



# Public Notice

**REFER TO:** MVP-2019-02609-MJG      **SECTION:** 404 - Clean Water Act

## 2. SPECIFIC INFORMATION

Construction methods for berms on the Eastern Perimeter Dam are similar with the removal of any soft soils (“muck cut”) not suitable to be used as the foundation of additional berming efforts at HTC. The majority of the soft soils are likely to be found within wet, low-lying areas at the toe of the dam slope. The soft soils will be excavated and immediately backfilled using the “muck cut” excavation method where a haul truck brings a load of coarse tailings dam fill material and leaves with a load of soft soils. The soft soils will be brought into the existing HTC tailings basin and be repurposed on the downstream slopes of existing dams at HTC. The spreading of soft organic materials on downstream slopes of dams at HTC has been a successful method to reclaim and vegetate the downstream slopes of dams. After the soft soils are removed and a coarse tailings foundation/suitable native ground (clay glacial till) is established at approximately the original native ground elevation at the toe of the dam, the “muck cut” is completed. A 90-

foot-wide access road would be required for heavy-equipment access to construct the downstream berms and would be used for dam safety inspections after construction is complete.

The second part of the downstream berm construction at HTC focuses on the establishment of a conveyance ditch into the downstream berm. Water conveyances (i.e., culvers or French drains) would maintain the flow of stormwater and allow the continued flow of water through the wetland northward to HTC's permitted NPDES discharge monitoring station (PN Figure 3). The design of the drain would incorporate a header trench and finger system. This includes a stone-coarse filter material to function as drain material, and this would be surrounded by a filter envelope that will consist of washed coarse tailings (tailings finer than the 200-sieve removed) and standard coarse tailings.

Access roads would be required for HTC to facilitate maintenance of the constructed conveyance ditch, which conveys water through onsite wetlands and northward towards HTC's NPDES discharge monitoring station. This component was completed before the submittal of the permit application and resulted in the permanent discharge of dredged and fill material in approximately 0.0814 acre of wetlands, after the fact.

**QUANTITY, TYPE, AND AREA OF FILL:** The proposed berming and access road improvements will result in approximately 16.6 acres of permanent wetland impact for placement of fill.

The aquatic resources on site are being evaluated further to determine the appropriate extent of Corps jurisdiction under Section 404 of the Clean Water Act, as identified in Section 4 of this public notice.

**VEGETATION IN AFFECTED AREA:** The natural upland plant communities beyond the existing tailings basin and surrounding access road infrastructure are early-successional fire-dependent forests with a canopy dominated by aspen (*Populus tremuloides*), paper birch (*Betula papyrifera*), and balsam poplar (*P. balsamifera*). Many of the surrounding wetlands adjacent to the tailing's basin and access road infrastructure within the proposed berming project area are present as wetland complexes, including shallow marsh, hardwood swamp, and shrub-carr as the primary communities. Shallow marsh is the most prominent wetland community habitat and consists of cattails (*Typha* spp.) and reed canary grass (*Phalaris arundinacea*). This shallow marsh habitat is often contiguous with deep marsh, which contains emergent vegetation or open water. Hardwood swamp wetlands are dominated by aspen and balsam poplar, with lesser amounts of red maple (*Acer rubrum*) and black ash (*Fraxinus nigra*). Shrub-carr habitat contains a mix of willows (*Salix discolor*, *S. petiolaris*, and *S. bebbiana*) and specked alder (*Alnus incana*).

**SOURCE OF FILL MATERIAL:** The applicant proposes to use coarse tailings, an angular sand-like fill material that is a byproduct of mining operations at HTC.

**SURROUNDING LAND USE:** The project area is entirely contained within property owned by HTC. The area of impact includes the existing tailings basing berm, site access roads, adjacent wetlands, and adjacent upland plant communities.

**DESCRIPTION OF STRUCTURE:** Three locations for berming have been selected at HTC. The total length of the downstream berms on the eastern dam would be approximately 3,350 feet long and extend outward up to a maximum of 475 feet.

**DESCRIPTION OF DREDGING OR EXCAVATION:** Construction methods for the berm structures on Eastern Perimeter Dam are similar with the removal of any soft soils (“muck cut”) not suitable to be used as the foundation of the additional buttressing efforts at HTC. The majority of the soft soils are likely to be found within the wet low-lying areas at the toe of the dam. The soft soils will be excavated and immediately back filled using a “muck cut” excavation method where a haul truck brings a load of coarse tailings dam fill material and leaves with a load of soft soils.

**THE FOLLOWING POTENTIALLY TOXIC MATERIALS COULD BE USED AT THE PROJECT SITE:** It is anticipated that hazardous materials normally associated with construction projects would be used on site, include gasoline and diesel fuels.

**THE FOLLOWING PRECAUTIONS TO PROTECT WATER QUALITY HAVE BEEN DESCRIBED BY THE APPLICANT:** The applicant would be required to obtain an individual Clean Water Act 401 Water Quality Certification or waiver, as discussed in Section 5 of this public notice. There is an existing NPDES/SDS permit for the site. This project will remain in compliance with that permit and implement best management practices (BMPs) as required by that permit, to protect waters within and downstream of the project area. To prevent erosion, a silt fence will be placed at the edge of the project limits to protect resources downslope from the project area, so as to maintain the permitted work area and placement of fill remains onsite.

**MITIGATION:** HTC proposes to debit 16.4772 credits for the proposed wetland impacts, and 0.1008 credits for the after-the-fact wetland impacts, totaling 16.5780 credits as compensatory mitigation to offset the unavoidable losses of wetland functions and values associated with the project proposal.

### 3. FEDERALLY LISTED THREATENED OR ENDANGERED WILDLIFE OR PLANTS OR THEIR CRITICAL HABITAT

Based on the Official Species List generated for the project site from the U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) website, the following Federally listed species were identified:

Northern Long-Eared Bat ( <i>Myotis septentrionalis</i> )	Endangered - Hibernates in caves and mines. Swarming in surrounding wooded areas in autumn. Roosts and forages in upland forests during spring and summer.
Tricolored Bat ( <i>Perimyotis subflavus</i> )	Threatened - Hibernates in caves and mines – Roosts and forages in forests during spring, summer, and fall.
Canada lynx ( <i>Lynx canadensis</i> )	Threatened - Forested areas.
Gray Wolf ( <i>Canis lupus</i> )	Threatened - Forested areas.

This application is being coordinated with the U.S. Fish and Wildlife Service. Any comments it may have concerning Federally listed threatened or endangered wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

#### 4. JURISDICTION

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act.

#### 5. SECTION 401 WATER QUALITY CERTIFICATION

Valid Section 404 permits cannot be issued for any activity unless water quality certification for the activity is granted or waived pursuant to Section 401 of the Clean Water Act. The Section 401 authority for this project is the Minnesota Pollution Control Agency (MPCA). A Department of the Army permit will not be granted until the MPCA has issued or waived Section 401 WQC certification and the U.S. Environmental Protection Agency (USEPA) neighboring jurisdiction process is completed. Corps Section 404 Clean Water Act decisions may not be finalized until after the USEPA completes this process.

The MPCA has indicated that this public notice serves as its public notice of the application for Section 401 water quality certification under Minnesota Rules Part 7001 Section 401 of the Clean Water Act (33 U.S. Code 1341 (a)(1)). The MPCA has indicated that if, at a later date, it makes a preliminary anti-degradation determination regarding Section 401 Water Quality Certification, it will at that time plan to issue an additional public notice under Minnesota Rules Part 7001.

Any comments relative to MPCA's Section 401 Certification for the activity proposed in this public notice may be sent to:

Minnesota Pollution Control Agency  
Resource Management and Assistance Division  
Attention: 401 Certification  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194  
401Certification.PCA@state.mn.us

#### 6. HISTORICAL/ARCHAEOLOGICAL

The Corps will review information on known cultural resources and/or historic properties within and adjacent to the project area. The Corps will also consider the potential effects of the project on any properties that have yet to be identified. The results of this review and the Corps' determination of effect will be coordinated with the State Historic Preservation Officer independent of this public notice. Any adverse effects on historic properties will be resolved prior to the Corps authorization, or approval, of the work in connection with this project.

