

Addendum 01

DOCUMENT 00 91 00

DATE: September 3, 2026

PROJECT: Clermont County Facilities Phase 3
CTC Building and Canopy
4019 East Filager Road
Batavia, OH 45103

PROJECT #: 22001.00

OWNER: Clermont County Commissioners
Contact: Ralph Linne
101 E. Main Street, Suite 329
Batavia, OH 45103

ARCHITECT: Garmann Miller
38 South Lincoln Drive
P.O. Box 71
Minster, Ohio 45865

TO: Prospective Bidders

This addendum form is a part of the Contract Documents and modifies the Construction Documents dated July 30, 2026, with amendments and additions noted below.

Acknowledge receipt of this Addendum on the Bid Form. Failure to do so may disqualify the Bidder.

This addendum consists of 2 pages, 3 specification sections, and 9 re-issued drawing sheets.

FOR INFORMATION ONLY

1. Pre-bid meeting minutes and the pre-bid meeting sign-in sheet are attached.

CHANGES TO THE PROJECT MANUAL

1. Section 00 11 00 Request for Bid, Article 5 and Article 8: Replace these articles in their entirety.
 - a. Article 5: Updated time of completion to be no later than 420 days after the Notice to Proceed.
 - b. Article 8: Updated the Bid Cost Sheet to include Alternate 2 and unit prices.



2. Section 00 31 19.02 Geotechnical Exploration Report: Replace preliminary report with final soil study report dated July 29, 2026.
3. Section 01 58 13 Temporary Project Signage, Article 2.02: Add temporary project sign template.
4. Section 07 71 00 Roof Specialties, Article 2.03: Add Metal Panel Systems - Edge Shield Fascia as an acceptable manufacturer.
5. Section 07 71 23 Manufactured Gutters, downspouts and Boots, Article 2.01: Add Metal Panel Systems – MIG 7 Gutter as an acceptable manufacturer.
6. Section 08 71 00 Door Hardware: Replace this section in its entirety.
7. Section 10 51 13 Metal Lockers, Article 2.01: Add LockersMFG as an acceptable manufacturer.

CHANGES TO THE DRAWINGS

1. Drawing Sheets C1.1, C1.2, C2.1, C3.1, C3.2, C6.1 and C 7.1: A hatch pattern has been added to denote areas outside of this project scope.
2. Drawing Sheet A1.2 Canopy Plan, Roof Plan & Section – Alternate 1: Add three 10 lb class B:C fire extinguishers with mounting bracket attached to canopy column at locations shown on the plan.
3. Drawing Sheet A1.3 Floor Plan, Sections & Elevations – Alternate 1: Add helical foundation pile at each corner of storage shed.

ATTACHMENTS

The following attachments are included and are part of this addendum:

Pre-Bid Meeting Minutes and Sign-in Sheet

Specification Sections 00 11 00 (Articles 5 & 8), 00 31 19.02 Soil Report, and 08 71 00

Temporary Project Signage Template

Drawing Sheets C1.1, C1.2, C2.1, C3.1, C3.2, C6.1, C 7.1, A1.2, A1.3

END OF ADDENDUM





Pre-Bid meeting

Project name	Filager Campus Improvement Phase 3	GM project no.	22001.00
Meeting date	09/01/2026	Meeting location	Highway Operations Building

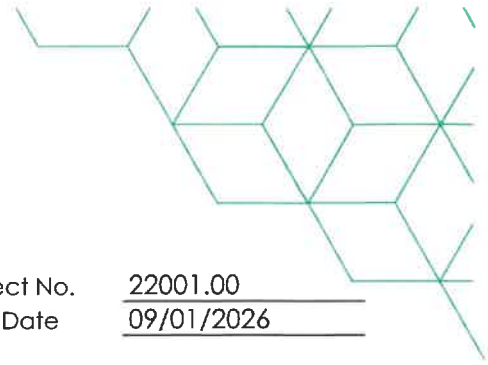
Outline

1. Attendees: Sign in sheet
2. Introductions and Project Overview
3. Bidding
 - a. Date: Thursday, September 17, 2026
 - b. Location: Bids will be opened in person at the Office of the Board of Clermont County Commissioners
Attn. BID – Filager Campus Improvement Phase 3
Address: 101 East Main Street, Suite 329
Batavia, Ohio 45103
 - a. Use the RFB (Request for Bid) Packet provided
Bids will be opened at 2:00pm
 - b. Plans have been submitted to Clermont County Permit Central for review and permits, costs to be paid by owner.
4. Bid categories
 - a. General construction
5. Alternates
 - a. Alternate No. 1: CTC Bus Canopy scope of work
 - b. Alternate No. 2: Bosch Fire Alarm System
6. Contingency amounts to be included in bid
 - a. General construction: \$150,000
7. Contracts will be administered by Garmann/Miller & Associates, Inc.
 - a. All questions and correspondence to go through Garmann Miller
 - b. All Construction RFIs to go through Garmann Miller
 - c. Pay applications to go to Garmann Miller
 - d. Garmann Miller will schedule a preconstruction meeting with the contractor after the notice of award
8. Schedule
 - a. Tentative date for Notice to Proceed: 1 month after Bid Opening



