



November 1, 2021

Stephanie Kammer, Manager
Emerging Pollutants Section
Department of Environment, Great Lakes, and Energy
350 Ottawa Avenue, NW Unit 10
Grand Rapids, MI 49503-2341

Re: Plan and Schedule for Surface Water Discharges from Former J.B. Sims Site

We are writing in response to your letter dated September 23, 2021, regarding surface water discharges from the former J.B. Sims site. Please be advised that the Grand Haven Board of Light & Power (GHBLP) notified Tim Unselde of the Department of Environment, Great Lakes, and Energy (EGLE) Materials Management Division (MMD) both verbally and electronically prior to the press release on June 17, 2021. This has been past protocol for groundwater monitoring well data reporting. We received an immediate response from Mr. Unselde that he would forward the test results within EGLE as needed. Copies of this correspondence are attached for the record. Please advise if EGLE-Water Resources Division (WRD) would like future test results (groundwater, surface water, coal combustion residuals (CCR) test results, non-CCR test results, etc.) to be submitted differently in the future and we will be happy to accommodate. Otherwise, we will continue submitting groundwater test results directly to MMD and let them distribute internally in EGLE as they see fit.

The GHBLP understands that the recent discovery of PFAS in the stormwater runoff of the former coal yard runoff area and remaining clay from the former Unit 3 impoundments renders the existing outfall discharges in the National Pollutant Discharge Elimination System (NPDES) permit unusable.

Upon initial discovery of PFAS in June 2021, and confirmation of a secondary set of tests in July, GHBLP investigated potential PFAS treatments strategies, for the stormwater collection areas, that was already currently deployed in similar applications within the state of Michigan. We informed EGLE of these efforts during the Coordination Meeting held on August 24, 2021, with EGLE representatives, GHBLP, City Officials, and respective representative legal councils. As stated during that meeting, the system we had preliminarily reviewed includes pretreatment and post treatment bag filtration systems with a multistage series of carbon vessels in between. We passed these findings onto Golder who has developed the attached Plan & Schedule to manage both the water treatment and discharges of the stormwater collection in the former coal yard runoff area and the remaining clay of the former Unit 3 impoundments.

- Development of a dewatering and liquids management plan that includes treatment for the detected constituents including PFAS – December 31, 2021
- Dewatering and pretreatment system design and contractor selection to complete the work – January 31, 2022



- Applying for and obtaining approval to discharge to the public owned sanitary sewer system (if approved) including pre-treatment for constituents including PFAS or submittal of request for discharge via a voluntary Administrative Consent Order to allow necessary dewatering so cleanup activities can continue – February 28, 2022
- Receiving landfill pre-approval for solids disposal and the landfill's conditions for disposal – February 28, 2022
- Receiving pre-approval for disposal of PFAS treatment system wastes (i.e. activated carbon, filters, etc.) – February 28, 2022
- Evaluate the due care requirements of the coal in the utility trenches – January 31, 2022

This plan and schedule was provided in a progress update prepared by Golder to GHBLP which has also been provided to Kent Walters (EGLE-MMD). A full copy of that document is attached for your files.

While we understand from your letter that a discharge to the waters could be managed through an Administrative Consent Order (ACO), we believe it may be best to first attempt to obtain authorization to discharge (following proper treatment) to the sanitary sewer system. If authorization can not be granted to use this system, then GHBLP will discuss an alternative path through an ACO. If EGLE believes an ACO is a more appropriate avenue, please let us know.

The former coal yard that only recently ceased operating is not a regulated wetland and we are aware of no requirements to apply for a permit within this area. However, we are aware there are other areas of the former Sims site that will require a wetlands permit (specifically the Inactive Units 1/2 impoundments) in the future once construction activities are ready to be undertaken.

We appreciate EGLE's guidance in your September 23, 2021, letter. If you have any questions regarding this submission, or require any additional information, please feel free to contact me at (616) 577-2054.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Erik Booth', is written over a light blue horizontal line.

Erik Booth, P.E.
Manager of Operations & Power Supply
Grand Haven Board of Light & Power

Attachments:

Response from EGLE of Receipt and Internal Distribution of Test Results of Non-CCR Related Constituents dated June 17, 2021.

Progress Update and Plan & Schedule for Former Coal Yard Closure, J.B. Sims Generating Station from Golder Associates dated October 28, 2021.

Erik Booth

From: Unseld, Timothy (EGLE) <UNSELDT@michigan.gov>
Sent: Thursday, June 17, 2021 1:04 PM
To: Erik Booth
Cc: Johnson, Tiffany; Dave Walters; Paul Cederquist; Prell, Dawn; 'Powrozek, Carolyn'; Walters, Kent (EGLE)
Subject: RE: Testing of Non-CCR Related Constituents

Thanks Erik. I will forward them within EGLE as needed.

From: Erik Booth <EBooth@ghblp.org>
Sent: Thursday, June 17, 2021 12:40 PM
To: Unseld, Timothy (EGLE) <UNSELDT@michigan.gov>
Cc: Johnson, Tiffany <Tiffany_Johnson@golder.com>; Dave Walters <DWalters@ghblp.org>; Paul Cederquist <PCederquist@ghblp.org>; Prell, Dawn <Dawn_Prell@golder.com>; 'Powrozek, Carolyn' <Carolyn_Powrozek@golder.com>
Subject: Testing of Non-CCR Related Constituents

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Tim,

As discussed via phone this afternoon, in preparation for eventual remediation of the inactive coal ash residuals impoundment, sampling was conducted to determine any potential contamination relating to past disposal of wastes at the former Sims site on Harbor Island. Test results which are attached confirmed the presence of elevated levels on the Sims site for the following constituents above regulatory criteria:

- Ammonia and total inorganic nitrogen
- Cyanide
- Perfluorooctanoic Acid (PFOA)
- Perfluorooctanesulfonic Acid (PFOS)

The test results will be made available to the public at [CCR Rule Compliance Data and Information - Grand Haven Board of Light & Power \(ghblp.org\)](#). This was the first test conducted for chemical constituents unrelated to coal ash. A second set of confirmatory sampling is scheduled within the next 10 days to verify these results. The results will be made available to EGLE and the public following the BLP's confirmation.

The utility tested for these non-ash compounds due to projected remedial activities which could include a significant dewatering program, excavation of ash (which could impact materials from the former dump), and discharges of water removed. While we have repeatedly stated that we are seeking a compliance strategy that avoids negatively impacting the in-situ materials (both ash and trash) that have been undisturbed in the ground for a long period of time, the BLP may likely be required to conduct some ash removal activities. The goal of the removal program will be to avoid any exacerbation of the materials historically disposed on the Sims Site of Harbor Island. Therefore, testing of this water needed to be conducted before a removal strategy could be effectively evaluated.

Erik



**Grand Haven
Board of Light & Power**

1700 Eaton Drive
Grand Haven, MI 49417
ghblp.org

Erik Booth, P.E.
Operations & Power Supply Manager

Office: 616-577-2054
ebooth@ghblp.org

Total Control Panel

[Login](#)

To: ebooth@ghblp.org [Remove](#) this sender from my allow list
From: unseldt@michigan.gov

You received this message because the sender is on your allow list.

October 28, 2021

Project No. 21451440

Paul Cederquist

Environment and Safety Specialist
Grand Haven Board of Light and Power
1700 Eaton Drive
Grand Haven, MI 49417

**PROGRESS UPDATE AND PLAN & SCHEDULE FOR FORMER COAL YARD CLOSURE, J.B. SIMS
GENERATING STATION**

Dear Mr. Cederquist,

Golder Associates Inc. (Golder) is providing this letter to provide information regarding the ongoing closure activities of the former coal yard area at the former J.B. Sims Generating Station (JB Sims, Site). This update provides a summary of completed and ongoing activities and recommendations for future work.

The status of completed and ongoing activities related to the former coal yard closure at the Site is summarized as follows:

- *Updated Closure Verification Work Plan* for the Site was prepared by Golder and reviewed and approved by the Michigan Department of Environment, Great Lakes and Energy (EGLE) on July 9, 2021 (the Plan)
- Completion of initial site survey in accordance the Plan over the western portion of the site in August 2021
- Survey of the eastern portion of the site and storm water runoff area in accordance with the Plan cannot be completed until dewatering is completed
- Completion of borings in accordance with the Plan in September 2021 that revealed:
 - The former coal yard area generally has only surficial coal in soil remaining
 - Thicker layers of coal exist near the utility trenches where soils mixed with coal was used as backfill that would require dewatering to remove and could cause issues to infrastructure.
 - Borings confirmed coal in the storm water runoff area
 - Coal in the stormwater runoff area that would require dewatering to remove
- Soil samples collected from borings in the former coal yard storm water runoff area and analytical testing was completed to characterize the material for disposal:

- Analytical results indicated that no constituents were above regulatory levels for Type II landfilling
- However, levels of total PFAS were detected above cleanup criteria and high sulfur levels in the soils may impact disposal options at landfills
- Testing of water in the stormwater runoff area also documented the presence of PFAS compounds
- Survey of the perimeter of former coal yard area was completed in October to evaluate the potential for storm water that contacted material to leave the area
- A berm was placed on the southern perimeter of the remaining clay from the former Unit 3 impoundments to prevent stormwater (from the former plant site) entering or leaving this area in October

Given the bulleted issues above, coal yard closure and verification cannot proceed until measures to remove and properly discharge the runoff waters are developed. Additionally, completing partial closure could result in coal being re-introduced to the area by stormwater from the areas not closed. Items needing to be addressed specifically are outlined in the following Plan and Schedule:

- Development of a dewatering and liquids management plan that includes treatment for the detected constituents including PFAS – December 31, 2021
- Dewatering and pretreatment system design and contractor selection to complete the work – January 31, 2022
- Applying for and obtaining approval to discharge to the public owned sanitary sewer system (if approved) including pre-treatment for constituents including PFAS or submittal of request for discharge via a voluntary Administrative Consent Order to allow necessary dewatering so cleanup activities can continue – February 28, 2022
- Receiving landfill pre-approval for solids disposal and the landfill's conditions for disposal – February 28, 2022
- Receiving pre-approval for disposal of PFAS treatment system wastes (i.e., activated carbon, filters, etc.) – February 28, 2022
- Evaluate the due care requirements of the coal in the utility trenches – January 31, 2022
- Others to be determined

In the interim while these items are being addressed, Golder recommends the existing stormwater management berm system around the perimeter of the coal pile be improved to prevent stormwater that contacts material from leaving the site. A berm elevation of greater than 584 feet above mean sea level (ft-amsl) is recommended to be above the surrounding floodplain elevation. Clean material from on or offsite sources should be used in completing the perimeter berm. We recommend placing temporary erosion and sediment protection such as a straw erosion matt on the berm slopes that do not currently have vegetation to protect the berm through the winter months until vegetation can be established or closure has been completed.

Several items should be included within the former coal yard area. First, we recommend an interior berm be constructed to an elevation greater than 584 ft-amsl to prevent stormwater from the eastern portions of the site migrating to the west. Material for the interior berm can be obtained by scraping the surficial material in the former

coal yard area west of the berm to a depth of several inches. Next, we recommend a swale be excavated to drain low areas in the northwest corner of the yard to low areas to the south. Material excavated in constructing the swale can be used to construct the interior berm, if required. The location of all proposed berms and swales are shown on the Figure 1 (attached).

Periodic inspection of the site to evaluate erosion should be completed following significant rain or snowmelt events. Regrading and erosion control may be necessary if any erosion is identified during the inspections. Appropriate erosion control measures should be determined based on conditions observed. These may include regrading, silt fencing, erosion matting, or other measures deemed acceptable to mitigate erosion observed.

Please feel free to contact one of the undersigned with any questions or concerns you have relative to the information provided and our recommendations. We also recommend that you forward this update and plan and schedule to EGLE for their records. We look forward to hearing from you and continuing this important work with you.

Sincerely,

Golder Associates Inc.



Blaine Litteral, P.E.

Practice Leader
BL/TJ

CC: Dave Walters - GHBLP
Erik Booth – GHBLP



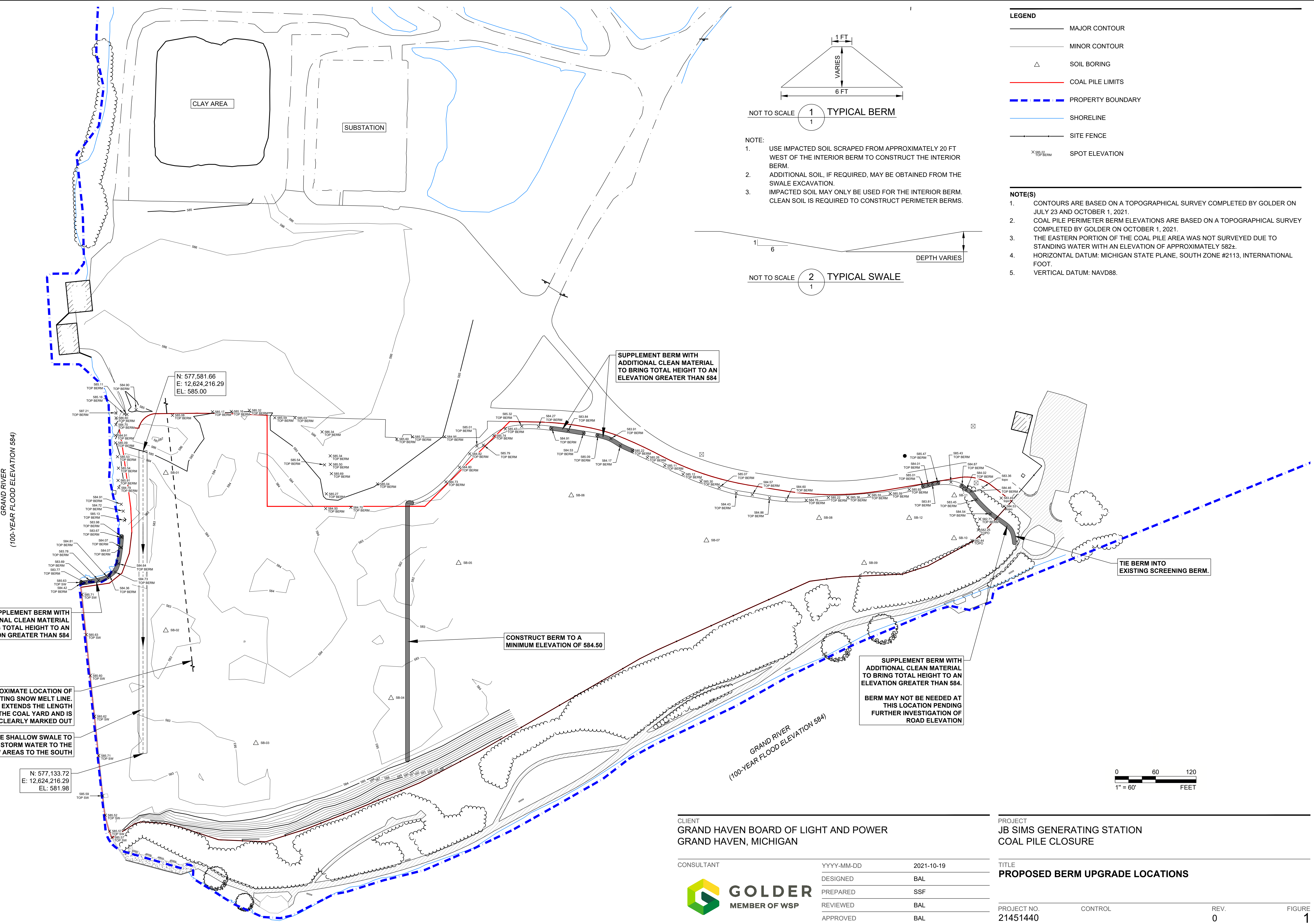
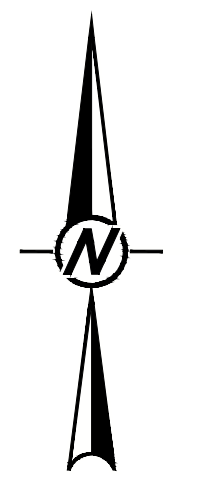
Tiffany D. Johnson, P.E.

Senior Consultant, Principal

Attachment – Proposed Berm Upgrade Locations

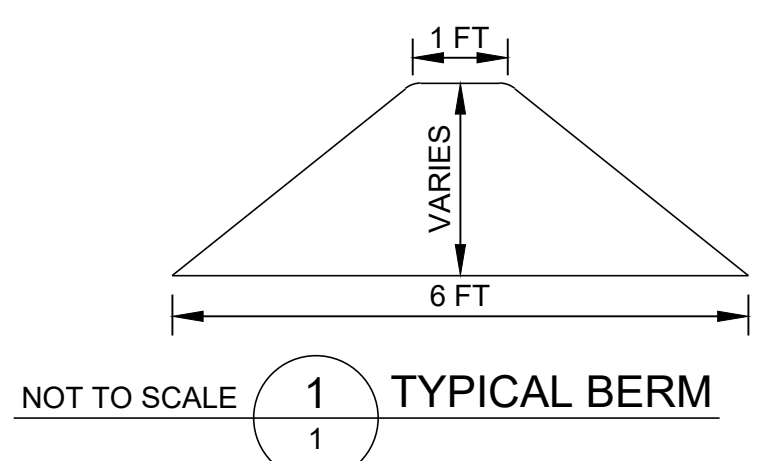
[https://golderassociates.sharepoint.com/sites/140296/project files/5 technical work/coal pile removal update oct21/10-28-21final coal pile closure status letter r2.docx](https://golderassociates.sharepoint.com/sites/140296/project%20files/5%20technical%20work/coal%20pile%20removal%20update%20oct21/10-28-21final%20coal%20pile%20closure%20status%20letter%20r2.docx)

Path: \\golder\gis\Complete\21451440\21451440_JB_Sims_Coal_Pile_Removal\PRODUCTION\Work\Plan_1 File Name: 21451440.dwg | Last Edited By: sfurner Date: 2021-10-19 Time: 10:04:05 AM

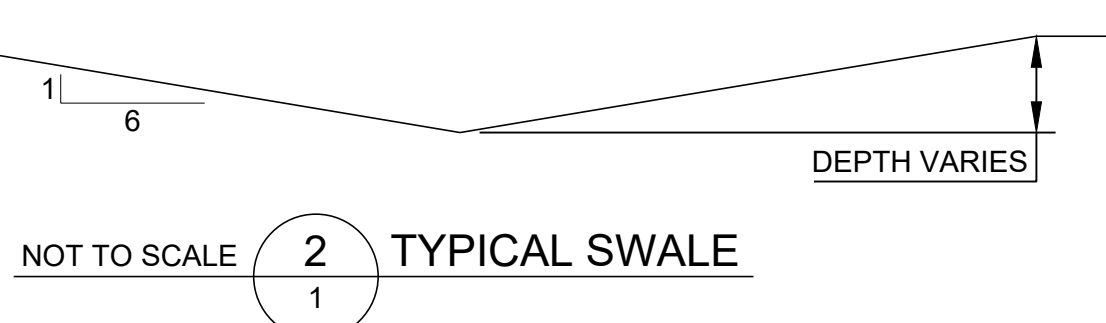


GRAND RIVER
(100-YEAR FLOOD ELEVATION 584)

GRAND RIVER
(100-YEAR FLOOD ELEVATION 584)



- NOTE:
- USE IMPACTED SOIL SCRAPED FROM APPROXIMATELY 20 FT WEST OF THE INTERIOR BERM TO CONSTRUCT THE INTERIOR BERM.
 - ADDITIONAL SOIL, IF REQUIRED, MAY BE OBTAINED FROM THE SWALE EXCAVATION.
 - IMPACTED SOIL MAY ONLY BE USED FOR THE INTERIOR BERM. CLEAN SOIL IS REQUIRED TO CONSTRUCT PERIMETER BERMS.



- LEGEND**
- MAJOR CONTOUR
 - MINOR CONTOUR
 - SOIL BORING
 - COAL PILE LIMITS
 - PROPERTY BOUNDARY
 - SHORELINE
 - SITE FENCE
 - SPOT ELEVATION

- NOTE(S)**
- CONTOURS ARE BASED ON A TOPOGRAPHICAL SURVEY COMPLETED BY GOLDR ON JULY 23 AND OCTOBER 1, 2021.
 - COAL PILE PERIMETER BERM ELEVATIONS ARE BASED ON A TOPOGRAPHICAL SURVEY COMPLETED BY GOLDR ON OCTOBER 1, 2021.
 - THE EASTERN PORTION OF THE COAL PILE AREA WAS NOT SURVEYED DUE TO STANDING WATER WITH AN ELEVATION OF APPROXIMATELY 582±.
 - HORIZONTAL DATUM: MICHIGAN STATE PLANE, SOUTH ZONE #2113, INTERNATIONAL FOOT.
 - VERTICAL DATUM: NAVD88.

N: 577,581.66
E: 12,624,216.29
EL: 585.00

SUPPLEMENT BERM WITH
ADDITIONAL CLEAN MATERIAL
TO BRING TOTAL HEIGHT TO AN
ELEVATION GREATER THAN 584

SUPPLEMENT BERM WITH
ADDITIONAL CLEAN MATERIAL
TO BRING TOTAL HEIGHT TO AN
ELEVATION GREATER THAN 584

CONSTRUCT BERM TO A
MINIMUM ELEVATION OF 584.50

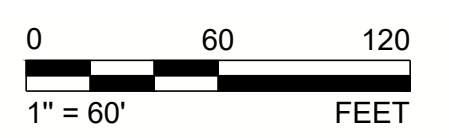
SUPPLEMENT BERM WITH
ADDITIONAL CLEAN MATERIAL
TO BRING TOTAL HEIGHT TO AN
ELEVATION GREATER THAN 584.

BERM MAY NOT BE NEEDED AT
THIS LOCATION PENDING
FURTHER INVESTIGATION OF
ROAD ELEVATION

APPROXIMATE LOCATION OF
EXISTING SNOW MELT LINE.
LINE EXTENDS THE LENGTH
OF THE COAL YARD AND IS
CLEARLY MARKED OUT

EXCAVATE SHALLOW SWALE TO
DIRECT STORM WATER TO THE
LOW AREAS TO THE SOUTH

N: 577,133.72
E: 12,624,216.29
EL: 581.98



CLIENT
GRAND HAVEN BOARD OF LIGHT AND POWER
GRAND HAVEN, MICHIGAN

PROJECT
JB SIMS GENERATING STATION
COAL PILE CLOSURE

CONSULTANT	DATE	DESCRIPTION
GOLDER MEMBER OF WSP	2021-10-19	DESIGNED
		PREPARED
		REVIEWED
		APPROVED

TITLE
PROPOSED BERM UPGRADE LOCATIONS

PROJECT NO.	CONTROL	REV.	FIGURE
21451440		0	1

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