#### 7. PUBLIC HEARING REQUESTS

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, in detail, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided or if there is otherwise no valid interest to be served.

#### 8. PUBLIC INTEREST REVIEW



The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. Environmental and other documents will be available for review in the St. Paul District Office.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

#### REPLIES/COMMENTS

Interested parties are invited to submit to this office written facts, arguments, or objections by the expiration date indicated above. These statements should bear upon the suitability of the location and the adequacy of the project and should, if appropriate, suggest any changes believed to be desirable. Comments received may be forwarded to the applicant.

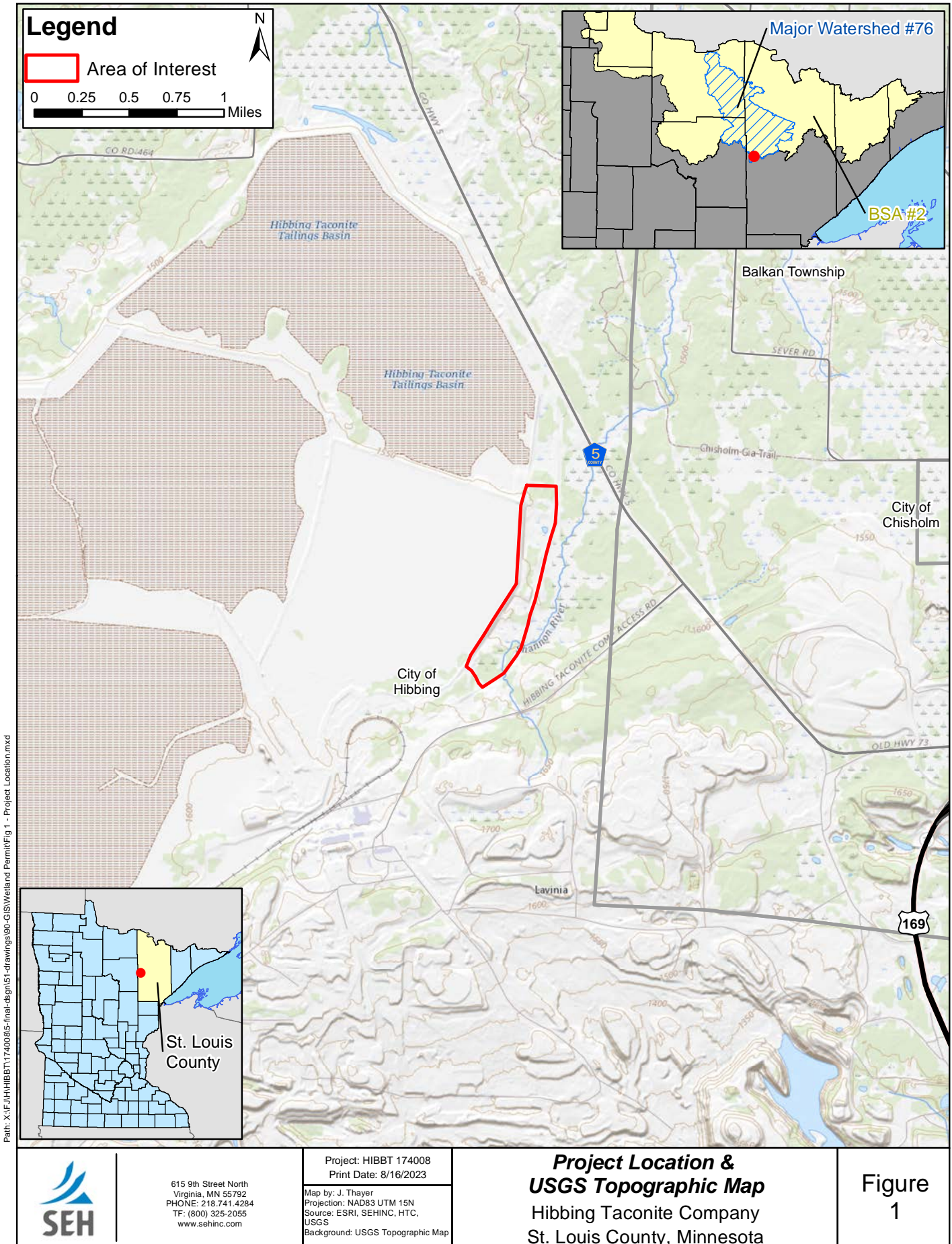
Replies may be sent to Mallory Gross at [Mallory.J.Gross@usace.army.mil](mailto:Mallory.J.Gross@usace.army.mil)

IF YOU HAVE QUESTIONS ABOUT THE PROJECT, contact Mallory Gross at (651) 290-5363 or [Mallory.J.Gross@usace.army.mil](mailto:Mallory.J.Gross@usace.army.mil).

To receive Public Notice notifications, go to: <https://www.mvp.usace.army.mil/Contact/RSS/> and subscribe to the RSS Feed for which you would like to receive Public Notices.

Enclosures:

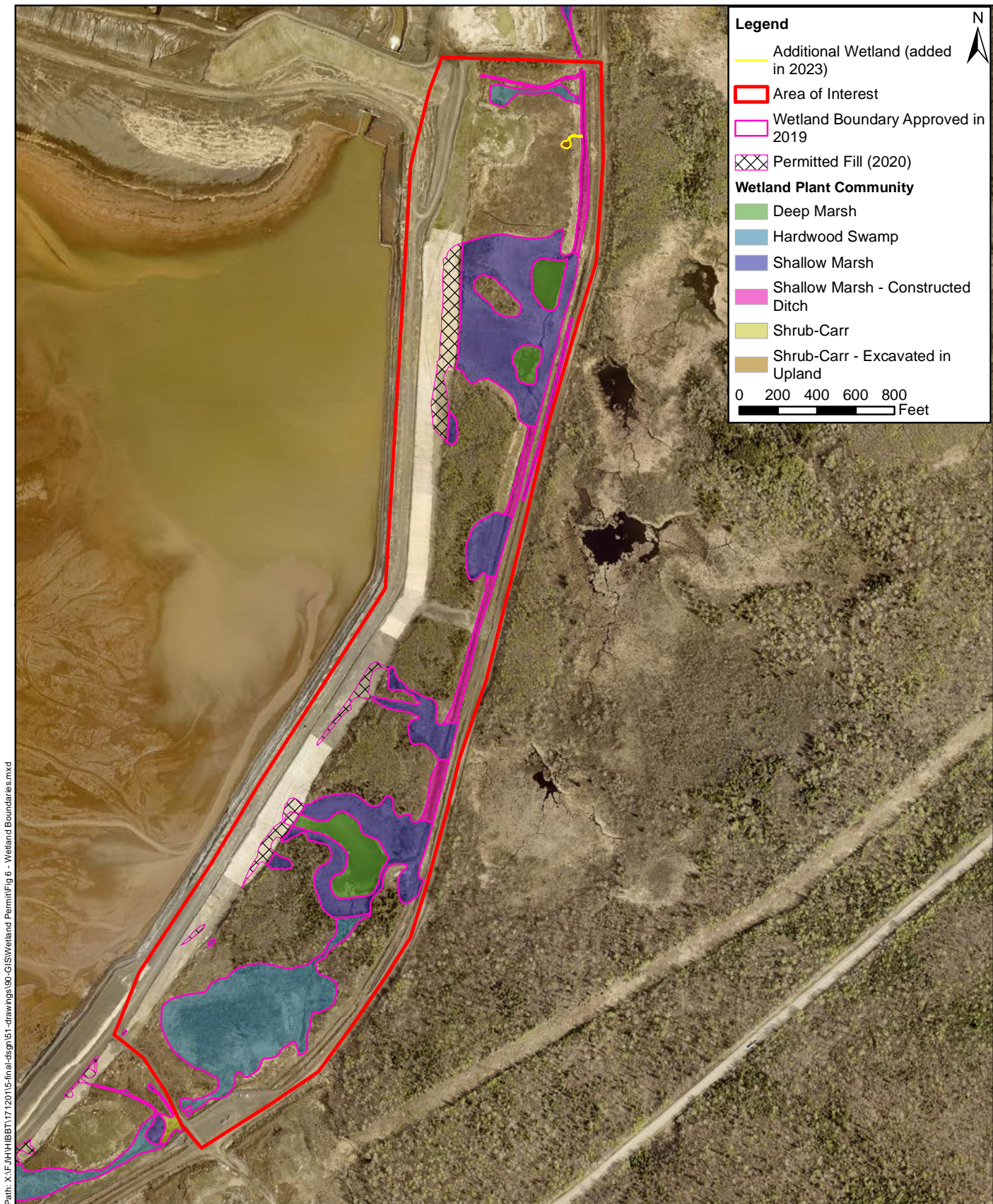
MVP-2019-02609-MJG, PN Figures 1-14




Path: X:\F\H\HIBBT\174008\5-final-ds\gn51-drawings\90-GIS\Wetland Permit\Fig 1 - Project Location.mxd

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.