- b. Completion date: 547 calendar days after Notice to Proceed
 - i. This will be revised to 420 calendar days in Addendum 1
 - ii. Liquidated Damages – \$2,000 per day
 - iii. Claims for weather days must follow table 108.06-1 in the RFB
- 9. General conditions
 - a. Waste Removal: General Contractor
 - b. General Contractor
 - i. Responsible for construction schedule and general supervision
 - ii. Submit preliminary schedule 10 days after notice to proceed
 - iii. Responsible for scheduling and administering job meetings; prepare agenda, responsible for meeting minutes and distributing copies
 - c. Responsible for field office
 - d. Responsible for internet connection for field office
 - e. Responsible for sanitary facilities, barriers, fencing, exterior and interior enclosures
 - f. Project sign
- 10. Temporary electricity
 - a. Electrical contractor to provide service, temporary power, temporary lighting, temporary service to general contractor job trailer.
 - b. An Aid to Construction allowance will be added in Addendum 1.
 - c. Cost of electricity: by owner
- 11. Temporary heat
 - a. Prior to building enclosure: As needed, cost by Contractor
 - b. After building enclosure:
 - i. Method by HVAC contractor
 - ii. Cost of heat: by owner
- 12. Temporary water
 - a. The general contractor shall connect to water utility supply and pay for installation of temporary metered service including tap fees and extend temporary water service to location required.
 - b. Cost of water: by owner
- 13. Substitution Requests and Bid RFI's
 - a. All Bid RFIs to go through Garmann Miller and Ronnie Ross
 - i. mniekamp@creategm.com and ross@clermontcountyohio.gov
 - ii. Requests must be received by 12:00pm Monday, September 7, 2026
 - iii. Answers will be sent via email by 4:30pm Friday, September 11, 2026
- 14. Additional Information
 - a. Pinnacle Environmental Consultants has completed an environmental assessment of the building to be demolished
 - i. Lab results did not identify any ACMs that require removal prior to demolition

- b. Geotechnical report prepared by Bowser Morner is included in the project manual
 - i. Unsuitable soils have been identified
 - 1. Unit costs will be added to the bid form in Addendum 1
 - 2. The initial project manual included the preliminary soils report. Final report will be issued with Addendum 1.
 - c. Phase 2 on the adjacent site is currently under construction
 - i. Some coordination may be required with that contractor – Graybach, LLC
 - d. The project is federally funded and will require federal prevailing wage as well as Build America Buy America (BABA) requirements.
 - e. UES will be contracted by the owner to provide special inspections.
15. Correspondence
- a. Correspondence to run through Garmann Miller
 - b. Architectural/ General – Mandy Niekamp mniekamp@creategm.com
 - c. Mechanical/Plumbing/Fire Suppression – Rick Gilbert rgilbert@creategm.com
 - d. Electrical – Chris Hess chess@creategm.com
 - e. Technology – Cody Tebbe ctebbe@creategm.com
16. Contractor Questions
- a. The owner noted the CTC buses will be relocated off-site during construction.



Sign-in Sheet

Project Name Filager Campus Improvement Phase 3

GM Project No. 22001.00

Meeting Location Highway Operations Building

Meeting Date 09/01/2026

Purpose Pre-Bid Meeting

Attendees

☐	Name <u>JOHN WATERS</u>	Phone <u>937 938 0262</u>
	Business/Title <u>TRUE UNITED CONTRACTORS</u>	
	Email <u>jwaters@trueunitedcontractors.com</u>	
☐	Name <u>ANGELINE SAY</u>	Phone <u>(513) 732-7805</u>
	Business/Title <u>Deputy Assistant County Administrator</u>	
	Email <u>angelinesay@clermontcountyoio.gov</u>	
☐	Name _____	Phone _____
	Business/Title _____	
	Email _____	
☐	Name _____	Phone _____
	Business/Title _____	
	Email _____	
☐	Name _____	Phone _____
	Business/Title _____	
	Email _____	
☐	Name _____	Phone _____
	Business/Title _____	
	Email _____	
☐	Name _____	Phone _____
	Business/Title _____	
	Email _____	

@ creategm.com

Minster, OH | Columbus, OH | Indianapolis, IN | Fort Wayne, IN



☐	Name	<u>Rennette Ross</u>	Phone	<u>513-615-5493</u>
	Business/Title	<u>CC. Dir F&E Mgmt</u>		
	Email	<u>ross@clermontcountyohio.gov</u>		
☐	Name	<u>Sarah Scott</u>	Phone	<u>513-503-5337</u>
	Business/Title	<u>Prj Mgr - Clermont County</u>		
	Email	<u>sscott sscott@clermontcountyohio.gov</u>		
☐	Name	<u>RALPH LINNE</u>	Phone	<u>513-</u>
	Business/Title	<u>ASST. COUNTY ADMINISTRATOR</u>		
	Email	<u>RLINNE@CLERMONTCOUNTYOHIO.GOV</u>		
☐	Name		Phone	
	Business/Title			
	Email			
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☒	Name	Michael Garrett	Phone	513-439-3279
	Business/Title	Garrett Concrete Services / Project Manager		
	Email	Ashley.gcs.llc@gmail.com		
☐	Name	Ben Vogelgesang	Phone	513-482-2700
	Business/Title	Universal Contracting Corporation / Estimator		
	Email	bvogelgesang@universal1957.com		
☐	Name	Deanne Whalen	Phone	513-248-4800
	Business/Title	Perkins/Carmack Construction LLC		
	Email	zach.evans@perkinscarmack.com (Zach Evans, Proj. MGR)		
☐	Name	JOHN WAITES	Phone	937 938 0262
	Business/Title	TRUE UNITED CONTRACTORS		
	Email	jwaites@trueunitedcontractors.com		
☐	Name	Joshua Riehle	Phone	937 289 9040
	Business/Title	SIDEWINDER Electric Co. Inc		
	Email	SIDEWINDER4@earthlink.net		
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☐	Name	NATHAN WILLIAMS	Phone	513 252 7903
	Business/Title	GRAYBACH - PERCON		
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ARTICLE 5

Project Specifications

ARTICLE 5: PROJECT SPECIFICATIONS

1. General

The Project Manual includes this document and all technical specifications sections Divisions 00 through 43 as enumerated in Division 00 Section 000003 Index to Specifications

General Conditions:

- See Division 00 Section 00 11 00 Request for Bid

Alternate Bids:

- See Division 01 Section 01 23 00 Alternates

Exclusions:

- N/A

Time of Completion:

- Receipt of a Certificate of Occupancy for all work shall be no later than 420 calendar days after the Notice to Proceed.

