, is to identify reclamation actions that would need to be performed by the state in the event NewRange were to cease management of the facility during construction (which includes the upcoming year).

4.1 Anticipated Closure Activities

(Minnesota Rules, part 6132.1300, subpart 4, item A)

The Legacy Closure Plan (Appendix 15.1 of Reference (2)) and Construction Contingency Reclamation Plan (Appendix 15.2 of Reference (2)) includes:

- demolition and removal of ferrous and nonferrous buildings and structures
- reclamation of haul roads and OSLA
- reclamation of stockpile footprints
- reclamation of the stormwater systems and mine water management systems
- reclamation of the Equalization Basin Area
- reclamation of the power distribution systems
- reclamation of the MSFMF and Railroad Spur
- reclamation of the tailings basin

As of the date of this submittal, construction has not yet begun under the NorthMet PTM. Therefore, only the Legacy Closure Plan (Appendix 15.1 of Reference (2)) is relevant to potential closure activities required.

4.2 Contingency Monitoring Plan

(NorthMet Mining Project PTM Special Condition 16b)

The Contingency Monitoring Plan that is associated with the Legacy Closure Plan and the Construction Contingency Reclamation Plan was submitted with our 2018 Annual Report and remains valid; this plan was included as Appendix B of the 2018 Annual Report. This plan coincides with the contingency reclamation plans and describes the water quality

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monitoring that would need to be conducted if NewRange were to cease management of the facility during the construction phase before Mine Year 1.

4.3 Maps and Cross Sections

(Minnesota Rules, part 6132.1300, subpart 4, item B)

Figures of the activities associated with the Legacy Closure Plan and Construction Contingency Reclamation Plan are included in Appendix 15.1 and 15.2 of Reference (2), respectively.

4.4 Cost Estimates and Financial Mechanisms

(Minnesota Rules, part 6132.1300, subpart 4, item C and NorthMet Mining Project PTM Special Condition 22 (as applicable))

4.4.1 Cost Estimates

The NorthMet financial assurance estimate will be updated prior to the start of construction. The 2019 NorthMet Financial Assurance Estimate Update and current financial assurance funding are summarized in Table 1-1. Based on the 2019 NorthMet Financial Assurance Estimate Update, there was an excess of \$2.6M in financial assurance for the Project. The 2019 financial assurance update included \$13M for reclamation associated with future construction activities, which had not yet begun. Based on these estimates, there is \$15.6M in excess financial assurance over the legacy liabilities that were onsite at the time. With the continued salvage and recycle program at the Plant Site, described in Section 1.0, and the removal of the landfill, described in Section 2.2 and 2.2.2.1, the legacy liabilities are also being reduced. Regardless, NewRange’s financial assurance that is in place with the DNR is significantly more than the existing liabilities onsite.

Table 1-1 Financial Assurance Summary

Financial Assurance (FA) Estimate	2019 Estimate Update	FA in Place	Difference
Legacy Reclamation Costs	\$45,633,344		
Legacy Long Term Costs	\$13,603,672		
Construction Reclamation Costs	\$13,164,826		
Total	\$72,401,842	\$75,000,000	+\$2,598,158

4.4.2 Financial Instruments

NewRange is not proposing changes to the financial instruments for the NorthMet Project based on this Project update.

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5.0 Corrective Action Plan (if necessary)

(Minnesota Rules, part 6132.1300, subpart 5)

5.1 Corrective Actions Completed during the Past Calendar Year

(Minnesota Rules, part 6132.1300, subpart 5, item A)

No corrective actions were necessary or completed during the past calendar years.

5.2 Anticipated Corrective Actions for the Upcoming Year

(Minnesota Rules, part 6132.1300, subpart 5, item B)

NewRange does not foresee violations of the PTM during the upcoming year. As such, no corrective actions are anticipated in the upcoming year and thus none are included here.

5.3 Corrective Actions Cost Estimate for the Upcoming Year

(Minnesota Rules, part 6132.1300, subpart 5, item C)

Not applicable; no corrective actions are anticipated in the upcoming year, and none are underway.

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6.0 Maps

(Minnesota Rules, part 6132.1300, subpart 6)

6.1 Mining and Reclamation Maps for the Past Calendar Year

No mining, construction, reclamation, or water modifications occurred during the past calendar years, thus there are no updates.

6.2 Mining and Reclamation Maps for the Upcoming Year

Maps showing the development of the Mining Area planned for the construction phase are attached as follows:

- Figure 1: Mine Site Development at End of Construction Phase
- Figure 2: Plant Site Development at End of Construction Phase
- Figure 3: Transportation and Utility Corridors Development at End of Construction Phase
- Figure 4: Mine Site Reclamation at End of Construction Phase
- Figure 5: Plant Site Reclamation at End of Construction Phase
- Figure 6: Watershed Modifications at End of Construction Phase
- Figure 7: Planned Wetland Impacts at the Mine Site: End of Construction Phase
- Figure 8: Planned Wetland Impacts at the Plant: End of Construction Phase
- Figure 9: 2023 Exploration Boreholes
- Figure 10: 99 Exploration Boreholes Sealed in 2023-2024

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7.0 References

1. **Poly Met Mining, Inc.** Mining and Reclamation Plan: NorthMet Project. March 2019.
2. **Barr Engineering Co.** Permit to Mine Application (v3). Prepared for Poly Met Mining, Inc. NorthMet Project. December 2017.

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Table 1 Changes to the Contact Information for NewRange’s Leadership and Environmental Team Since the Last Annual Report

Position	Name	Phone Number	Email Address
General Manager	Tannice McCoy	218-471-2150	tannice.mccoy@newrangepoppernickel.com
Sustainability, Environmental, and Regulatory Affairs (SERA) Director	Christie Kearney	218-461-7746	christie.kearney@newrangepoppernickel.com
Permitting and Environment Manager	Kevin Pylka	218-750-2054	kevin.pylka@newrangepoppernickel.com
Compliance Lead			
Mesaba Environmental Lead	Paul Drevnick	218-235-9906	paul.drevnick@newrangepoppernickel.com
Environmental Specialist	Bryan Harp	218-606-5672	bryan.harp@newrangepoppernickel.com

Table 2 NorthMet Project Permits Held and Permit Status as of March 1, 2024

Type of Permit	Permit Number	Date Issued	Date of Expiration	Permit Status (in compliance, under SOC, etc.)	Additional Information
Permit to Mine	--	11/01/2018	N/A	In Compliance; Remanded to DNR	For NorthMet Project
Wetland Conservation Act Approval	--	11/01/2018	N/A	In Compliance	For NorthMet Project
Dam Safety Permit	2016-1380	11/01/2018	10/31/2045	In Compliance	For the Flotation Tailings Basin
Dam Safety Permit	2016-1383	11/01/2018	10/31/2045	In Compliance	For Hydrometallurgical Residue Facility
Dam Safety Permit (Legacy)	1981-2100	11/01/2018	10/31/2045	In Compliance	For the existing tailings basin
Water Appropriation Permit	2016-1363	11/01/2018	N/A	In Compliance	For East Pit Dewatering
Water Appropriation Permit	2016-1364	11/01/2018	N/A	In Compliance	For Central Pit Dewatering
Water Appropriation Permit	2016-1365	11/01/2018	N/A	In Compliance	For West Pit Dewatering
Water Appropriation Permit	2016-1367	11/01/2018	N/A	In Compliance	For Mine Processing and Mine Site Infrastructure
Water Appropriation Permit	2016-1369	11/01/2018	N/A	In Compliance	For Mine Processing and Plant Site Infrastructure
Water Appropriation Permit	2017-0260	11/01/2018	N/A	In Compliance	For Colby Lake for Mine Processing Make-up Water
Takings Permit	23235	11/01/2018	N/A	In Compliance	For NorthMet Project
Public Waters Work Permit	2017-2077	11/01/2018	11/01/2023	In Compliance; extension requested Nov. 1, 2023	For Dunka Road Upgrade Culvert Extension at Unnamed Tributary to Wyman Creek

Type of Permit	Permit Number	Date Issued	Date of Expiration	Permit Status (in compliance, under SOC, etc.)	Additional Information
Air Individual Permit, Part 70 Permit	13700345-101	12/20/2018	12/20/2023	In Compliance	For NorthMet Project
Corps of Engineers 404 Permit	MVP-1999-05528-JKA	3/22/2019	12/31/2034	Revoked June 2023	For NorthMet Project
Section 401 Water Quality Certification	1999-5528-JKA	12/20/2018	N/A	Tied to 404 Permit	For NorthMet Project
NPDES/SDS Permit	MN0071013	12/20/2018	11/30/2023	Remanded to MPCA	For NorthMet Project
NPDES/SDS Permit and Consent Decree (Legacy)	MN0054089	05/04/2001 (modified: 12/01/2018)	11/30/2005 (administratively extended)	In Compliance	For the existing tailings basin
Minnesota Construction Stormwater NPDES/SDS General Permit	Permit # MNR100001, Permit ID C00053253	6/12/2019	7/31/2023	In Compliance	For the Mine Site
Minnesota Construction Stormwater NPDES/SDS General Permit	Permit # MNR100001, Permit ID C00053251	5/14/2019	7/31/2023	In Compliance	For the Plant Site
Minnesota Construction Stormwater NPDES/SDS General Permit	Permit # MNR100001, Permit ID C00053252	5/14/2019	7/31/2023	In Compliance	For the Tailings Basin
Minnesota Construction Stormwater NPDES/SDS General Permit	Permit # MNR100001, Permit ID C00053254	11/24/2020	7/31/2023	In Compliance	For the Transportation and Utility Corridors
Minnesota Industrial Stormwater NPDES/SDS General Permit	Permit # MNR050000, Permit ID MNR053DMW	4/1/2020	03/31/2025	In Compliance	For the Transportation and Utility Corridors; coverage relevant during operations (after construction)
Minnesota Industrial Stormwater NPDES/SDS General Permit	Permit # MNR050000, Permit ID MNR053DNH	4/1/2020	03/31/2025	In Compliance	For the Mine Site; coverage relevant during operations (after construction)

Type of Permit	Permit Number	Date Issued	Date of Expiration	Permit Status (in compliance, under SOC, etc.)	Additional Information
Minnesota Industrial Stormwater NPDES/SDS General Permit	Permit # MNR050000, Permit ID MNR053DNJ	4/1/2020	03/31/2025	In Compliance	For the Plant Site; coverage relevant during operations (after construction)
Minnesota Solid Waste Facility Permit (Legacy)	Permit #SW-619	8/26/2010 (modified 1/15/2019)	8/26/2015 (administratively extended)	In Compliance	For the legacy landfill; landfill removed 2023
U.S. Forest Service Special Use Permit	LAU403401	1/7/2020	12/31/2024	In Compliance	Partridge River Stream Gage Monitoring

Note: This table does not include the separate permits held for the geotechnical program at the Mine Site and Plant Site for installation of monitoring wells and geotechnical drilling. A listing of those permits has been provided to the DNR separate from this Project update.

Table 3 Flotation Tailings Basin Dam Height Status for Year 2023 and 2024 and Planned at the End of the Construction Phase

Dam Segment Location	Figure Reference ⁽¹⁾	Permitted Dam Height ⁽²⁾	2023 - 2024	End of Construction Phase
			Dam Height (ft MSL) ⁽²⁾	Planned Dam Height (ft MSL) ⁽²⁾
Cell 2E North Dam	Drawings FTB-008 and FTB-010	1,732	1,580 (no change) ⁽³⁾	1,602
Cell 1E/2E East Dam	Drawings FTB-011 and FTB-012	1,732	N/A ⁽⁴⁾	N/A ⁽⁴⁾
Cell 1E/2E South Dam	Drawings FTB-013 and FTB-014	1,732	1,670 (no change) ⁽³⁾	1,670 (no change) ⁽³⁾

Notes:

N/A – not applicable

- (1) Flotation Tailings Basin and FTB Seepage Containment and Stream Augmentation Systems Permit Application Support Drawings (Appendix 6 of Reference (1)) which shows the Dam Segment Locations.
- (2) Elevations of tailings basin dams/dikes are in feet, relative to Mean Sea Level (MSL). Elevations shown are for the end of the calendar year.
- (3) Elevations given are current elevation, with no change in elevation since permit issuance.
- (4) Cell 1E/2E East Dam is not needed until Mine Year 7.

Table 4 Mining Rates and Production Summary for Year 2023, and Planned at the End of the Construction Phase

Facility ⁽¹⁾	2023 (Actual)				End of Construction Phase (Planned)			
	Ore		Concentrate		Ore/feed		Concentrate	
	short tons	cubic yards ⁽³⁾	Cu	Ni	short tons	cubic yards ⁽³⁾	Cu	Ni
			short tons	short tons			short tons	short tons
East Pit Ore	0	0	N/A	N/A	0	0	N/A	N/A
Central Pit Ore	0	0	N/A	N/A	0	0	N/A	N/A
West Pit Ore	0	0	N/A	N/A	0	0	N/A	N/A
Plant	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0

Waste Rock ⁽²⁾	2023		End of Construction Phase	
	short tons	cubic yards ⁽³⁾	short tons	cubic yards ⁽³⁾
Stockpiled	0	0	1,030,000	540,000
Used in Construction	0	0	0	0
Total	0	0	1,030,000	540,000

Flotation Tailings	2023		End of Construction Phase	
	short tons	cubic yards	short tons	cubic yards
Total	0	0	0	0

Saturated Mineral Overburden	2023		End of Construction Phase	
	short tons	cubic yards ⁽⁴⁾	short tons	cubic yards ⁽⁴⁾
Total	0	0	1,800,000	1,210,000

Hydromet Residue	2023		End of Construction Phase	
	short tons	cubic yards	short tons	cubic yards
Total	0	0	0	0

Unsaturated Mineral Overburden	2023		End of Construction Phase	
	short tons	cubic yards ⁽⁴⁾	short tons	cubic yards ⁽⁴⁾
Total⁽⁵⁾	0	0	2,580,000	1,730,000

Notes:

N/A – not applicable

(1) Tracking includes both ore feed and concentrate; therefore, "facility" can be either a pit or the plant.

(2) Total waste rock including all categories. See Table 5 and Table 6 for breakdown by waste rock category.

(3) Cubic yards based on conversion factor of 1.9 short tons per cubic yard for ore and waste rock.

(4) Cubic yards based on conversion factor of 1.5 short tons per cubic yard for saturated and unsaturated mineral overburden.

(5) Unsaturated mineral overburden need only be tracked when extracted from its original location, not when moved again, per NorthMet Mining Project Special Condition 91.

Table 5 Stockpile and Pit Backfill Activity for Year 2023

Stockpile Name and Location	Waste Rock to In-pit Disposal	2023 (Actual)			
	(Y/N)	Average Sulfur Content %	Amount of Material (short tons)	Amount Surface Storage Used (CY)	Amount Surface Storage Remaining ⁽¹⁾ (CY)
Category 1 Waste Rock Stockpile					
Waste Rock	N	N/A	0	0	N/A
Unsaturated Mineral Overburden or Peat	N/A	N/A	0	0	
Total	N	N/A	0	0	90,530,000
Category 2/3 Waste Rock Stockpile					
Waste Rock	N	N/A	0	0	N/A
Overburden	N/A	N/A	0	0	
Total	N	N/A	0	0	31,890,000
Category 4 Waste Rock Stockpile					
Waste Rock	N	N/A	0	0	N/A
Overburden	N/A	N/A	0	0	
Total	N	N/A	0	0	7,890,000
Ore Surge Pile					
Ore	N/A	N/A	0	0	1,620,000

Notes:

"In-pit" indicates whether rock is placed in one of the waste rock stockpiles on the surface or within the East and Central Pits in later years.

CY = cubic yards

Y/N = yes/no

N/A = not applicable

(1) Amount surface storage remaining is based on the total capacity of the stockpile in tons and the density of placed rock.

Table 6 Stockpile and Pit Backfill Activity Planned at the End of the Construction Phase

Stockpile Name and Location	Waste Rock to In-pit Disposal	End of Construction Phase (Planned)		
	(Y/N)	Amount of Material (short tons)	Amount Surface Storage Used (CY)	Amount Surface Storage Remaining ⁽¹⁾ (CY)
Category 1 Waste Rock Stockpile				
Waste Rock	N	0	0	90,530,000
Category 2/3 Waste Rock Stockpile				
Waste Rock	N	0	0	31,890,000
Category 4 Waste Rock Stockpile				
Waste Rock	N	1,030,000	540,000	7,350,000
Saturated Mineral Overburden (Planned)⁽²⁾				
Overburden	N/A	1,800,000	1,210,000	N/A
Unsaturated Mineral Overburden (Planned)⁽³⁾				
Overburden	N/A	2,580,000	1,730,000	N/A
Ore Surge Pile				
Ore	N/A	0	0	1,620,000

Notes:

"In-pit" indicates whether rock is placed in one of the waste rock stockpiles on the surface or within the East and Central Pits in later years.

CY = cubic yards

Y/N = yes/no

N/A = not applicable

(1) Amount surface storage remaining is based on the total capacity of the stockpile in tons and the density of placed rock.

(2) Saturated Mineral Overburden is included as a separate "location" for planned amounts of materials needing storage. Saturated Mineral Overburden will be placed on lined stockpiles or disposed of in-pit.

(3) Unsaturated Mineral Overburden is included as a separate "location" for planned amounts that will be used as general construction material. Unsaturated Mineral Overburden will not be stockpiled beyond a temporary basis prior to use during construction.

Table 7 Reclamation Summary for Year 2023

Name	GPS Coordinates Entry Point	Figure Reference	Area (acres)	Landform Type ⁽¹⁾	Physical Alterations ⁽²⁾	Seed Mix Composition	Amendments ⁽³⁾	Additional Comments ⁽⁴⁾
Temporary Reclamation								
Not applicable; no temporary reclamation activities were performed in 2023								
Permanent Reclamation								
Not applicable; no permanent reclamation activities were performed in 2023								

(1) Landforms include stockpile, pit, tailings basin, dike, reclaimed road, etc.

(2) Physical alterations include sloping, discing, crimping, application of overburden, or other physical alterations.

(3) Amendments include biosolids, fertilizer, mulch, etc. If this includes fertilizer, include the type of fertilizer, pounds per acre, NPK ratio, timing, and method of application in the comments.

(4) Include any acceptable research or innovative reclamation grant information in comments.

Table 8 Wetland Impacts Summary for Year 2023

Wetlands Impacted – 2023 (Actual) ⁽¹⁾										
Mining Area	Wetland ID	Dominant Circular 39 Community	Total Wetland Area within the Mining Area (acres)	Direct Wetland Impacts (acres)	Fragmentation Impacts (acres)	Remaining Wetland Area (acres)	Dominant Eggers and Reed Wetland Community	Wetland Quality	Type of Impact ⁽²⁾	Reason for Impact
Not applicable; no wetland impact activities occurred in 2023										
TOTAL										

(1) In future annual reports, figures will be included showing the wetland impacts.

(2) The types of wetland impact are excavation (E), fill (F), fragmentation (Fr), and seepage containment system (C).

Table 9 Wetlands Mitigation Summary for Year 2023

Wetland Mitigation – 2023 (Actual)⁽¹⁾				
Wetland	Direct Wetland Impacts (acres)	Bank Credits Required⁽²⁾	Bank Credits Purchased	Remaining Bank Credits after 2023
Type 2 Fresh (Wet) Meadow	Not applicable (N/A); no wetland impact activities nor wetland mitigation activities occurred in 2019	N/A	---	---
Type 2 Sedge Meadow	N/A	N/A	---	---
Type 3 Shallow Marsh	N/A	N/A	---	---
Type 4 Deep Marsh	N/A	N/A	---	---
Type 5 Shallow, Open Water	N/A	N/A	---	---
Type 6 Shrub-Carr	N/A	N/A	---	---
Type 6 Alder Thicket	N/A	N/A	---	---
Type 7 Hardwood Swamp	N/A	N/A	---	---
Type 7 Coniferous Swamp	N/A	N/A	---	---
Type 8 Open Bog	N/A	N/A	---	---
Type 8 Coniferous Bog	N/A	N/A	---	---
Wetland Total	N/A	N/A	1,400 credits	1,400

(1) See Table 8, which shows the wetland impacts.

(2) Per Minnesota Rules 8420.0522 Subp. 4.A.(1), the replacement ratio for withdrawal of existing wetland bank credits from within the Project bank service area (#1) is 1:1 for a greater than 80% area.

Table 10 **Planned Wetlands Impacts at the End of the Construction Phase**

Mining Area	Wetland ID	Dominant Circular 39 Community	Dominant Eggers and Reed Wetland Community	Total Wetland Area within the Mining Area ⁽²⁾ (acres)	Permitted Wetland Impacts		Wetlands to be Impacted – End of Construction Phase (Planned) ⁽¹⁾			
					Direct Wetland Impacts (acres)	Fragmentation Impacts (acres)	Direct Wetland Impacts (acres)	Fragmentation Impacts (acres)	Type of Impact(3)	Reason for Impact
Mine Site	8	2	Sedge meadow	6.80	6.80	0	6.80	0	F,E	Construction
Mine Site	9	3	Shallow marsh	1.80	0.07	0	0.07	0	F	Construction
Mine Site	13	4	Deep marsh	5.03	0.09	0	0.09	0	F	Construction
Mine Site	14	2	Wet meadow	0.33	0.33	0	0.33	0	F	Construction
Mine Site	19	3	Shallow marsh	1.68	0.05	0	0.05	0	E	Construction
Mine Site	24	6	Alder thicket	0.80	0.39	0	0.39	0	E	Construction
Mine Site	27	8	Coniferous swamp	1.07	1.07	0	1.07	0	E	Construction
Mine Site	32	8	Coniferous bog	73.36	70.99	2.37	13.74	0	F,E, Fr	Construction
Mine Site	43	6	Alder thicket	8.39	6.39	0	6.39	0	F	Construction
Mine Site	44	6	Alder thicket	3.55	2.27	0	2.27	0	E	Construction
Mine Site	47	8	Open bog	0.54	0.40	0.14	0.40	0.14	F, Fr	Construction
Mine Site	48	8	Coniferous bog	88.16	27.30	1.86	22.85	1.86	F,E, Fr	Construction
Mine Site	48A	7	Coniferous swamp	2.65	2.19	0.02	2.19	0.02	F, Fr	Construction
Mine Site	51	6	Alder thicket	7.47	7.45	0.02	7.45	0.02	F, Fr	Construction
Mine Site	52	6	Alder thicket	3.88	3.88	<0.01	3.88	<0.01	F,E, Fr	Construction
Mine Site	68	7	Coniferous swamp	24.22	10.89	0.09	8.66	0.09	F,E, Fr	Construction
Mine Site	76	8	Coniferous bog	3.92	2.21	0	2.21	0	E	Construction
Mine Site	77	8	Coniferous bog	13.31	0.94	<0.01	0.94	<0.01	F,E, Fr	Construction
Mine Site	78	8	Coniferous bog	2.41	2.41	0	0.76	0	F	Construction
Mine Site	81	7	Coniferous swamp	1.68	1.44	0.24	1.44	0.24	F,E, Fr	Construction
Mine Site	85	8	Coniferous bog	1.41	1.41	0	1.41	0	E	Construction
Mine Site	88	8	Coniferous bog	5.58	2.84	0	2.84	0	F	Construction
Mine Site	90	8	Coniferous bog	166.79	25.6	0	4.46	0	F,E	Construction
Mine Site	95	8	Coniferous swamp	2.54	2.54	0	2.54	0	E	Construction
Mine Site	96	8	Coniferous bog	17.54	13.20	0	0.27	0	F,E	Construction
Mine Site	97	8	Coniferous bog	4.46	2.57	1.89	2.57	1.00	F,E, Fr	Construction
Mine Site	99	8	Coniferous bog	1.40	0.49	0	0.49	0	F,E	Construction
Mine Site	100	8	Coniferous bog	176.19	102.96	3.44	59.81	2.66	F,E, Fr	Construction

Mining Area	Wetland ID	Dominant Circular 39 Community	Dominant Eggers and Reed Wetland Community	Total Wetland Area within the Mining Area ⁽²⁾ (acres)	Permitted Wetland Impacts		Wetlands to be Impacted – End of Construction Phase (Planned) ⁽¹⁾			
					Direct Wetland Impacts (acres)	Fragmentation Impacts (acres)	Direct Wetland Impacts (acres)	Fragmentation Impacts (acres)	Type of Impact(3)	Reason for Impact
Mine Site	100A	6	Alder thicket	1.66	1.66	0	1.66	0	F	Construction
Mine Site	101	8	Coniferous bog	14.45	11.97	0.08	10.44	0.08	F,E, Fr	Construction
Mine Site	103	8	Coniferous bog	118.84	109.97	8.86	8.95	5.58	F,E, Fr	Construction
Mine Site	104	8	Coniferous bog	3.57	1.82	0.10	1.82	0.10	F, Fr	Construction
Mine Site	107	8	Coniferous bog	40.92	31.63	0.10	0.95	0	F,E, Fr	Construction
Mine Site	107B	3	Shallow marsh	4.51	2.89	0	0.24	0	F,E	Construction
Mine Site	120	3	Shallow marsh	0.58	0.12	0	0.12	0	E	Construction
Mine Site	200	7	Hardwood swamp	6.36	6.36	0	0.34	0	F	Construction
Mine Site	202	8	Open bog	3.11	3.11	0	2.81	0	F	Construction
Mine Site	552	8	Coniferous bog	8.72	8.72	0	7.13	0	F	Construction
Mine Site	567	3	Shallow marsh	1.40	1.40	0	1.40	0	F	Construction
Mine Site	2009	6	Alder thicket	0.20	0.20	0	0.20	0	F	Construction
Mine Site	2010	7	Coniferous swamp	0.47	0.47	0	0.47	0	F	Construction
Mine Site	2015	6	Alder thicket	0.26	0.26	0	0.02	0	F	Construction
Mine Site	2017	6	Alder thicket	0.25	0.25	0	0.25	0	F	Construction
Railroad Connection Corridor	1038	7	Coniferous swamp	0.07	0.07	0	0.07	0	F	Construction
Railroad Connection Corridor	R-3	6	Shrub-carr	0.10	0.10	0	0.10	0	F	Construction
Railroad Connection Corridor	R-4	6	Alder thicket	0.20	0.20	0	0.20	0	F	Construction
Railroad Connection Corridor	R-5	3	Shallow marsh	0.07	0.07	0	0.07	0	F	Construction
Dunka Road and Utility Corridor	22B	3	Shallow marsh	0.34	0.34	0	0.34	0	F	Construction
Dunka Road and Utility Corridor	22C	6	Alder thicket	0.38	0.38	0	0.38	0	F	Construction
Dunka Road and Utility Corridor	54A	7	Coniferous swamp	0.60	0.60	0	0.60	0	F	Construction
Dunka Road and Utility Corridor	54B	6	Alder thicket	0.13	0.13	0	0.13	0	F	Construction
Dunka Road and Utility Corridor	54D	7	Coniferous swamp	0.09	0.09	0	0.09	0	F	Construction

Mining Area	Wetland ID	Dominant Circular 39 Community	Dominant Eggers and Reed Wetland Community	Total Wetland Area within the Mining Area ⁽²⁾ (acres)	Permitted Wetland Impacts		Wetlands to be Impacted – End of Construction Phase (Planned) ⁽¹⁾			
					Direct Wetland Impacts (acres)	Fragmentation Impacts (acres)	Direct Wetland Impacts (acres)	Fragmentation Impacts (acres)	Type of Impact ⁽³⁾	Reason for Impact
Dunka Road and Utility Corridor	390	6	Alder thicket	0.41	0.41	0	0.41	0	F	Construction
Dunka Road and Utility Corridor	392	6	Alder thicket	0.14	0.14	0	0.14	0	F	Construction
Dunka Road and Utility Corridor	394	7	Coniferous swamp	0.64	0.64	0	0.64	0	F	Construction
Dunka Road and Utility Corridor	395	7	Coniferous swamp	0.01	0.01	0	0.01	0	F	Construction
Dunka Road and Utility Corridor	396	6	Alder thicket	0.65	0.65	0	0.65	0	F	Construction
Dunka Road and Utility Corridor	400	8	Coniferous bog	0.14	0.14	0	0.14	0	F	Construction
Dunka Road and Utility Corridor	553	7	Coniferous swamp	0.09	0.09	0	0.09	0	F	Construction
Dunka Road and Utility Corridor	554	7	Coniferous swamp	0.11	0.11	0	0.11	0	F	Construction
Dunka Road and Utility Corridor	569	6	Alder thicket	0.68	0.68	0	0.68	0	F	Construction
Dunka Road and Utility Corridor	716	6	Alder thicket	0.02	0.02	0	0.02	0	F	Construction
Dunka Road and Utility Corridor	814	8	Coniferous bog	0.75	0.75	0	0.75	0	F	Construction
Dunka Road and Utility Corridor	862	6	Alder thicket	0.78	0.78	0	0.78	0	F	Construction
Dunka Road and Utility Corridor	1034	6	Alder thicket	0.02	0.02	0	0.02	0	F	Construction
Dunka Road and Utility Corridor	1035	6	Alder thicket	0.16	0.16	0	0.16	0	F	Construction
Dunka Road and Utility Corridor	1124	6	Alder thicket	0.44	0.44	0	0.44	0	F	Construction
Dunka Road and Utility Corridor	R-7	3	Shallow marsh	0.18	0.18	0	0.18	0	F	Construction
FTB	251	6	Alder thicket	1.43	1.43	0	1.43	0	C	Construction
FTB	272	4	Deep marsh	1.11	1.10	0.01	1.10	0.01	C, Fr	Construction
FTB	278	6	Alder thicket	1.04	0.23	0	0.23	0	C	Construction

Mining Area	Wetland ID	Dominant Circular 39 Community	Dominant Eggers and Reed Wetland Community	Total Wetland Area within the Mining Area ⁽²⁾ (acres)	Permitted Wetland Impacts		Wetlands to be Impacted – End of Construction Phase (Planned) ⁽¹⁾			
					Direct Wetland Impacts (acres)	Fragmentation Impacts (acres)	Direct Wetland Impacts (acres)	Fragmentation Impacts (acres)	Type of Impact ⁽³⁾	Reason for Impact
FTB	279	6	Alder thicket	4.84	3.33	<0.01	3.33	<0.01	C, Fr	Construction
FTB	282	3	Shallow marsh	14.25	7.42	0	7.42	0	C	Construction
FTB	284	6	Alder thicket	2.92	2.51	0	2.51	0	C	Construction
FTB	290	7	Coniferous swamp	0.48	0.37	0.02	0.37	0.02	F,E, Fr	Construction
FTB	292	4	Deep marsh	1.71	1.71	0	1.71	0	C	Construction
FTB	307	3	Shallow marsh	0.78	0.78	0	0.78	0	C	Construction
FTB	308	4	Deep marsh	7.17	2.91	0	2.91	0	C	Construction
FTB	309	2	Wet meadow	0.02	0.02	0	0.02	0	C	Construction
FTB	312	6	Shrub-carr	1.98	1.33	0	1.33	0	C	Construction
FTB	314	3	Shallow marsh	24.87	6.01	0	6.01	0	C	Construction
FTB	572	4	Deep marsh	7.33	0.02	0	0.02	0	C	Construction
FTB	582	4	Deep marsh	27.49	8.11	0	8.11	0	C	Construction
FTB	586	4	Deep marsh	1.89	1.53	0	1.53	0	C	Construction
FTB	587	3	Shallow marsh	0.97	0.17	0	0.17	0	C	Construction
FTB	590	3	Shallow marsh	5.43	5.38	0	5.38	0	C	Construction
FTB	591	4	Deep marsh	2.71	0.70	0	0.70	0	C	Construction
FTB	593	4	Deep marsh	9.80	8.47	0.15	8.47	0.15	C, Fr	Construction
FTB	811	7	Coniferous swamp	0.20	0.20	0	0.20	0	C	Construction
FTB	968	7	Coniferous swamp	13.76	11.37	0	11.37	0	C	Construction
FTB	1134	3	Shallow marsh	14.45	8.73	0.02	8.73	0.02	C, Fr	Construction
FTB	1139	3	Shallow marsh	20.25	2.54	0	2.54	0	C	Construction
FTB	1155	3	Shallow marsh	0.55	0.41	0.15	0.41	0.15	C, Fr	Construction
FTB	1156	3	Shallow marsh	14.49	11.08	0.06	11.08	0.06	C, Fr	Construction
FTB	1159	3	Shallow marsh	0.05	0	0.05	0	0.05	Fr	Construction
FTB	T14	4	Deep marsh	45.20	45.20	0	45.20	0	E	Construction
TOTAL				1,066.63	620.26	19.67	333.43	12.25		

(1) See Figure 7 and Figure 8, which show the planned wetland impacts at the Mine Site and Plant, respectively, at the end of the construction phase.

(2) Wetland acreages are based on the USACE 2018 revised delineation.

(3) The types of wetland impact are excavation (E), fill (F), fragmentation (Fr), and seepage containment system (C).

Table 11 Planned Wetlands Mitigation Summary at the End of the Construction Phase

Wetland Type	Direct Wetland Impacts ^(1,2,3)		Wetland Mitigation		
	Permitted (acres)	At the End of Construction Phase (acres)	Bank Credits Required ⁽⁴⁾	Bank Credits Purchased	Remaining Bank Credits at the End of Construction Phase
Type 2 Fresh (Wet) meadow	15.80	0.35	0.35	---	---
Type 2 Sedge meadow	23.93	6.80	6.80	---	---
Type 3 Shallow marsh	70.45	45.27	45.27	---	---
Type 4 Deep marsh	75.67	70.00	70.00	---	---
Type 5 Shallow, Open Water	0	0	0	---	---
Type 6 Shrub-carr	4.03	1.43	1.43	---	---
Type 6 Alder thicket	112.64	34.04	34.04	---	---
Type 7 Hardwood swamp	14.06	0.34	0.34	---	---
Type 7 Coniferous swamp	86.16	30.29	30.29	---	---
Type 8 Open bog	7.64	3.35	3.35	---	---
Type 8 Coniferous bog	517.78	153.81	153.81	---	---
Wetland Total	928.16	345.68	345.68	1,400 credits	1,054.32

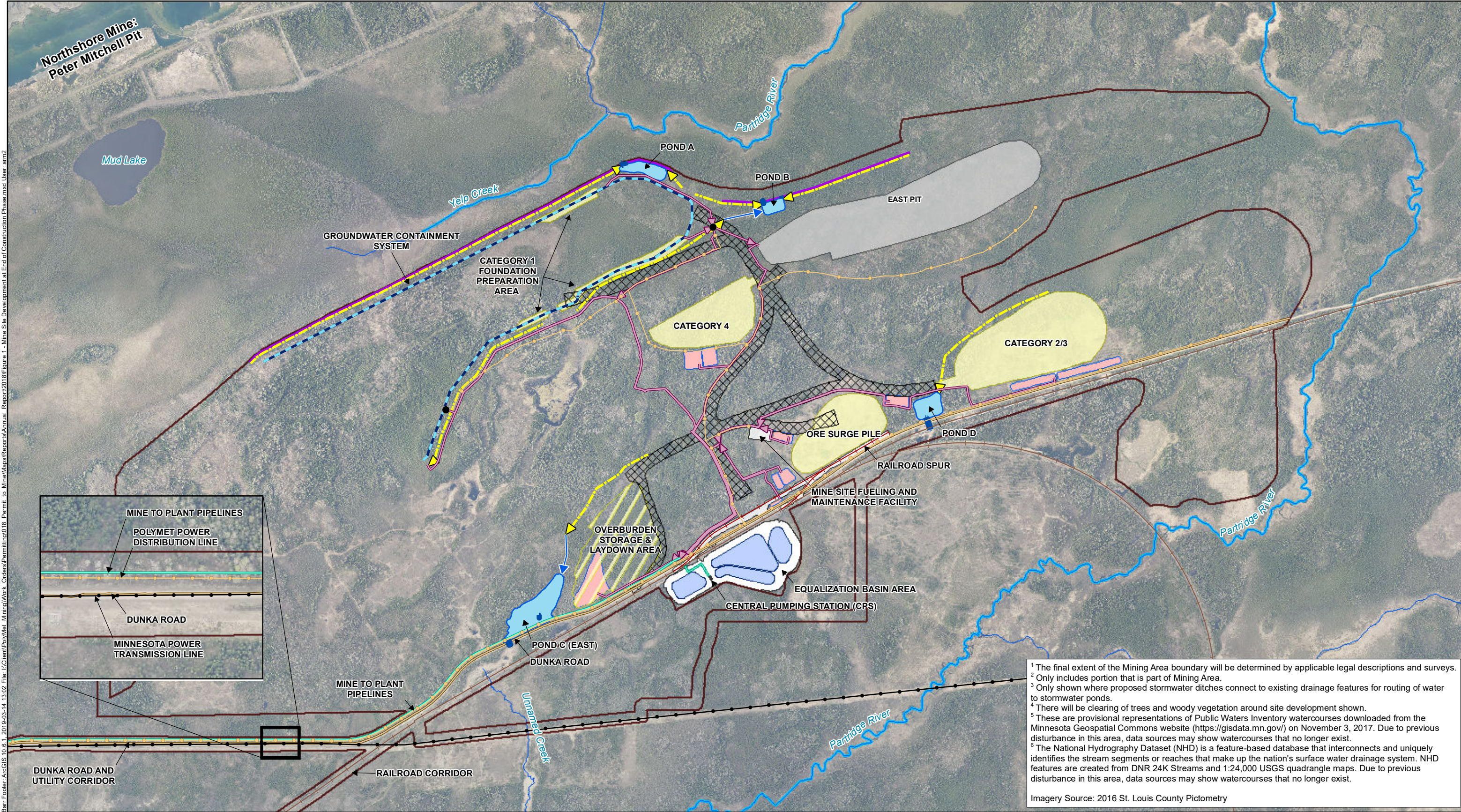
(1) Includes wetlands impacted by fragmentation.

(2) See Table 10, which shows the wetland impacts.

(3) Wetland acreages are based on the USACE 2018 revised delineation.

(4) Per Minnesota Rules 8420.0522 Subp. 4A.(1), the replacement ratio for withdrawal of existing wetland bank credits from within the project bank service area (#1) is 1:1 for a greater than 80% area.

Figures



Barr Footer: ArcGIS 10.8.1 2019-05-14 13:02 File: I:\Client\PolyMet Mining\Work Orders\Permitting\018 Permit to Mine\Maps\Reports\Annual Report\2018\Figure 1 - Mine Site Development at End of Construction Phase.mxd User: arm2

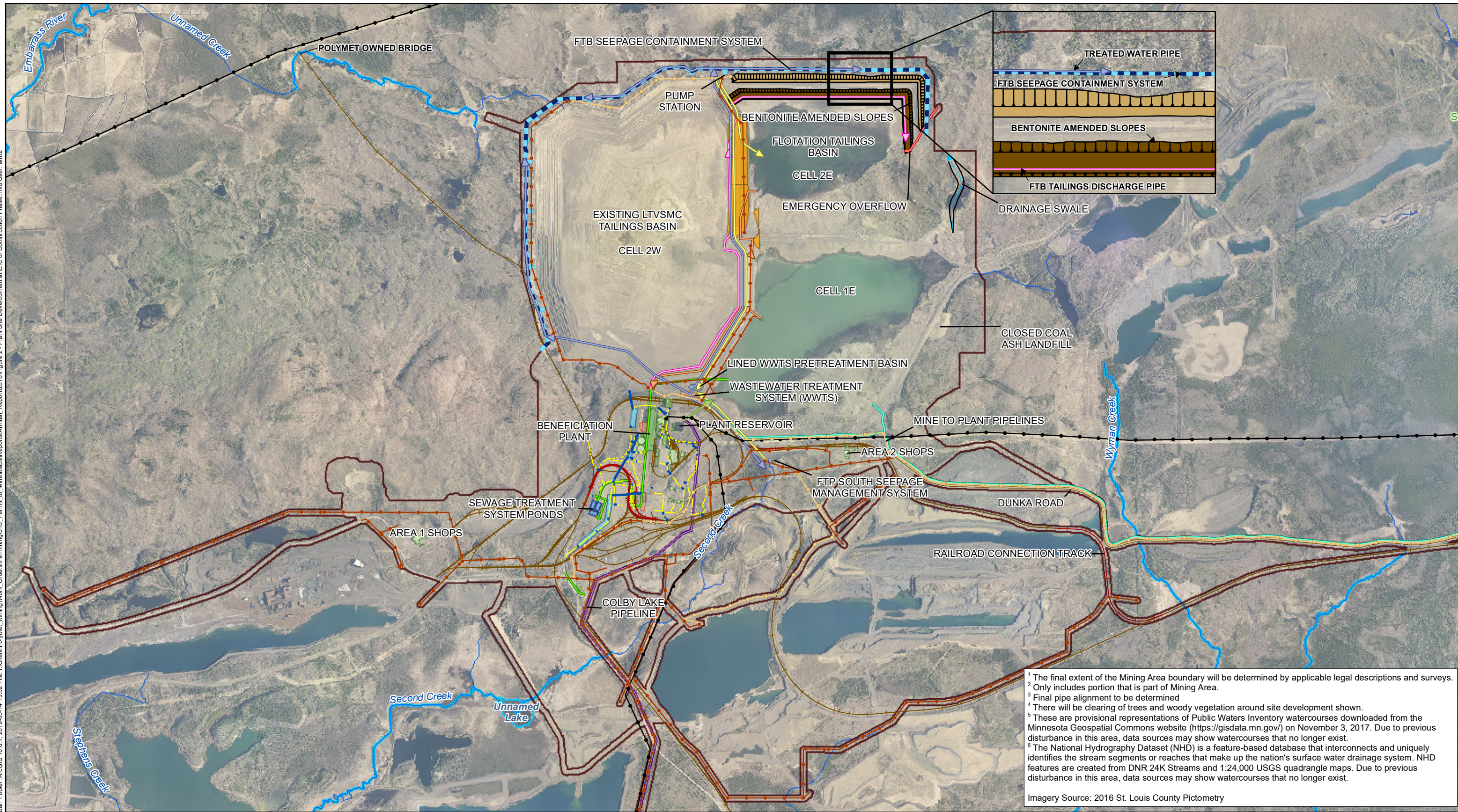
1 The final extent of the Mining Area boundary will be determined by applicable legal descriptions and surveys.
 2 Only includes portion that is part of Mining Area.
 3 Only shown where proposed stormwater ditches connect to existing drainage features for routing of water to stormwater ponds.
 4 There will be clearing of trees and woody vegetation around site development shown.
 5 These are provisional representations of Public Waters Inventory watercourses downloaded from the Minnesota Geospatial Commons website (<https://gisdata.mn.gov/>) on November 3, 2017. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
 6 The National Hydrography Dataset (NHD) is a feature-based database that interconnects and uniquely identifies the stream segments or reaches that make up the nation's surface water drainage system. NHD features are created from DNR 24K Streams and 1:24,000 USGS quadrangle maps. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
 Imagery Source: 2016 St. Louis County Pictometry

<ul style="list-style-type: none"> Mining Area¹ PolyMet Power Distribution Lines Minnesota Power Transmission Line Dunka Road² Existing Private Railroad Proposed Railroad Track 	<ul style="list-style-type: none"> Mine Pit Stripping Stockpile Storage & Laydown Area Haul Roads 	<ul style="list-style-type: none"> Groundwater Containment System Sumps Groundwater Containment System Mine to Plant Pipelines Mine Water Pipes Mine Water Ponds and Sumps 	<ul style="list-style-type: none"> Perimeter Dike Existing Drainage³ Stormwater Ditches Stormwater Culverts Stormwater Ponds Public Waters Inventory (PWI) Watercourses⁵ 	<ul style="list-style-type: none"> National Hydrography Dataset (NHD) Rivers & Streams⁶
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0 1,500 3,000
 Feet

**MINE SITE DEVELOPMENT AT
 END OF CONSTRUCTION PHASE**
 NorthMet Project
 NewRange Copper Nickel LLC
 Figure 1
 2023 PTM Project Update

Barr Footer: ArcGIS 10.6.1, 2019-03-14 13:02 File: I:\Client\PolyMet_Mining\Work_Orders\Permitting\018_Permit_to_Mine\Maps\Reports\Annual_Report\2019\Figure 2 - Plant Site Development at End of Construction Phase.mxd User: am2



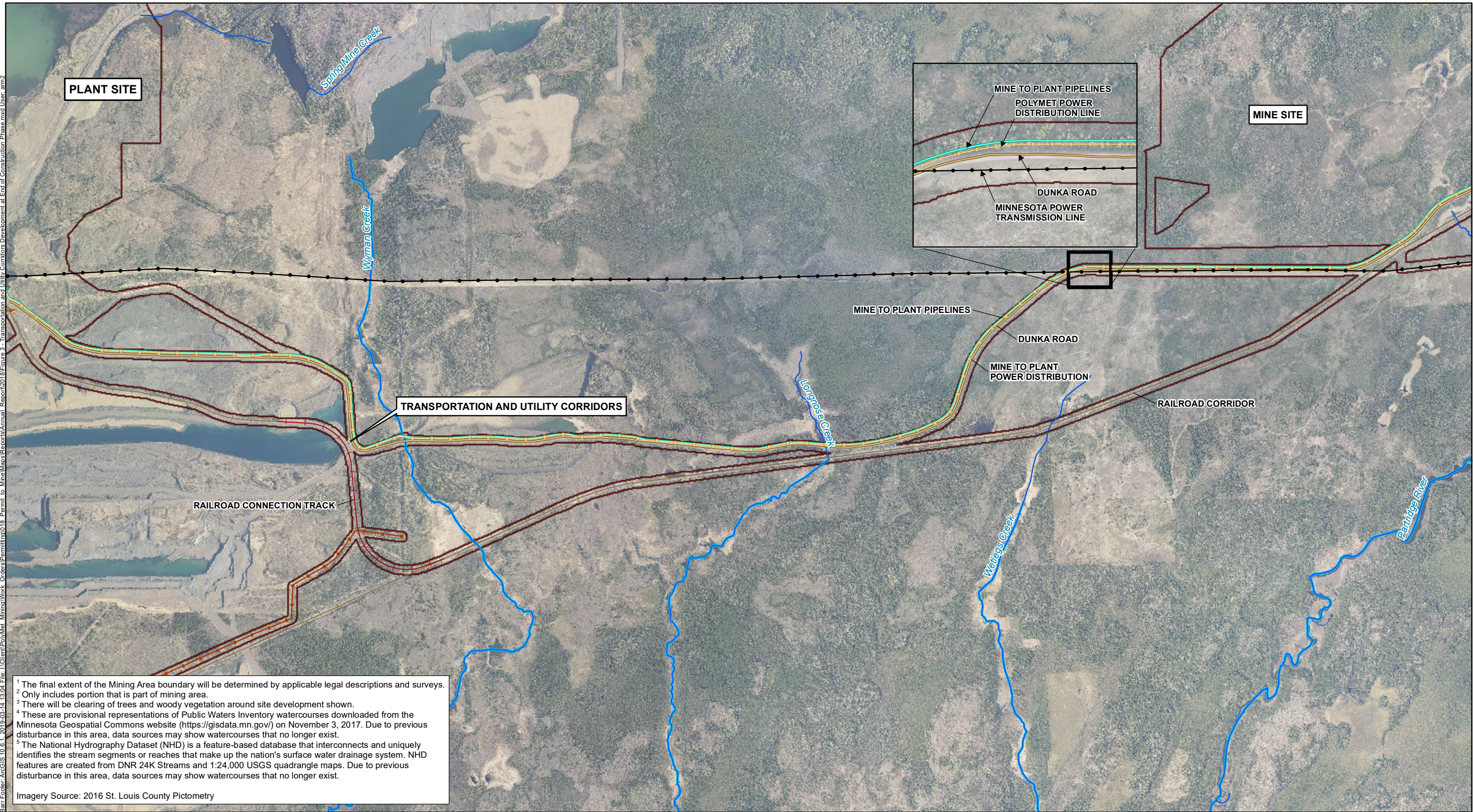
1 The final extent of the Mining Area boundary will be determined by applicable legal descriptions and surveys.
 2 Only includes portion that is part of Mining Area.
 3 Final pipe alignment to be determined.
 4 There will be clearing of trees and woody vegetation around site development shown.
 5 These are provisional representations of Public Waters Inventory watercourses downloaded from the Minnesota Geospatial Commons website (<https://gisdata.mn.gov/>) on November 3, 2017. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
 6 The National Hydrography Dataset (NHD) is a feature-based database that interconnects and uniquely identifies the stream segments or reaches that make up the nation's surface water drainage system. NHD features are created from DNR 24K Streams and 1:24,000 USGS quadrangle maps. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
 Imagery Source: 2016 St. Louis County Pictometry

Mining Area ¹	Existing Railroad	FTB Seepage Containment System	Plant Reservoir Overflow	Flotation Tailings Basin
Dunka Road ²	Proposed Railroad	FTB Water Return Pipe	Mine to Plant Pipelines	Dam
Existing Beneficiation Plant Building	PolyMet Power Distribution Lines - Existing	FTB Tailings Discharge Pipe	Proposed Sewer Pipe ³	Partial North Buttress
Existing Other Plant Building	PolyMet Power Distribution Lines - Proposed	Tailings Basin Seepage Water Pipe	Stormwater Pond	Borrow Area
Proposed Beneficiation Plant Building	Minnesota Power Transmission Lines	Treated Water Pipe	Stormwater Culvert	Public Waters Inventory (PWI) ⁰ Watercourses ⁵
			Stormwater Ditch	National Hydrography Dataset (NHD) Rivers & Streams ⁶

**PLANT SITE DEVELOPMENT AT
END OF CONSTRUCTION PHASE**
 NorthMet Project
 NewRange Copper Nickel LLC

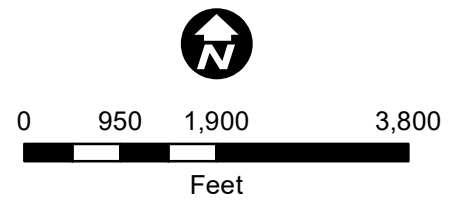
Figure 2
2023 PTM Project Update

Bar Footer: ArcGIS 10.6.1 2019-05-14 13:04 File: I:\Client\PolyMet_Mining\Work_Orders\Permitting\018_Permit to Mine\Maps\Reports\Annual_Report\2018\Figure 3 - Transportation and Utility Corridors Development at End of Construction Phase.mxd User: am2

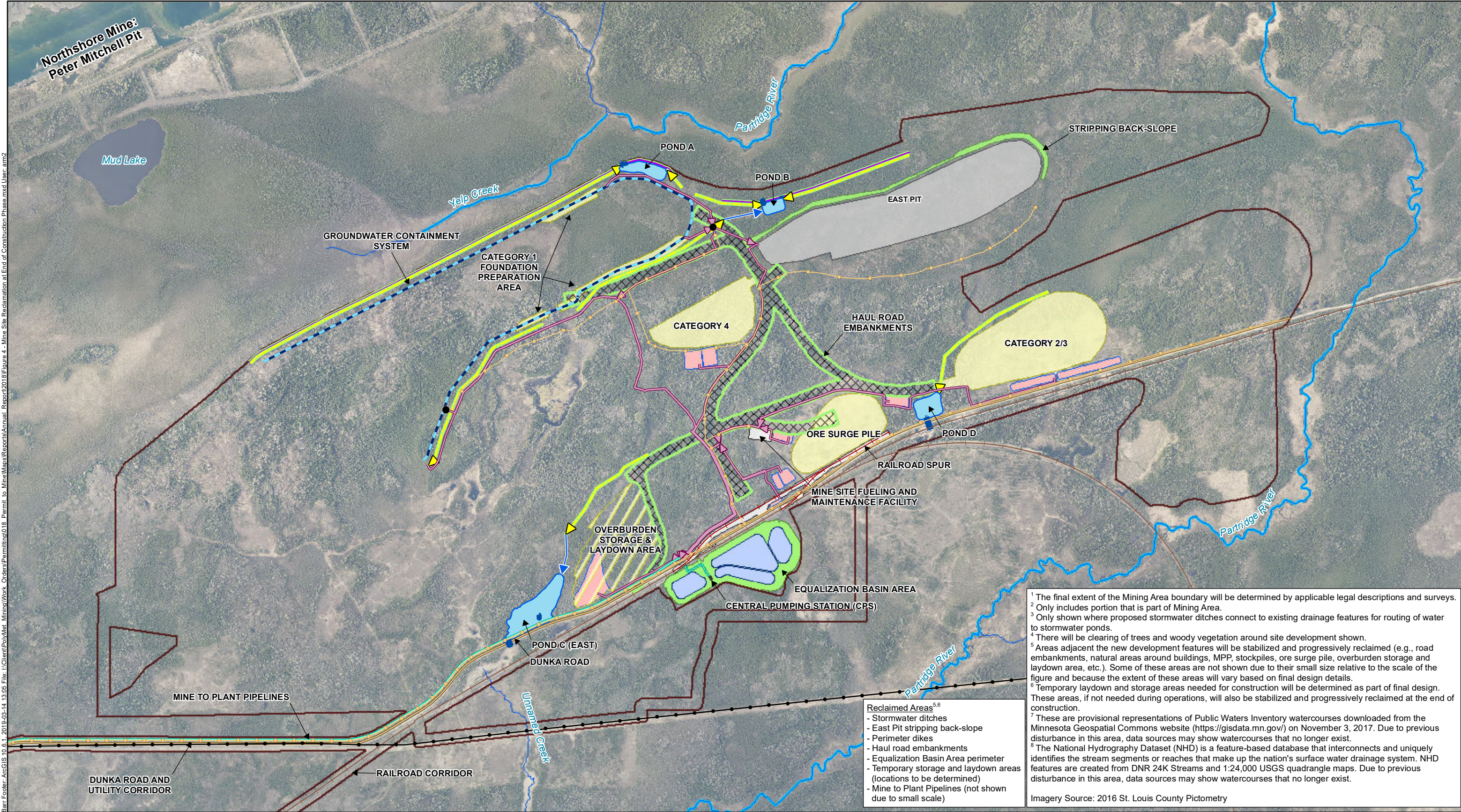


1 The final extent of the Mining Area boundary will be determined by applicable legal descriptions and surveys.
 2 Only includes portion that is part of mining area.
 3 There will be clearing of trees and woody vegetation around site development shown.
 4 These are provisional representations of Public Waters Inventory watercourses downloaded from the Minnesota Geospatial Commons website (<https://gisdata.mn.gov/>) on November 3, 2017. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
 5 The National Hydrography Dataset (NHD) is a feature-based database that interconnects and uniquely identifies the stream segments or reaches that make up the nation's surface water drainage system. NHD features are created from DNR 24K Streams and 1:24,000 USGS quadrangle maps. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
 Imagery Source: 2016 St. Louis County Pictometry

- Mining Area¹
- Dunka Road²
- Existing Private Railroad
- Proposed Railroad Track
- PolyMet Power Distribution Lines - Existing
- PolyMet Power Distribution Lines - Proposed
- Minnesota Power Transmission Line
- Mine to Plant Pipelines
- Public Waters Inventory (PWI) Watercourses⁴
- National Hydrography Dataset (NHD) Rivers & Streams⁵



**TRANSPORTATION AND UTILITY
 CORRIDORS DEVELOPMENT AT END OF
 CONSTRUCTION PHASE**
 NorthMet Project
 NewRange Copper Nickel LLC
 Figure 3
 2023 PTM Project Update



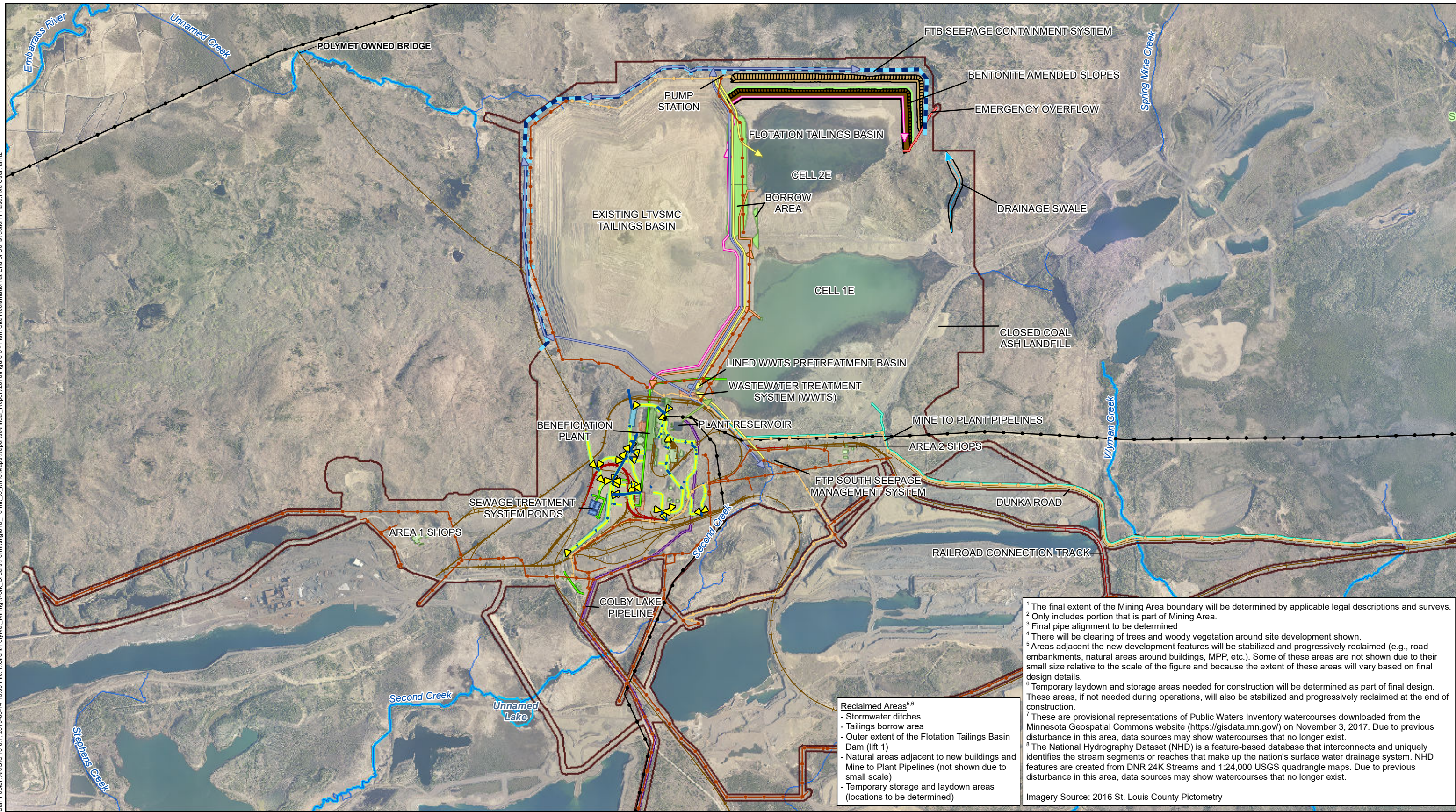
Barr Footer: ArcGIS 10.6.1 2019-05-14 13:05 File: I:\Client\PolyMet_Mining\Work_Orders\Permitting\018_Permit_to_Mine\Maps\Reports\Annual_Report\2018\Figure 4 - Mine Site Reclamation at End of Construction Phase.mxd User: arm2

¹ The final extent of the Mining Area boundary will be determined by applicable legal descriptions and surveys.
² Only includes portion that is part of Mining Area.
³ Only shown where proposed stormwater ditches connect to existing drainage features for routing of water to stormwater ponds.
⁴ There will be clearing of trees and woody vegetation around site development shown.
⁵ Areas adjacent the new development features will be stabilized and progressively reclaimed (e.g., road embankments, natural areas around buildings, MPP, stockpiles, ore surge pile, overburden storage and laydown area, etc.). Some of these areas are not shown due to their small size relative to the scale of the figure and because the extent of these areas will vary based on final design details.
⁶ Temporary laydown and storage areas needed for construction will be determined as part of final design. These areas, if not needed during operations, will also be stabilized and progressively reclaimed at the end of construction.
⁷ These are provisional representations of Public Waters Inventory watercourses downloaded from the Minnesota Geospatial Commons website (<https://gisdata.mn.gov/>) on November 3, 2017. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
⁸ The National Hydrography Dataset (NHD) is a feature-based database that interconnects and uniquely identifies the stream segments or reaches that make up the nation's surface water drainage system. NHD features are created from DNR 24K Streams and 1:24,000 USGS quadrangle maps. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
 Imagery Source: 2016 St. Louis County Pictometry

- | | | | | |
|---|---|---|---|--|
| <ul style="list-style-type: none"> Mining Area¹ PolyMet Power Distribution Lines Minnesota Power Transmission Line Dunka Road² Existing Private Railroad Proposed Railroad Track | <ul style="list-style-type: none"> End of Construction Footprints Mine Pit Stripping Stockpile Storage & Laydown Area Haul Roads | <ul style="list-style-type: none"> Groundwater Containment System Sumps Groundwater Containment System Mine to Plant Pipelines Mine Water Pipes Mine Water Ponds and Sumps Perimeter Dike | <ul style="list-style-type: none"> Existing Drainage³ Stormwater Ditches Stormwater Culverts Stormwater Ponds Reclaimed/Stabilized Areas Public Waters Inventory (PWI) Watercourses⁷ | <ul style="list-style-type: none"> National Hydrography Dataset (NHD) Rivers & Streams⁸ |
|---|---|---|---|--|

**MINE SITE RECLAMATION AT
 END OF CONSTRUCTION PHASE**
 NorthMet Project
 NewRange Copper Nickel LLC
 Figure 4
 2023 PTM Project Update

Barr Footer: ArcGIS 10.6.1, 2019-03-14 13:09 File: I:\Client\PolyMet_Mining\Work_Orders\Permitting\018_Permit_to_Mine\Maps\Reports\Annual_Report\2019\Figure 5 - Plant Site Reclamation at End of Construction Phase.mxd User: arm2



¹ The final extent of the Mining Area boundary will be determined by applicable legal descriptions and surveys.
² Only includes portion that is part of Mining Area.
³ Final pipe alignment to be determined
⁴ There will be clearing of trees and woody vegetation around site development shown.
⁵ Areas adjacent the new development features will be stabilized and progressively reclaimed (e.g., road embankments, natural areas around buildings, MPP, etc.). Some of these areas are not shown due to their small size relative to the scale of the figure and because the extent of these areas will vary based on final design details.
⁶ Temporary laydown and storage areas needed for construction will be determined as part of final design. These areas, if not needed during operations, will also be stabilized and progressively reclaimed at the end of construction.
⁷ These are provisional representations of Public Waters Inventory watercourses downloaded from the Minnesota Geospatial Commons website (<https://gisdata.mn.gov/>) on November 3, 2017. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
⁸ The National Hydrography Dataset (NHD) is a feature-based database that interconnects and uniquely identifies the stream segments or reaches that make up the nation's surface water drainage system. NHD features are created from DNR 24K Streams and 1:24,000 USGS quadrangle maps. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.

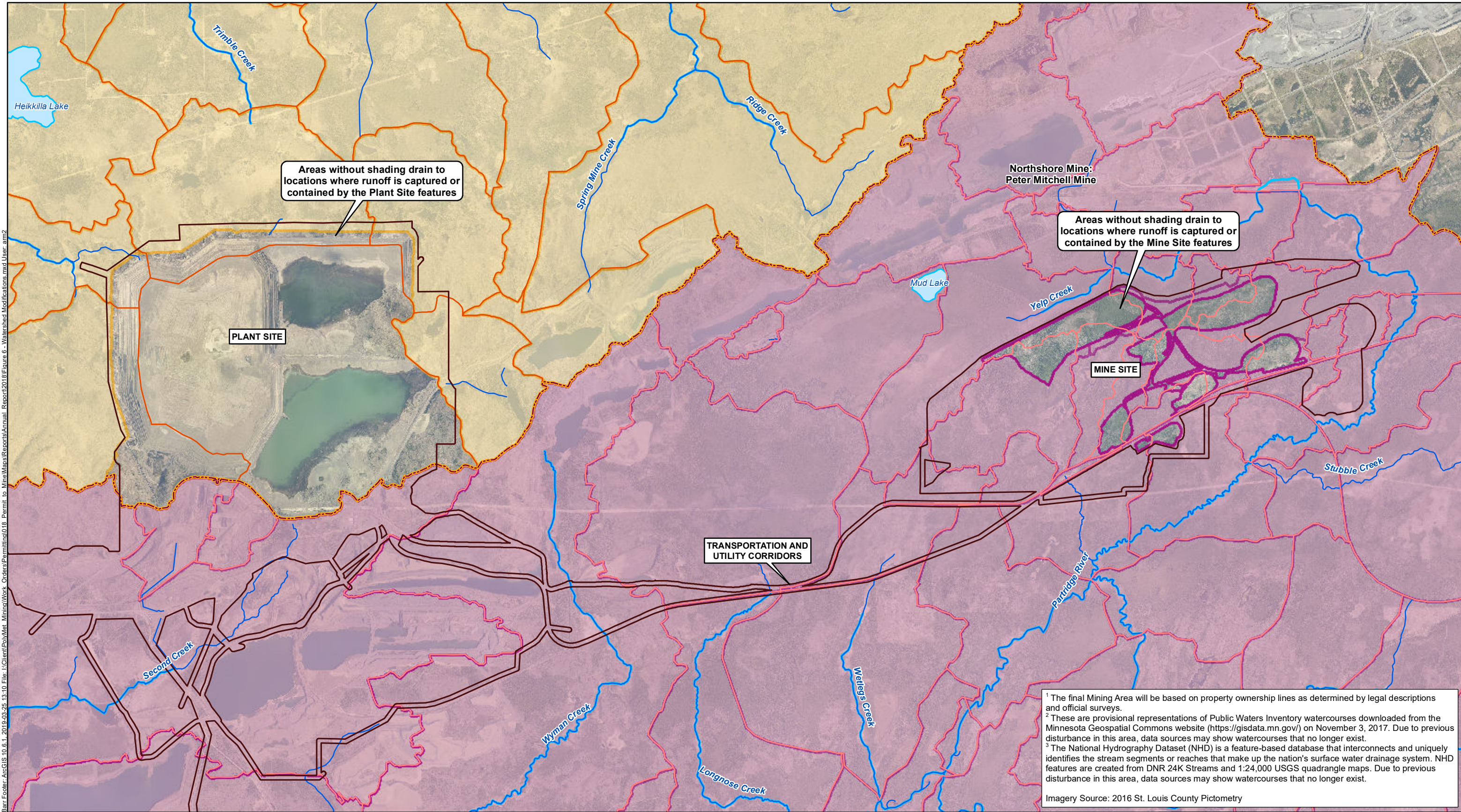
Imagery Source: 2016 St. Louis County Pictometry

Reclaimed Areas^{5,6}
 - Stormwater ditches
 - Tailings borrow area
 - Outer extent of the Flotation Tailings Basin Dam (lift 1)
 - Natural areas adjacent to new buildings and Mine to Plant Pipelines (not shown due to small scale)
 - Temporary storage and laydown areas (locations to be determined)

- | | | | | |
|---------------------------------------|---|-----------------------------------|----------------------------------|--|
| Mining Area ¹ | Existing Railroad | FTB Seepage Containment System | Mine to Plant Pipelines | Partial North Buttress |
| Dunka Road ² | Proposed Railroad | FTB Water Return Pipe | Proposed Sewer Pipe ³ | Reclaimed/Stabilized Areas |
| Existing Beneficiation Plant Building | PolyMet Power Distribution Lines - Existing | FTB Tailings Discharge Pipe | Stormwater Pond | Public Waters Inventory (PWI) Watercourses ⁷ |
| Existing Other Plant Building | PolyMet Power Distribution Lines - Proposed | Tailings Basin Seepage Water Pipe | Stormwater Culvert | National Hydrography Dataset (NHD) Rivers & Streams ⁸ |
| Proposed Beneficiation Plant Building | Minnesota Power Transmission Lines | Treated Water Pipe | Flotation Tailings Basin Dam | |
| Plant Reservoir Overflow | | | | |

PLANT SITE RECLAMATION AT END OF CONSTRUCTION PHASE
 NorthMet Project
 NewRange Copper Nickel LLC

Figure 5
 2023 PTM Project Update



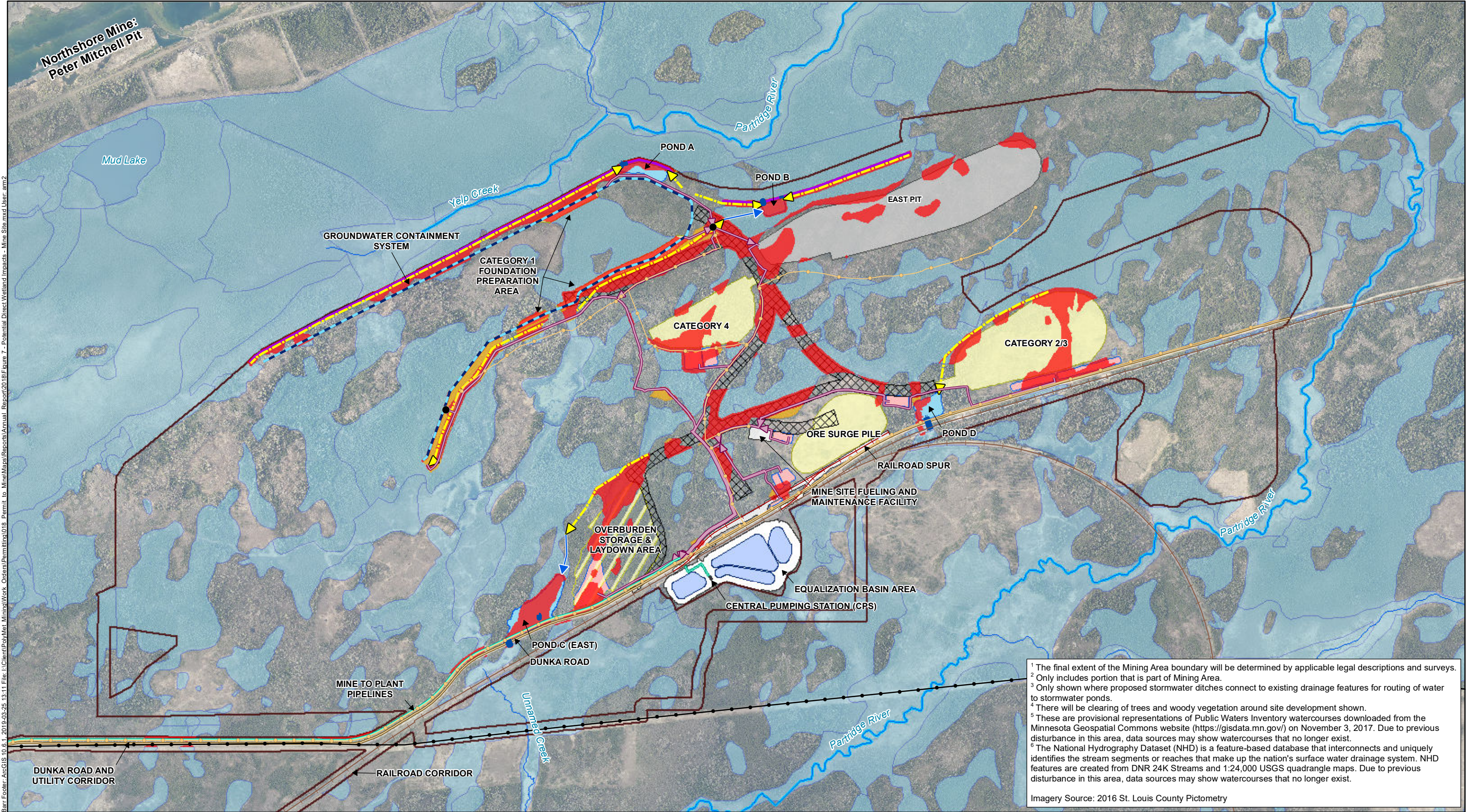
Barr Footer: ArcGIS 10.6.1 2019-05-25 13:10 File: I:\Client\Polymet_Mining\Work_Orders\Permitting\018_Permit_to_Mine\Maps\Reports\Annual_Report\2018\Figure 6 - Watershed Modifications.mxd User: am2

¹ The final Mining Area will be based on property ownership lines as determined by legal descriptions and official surveys.
² These are provisional representations of Public Waters Inventory watercourses downloaded from the Minnesota Geospatial Commons website (<https://gisdata.mn.gov/>) on November 3, 2017. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
³ The National Hydrography Dataset (NHD) is a feature-based database that interconnects and uniquely identifies the stream segments or reaches that make up the nation's surface water drainage system. NHD features are created from DNR 24K Streams and 1:24,000 USGS quadrangle maps. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
 Imagery Source: 2016 St. Louis County Pictometry

End of Construction Phase Watershed Divide Embarrass River Subwatersheds Partridge River Subwatersheds Area Drains to Plant Site Features Area Drains to Mine Site Features	Existing Conditions Partridge River Subwatersheds Embarrass River Subwatersheds	Mining Area ¹ Public Waters Inventory (PWI) Basins Public Waters Inventory (PWI) Watercourses ² National Hydrography Dataset (NHD) Rivers & Streams ³
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**WATERSHED MODIFICATIONS AT
 END OF CONSTRUCTION PHASE**
NorthMet Project
NewRange Copper Nickel LLC

Figure 6
 2023 PTM Project Update



Barr Footer: ArcGIS 10.6.1 2019-05-25 13:11 File: I:\Client\Polymet Mining\Work Orders\Permitting\018 Permit to Mine\Maps\Reports\Annual Report\2018\Figure 7 - Potential Direct Wetland Impacts - Mine Site.mxd User: arm2

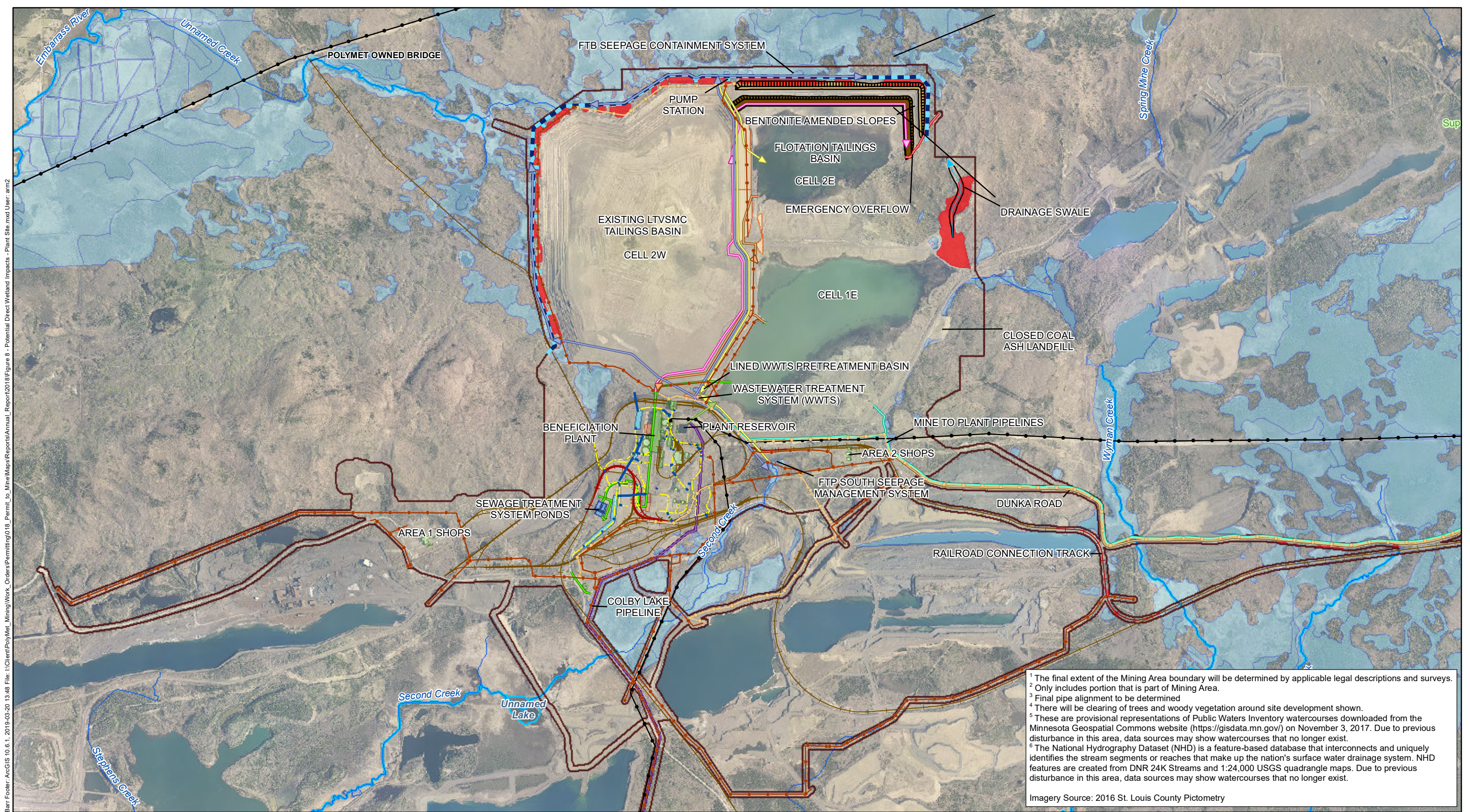
¹ The final extent of the Mining Area boundary will be determined by applicable legal descriptions and surveys.
² Only includes portion that is part of Mining Area.
³ Only shown where proposed stormwater ditches connect to existing drainage features for routing of water to stormwater ponds.
⁴ There will be clearing of trees and woody vegetation around site development shown.
⁵ These are provisional representations of Public Waters Inventory watercourses downloaded from the Minnesota Geospatial Commons website (<https://gisdata.mn.gov/>) on November 3, 2017. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.
⁶ The National Hydrography Dataset (NHD) is a feature-based database that interconnects and uniquely identifies the stream segments or reaches that make up the nation's surface water drainage system. NHD features are created from DNR 24K Streams and 1:24,000 USGS quadrangle maps. Due to previous disturbance in this area, data sources may show watercourses that no longer exist.

Imagery Source: 2016 St. Louis County Pictometry

<ul style="list-style-type: none"> Mining Area¹ PolyMet Power Distribution Lines Minnesota Power Transmission Line Dunka Road² Existing Private Railroad Proposed Railroad Track 	<ul style="list-style-type: none"> End of Construction Footprints Mine Pit Stripping Stockpile Storage & Laydown Area Haul Roads 	<ul style="list-style-type: none"> Groundwater Containment System Sumps Groundwater Containment System Mine to Plant Pipelines Mine Water Pipes Mine Water Ponds and Sumps 	<ul style="list-style-type: none"> Perimeter Dike Existing Drainage³ Stormwater Ditches Stormwater Culverts Stormwater Ponds Public Waters Inventory (PWI) Watercourses⁵ 	<ul style="list-style-type: none"> National Hydrography Dataset (NHD) Rivers & Streams⁶ Planned Wetland Impacts Direct Fragment No Impact
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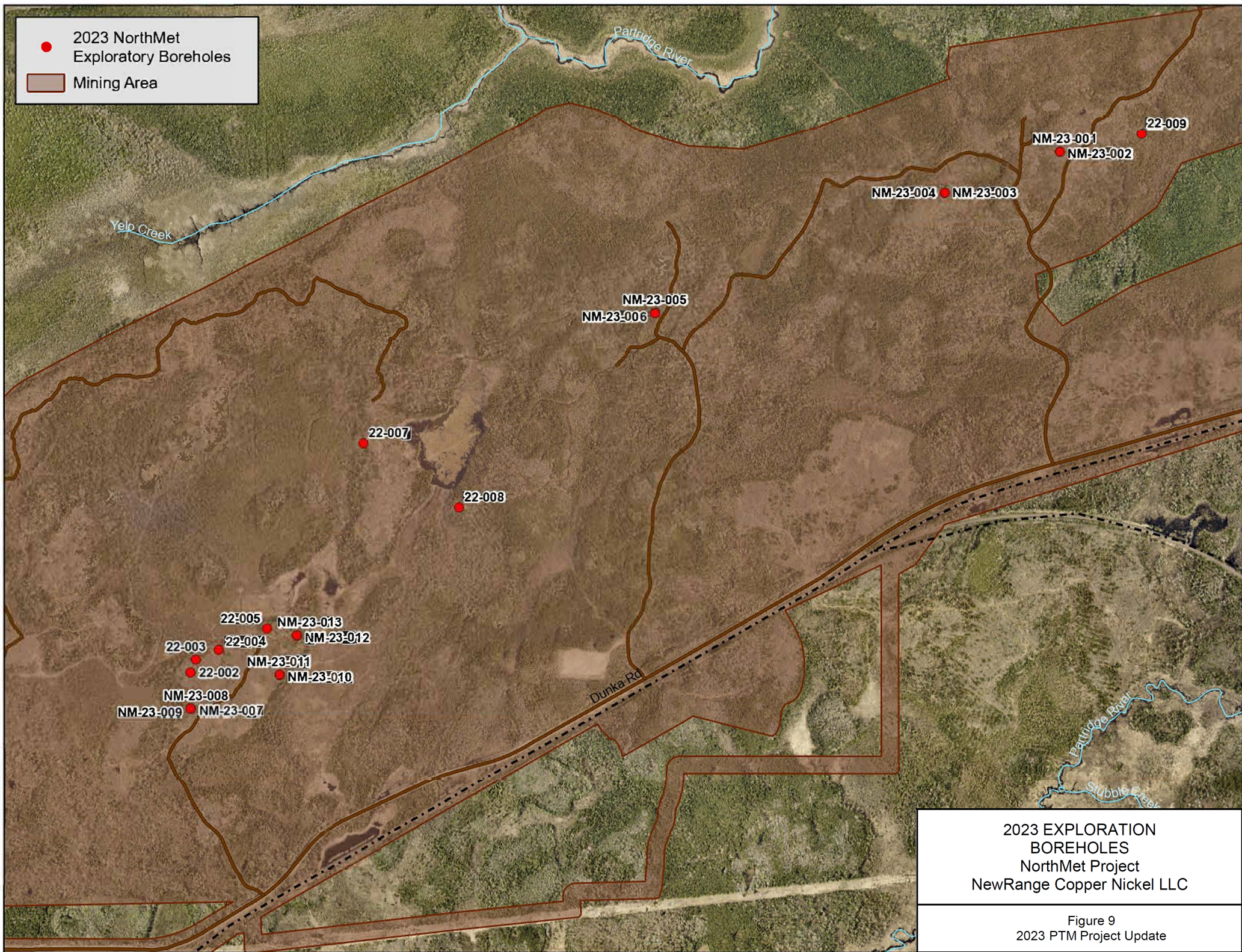
PLANNED WETLAND IMPACTS AT THE MINE SITE: END OF CONSTRUCTION
 NorthMet Project
 NewRange Copper Nickel LLC

Figure 7
 2023 PTM Project Update



<ul style="list-style-type: none"> Mining Area¹ Dunka Road² Existing Beneficiation Plant Building Existing Other Plant Building Proposed Beneficiation Plant Building 	<ul style="list-style-type: none"> Existing Railroad Proposed Railroad PolyMet Power Distribution Lines - Existing PolyMet Power Distribution Lines - Proposed Minnesota Power Transmission Lines 	<ul style="list-style-type: none"> FTB Seepage Containment System FTB Water Return Pipe FTB Tailings Discharge Pipe Tailings Basin Seepage Water Pipe Treated Water Pipe 	<ul style="list-style-type: none"> Plant Reservoir Overflow Mine to Plant Pipelines Proposed Sewer Pipe³ Stormwater Pond Stormwater Culvert Stormwater Ditch 	<ul style="list-style-type: none"> Dam Partial North Buttress Borrow Area Public Waters Inventory (PWI) Watercourses⁵ National Hydrography Dataset (NHD) Rivers & Streams⁶ 	<p>Planned Wetland Impacts</p> <ul style="list-style-type: none"> Direct Fragment No Impact 	<p>0 3,000 Feet</p>	<p>PLANNED WETLAND IMPACTS AT THE PLANT: END OF CONSTRUCTION NorthMet Project NewRange Copper Nickel LLC</p>
<p>Figure 8 2023 PTM Project Update</p>							

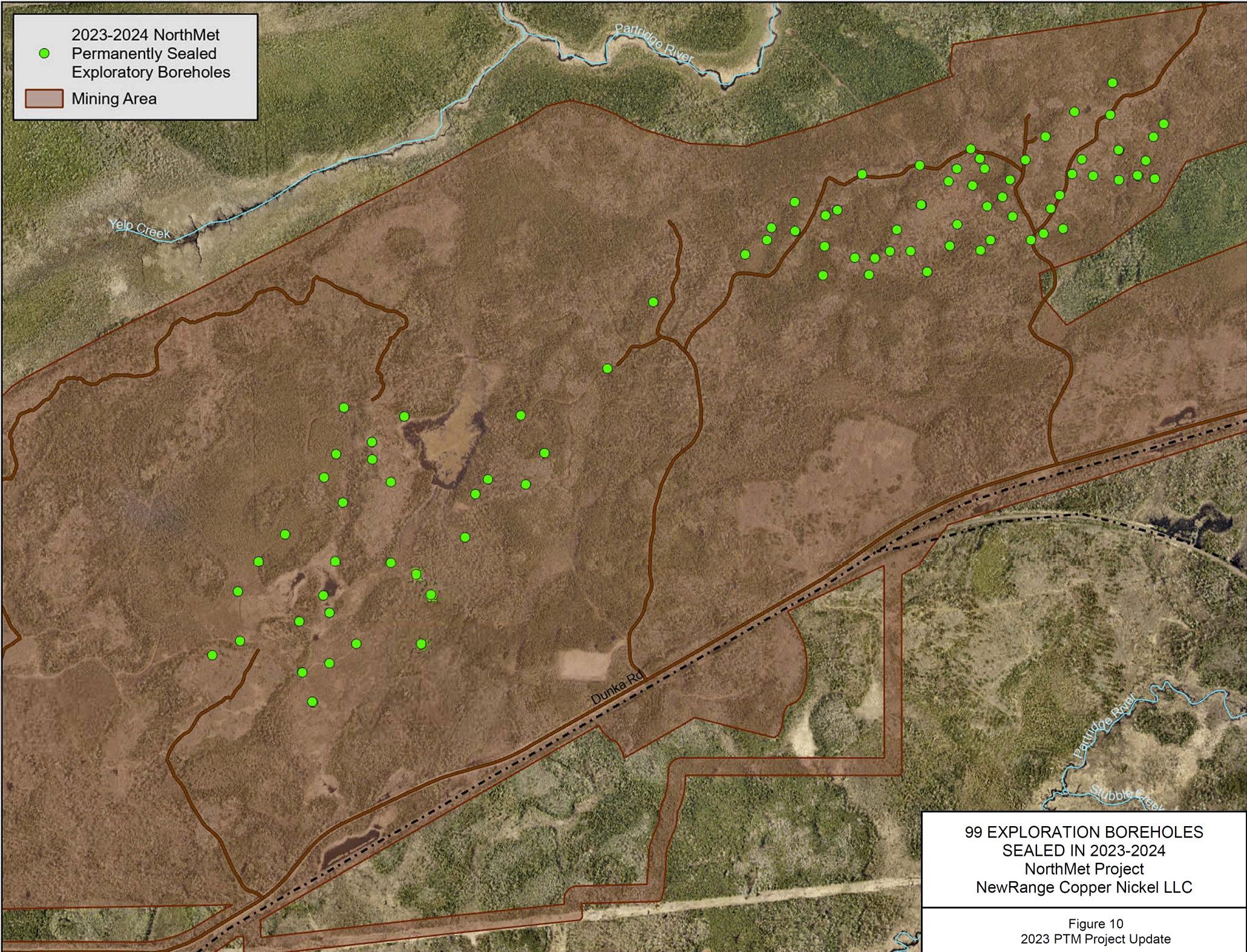
● 2023 NorthMet
Exploratory Boreholes
 Mining Area



**2023 EXPLORATION
BOREHOLES**
 NorthMet Project
 NewRange Copper Nickel LLC

Figure 9
 2023 PTM Project Update

2023-2024 NorthMet
● Permanently Sealed
Exploratory Boreholes
■ Mining Area



99 EXPLORATION BOREHOLES
SEALED IN 2023-2024
NorthMet Project
NewRange Copper Nickel LLC

Figure 10
2023 PTM Project Update

Appendices

Appendix A

2024 Certificate of Liability Insurance