Path: X:\F\J\H\HIBBT171201\5-final-dsgn\51-drawings\90-GIS\Wetland Permit\Fig 6 - Wetland Boundaries.mxd

	615 9th Street North Virginia, MN 55792 PHONE: 218.741.4284 TF: (800) 325-2055 www.sehinc.com	Project: HIBBT 174008 Print Date: 9/11/2023 Map by: J. Thayer Projection: NAD83 UTM 15N Source: ESRI, SEHINC, HTC Background: 2023 St. Louis Co.	<b>Wetland Boundaries &amp; Types</b> Hibbing Taconite Company St. Louis County, Minnesota	<b>Figure 7</b>
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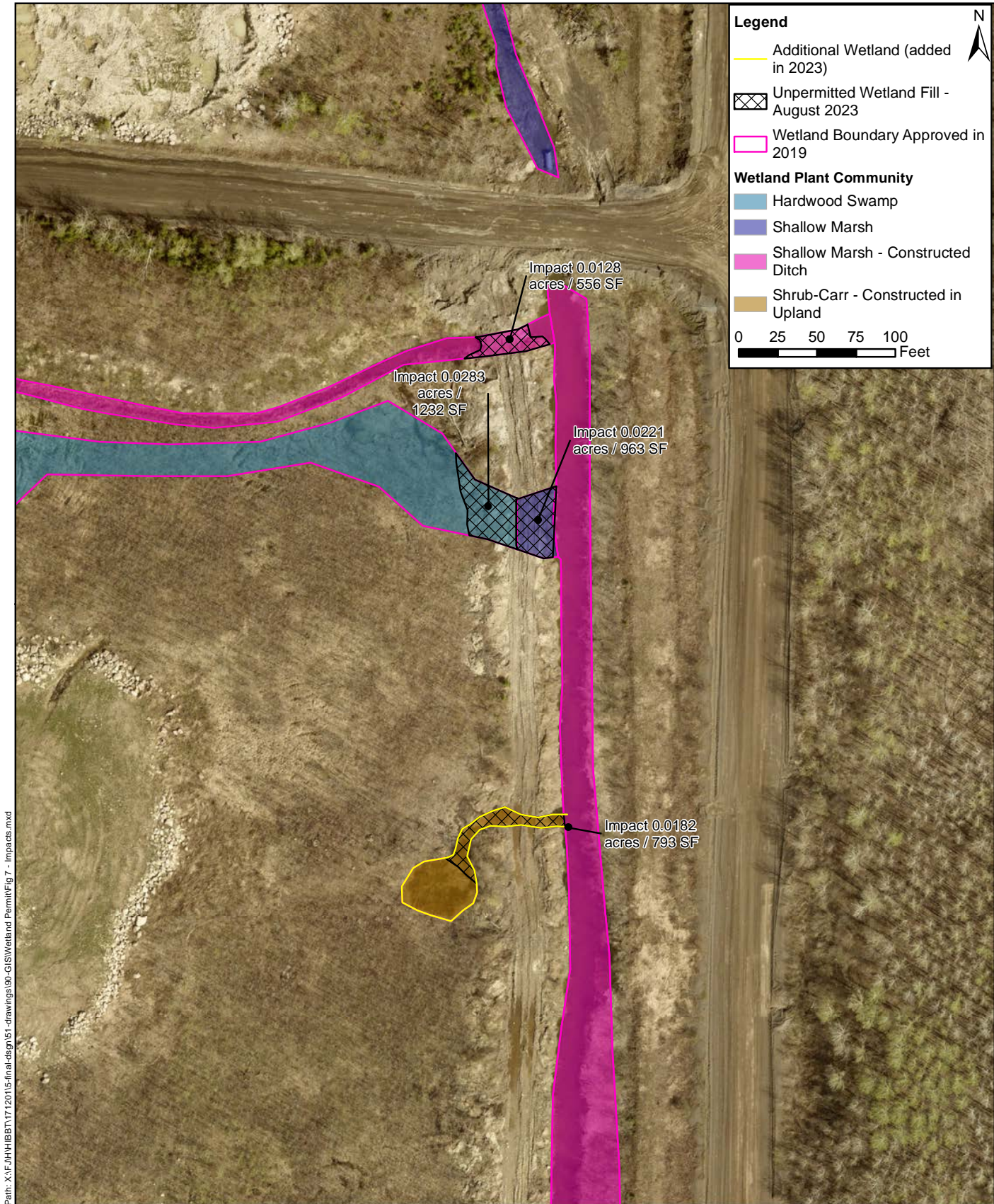




Path: X:\F\H\HIBBT\171201\5-final-dsgn\5-1-drawings\90-GIS\Wetland Permit\Fig 8 - Flow Routes.mxd

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615 9th Street North  
Virginia, MN 55792  
PHONE: 218.741.4284  
TF: (800) 325-2055  
www.sehinc.com

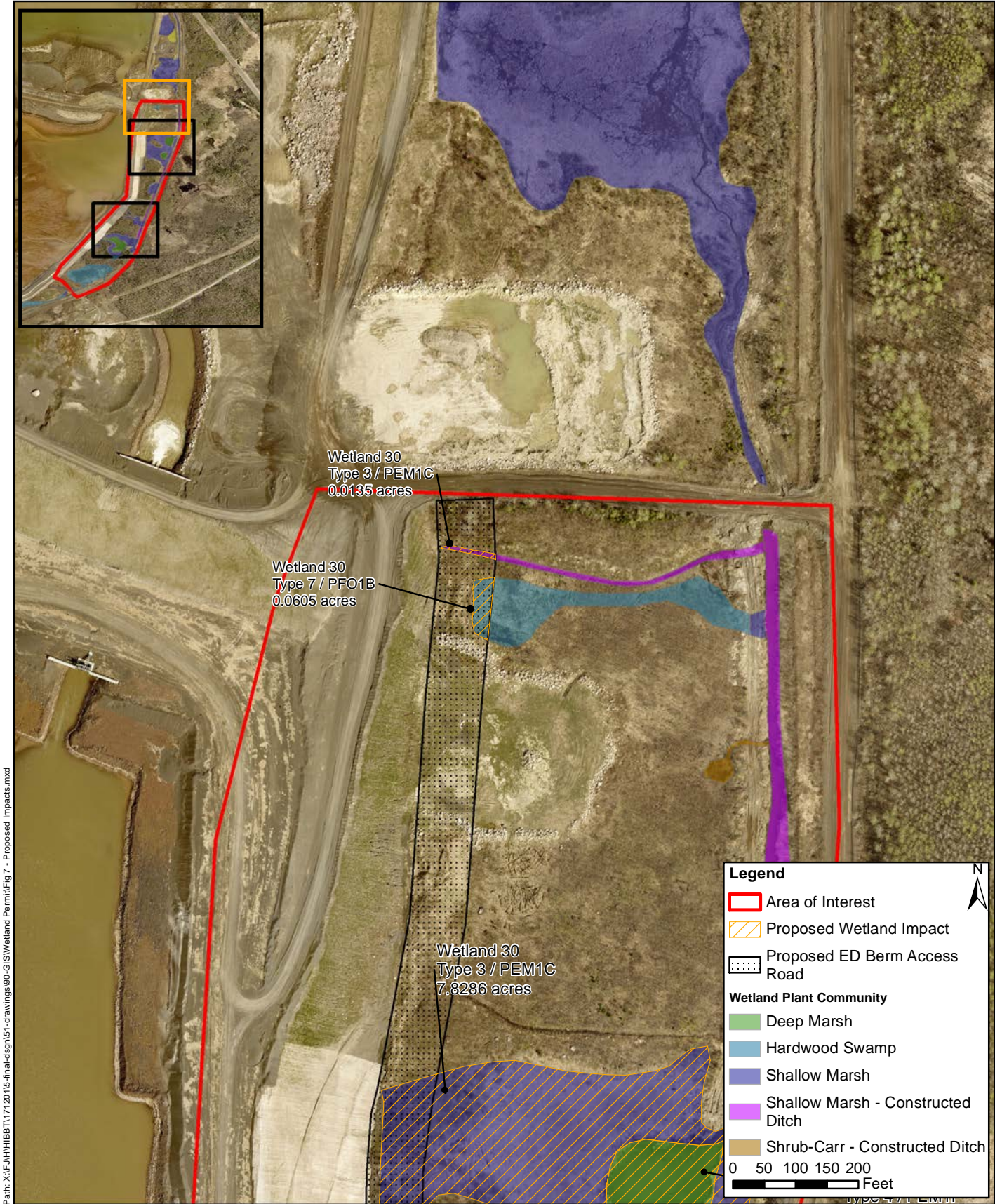
Project: HIBBT 174008  
Print Date: 9/11/2023  
Map by: J. Thayer  
Projection: NAD83 UTM 15N  
Source: ESRI, SEHINC, HTC  
Background: 2023 St. Louis Co.

**Unpermitted Wetland Impact -  
Wetland 30 - August 2023**  
Hibbing Taconite Company  
St. Louis County, Minnesota


Figure  
9

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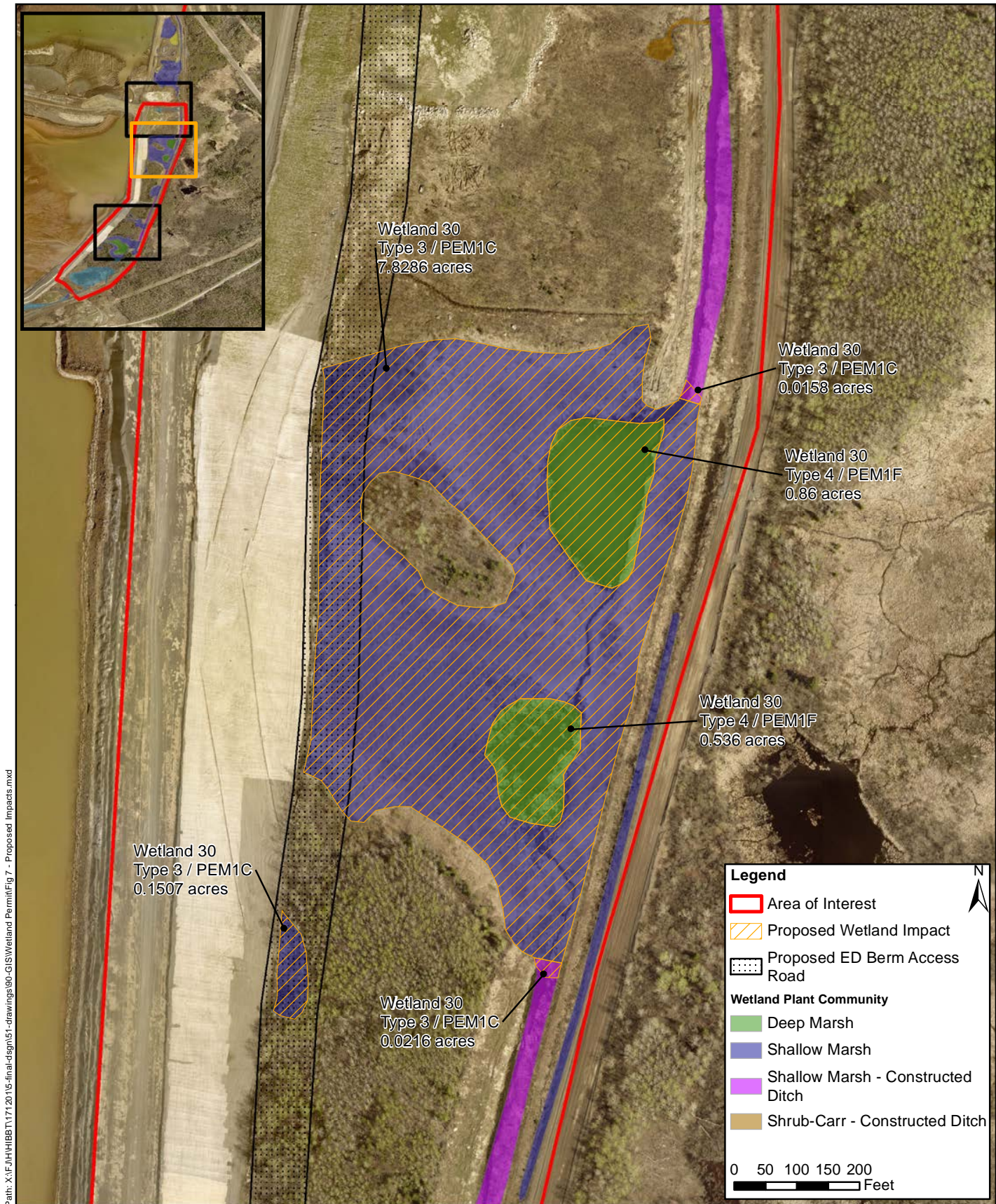


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	615 9th Street North Virginia, MN 55792 PHONE: 218.741.4284 TF: (800) 325-2055 www.sehinc.com	Project: HIBBT 174008 Print Date: 2/28/2024	<b>Proposed Wetland Impacts</b> Hibbing Taconite Company St. Louis County, Minnesota	<b>Figure 10-1</b>
		Map by: J. Thayer Projection: NAD83 UTM 15N Source: ESRI, SEHINC, HTC Background: 2023 St. Louis Co.		

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615 9th Street North  
Virginia, MN 55792  
PHONE: 218.741.4284  
TF: (800) 325-2055  
www.sehinc.com

Project: HIBBT 174008  
Print Date: 2/28/2024

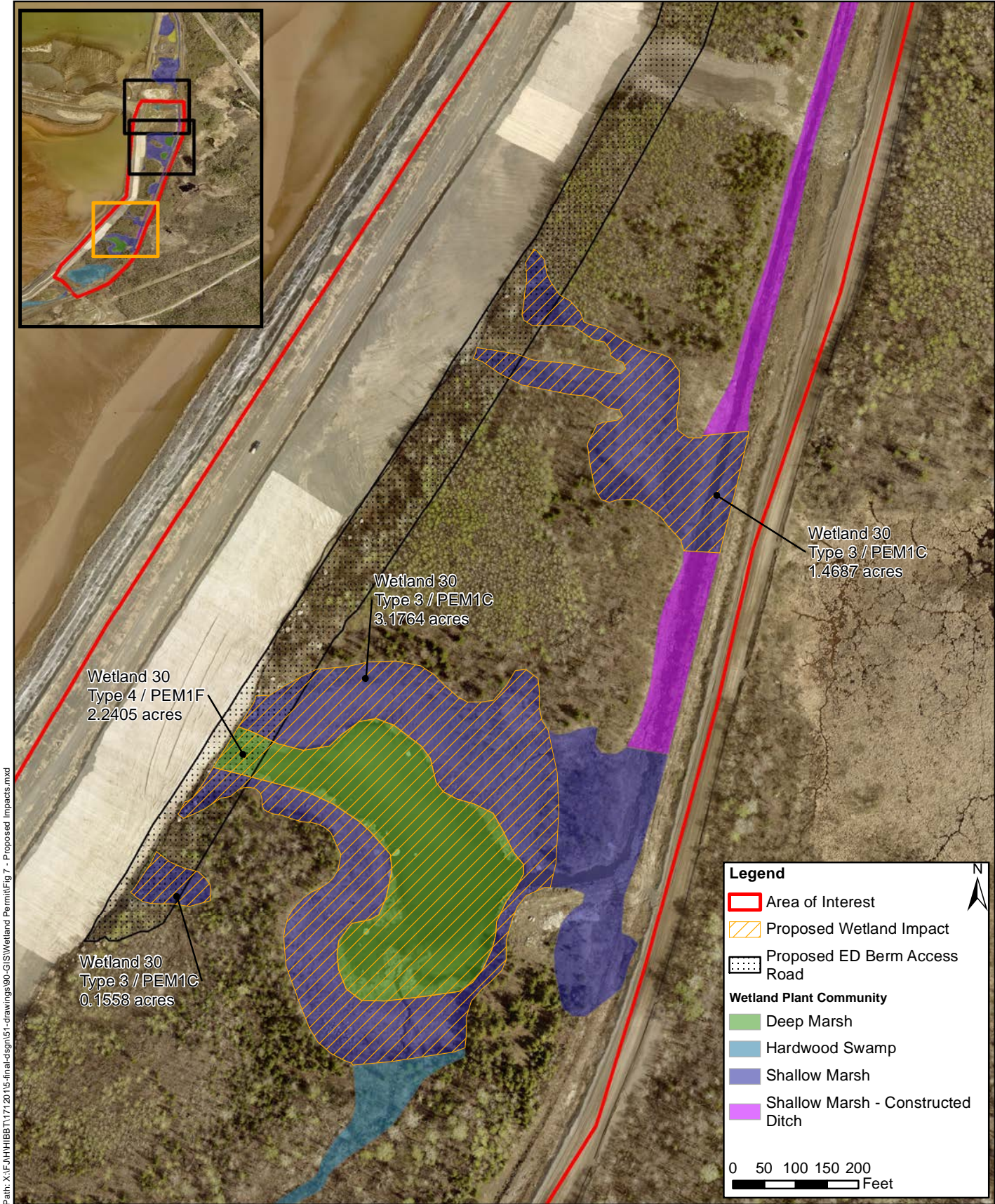
Map by: J. Thayer  
Projection: NAD83 UTM 15N  
Source: ESRI, SEHINC, HTC  
Background: 2023 St. Louis Co.

**Proposed  
Wetland Impacts**  
Hibbing Taconite Company  
St. Louis County, Minnesota


**Figure  
10-2**

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.





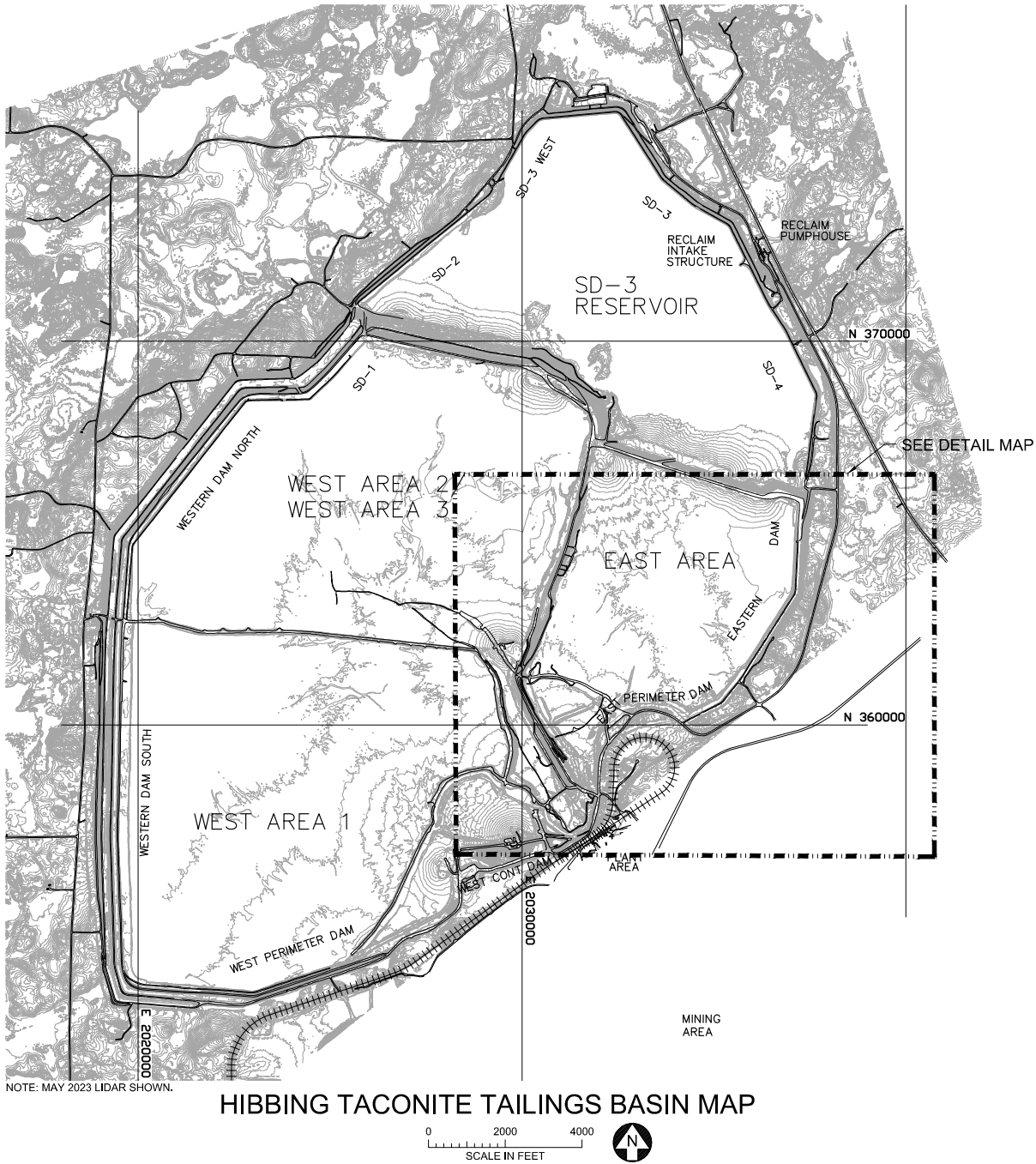
Path: X:\F\H\HIBBT\1712015-final-dsgn\51-drawings\90-GIS\Wetland Permit\Fig 7 - Proposed Impacts.mxd

	615 9th Street North Virginia, MN 55792 PHONE: 218.741.4284 TF: (800) 325-2055 www.sehinc.com	Project: HIBBT 174008 Print Date: 2/28/2024	<b>Proposed Wetland Impacts</b> Hibbing Taconite Company St. Louis County, Minnesota	<b>Figure 10-3</b>
		Map by: J. Thayer Projection: NAD83 UTM 15N Source: ESRI, SEHINC, HTC Background: 2023 St. Louis Co.		

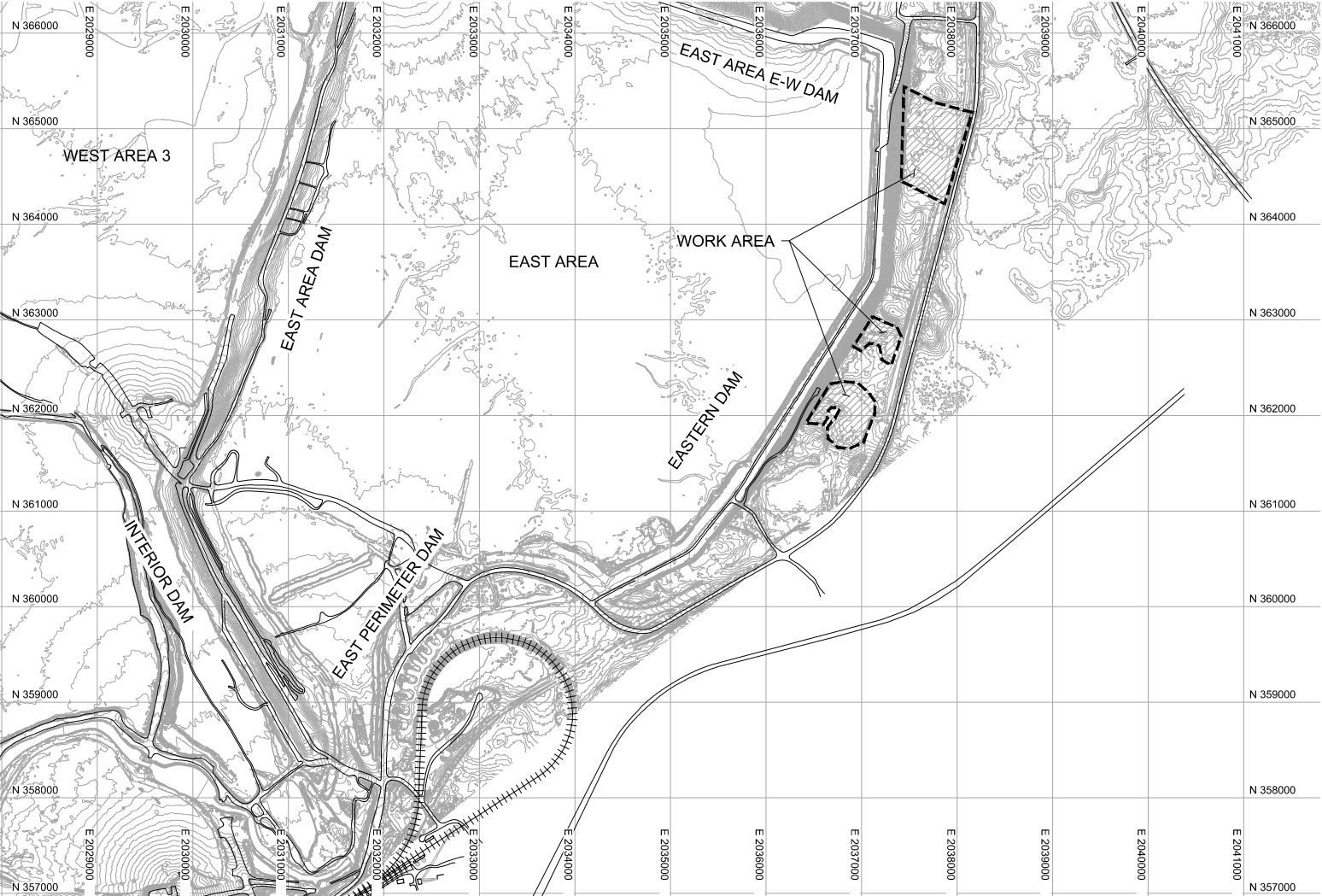
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# HIBBING TACONITE COMPANY TAILINGS BASIN, EASTERN DAM DOWNSTREAM BERM CONSTRUCTION



HIBBING TACONITE TAILINGS BASIN MAP



EASTERN DAM DETAIL MAP

## INDEX OF SHEETS

- C-01 . . . . TAILINGS BASIN MAP, EASTERN DAM DETAIL MAP, AND INDEX OF SHEETS
- C-02 . . . . CONSTRUCTION PLAN
- C-03 . . . . STA. 2+00 TO 16+00 AND STA. 25+00 TO 40+00 CONSTRUCTION PLANS
- C-04 . . . . SECTION STATION 9+00
- C-05 . . . . SECTION STATION 35+50
- C-06 . . . . CONSTRUCTION DETAILS
- EC-01 . . . . TEMPORARY EROSION CONTROL PLAN AND DETAILS

ABBREVIATIONS		LEGEND	
EL. - ELEVATION			RANDOM CLAY FILL
EX. - EXISTING			SELECT CLAY FILL
H. - HORIZONTAL			ZONE A-III
T.O. - TOP OF			COARSE TAILINGS
TYP. - TYPICAL			RIPRAP
V. - VERTICAL			SELECT FILTER STONE - COARSE
APP. - APPROXIMATE			

60% DRAFT  
NOT FOR  
CONSTRUCTION

REQUIRED REFERENCED DRAWINGS  
location map 2369082600\_2023 LOCATION MAP SPRING 2023.DWG  
instrumentation base 2369082600\_BASE\_INSTRUMENTATION-2022.DWG  
control base 2369082681\_ED\_USB\_CONTROL BASE.DWG  
design base 2369082681\_ED\_USB\_C3D-BASE.DWG

NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION
C	PLF	RHV		02/29/24	60% DRAFT
B	TJK	RHV		01/05/24	60% DRAFT
A	TJK	RHV		12/22/23	60% DRAFT

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	
PRINTED NAME	_____
SIGNATURE	_____
DATE	_____
LICENSE #	_____

CLIENT	12/22/23	01/05/24	02/29/24						
BID									
CONSTRUCTION									
RECORD									
RELEASED TO/FOR	A	B	C	0	1	2	3		
DATE RELEASED									

**BARR**

Project Office:  
BARR ENGINEERING CO.  
4300 MARKETPOINTE DRIVE  
Suite 200  
MINNEAPOLIS, MN 55435  
Ph: 1-800-632-2277  
Fax: (952) 832-2601  
www.barr.com

Corporate Headquarters:  
Minneapolis, Minnesota  
Ph: 1-800-632-2277

Scale	AS SHOWN
Date	12-11-23
Drawn	TJK
Checked	RHV
Designed	TCD
Approved	—

HIBBING TACONITE COMPANY  
HIBBING, MINNESOTA

PROPOSED DAM CONSTRUCTION EASTERN DAM DOWNSTREAM BERM	
TAILINGS BASIN MAP, EASTERN DAM DETAIL MAP, AND INDEX OF SHEETS	

BARR PROJECT No. 23690826.81	
CLIENT PROJECT No.	
DWG. No. C-01	REV. No. C



1. ALL INSTRUMENTATION SHALL BE PROTECTED AND REPLACED IF DAMAGED, EXTEND ALL INSTRUMENTS AFFECTED BY CONSTRUCTION, AS NECESSARY, COORDINATE WITH OWNER WHEN INSTRUMENTATION NEEDS TO BE EXTENDED.
2. MSHA SPECIFIED BERMS SHALL BE MAINTAINED DURING CONSTRUCTION.
3. EXISTING CONTOURS FROM MAY 2023 LIDAR SURVEY. ACTUAL CONDITIONS MAY VARY.
4. STRIKE THROUGH INDICATES PIEZOMETER IS NO LONGER BEING READ.
5. 2020 TOE DRAIN RECORD SURVEY DATED 9/2/20 PROVIDED BY HTC.
6. CONSTRUCTION ACCESS NOT SHOWN.



LEGEND











- |   |  |
|---|--|
|  | EXISTING 2'-10' CONTOURS (2023 SPRING LIDAR)     |
|  | PROPOSED 1'-5' CONTOURS                          |
|  | EXISTING PIEZOMETER                              |
|  | EXISTING SETTLEMENT PLATE                        |
|  | FINGER DRAIN AND HEADER TRENCH (RECORD LOCATION) |
|  | TREE LINE (2020)                                 |
|  | CONSTRUCTION BERM ACCESS (ESTIMATED BY OTHERS)   |
|  | CLEAR AND GRUB LIMITS                            |
|  | DELINEATED WETLAND (2019)                        |
|  | ESTIMATED WETLAND IMPACTS                        |

TABLE 1 (FD BASELINE ALIGNMENT)

STATION	NORTHING	EASTING
PI 0+00	365694.48	2037270.89
PI 22+29.07	363468.23	2037158.82
PI 49+00.00	361215.04	2035724.60

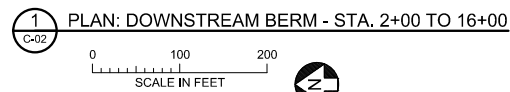
TABLE 2 (WETLAND IMPACTS)

ITEM	APPROXIMATE AREA
BERM ACCESS	0.29 ACRES
DOWNSTREAM BERM	16.3 ACRES

60% DRAFT  
NOT FOR  
CONSTRUCTION

BARR M-2024-02-2011										I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.										CLIENT BARR CONSTRUCTION RECORD										12/22/2301/05/2402/29/24										 Project Office: BARR ENGINEERING CO, 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435										Scale AS SHOWN Date 12-11-23 Drawn TJK Checked RHV Designed TCD Approved										HIBBING TACONITE COMPANY HIBBING, MINNESOTA										PROPOSED DAM CONSTRUCTION EASTERN DAM DOWNSTREAM BERM										BARR PROJECT No. 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C PLF RHV — 02/29/2460% DRAFT B TJK RHV — 01/05/2460% DRAFT A TJK RHV — 12/22/2360% DRAFT										PRINTED NAME: _____ SIGNATURE: _____ DATE: _____ LICENSE # _____										RELEASED TO/FOR										A B C 0 1 2 3 DATE RELEASED										Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277 Fax: (612) 832-2601 www.barr.com										Ph: 1-800-632-2277 Fax: (612) 832-2601 www.barr.com										CONSTRUCTION PLAN										DWG. No. C-02										REV. 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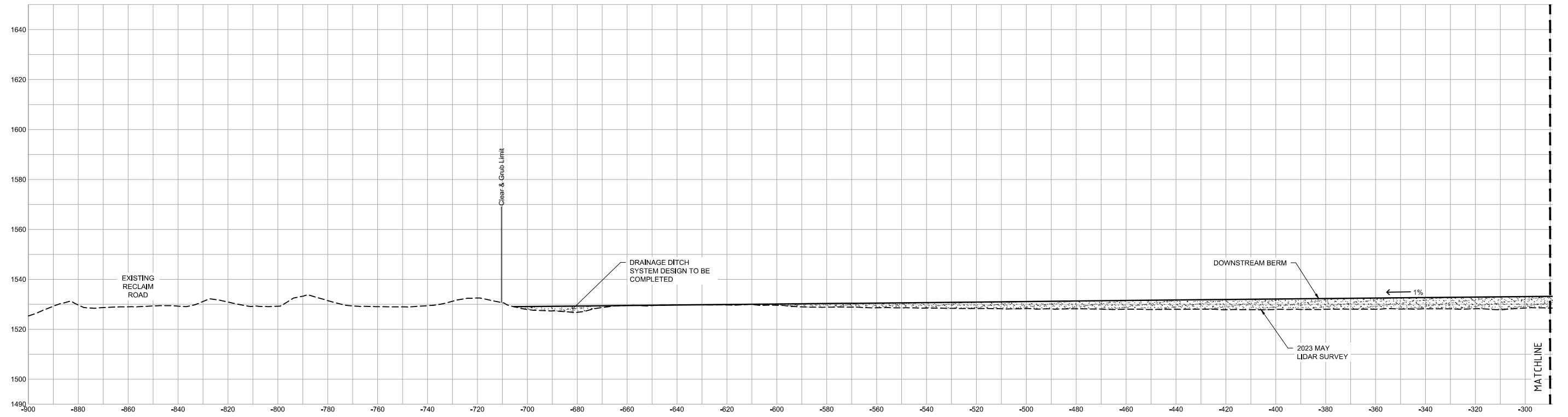
EXISTING 2'-10' CONTOURS (2023 SPRING LIDAR)  
PROPOSED 1'-5' CONTOURS  
FINGER DRAIN AND HEADER TRENCH (RECORD LOCATION)  
WATER RECLAIM LINE  
TREE LINE (2020)  
CONSTRUCTION BERM ACCESS (ESTIMATED BY OTHERS)  
CLEAR AND GRUB LIMITS  
DELINEATED WETLAND (2019)  
ESTIMATED WETLAND IMPACTS

1. ALL INSTRUMENTATION SHALL BE PROTECTED AND REPLACED IF DAMAGED, EXTEND ALL INSTRUMENTS AFFECTED BY CONSTRUCTION, AS NECESSARY, COORDINATE WITH OWNER WHEN INSTRUMENTATION NEEDS TO BE EXTENDED.
2. MSHA SPECIFIED BERMS SHALL BE MAINTAINED DURING CONSTRUCTION.
3. EXISTING CONTOURS FROM MAY 2023 LIDAR SURVEY. ACTUAL CONDITIONS MAY VARY.
4. 2020 TOE DRAIN SELECT FILTER STONE-COARSE RECORD SURVEY DATED 9/2/20 PROVIDED BY HTC. SURVEY COMPLETED BY MANUAL GPS SURVEY.

60% DRAFT  
NOT FOR  
CONSTRUCTION

PROPOSED DAM CONSTRUCTION  
EASTERN DAM DOWNSTREAM BERM  
STA. 2+00 TO 16+00 AND STA. 25+00 TO 40+00  
CONSTRUCTION PLANS

BARR PROJECT No.	
23690826.81	
CLIENT PROJECT No.	
DWG. No.	REV. No.
C-03	C



A horizontal scale bar with the text "SCALE IN FEET" centered below it. The bar has tick marks at 0, 20, and 40 feet. There are 10 small tick marks between 0 and 20, and 10 small tick marks between 20 and 40.

- |    |     |      |      |          |                      |  |
|----|-----|------|------|----------|----------------------|--|
|    |     |      |      |          |                      |  |
|    |     |      |      |          |                      |  |
|    |     |      |      |          |                      |  |
| B  | TJK | RHV  | —    | 01/05/24 | 60% DRAFT            |  |
| A  | TJK | RHV  | —    | 12/22/23 | 60% DRAFT            |  |
| O. | BY  | CHK. | APP. | DATE     | REVISION DESCRIPTION |  |

CLIENT	12/22/23	01/05/24						
BID								
CONSTRUCTION								
RECORD								
RELEASED TO/FOR	A	B	C	0	1	2	3	
	DATE RELEASED							



Scale	AS SHOWN
Date	12-11-23
Drawn	TJK
Checked	RHV
Designed	TCD
Approved	---

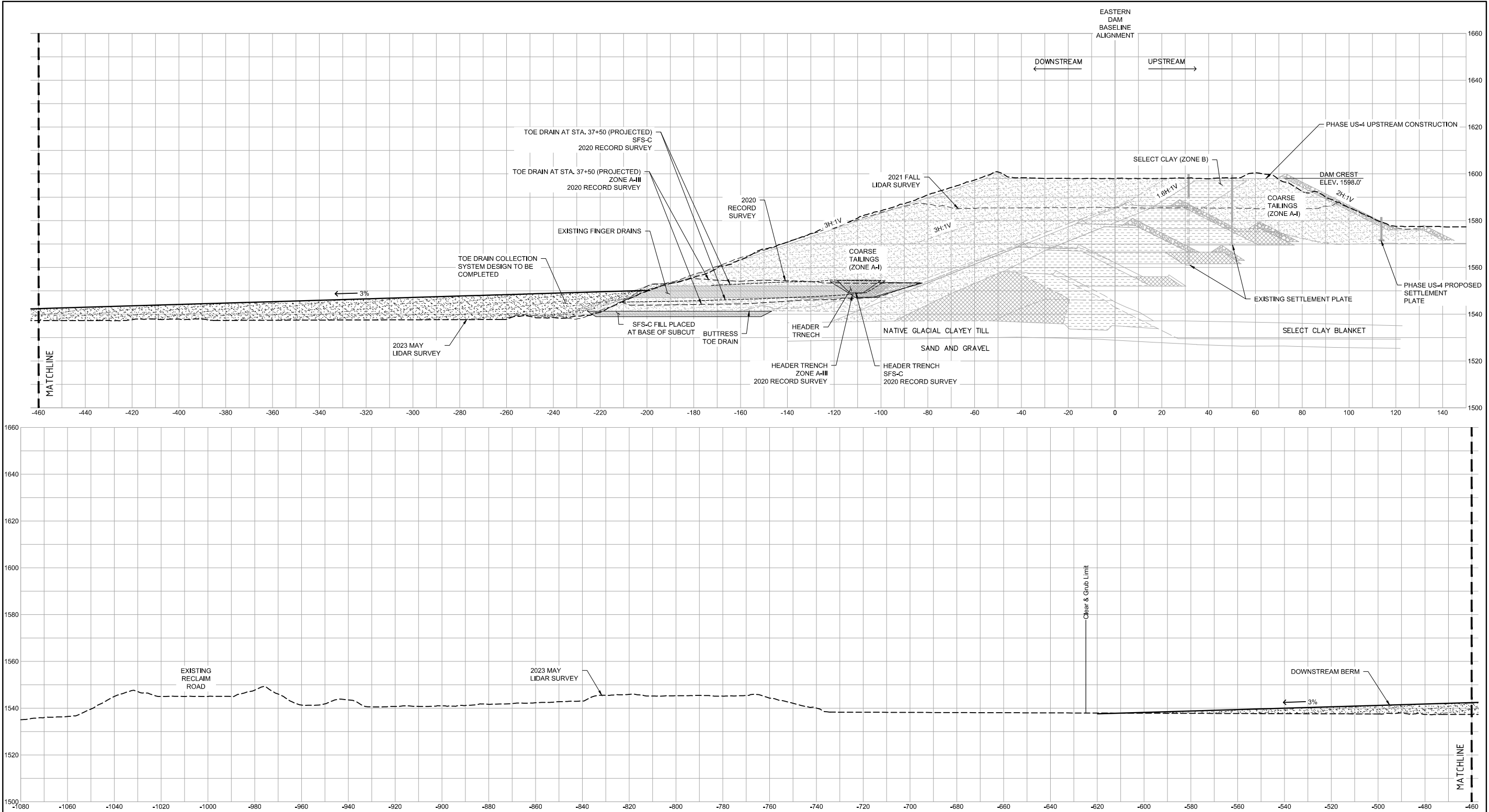
## PROPOSED DAM CONSTRUCTION EASTERN DAM DOWNSTREAM BERM

60% DRAFT  
NOT FOR  
CONSTRUCTION

BARR PROJECT No.	23690826.81
CLIENT PROJECT No.	

DWG. No. C-04	REV. No. B
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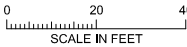
CADD USER: Travis J. Kemp FILE: M:\DESIGN\23690826\1\_ED\_DS6\_C-05.DWG PLOT SCALE: 1/2 PLOT DATE: 14/2024 8:37 PM  
BARR: M:\AutoCAD 2011\AutoCAD 2011 Support\enu\Template\Barr\_2011\_Template.dwt Plot at 1 10/5/2010 14:03:50



GENERAL NOTES:

- STATIONING SHOWN FROM ED BASELINE ALIGNMENT. PRIOR DAM DESIGN STRATIGRAPHY SHOWN IS PROJECTED AND REPRESENTATIVE OF PHASE US-4 DESIGN FROM STATION 37+00. HISTORICAL RECORD SURFACE INFORMATION AND DOWNSTREAM BERM DESIGN SHOWN AT STATION 35+50.
- ALL INSTRUMENTATION SHALL BE PROTECTED AND REPLACED IF DAMAGED. EXTEND ALL INSTRUMENTS AFFECTED BY CONSTRUCTION, AS NECESSARY. COORDINATE WITH OWNER WHEN INSTRUMENTATION NEEDS TO BE EXTENDED.
- MSHA SPECIFIED BERMS SHALL BE MAINTAINED DURING CONSTRUCTION.

1 SECTION: EASTERN DAM DOWNSTREAM BERM  
C-02 STATION 35+50  
(SEE NOTE 1)



NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION
B	TJK	RHV		01/05/24	60% DRAFT
A	TJK	RHV		12/22/23	60% DRAFT

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINTED NAME: \_\_\_\_\_  
SIGNATURE: \_\_\_\_\_  
DATE: \_\_\_\_\_ LICENSE #: \_\_\_\_\_

CLIENT	12/22/23	01/05/24							
BID									
CONSTRUCTION									
RECORD									
RELEASED TO/FOR	A	B	C	0	1	2	3		
DATE RELEASED									

**BARR**  
Corporate Headquarters:  
Minneapolis, Minnesota  
Ph: 1-800-632-2277

Project Office:  
BARR ENGINEERING CO.  
4300 MARKETPOINTE DRIVE  
Suite 200  
MINNEAPOLIS, MN 55435  
Ph: 1-800-632-2277  
Fax: (952) 832-2601  
www.barr.com

Scale	AS SHOWN
Date	12-11-23
Drawn	TJK
Checked	RHV
Designed	TCD
Approved	—

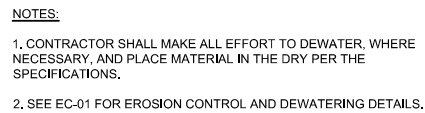
HIBBING TACONITE COMPANY  
HIBBING, MINNESOTA

PROPOSED DAM CONSTRUCTION  
EASTERN DAM DOWNSTREAM BERM

SECTION  
STA. 35+50

60% DRAFT  
NOT FOR  
CONSTRUCTION

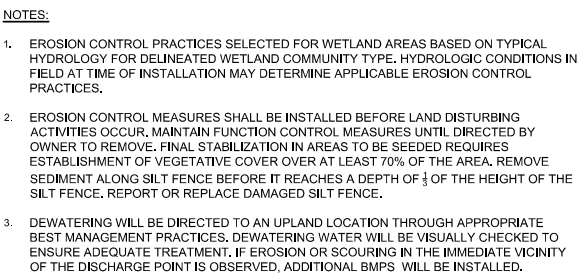
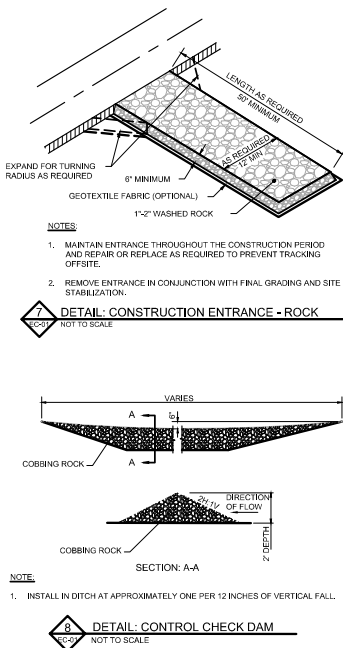
BARR PROJECT No. 23690826.81	
CLIENT PROJECT No.	
DWG. No. C-05	REV. No. B



60% DRAFT  
NOT FOR  
CONSTRUCTION

										I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.										CLIENT 2/22/23 9:05/24 BID CONSTRUCTION										<div><div></div><div><div>BARR</div><div>Corporate Headquarters: Minneapolis, Minnesota Ph: 1-800-632-2277</div></div></div> <div>Project Office: BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE Suite 200 MINNEAPOLIS, MN 55435</div>										Scale AS SHOWN Date 12-11-23 Drawn TJK Checked RHV Designed TCD Approved —										HIBBING TACONITE COMPANY HIBBING, MINNESOTA																				PROPOSED DAM CONSTRUCTION EASTERN DAM DOWNSTREAM BERM																				BARR PROJECT No. 23690826.81																			
B TJK RHV — 01/05/24 60% DRAFT A TJK RHV — 12/22/23 60% DRAFT										PRINTED NAME — SIGNATURE _____ DATE — LICENSE # —										RELEASED TO/OF DATE RELEASED																				CONSTRUCTION DETAILS																				CLIENT PROJECT No.																																																	
NO. BY CHK. APP. DATE REVISION DESCRIPTION																																								DWG. No. C-06 REV. No. B																																																																					





**BARR**  
Corporate Headquarters:  
Minneapolis, Minnesota  
Ph: 1-800-632-2277