Liquidated Damages:

- Failure to complete the project within the agreed timeframe shall subject the Contractor to liquidated damages. Said damages shall be assessed against the General Contractor, no exceptions will be made. Owner and Contractor agree that as liquidated damages for delay, Contractor shall pay Owner two thousand dollars (\$2,000.00) for each day that expires after the completion date in accordance with "Time of Completion" above. Contractor claims for delay will be evaluated in terms of Section 108.06 of the State of Ohio Department of Transportation Construction & Material Specifications, January 01, 2016 edition. Claims for weather days will not be accepted unless they exceed those indicated in Table 108.06-1 as shown below.

TABLE 108.06-1

Month	Number of Workdays Lost Due to Weather
January	8
February	8
March	7
April	6
May	5
June	5
July	4
August	4
September	5
October	6
November	6
December	6

ARTICLE 8

Bid Detail Cost Sheet

BID COST SHEET

Contractor Name: _____

Contractor Address: _____

Contact Person: _____

Phone Number - Contact Person: _____

Fax Number - Contact Person: _____

Base Bid Contract \$ _____**Base Bid in Written Number** _____**ALTERNATES:****ALTERNATE 1 (Work associated with Bus Canopy Package)** \$ _____**ALTERNATE 2 (Bosch Fire Alarm System)** \$ _____**Grand Total (Total Base Bid + Alternates)** \$ _____**Grand Total in Written Number** _____**The following are Unit Prices for specific portions of the Work as listed:**

Contaminated Soils:

\$ _____ Per Cubic Yard

Unsuitable Material:

Excavated Material:

\$ _____ Per Cubic Yard

Lean Concrete Fill:

\$ _____ Per Cubic Yard

Gravel Fill:

\$ _____ Per Cubic Yard

Controlled Density Fill

\$ _____ Per Cubic Yard

Cement Stabilization

\$ _____ Per Cubic Yard

Lime Kiln Stabilization:

\$ _____ Per Cubic Yard

Fabric Geogrid:

\$ _____ Per Square Yard

Acknowledgement of Addenda: _____
(include numerical list of addenda)_____
Signature - Authorized Representative_____
Date_____
Title

BID DETAIL COST SHEET

Contractor Name: _____

For Owner's information and evaluation, provide the following detail breakdown of base bid costs:

General Requirements	\$ _____.
Site Construction	\$ _____.
Concrete	\$ _____.
Masonry	\$ _____.
Metals	\$ _____.
Wood and Plastics	\$ _____.
Thermal and Moisture Protection	\$ _____.
Doors and Windows	\$ _____.
Finishes Base Bid	\$ _____.
Carpet/Flooring	\$ _____.
Specialties	\$ _____.
Equipment	\$ _____.
Mechanical	\$ _____.
Plumbing	\$ _____.
Fire Suppression	\$ _____.
Electrical	\$ _____.
Voice/Data	\$ _____.
Landscaping	\$ _____.

The Owner may negotiate scopes of work to be self-performed or performed under State Contract.

**Soil Study for Proposed CTC Building and CTC Bus Canopy
Project, Filager Road, Batavia, Ohio**

Submitted To:

Clermont County Board of Commissioners

Attn: Mr. Ralph Linne
101 East Main Street
Batavia, Ohio 45103

Report No. 20009948-0726-175
July 29, 2026

**BOWSER
MORNER®**



DAYTON ENGINEERING SERVICES

P.O. Box 51

Dayton, Ohio 45401-0051

P. 937.236.8805 F. 937.233.2016

www.bowser-morner.com

July 29, 2026

Clermont County Board of Commissioners
Attention: Mr. Ralph Linne, MBA, CPM, Assistant County Administrator
101 East Main Street
Batavia, Ohio 45103

Re: Report No. 20009948-0726-175; Soil Study for
Proposed CTC Building and CTC Bus Canopy
Project, Filager Road, Batavia, Ohio

Dear Mr. Linne:

Bowser-Morner, Inc. is pleased to submit our report of the soil study for the above-referenced project. The purpose of this study is to determine the physical characteristics of the soil strata and allowable bearing capacity for the proposed building and bus canopy. Also noted are other conditions that could affect the design and/or construction of the structures.

The samples collected that were not used to perform the laboratory tests will be kept in our laboratory for 30 days unless you advise us otherwise. If you have any questions or if we can help you in any way on this project or future work, please call us.

Respectfully submitted,
BOWSER-MORNER, INC.

"This document was originally issued by Chris R. Ryan, M.S.C.E., P.E. and Daniel Otieno on July 29, 2026. This document is not considered a sealed document."

Daniel M. Otieno
Geotechnical Engineer

Chris R. Ryan, M.S.C.E., P.E.
Sr. Geotechnical Engineer

DMO/CRR/an
3-Client
2-File

Civil & Geotechnical
Engineering

Environmental
Consulting

Construction QA/QC &
Special Inspections

Analytical, Construction Materials &
Geotechnical Laboratories

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TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE NO.</u>
I TEXT	
1.0 INTRODUCTION	1
2.0 WORK PERFORMED	1
2.1 FIELD WORK	1
2.2 LABORATORY WORK	2
3.0 SOIL AND GROUNDWATER CONDITIONS	3
3.1 GEOLOGIC SOIL PROFILE	3
3.2 SUBSURFACE CONDITIONS	4
4.0 DISCUSSION AND RECOMMENDATIONS	5
4.1 PROJECT DESCRIPTION	5
4.2 FOUNDATION RECOMMENDATIONS	6
4.3 FLOOR SLABS ON-GRADE OR CONCRETE PAD	10
4.4 COMPACTION REQUIREMENTS	11
4.5 FOUNDATION EXCAVATIONS	11
4.6 CONSTRUCTION DEWATERING	12
4.7 DRAINAGE	13
4.8 PAVEMENT RECOMMENDATIONS	13
5.0 CLOSURE	15
5.1 BASIS OF RECOMMENDATIONS	15
5.2 LIMITATIONS AND ADDITIONAL SERVICES	16
5.3 WARRANTY	17
II SUGGESTED SPECIFICATIONS	
CLEARING AND GRADING	
III BORING LOG TERMINOLOGY, BORING LOGS, LABORATORY DATA, AND PRINTS	



Section I

Text

1.0 INTRODUCTION

A proposed CTC building and CTC bus canopy will be constructed at 4003 Filager Road in Batavia, Clermont County, Ohio. A vicinity map (Figure 1) is included in Section III of this report. Our findings on the soil conditions and groundwater levels with respect to the potential construction problems, and recommendations for the allowable bearing capacity for the construction of the building and bus canopy are given in this report.

Authorization to proceed with the soil study for the CTC Building was given by Clermont County Board of Commissioners in a signed Purchase Order No. 26003122 dated May 27, 2026. The work was to proceed in accordance with our proposal and agreement, Quotation No. 26-312-010 dated February 12, 2026. Additionally, authorization to proceed with the soil study for the CTC Bus Canopy was given by Clermont County Board of Commissioners in a signed Purchase Order No. 26003121 dated May 27, 2026. The work was to proceed in accordance with our proposal and agreement, Quotation No. 26-312-011 dated February 12, 2026.

The draft soil boring logs and preliminary foundation recommendations were emailed to Mr. Ralph Linne on June 23, 2026.

Bowser-Morner, Inc. Report No. 206830-1122-229, dated November 3, 2022 discusses the soil conditions for the facilities/engineering management building. Sixteen borings were made for that study. Bowser-Morner Report No. 206830-1122-229, dated November 3, 2022 discusses the soil conditions for the Clermont County Facilities. Ten borings were performed for that study. We reviewed the data included in the previous reports for the preparation of this report.

2.0 WORK PERFORMED

2.1 Field Work

Eight (8) soil borings were made at the locations shown on the boring location plan, Figure 2 in Section III. Borings 1 through 6 were performed in the proposed CTC Building area, whereas Borings 7 and 8 were performed in the proposed CTC Bus Canopy area. The boring logs and boring location plan are included in Section III. The borings were made with a boring rig using hollow-stem augers and standard penetration resistance methods. The standard penetration tests were performed in accordance with ASTM D1586, which includes a 140-pound hammer, 30-inch drops, and two-inch-O.D. split-spoon samplers driven at maximum depth intervals of five feet or at major changes in stratum, whichever occurred first. The disturbed split-spoon samples were visually classified, logged, sealed in moisture-proof jars, and taken to the Bowser-Morner, Inc. laboratory for study. The depths where these "SS"-type split-spoon samples were collected are noted on the corresponding boring logs.

2.2 Laboratory Work

Plasticity Testing: Three (3) Atterberg limits tests were performed in accordance with ASTM D4318 to determine the liquid and plastic limits on the most visibly plastic cohesive soil or as needed for soil classification. Plasticity testing is commonly performed to assess seasonal volume change potential of subsurface cohesive materials for use as structural fill and foundation support materials.

Moisture Contents: 28 moisture content determinations were made in accordance with ASTM D2216. The results of the laboratory tests are summarized in Table 2-1 and included in Section III of this report.

Table 2-1. Summary of Laboratory Test Results

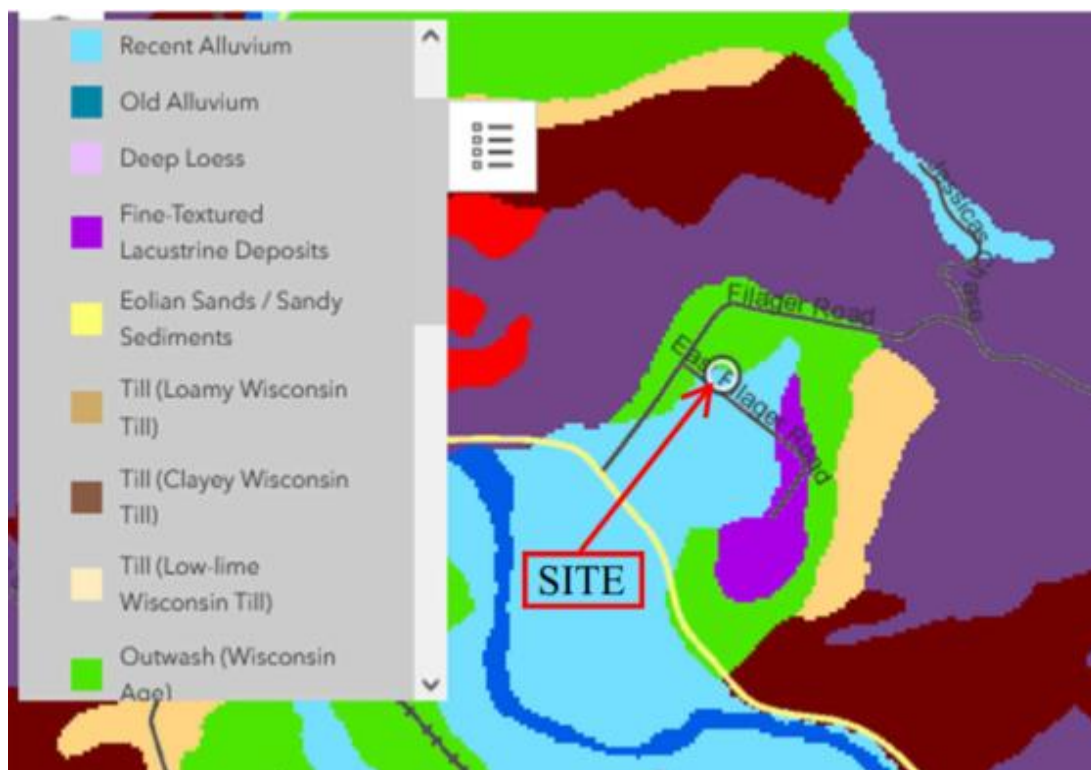
Boring No.	Depth (ft.)	Moisture Content (%)	Atterberg Limits		
			LL	PL	PI
1	1.0 – 2.5	7.9	41	20	21
	3.5 – 5.0	19.8			
	6.0 – 7.5	20.6			
	8.5 – 10.0	28.3			
2	1.0 – 2.5	15.1	47	19	28
	3.5 – 5.0	17.9			
	6.0 – 7.5	23.1			
3	1.0 – 2.5	12.4			
	3.5 – 5.0	18.7			
	6.0 – 7.5	18.9			
4	1.0 – 2.5	12.2			
	3.5 – 5.0	15.7			
	6.0 – 7.5	15.2			
5	3.5 – 5.0	18.5			
	6.0 – 7.5	20.4			
	8.5 – 10.0	16.3			
6	1.0 – 2.5	12.9			
	3.5 – 5.0	16.7			
	6.0 – 7.5	25.3			
	8.5 – 10.0	25.5			
7	1.0 – 2.5	27.9	26	18	8
	3.5 – 5.0	27.6			
	6.0 – 7.5	25.9			
	8.5 – 10.0	62.7			
8	1.0 – 2.5	6.3			
	3.5 – 5.0	25.1			
	6.0 – 7.5	23.9			
	13.5 – 15.0	48.8			

3.0 SOIL AND GROUNDWATER CONDITIONS

3.1 Geologic Soil Profile

Geologically, the site is situated in Clermont County which lies on the unglaciated edge of the Illinoian glacial advance and just west of the Wisconsin glacial limit. During the Illinoian glaciation, which occurred around 300,000 to 130,000 years ago, ice sheets advanced into the county, reshaping the landscape and depositing layers of till and outwash. The more recent Wisconsin glaciers did not reach Clermont County. However, glacial meltwater and outwash from the retreating ice sheets, and loess (windblown silt from outwash plains) were still deposited in the county during the Wisconsin period. The bedrock in Clermont County includes limestone, dolomite and shale from the Ordovician period.

The soils in the vicinity of the site are recent alluvium - loose, unconsolidated sediment that has been transported and deposited by running water. It typically consists of mixtures of sand, silt, clay, and gravel. The alluvium is underlain by Wisconsin age outwash. These recent alluvium deposits are shaded light blue in the diagram below, whereas the Wisconsin age outwash are shaded green.



(References: Soil Explorer. Online at <http://SoilExplorer.net>. Accessed 07/15/2026.)

The U.S. Department of Agriculture Soil Survey mapping of this site indicates that there are three main units of surface deposits on the property: Sh (Shoals Silt loam, 0 to 2 percent slopes), UGpB (Urban land-Glenford complex, 2-6 percent slopes), and UocB (Urban land-Ockley, Southern Ohio Till Plain, complex, 2-6 percent slopes). According to the USDA mapping, the UOcB surface deposits at the site tend to be mostly clayey, whereas the Sh deposits tend to be mostly silty.



3.2 Subsurface Conditions

Based on the information from the eight (8) borings made for this study, the subgrade soil conditions are described in descending order below:

STRATUM 1: UNDOCUMENTED FILL LAYERS or TOPSOIL: Encountered from Surface to depths of ± 6.0 inches to ± 8.0 feet.

In Boring 2, topsoil extending to a depth of approximately six inches. Topsoil consists of the semi-organic surface layer of soil that is often mixed with root matter and vegetative materials. Because the organic matter in this soil layer has a high potential for degradation and future volume change, it is not considered to be a reliable stratum for support of buildings or structures. Any surface layer with more than 4% organics (as a percentage of the total dry weight of the soil) should be considered topsoil and should be removed from use for structural fill purposes.

In Borings, 1, 3, 4, 5, 6, 7, and 8, 14.5 inches to 8 feet of undocumented and uncontrolled fill consisting of asphalt, gravel, and brown-to-dark brown sandy lean clay.

STRATUM 2: GLACIAL DRIFT and OUTWASH: Encountered below stratum 1 to the bottom of borings at 15, 20, 25 or 35 feet.

Soft-to-stiff brown-to-dark brown or gray sandy lean clay, medium dense gray silty sand, and very soft-to-stiff gray lean clay. The gray lean clay at times has elevated amounts of sand and sometimes silt. These materials do not present in any given order. The stratum extends to the bottom of the boring at depths, below the existing grade, of 15 feet in Borings 1, 4, 7, and 8, at 20 feet in Borings 5 and 6, at 25 feet in Boring 2, and at 35 feet in Boring 3.

Free groundwater was encountered during the advancement of the borings at the depths and elevations summarized in Table 3-1.

Table 3-1. Summary of Groundwater Observations

Boring No.	Depth Groundwater First Observed (ft)		Groundwater Observations at Completion of Boring	
	Depth	Elevation*	Depth	Elevation*
1		No Water	3.0	575.9
2		No Water	16.0	563.4
3	18.5	557.8	12.0	564.3
4		No Water	No Water	
5		No Water	10.0	570.4
6		No Water	5.0	567.6
7	8.5	562.6	7.0	564.1
8	3.0	566.6	3.0	566.6

* In reference to surface elevation based on Ohio South State Plane Coordinate System.

Free groundwater is defined as water that seeps into an open borehole before it is backfilled. Groundwater observations were made during the boring operations by noting the depth of water on the boring tools and in the open boreholes following withdrawal of the boring augers. However, it should be noted that short-term water level readings are not necessarily a reliable indication of the groundwater level and that significant fluctuations may occur due to variations in rainfall and other factors. For specific questions on the soil conditions, please refer to the individual boring logs in Section III.

4.0 DISCUSSION AND RECOMMENDATIONS

4.1 Project Description

A proposed CTC building and CTC bus canopy will be constructed at 4003 Filager Road in Batavia, Clermont County, Ohio. The proposed office building will be 34 feet wide and 70 feet long. No design loading information was provided for this report.

As part of this project, a car and truck parking lot will be constructed. The parking area will be constructed on the west side of the proposed building. We understand that existing buildings and structures are currently at this site. These buildings will be demolished for the construction of this project

The following recommendations are based on this information. If the above statements are incorrect or changes are made, Bowser-Morner, Inc. should be notified so that the new data can be reviewed and additional recommendations and services can be given if required to meet the needs of your project.

4.2 Foundation Recommendations

4.2.1 Foundation Subgrade Preparation

Based on the subgrade soil conditions indicated in the eight (8) borings made at this site, the site is covered with undocumented and uncontrolled fill, topsoil, and/or weaker soil that extends to the approximate depths outlined in Table 4-1. Again, Borings 1 through 6 were performed in the proposed CTC Building area, whereas Borings 7 and 8 were performed in the proposed CTC Bus Canopy area. Based on the results of the standard penetration tests (SPT) in the borings, the recommended net allowable bearing capacities and the depths to bearing strata at each boring are also tabulated in Table 4-1.

Table 4-1. Depths and Elevations to Bearing Strata

Boring No.	Depth to Bearing Strata (ft)	Elevation* of Bearing Strata (ft)	Topsoil or Fill, and/or Weak Soil	Recommended Net Allowable Bearing Capacity (psf)
1	1.2	577.7	Fill	1,000
2	0.5	578.9	Topsoil	1,000
3	3.0	573.3	Fill	1,000
	28.5	547.8	Fill and Weak Soil	2,500
	33.5	542.8	Fill and Weak Soil	4,000
4	8.0	573.1	Fill	2,000
5	5.5	574.9	Fill	1,000
	8.5	571.9	Fill and Weak Soil	2,000
6	6.0	566.6	Fill	1,000
	18.5	554.1	Fill and Weak Soil	2,000
7	1.5	569.6	Fill	1,000
8	2.5	567.1	Fill	1,000
	13.5	556.1	Topsoil and Weak Soil	2,000

* In reference to surface elevation based on Ohio South State Plane Coordinate System.

The fill or topsoil is unreliable to support the foundations of the proposed bus canopy, and building and floor slab on-grade and should be removed. The topsoil can be stockpiled for landscaping purposes. We understand that the site has existing buildings and structures on it that will be removed prior to the construction of the proposed CTC Building and Bus Canopy. The existing buildings and structures, including all foundations and slabs, should be removed from within the proposed construction limits. The fill, topsoil and the weaker soil can be removed to the suitable depths with the desired allowable bearing capacities as outlined in Table 4-1 and replaced with compacted backfill.

The bottoms of the foundation excavations should extend to the suitable depths with the desired allowable bearing capacities as outlined in Table 4-1. After the foundation excavations extend to the suitable depths, the over-excavation can be filled with compacted backfill. The bottoms of exterior footing foundations should be placed at least 32 inches below the final adjacent grades to protect against frost penetration and heaving. Interior footings not subject to frost action may bear at a minimum depth of 18 inches below the floor slab if they are supported on original materials or compacted fill placed in accordance with our recommendations. If the proposed building will not be heated, the bottoms of exterior footing foundations should be placed at least 36 inches below the final adjacent grades to protect against frost penetration and heaving.

The base of each excavation should extend one lateral foot for every foot of excavation below the bottom of the footing foundation as shown in Figure 3 in Section III. If an excavation will extend more than five feet below the existing grade, a maximum allowable side slope of 1 (horizontal) to 1 (vertical) should be maintained in any excavation for stability and for the safety of the workers.

After the foundation excavations extend to the desired grade, the top foot at the bottom of each excavation should be compacted to at least 90% of the maximum dry-unit weight as determined by the modified Proctor test (ASTM D1557) before any new fill or foundation is placed. Any soft soil pockets should be undercut and replaced with newly compacted fill. Any lean clay soils to be imported as backfill or removed from the project site probably will have significantly different Proctor values. Consequently, samples to be tested by the Proctor method should be obtained from a representative area and from the same elevation as the design subgrade.

After the bottoms of the excavations have been compacted, structural fill can be placed to bring the bottoms of the excavations to reach the desired final grade. The fill placed below the bottom of the footing foundations should be placed in eight-inch-thick lifts and compacted to at least 95% of the maximum dry-unit weight as determined by the modified Proctor test (ASTM D1557). Fill placed above the bottom of the footing foundations to serve as the subgrade for the floor slab should be compacted to at least 90% of the maximum dry-unit weight as determined by the modified Proctor test (ASTM D1557). Structural fill should be placed in accordance with the recommendations given in Section 4.4.

Alternatively, the over excavations for the construction of the foundations can be backfilled with lean concrete. The lean concrete should have a 28-day compressive strength of at least 1,500 psi. We recommend that the foundation excavations should be at least one foot wider on all sides of the footing foundations. Since the foundation excavation will be relatively narrow, no worker should enter the excavations that are five feet or deeper for the existing grade. After the over-excavations for footing foundations are filled with lean concrete fill, the footing foundations can be constructed over the cured lean concrete.

The footing foundations for the proposed building and bus canopy can be supported on the original subgrade soil or newly compacted backfill extending to the depths outlined in Table 4-1. The foundations can be designed with the corresponding net allowable bearing capacities outlined in Table 4-1. For these recommended allowable bearing capacities outlined in Table 4-1 for the original soil layer or for the newly compacted backfill, the total estimated amount of settlement of the foundations will be about one inch with differential settlement of about 3/4 inch over a distance of 40 feet.

The soil removed from this site that is free of organic or objectionable materials as defined by a field technician who is qualified in soil material identification and compaction procedures can be reused as fill. Objectionable or undesirable soils are defined as those materials that cannot meet design placement specifications or materials that will deteriorate with time.

When determining the geometric size (the “footprint”) of the footing foundation, the total system loads applied to the tops of the foundations should be considered in the bearing pressure calculations.

The bearing capacities recommended in Table 4-1 for foundations supported on structural fill applies to well-graded granular soils, low-to-medium plastic clays, clayey sands, and some silty sands that are placed and compacted in accordance with the recommendations given in this report. However, uniformly graded or gap-graded granular soils (GP or SP), silts (ML), silty fine sands (SM), and high plasticity clays (CH) will be difficult to place and compact, and may result in a reduced bearing capacity. If these soils will be used as backfill, Bowser-Morner should be notified before the soils are placed so that the proposed placement methods and bearing capacity recommendations can be reviewed.

The bearing capacity of a soil is not a unique physical property of the soil. Instead, it depends explicitly on several factors including the footing type, size, and shape; the depth of embedment; the eccentricity and inclination of the applied load; the footing base inclination; the stiffness of the footing; the proximity of the footing to open cuts or slopes; the relative distance between the bottom of the footing and the water table; and the allowable amounts of settlement. The recommended allowable bearing capacity is based on the foundation design parameters given above and the assumptions that the applied load is vertical with no eccentricity, the base is horizontal and level, the footing is rigid, the footing is not close to an open cut or slope, and the water table is below the bottom of footing. If the actual conditions vary from the parameters and assumptions stated above, Bowser-Morner should be notified so that the new information can be reviewed

and additional recommendations and services can be given to meet the needs of your project.

Foundations supported on soil settle as the result of externally applied loads. While the foundations should be expected to settle, the amount of settlement should be within the tolerable limits for the structures.

Alternatively, the weaker soil can remain in-place. The weak subgrade soil can be modified by installing Geopiers® for the construction of the building and bus canopy. The Geopier® method is a patented method that includes the placement and the compaction of sand and gravel in pre-augered holes. With this method, the sand and gravel fill will be compacted in lifts using a drop hammer. The Geopiers® will be constructed in a pre-set pattern.

The structures can simply be supported on spread-footing foundations over the Geopier®-improved subgrade soil. The building's floor slabs on-grade, including the concrete pad for the bus canopy, also can be supported over the Geopier®-improved subgrade soil. The spacing for the Geopiers® to be installed beneath the floor slabs on-grade or concrete pad will be much wider than the support for the foundations. If the Geopier® method is selected, the Geopier® Foundation Company, Inc. will perform the design of the Geopier® system including the spacing of the piers and the allowable bearing capacity on top of the Geopiers®.

The footing foundations supported on the Geopier®-improved subgrade can be designed with the allowable bearing capacity specified by the Geopier® Foundation Company, Inc. Based on our experiences with other projects, the allowable bearing capacities are about 3,000 to 5,000 pounds per square foot (psf) with Geopier® modified subgrade soil for these type of projects.

In general, for the selection or the installation of any type of aggregate piers, the compaction performed with a hammer should provide vertical impact to the granular fill. Each lift of aggregate should be 12 to 36 inches thick and should be placed starting from the bottom of the hole.

If stone-column methods other than the Geopier® method are selected, the compaction of the stone columns should be verified with a dynamic cone-penetration test through the aggregate piers. The "N" values can be obtained continuously through the full length of the aggregate piers. After the tests are completed and the aggregate is still loose, the piers should be recompacted using the installer's equipment. Based on our experience with other projects, a top-feed method of placing the granular material with a vibration device in the open hole cannot achieve the required compaction. The top-feed method with a vibration device is not acceptable and cannot be considered as equal to the Geopiers®.

The Geopier® Foundation Company, Inc. will design the Geopiers® including the length, diameter, and spacing of the piers and the allowable bearing capacities of the improved subgrade soil or with foundations supported directly on top of the piers. If the Geopier® subgrade-improvement method with a displacement mandrel will be used, temporary steel casings will not be needed to extend through the existing fill and weak soil to keep the shafts from caving in. If the Geopier® subgrade-improvement method will be considered, we can contact and provide our study to Geopier® Foundation Company, Inc. on behalf of the client to obtain a preliminary cost estimate for this project.

4.2.2 Site Classification For Seismic Design

Based on the results of the standard penetration tests (SPT) in the borings made in the building area for this study, the average “N” values is between 5 and 15 blows per foot for the soil layer within 15 to 35 feet of the existing grade. Based on the results of the average “N” value, it is our opinion that the site will be classified as an “E” type in accordance with the *Ohio Building Code*. However, if the weak soil will be removed and replaced with compacted backfill or will be modified with Geopiers, the “N” values in the compacted fill layer will be more than 15 and the site can be re-classified as a “D” type in accordance with the *Ohio Building Code*.

4.3 Floor Slabs On-Grade or Concrete Pad

Based on information from the borings performed, the proposed CTC Building and CTC Bus Canopy area is covered by a layer of undocumented and uncontrolled fill or topsoil that extends to the depths outlined in Table 4-1. The fill or topsoil is also not reliable to support the building floor slabs or bus canopy concrete pad due to the potential for settlement. The bottoms of the floor slab on-grade and concrete pad excavations should extend to the suitable depths with the desired allowable bearing capacities as outlined in Table 4-1. The floor slabs on-grade or concrete pad either can be constructed over the newly compacted backfill or over the Geopier®-improved subgrade soil. The upper one foot of compacted fill should be a well-graded, granular material such as crushed sand and gravel or crushed stone. To help distribute concentrated loads and equalize moisture conditions under the slab, this granular material should contain less than 5% of fines or particles that can pass through a No. 200 sieve.

We also recommend that slabs on-grade “float” by being fully supported on the ground and not structurally connected to the walls or foundations. Floating will minimize the possibility of cracking and displacement of the slabs on-grade as a result of differential movements between the slabs and the foundations. Although the movements should be within the tolerable limits for structural safety, such movements could be detrimental to the slabs if they were rigidly connected to the foundations.

4.4 Compaction Requirements

Structural fill placed below the foundation bearing elevation should be compacted to at least 95% of the maximum dry unit weight with moisture contents within 2% of the optimum moisture content as determined by the modified Proctor test (ASTM D1557). Fill placed above the bottoms of the foundations or under pavement areas should be compacted to at least 90% of the maximum dry unit weight with moisture contents within 2% of the optimum moisture content as determined by the modified Proctor test (ASTM D1557). The compaction should be accomplished by placing the fill in successive, horizontal, approximately six- to eight-inch-thick loose lifts and mechanically compacting each lift to at least the specified minimum dry density. Field density tests should be performed at a minimum rate of one per 2,500 square feet of fill area and for each lift to verify that adequate compaction is achieved. Backfill for utility trenches, foundation excavations, etc., within structures or paved areas, is considered structural fill and should be placed in accordance with these recommendations.

It must be emphasized that the excavation and compaction of soil fill are highly influenced by weather conditions. Performing the earthwork under wet and frozen conditions is generally very difficult. As a result, compaction of wet silty and clayey soil should be avoided during wet and frozen conditions because the wet soil cannot be compacted to the required unit weight without drying or other soil stabilization methods. Alternatively, granular soil can be used as backfill to facilitate the backfill and compaction work during winter and wet weather conditions. The construction cost during the winter and wet weather conditions will be higher by the purchase of granular soil from the sand and gravel pits.

Puddling or jetting of the backfill material, including the utility trenches, should not be allowed as a compaction method. Silty or clayey soils encountered above foundation depth will often soften, and the bearing capacity may be reduced if water ponds in the excavation.

Lean concrete that is placed below the bottom of foundation should have a minimum 28-day compressive strength of 1,500 pounds per square inch (psi).

4.5 Foundation Excavations

During the foundation excavations, the subsurface conditions should be verified. Changes in subsurface conditions other than what are shown on the boring logs warrant additional subsurface investigation before the CTC Building and CTC Bus Canopy foundations are constructed.

The foundation excavations should be observed to ensure that the loose, soft, or otherwise undesirable materials are removed and that the foundations will be supported directly on an acceptable surface. At the time of this observation, it may be necessary to use a hand penetration device in the base of the foundation excavation to ensure that the soils immediately below the foundation base are satisfactorily prepared to support the foundations. Please note that such shallow observations do not replace an adequate deep-boring program and structural fill compaction QA/QC records. The overall performance of the foundations is governed by the soils below the bottom of the footing foundation.

If pockets of soft, loose, or otherwise unsuitable materials are encountered in the footing excavations and it is inconvenient to lower the footings, the proposed footing elevations may be reestablished by backfilling after the undesirable materials have been removed. The excavation under each footing should extend to suitable soils, and the base of the excavation should extend one lateral foot for every foot of excavation below the bottom of the footing foundation as shown in Figure 3 in Section III. The entire excavation should then be refilled with well-compacted, engineered fill. Special care should be taken to remove the sloughed, loose, or soft materials near the base of the excavation slopes. Extra care should also be taken to tie-in the compacted fill with the excavation slopes, with benches as necessary, to ensure that no pockets of loose or soft materials are left along the excavation slopes below the foundation bearing level. The contractor should maintain temporary cut slopes in accordance with the current OSHA regulations governing trenching and slope stability.

Soils exposed at the bases of satisfactory foundation excavations should be protected against any detrimental change in condition such as from construction disturbances, rain, and freezing. Surface runoff should be drained away from the excavation and not allowed to pond. If possible, foundation concrete should be placed the same day the excavation is made. If this is not practical, the foundation excavations should be adequately protected. Also, for this reason, proper drainage should be maintained after construction. It must be emphasized that all excavations must conform to all state, federal, and local regulations relative to slope geometry.

4.6 Construction Dewatering

At the time of our study, free groundwater was encountered at depths of 3.0 to 18.5 feet in all but Boring 4 during the boring operations as outlined in Table 3-1. Any groundwater or surface water that accumulates in the excavations should be lowered by sumps and pumps during the excavations for the construction of the proposed structures. The groundwater will have to be lowered to the bottoms of the excavations and to the top of the clay layer, and to three feet below the bottom of the excavation in the granular soil layer. However, care must be exercised when pumping from sumps that extend into silts or other granular soils since general deterioration of the bearing soils and a localized “quick” condition could result. If significant groundwater influxes are noted within the excavations, other dewatering techniques should be determined at the time of construction.

For the installation of GeoPiers®, any groundwater seepage can be intercepted by lowering a submersible pump into the cased open holes. The water can be pumped from the bottoms of the Geopier® excavations. