




Newaygo County Road Commission

935 EAST ONE MILE ROAD
WHITE CLOUD, MI 49349
Phone (231) 689-6682
Fax (231) 689-5994
www.newaygoroads.org

 Find Us On Facebook

NOTICE TO BIDDERS

The Board of County Road Commissioners of Newaygo County will receive sealed bids at their office at 935 East One Mile Road, White Cloud, MI 49349, until 8:00 a.m. on Wednesday, May 8, 2024, for the following:

- ❖ Temporary Cofferdam on Vista Dr., Brooks Township, Newaygo County

Specifications and bid forms may be obtained at the Road Commission offices during regular business hours or by visiting our website at www.newaygoroads.org

All proposals must be submitted on Road Commission furnished bid forms. Said forms must be in sealed envelopes, plainly marked as to item bid and shall bear the name of the bidder.

The Newaygo County Road Commission hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprise will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of sex, race, color or national origin in consideration for an award.

The Board reserves the right to accept or reject any or all bids, to waive any irregularities in the bids and to make award in any manner they deem to be in the best interest of Newaygo County.

BOARD OF COUNTY ROAD COMMISSIONERS
OF
NEWAYGO COUNTY

William Gonyon, Chairman
Douglas Harmon, Vice-Chairman
Lee Fetterley, Commissioner

Bid for Temporary Cofferdam

Vista Drive, Brooks Township

Description: This work consists of designing, providing, installing, and removing a temporary cofferdam to provide a 100 ft by 20 ft total enclosure workspace for placement of a box culvert. Consists of approximately 240 lineal ft of 16 ft long (minimum) sheets (see drawing for layout). It is highly recommended to visit the site prior to bidding.

NCRC Responsibility: Top of cofferdam sheeting shall be driven to an elevation set by NCRC. EGLE Permit, Excavation, box culvert, will be handled by NCRC

Time and Duration: This work shall take place the week of September 9, 2024 for a duration of approximately 10-14 days.

Specifications: Placement of temporary cofferdam shall be performed according to 2020 Michigan Department of Transportation Standard Specifications for Construction, Section 704, and 906

Insurance Requirements:

1. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Newaygo County Road Commission and its agents and employees from and against all claims, damages, losses and expenses including, but not limited to, attorneys' fees arising out of or resulting from the performance of this Contract including claims, damages, losses and expenses attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, but only to the extent caused by the fault, negligent acts, or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage loss or expense is caused in part by the parties indemnified hereunder. This obligation does not include an obligation to indemnify the parties, indemnified hereunder for their sole negligence and shall not be construed to negate or modify other rights

or obligations of indemnity that otherwise exist as to the parties or persons described herein, arising out of and during the progress and to the completion of work all in accordance with Public Act 468 of 2012 and the 2012 Michigan Department of Transportation's "Standard Specifications for Construction", Division 1, paragraph 1.07.10 with the following minimum requirements:

Workman's Compensation Statutory Coverage

Bodily Injury and Property Damage Other Than Automobile:

Each Occurrence \$1,000,000

Aggregate \$2,000,000

Bodily Injury Liability and Property Damage Liability Automobile:

Bodily Injury Liability \$500,000 Each Person,
Each Occurrence \$1,000,000

Property Damage Liability \$1,000,000 Each Occurrence

Combined Single Limit for Bodily Injury and Property Damage Liability

Each Occurrence \$2,000,000

Insurance Certificate declaring Newaygo County Road Commission as additional insured, not certificate holder, must be issued and shall become part of the contract.

2. Contractor shall maintain current up-to-date insurance coverage during the term of the contract and failure to do so shall result in termination of said contract.
3. Certificate must be submitted within fifteen days upon notification of award of Contract and prior to Contract signing.

Submission of bid will be construed as a conclusive presumption that the Contractor is thoroughly familiar with the bid requirements and specifications and that he/she understands and agrees to abide by each and all of the stipulations and requirements contained therein.

Measurement and Payment: Cofferdam shall be paid as a lump sum. The unit price for cofferdam includes designing, providing, installing, maintaining and removing sheet piling.

Questions should be directed to Mike Brege, Superintendent, Newaygo County Road Commission or Derek Wawczyk, Manager, Newaygo County Road Commission at (231)-689-6682.

BID FORM – Temporary Cofferdam

DUE BY 8:00a.m. on Wednesday, May 8, 2024

Submitted to:

Newaygo County Road Commission

935 East One Mile Road

White Cloud, MI 49349

Fax: 231-689-5994

admin@newaygoroads.org

Cofferdam shall be paid as a lump sum. The unit price for cofferdam includes designing, providing, installing, maintaining and removing sheet piling. Work shall take place the week of September 9, 2024 for a duration of approximately 10-14 days. It is highly recommended bidders visit the site prior to submitting bid.

▪ **Lump Sum TOTAL:**

\$ _____

Contractor Signature: _____

Printed Name and Title: _____

Company: _____

Address: _____

City, State, ZIP: _____

Telephone Number: _____

Fax Number: _____

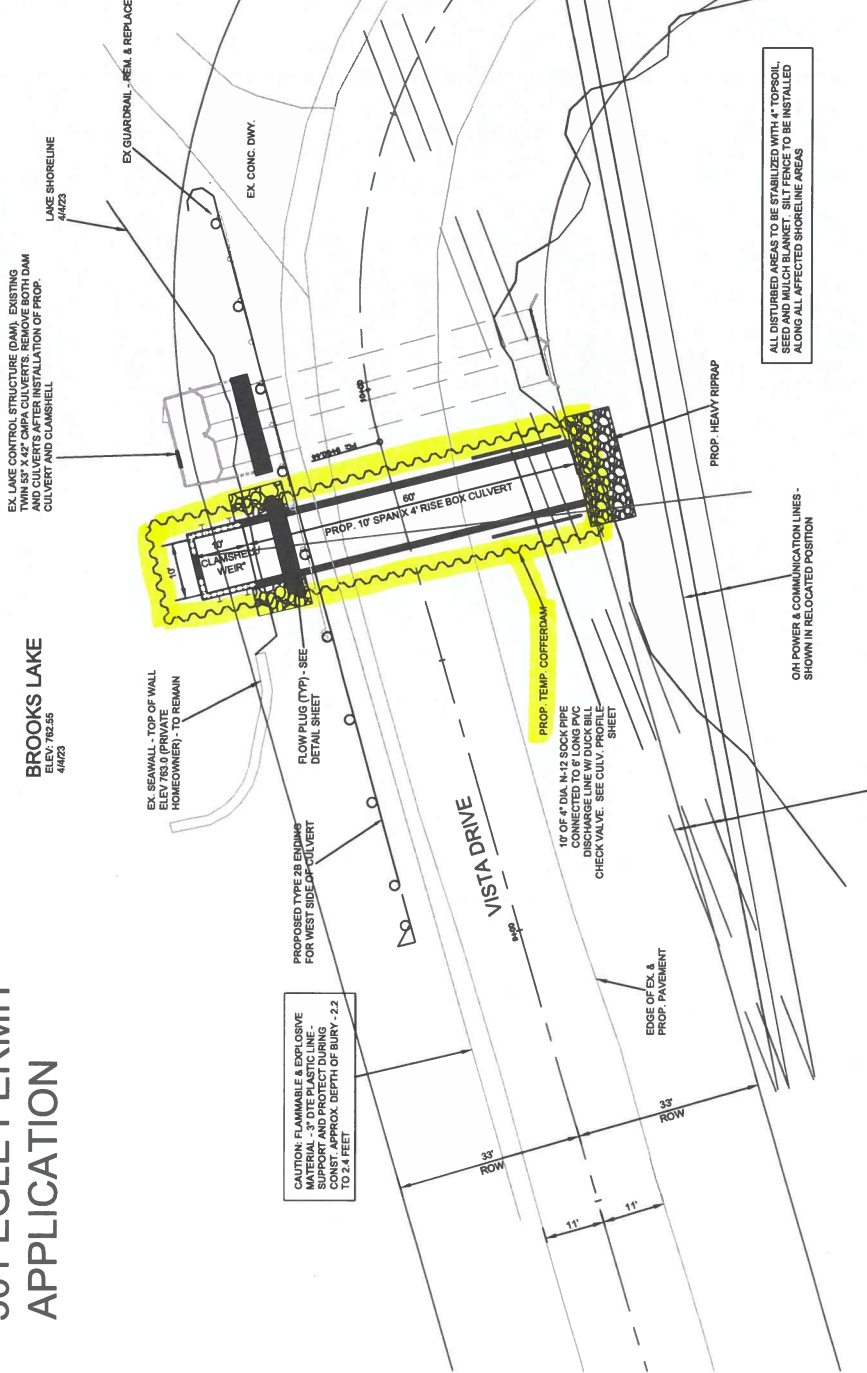
E-Mail Address: _____

SUBMITTED FOR PART 301 EGLE PERMIT APPLICATION

NOTE: ALL ELEVATIONS GIVEN ARE IN 1988 NAVD UNLESS OTHERWISE NOTED. THE HISTORIC PLANS FOR CONSTRUCTION OF BROOKS LAKE SURFACE ELEVATION IS THOUGHT TO HAVE USED THE 1928 DATUM. 1985 COURT ORDER LAKE LEVEL: 792.58 (1928 DATUM) 1985 COURT ORDER CONVEYED TO: 792.16 (1988 DATUM) PROPOSED TOP OF WEIR ELEVATION: 792.16 (1988 DATUM)



DATE	BY	REVISION



ALL DISTURBED AREAS TO BE STABILIZED WITH 4\"/>

CAUTION: EX. OH POWER & COMMUNICATION LINES -

PROPOSED CULVERT WORK
VISTA DRIVE AT BROOKS LAKE OUTFALL

SHEET REVIEW AND APPROVALS:
REVIEWED BY: WAH
DATE: 6/10/23
DT

NCRC - VISTA DRIVE OVER BROOKS CREEK

Issued On: 11/07/2023
Expires On: 11/07/2025

DATE

AS CONSTRUCTED BY

SURVEYED BY: SHIRODA APRIL 3, 2023

TERRACON 6/14/23



Summer Ave

82

Pine Point Dr

Vista Dr

First Baptist Church
of Newaygo

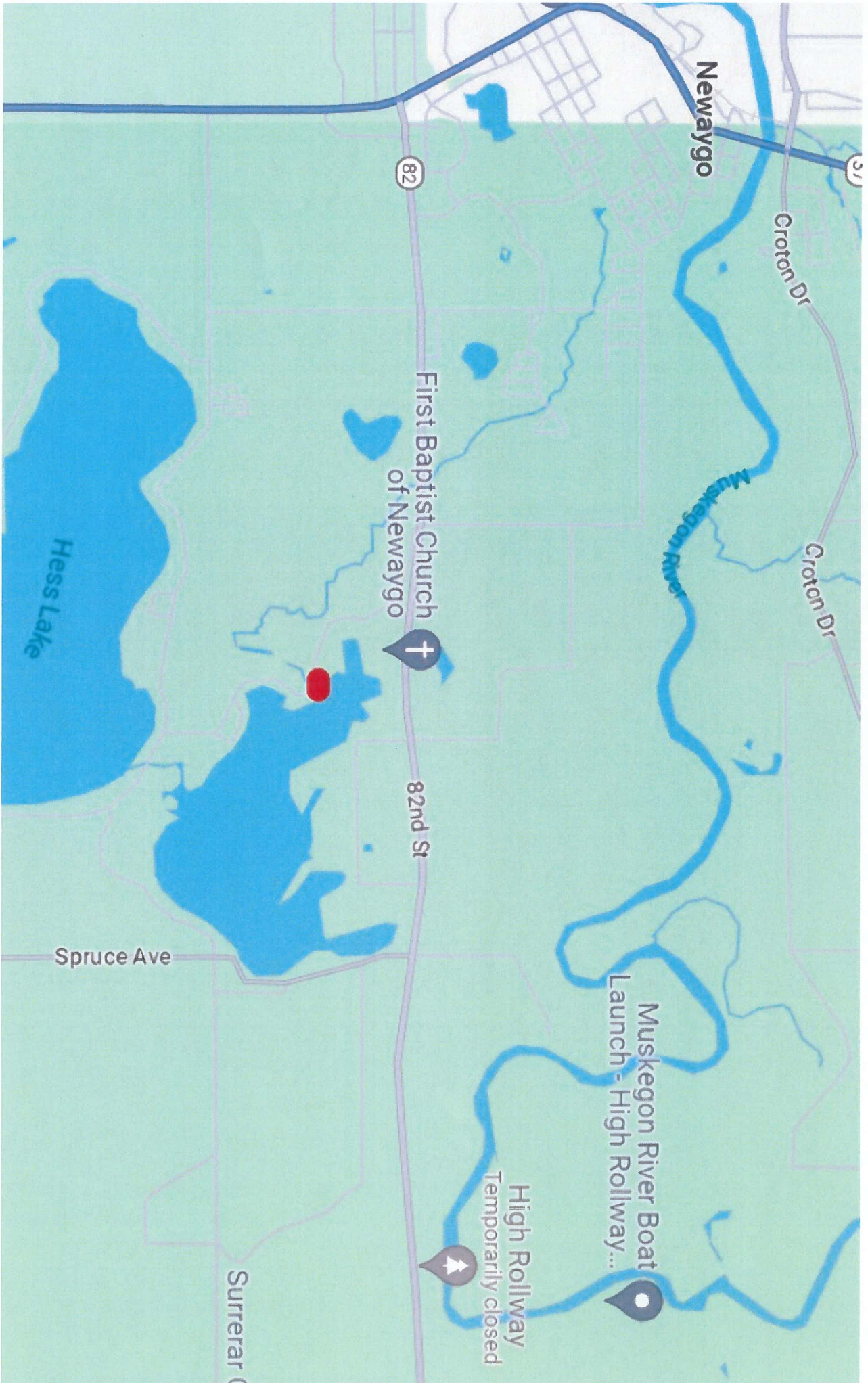
Cove Point

Vista Dr

K.E.G. Computer Repairs

82nd St

Basswood A



Newaygo

82

37

Croton Dr

First Baptist Church
of Newaygo



Croton Dr

Muskegon River

82nd St

Hess Lake

Spruce Ave

Muskegon River Boat
Launch - High Rollway...

High Rollway
Temporarily closed

Surrerar C

May 2, 2022

GEOTECHNICAL MEMORANDUM

RE: Brooks Lake Outlet Structure
Newaygo County, Michigan
129311SG2020

This memorandum summarizes Spicer Group's geotechnical investigation for the proposed lake level control structure and road-stream crossing replacement project.

Project Overview:

Water levels in Brooks Lake are currently controlled by a sheet pile weir structure, approximately 10 by 16 feet in plan dimension, which conveys flow to a pair of corrugated metal pipes, which cross under Vista Drive. The project will replace the degrading structures, likely with a new sheet pile outlet structure and precast concrete box culvert.

The purpose of our geotechnical services was to provide recommendations for design of sheet piling and culvert support.

Subsurface Investigation:

Subsurface conditions at the site were explored on April 29, 2022 by drilling three soil borings. Borings B01 and B02 were drilled from the roadway, on either side of the pair of culverts, to depths of 45 and 30 feet respectively. Boring B03 was extended to a depth of 2.25 feet below the lake bottom, offshore from the control structure, to determine the nature and consistency of the sediment.

Borings B01 and B02 were drilled using a truck-mounted Acker Renegade drill rig by Pearson Drilling Company of Lake City, Michigan, utilizing hollow stem auger methods. During drilling, samples were obtained at 2.5-foot intervals in the upper 10 feet and 5-foot intervals thereafter, in accordance with the standard penetration test (ASTM D1586). Boring B03 was advanced using a 2-inch O.D. sample tube driven with a hand-operated 20-lb slide hammer falling 18-inches. Relative density of the lake bottom material was measured using a Sowers-type dynamic cone penetrometer, which consists of 1.5-inch diameter cone driven successive 1.75-inch increments using a 15-lb hammer falling 20 inches.

Site Conditions:

Vista Drive is an asphalt-paved roadway, approximately 21 feet wide, supported on an embankment. The roadway is about 4 feet above the lake level and 7 feet above the water surface of the stream as it outlets from the culverts. Water depth at the sheet piling control structure is about 2.75 feet.

The NRCS Web Soil Survey maps the surficial soils in the immediate area as Carlisle muck and Plainfield sand. Carlisle muck is described as woody organic material formed in depression on glacial drift. Plainfield sand is described as sandy material formed on moraines, outwash terraces, and outwash plains.

Historic water well records retrieved from the EGLE database show predominately sand (to well depths of up to about 80 feet), with a few wells encountering scattered layers of clay up to several feet thick.

The borings drilled for this study encountered predominately sandy material. Under about 2 inches of hot-mix asphalt surfacing and 8 inches of aggregate base, we observed 7 to 7.5 feet of relatively well-graded embankment fill, in a loose to medium dense consistency. Immediately below this, and at about the point where groundwater was encountered, we observed some silty sand with organics overlying predominately fine to medium and fine to coarse sand. The sand was generally loose, but became medium dense around 33 feet in depth. More detail is included in the attached boring logs.

Conclusions & Recommendations:

In general, the subsurface conditions should not impose any significant impediment to the proposed project. The following table presents recommended design parameters for the soils encountered.

Soil Unit	Depth (ft)	Unit Weight (lb/ft ³)	Friction Angle (degrees)	Cohesion (lb/ft ²)
Exist. Embankment Fill	0 – 7	115	33	0
Upper Sand, Silty Sand, and Lake Bottom Sediment	7 - 33	110	30	0
Lower Sand	>33	120	34	0
New Class II Fill	--	120	34	0

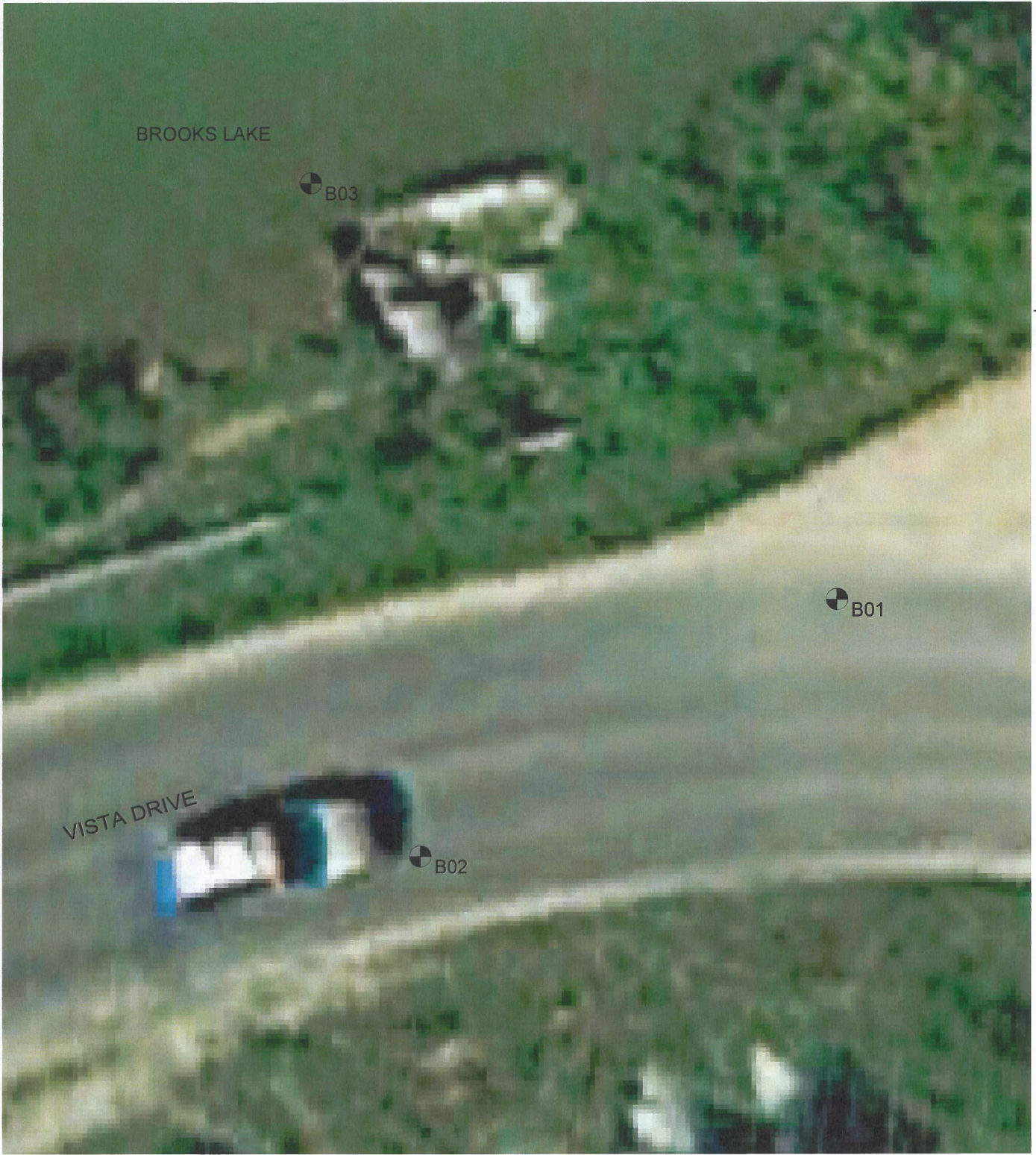
Foundations for the structure should bear below the anticipated depth of scour. Ultimate bearing capacity for shallow spread footings can be assumed to be 7,500 lb/ft². For a recommended factor of safety of 3, the allowable bearing pressure is 2,500 lb/ft². Under this load, total settlement is estimated to be less than about 1 inch.

If piles are used, the following pile depths are anticipated to provide the nominal resistances given. Note that assumed soil conditions are extrapolated beyond the bottoms of the borings (though soil strengths likely increase with depth). Nominal capacities are the maximums used for the given pile type and size based on structural capacities. Lesser capacities can be used, with corresponding decrease in embedment depth. Pile capacities should be verified using dynamic formula during construction.

Pile Size & Type	Nominal Ultimate Capacity (kips)	Embedment Depth (ft)
10-inch H-Pile	275	>90
12-inch H-Pile	350	>90
12-inch Pipe Pile	250	55
10-inch Timber Pile	150	65

Shallow footings appear to be a more feasible option for supporting the culvert. If proposed loading requires impractically large footings, a four-sided box culvert can be used.

Sheet piling should be designed for the anticipated unbalance soil and water depths, using the strengths and unit weights provided above. Where soils are saturated, buoyant unit weights should be used (the given moist unit weight minus the unit weight of water). Specific sheet pile sections and embedment depths will depend on the proposed cross-sectional geometry of the structure.



LEGEND

 B01 BORING LOCATION & DESIGNATION

DRAWING SOURCE: GOOGLE EARTH

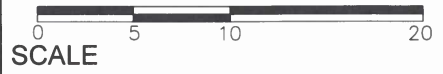


Spicer Group, Inc.
1624 Business Park Dr.
Traverse City, MI 49686
TEL (231) 492-2583
www.SpicerGroup.com

EXPLORATION PLAN
BROOKS LAKE OUTLET

SHEET 1 OF 1

DATE: 05/02/2022



PROJ NO: 129311SG2020



BORING LOG LEGEND AND SOIL CLASSIFICATION

Relative Density/Consistency versus SPT N-value

Cohesionless Soils		Cohesive Soils		
Density	N (blows/foot)	Consistency	N (blows/foot)	Qu (tsf)
Very Loose	0 to 4	Very Soft	0 to 2	< 0.25
Loose	4 to 10	Soft	2 to 4	0.25 to 0.50
Medium Dense	10 to 30	Medium Stiff	4 to 8	0.50 to 1.0
Dense	30 to 50	Stiff	8 to 15	1.0 to 2.0
Very Dense	50 or more	Very Stiff	15 to 30	2.0 to 4.0
		Hard	30 or more	4.0 or more

Soil Structure

Stratified	Alternating layers of varying material or color with layers at least ¼ inch thick
Laminated	Alternating layers of varying material or color with layers less than ¼ inch thick
Fractured	Breaks along definite planes of weakness with little resistance to fracturing
Slickensided	Fractured surfaces appear polished or glossy; sometimes striated
Blocky	Cohesive soil which can be broken into small, angular lumps which resist further breakdown
Friable	Cohesive or cemented soil which readily breaks down into individual particles
Cemented	Individual particles adhere to one another due to chemical mineral precipitate
Homogenous	Same color throughout; materials thoroughly mixed
Mottled	Intermixed, random combination of colors

Unified Soil Classification System (ASTM D2487/2488)

MAJOR DIVISIONS		SYMBOLS		DESCRIPTIONS		
Coarse-Grained Soils	Gravel and gravelly soils	Gravel with <5% fines	GW	Well-graded gravel		
			GP	Poorly-graded gravel		
	More than 50% of coarse fraction retained on No. 4 sieve	Gravel with 5% to 15% fines		GW-GM	Well-graded gravel with silt	
				GW-GC	Well-graded gravel with clay	
		Gravel with >15% fines		GP-GM	Poorly-graded gravel with silt	
				GP-GC	Poorly-graded gravel with clay	
	More than 50% of material is retained on No. 200 sieve	Sand and sandy soils	Sand with <5% fines	GM	Silty gravel	
				GC	Clayey gravel	
		More than 50% of coarse fraction passing No. 4 sieve	Sand with <5% fines		SW	Well-graded sand
					SP	Poorly-graded sand
Sand with 5% to 15% fines				SW-SM	Well-graded sand with silt	
				SW-SC	Well-graded sand with clay	
Sand with >15% fines		SP-SM	Poorly-graded sand with silt			
		SP-SC	Poorly-graded sand with clay			
Fine-Grained Soils	Silt and clays	Fine-grained soils with liquid limit <50		ML	Inorganic silt with low plasticity	
				CL	Lean inorganic clay with low plasticity	
				OL	Organic silt with low plasticity	
		Fine-grained soils with liquid limit >50		MH	Inorganic silt with high plasticity	
				CH	Inorganic clay with high plasticity	
				OH	Organic silt or clay with high plasticity	
Highly Organic Soils			PT	Peat soils with high organic content		

Soils logged by Spicer Group are classified in general accordance with the Unified Soil Classification System (USCS) per ASTM D2487 and D2488 and as defined on this sheet.

Sampling Method

SS	Split spoon, 2-in. O.D.
ST	Shelby tube, 2-inch unless noted otherwise
AU	Auger cuttings
GB	Grab sample
DP	Direct push, 1.5-inch unless noted otherwise
RC	Rock core, N-size, unless noted otherwise

Transitions

—————	Abrupt change in soil unit observed or anticipated
-----	Change in soil unit gradual or not observed

Soil Stratification

Parting	Less than 1/16 inch thick
Seam	1/16 to ¼ inch thick
Layer	1/2 to 12 inches thick
Lens	Discontinuous inclusion
Nodule	Particle-like agglomeration of material

Structure Frequency

Scattered	Less than one occurrence per six inches
Numerous	More than one occurrence per six inches

Component Definitions

Boulders	Greater than 12 inches (30 cm)
Cobbles	3 to 12 inches (75 mm to 30 cm)
Coarse Gravel	¾ to 3 inches (19 to 75 mm)
Fine Gravel	No. 4 sieve to ¾ inch (5 to 19 mm)
Coarse Sand	No. 10 to No. 4 sieve (2 to 5 mm)
Medium Sand	No. 40 to No. 10 sieve (0.4 to 2 mm)
Fine Sand	No. 200 to No. 40 sieve (0.075 to 0.4 mm)
Silt and Clay	Passing No. 200 sieve (< 0.075 mm)

Component Proportions

Trace	Less than 5%
Few	5% to 25%

Moisture Content

Dry	Absence of moisture, dusty
Moist	Damp, but no visible water
Wet	Visible free water, saturated



LOG OF BORING 02

CLIENT Newwaygo County Drain Commissioner
 PROJECT NUMBER 129311SG2020
 DATE STARTED 4/29/2022 COMPLETED 4/29/2022
 DRILLING METHOD hollow-stem auger/split-spoon sampler
 LOGGED BY NWL CHECKED BY NWL
 BORING LOCATION 6 ft S of CL Vista Drive, 15 ft W of CL culverts

PROJECT NAME Brooks Lake Outlet Structure
 PROJECT LOCATION Newwaygo County, Michigan
 GROUND ELEVATION not measured
 GW DURING DRILLING 7.0 ft
 GW AT END OF DRILLING not measured
 GW AFTER DRILLING not measured
 PAGE 1 OF 1

DEPTH (FT)	ELEVATION (FT)	STRATIGRAPHY	MATERIAL DESCRIPTION	SAMPLE TYPE	NUMBER	RECOVERY (in/in)	BLOW COUNTS	N VALUE	POCKET PEN. (TSF)	MOISTURE CONTENT	SPT N-VALUE					
											0	25	50	75	100	
0			2 inches HMA surface over 8 inches aggregate base													
			Brown, fine to coarse SAND (SW), trace fine gravel - moist - medium dense	SPT	1	14/18	11 6 7	13								
			becomes loose	SPT	2	14/18	9 4 3	7								
			Dark brown, fine to medium SILTY SAND (SM), few organics - wet - loose	SPT	3	14/18	2 2 2	4								
			Brown, fine to coarse SAND (SW) - wet - very loose													
			Brown, fine to medium SILTY SAND (SM), few organics - wet - very loose	SPT	4	12/18	7 2 1	3								
			Brown, fine to coarse SAND (SW), scattered wood - wet - medium dense													
			Light brown, fine SAND (SP) - wet - medium dense	SPT	5	12/18	2 5 7	12								
			Light brown, fine to coarse SAND (SW), trace fine to coarse gravel, scattered wood - wet - loose	SPT	6	2/18	3 2 2	4								
				SPT	7	3/18	4 4 3	7								
			negligible gravel and wood	SPT	8	4/18	2 4 1	5								
30			Boring terminated at 30 feet below ground surface, backfilled with cuttings.													



**LOGS OF HAND
AUGER BORING**

Client: Newaygo County Drain Commissioner
Project No: 129311SG2020

Project Name: Brooks Lake Outlet Structure
Project Location: Newaygo County, Michigan

B03

Location: 3 feet N of NW corner of water level control structure

Lat: --

Long: --

By: NWL

Surface: open water

GW: 0 feet

Date: 4/29/2022

Depth	Material Description	Sample	DCPT	Other
0	2.75 feet water			
1				
2				
3	Light brown, fine to coarse SAND (SW), trace silt and organics - wet - very loose to loose		5	3
4			2	1
5			3	3
6			4	5
	Boring terminated at 5 feet below water surface.			
6				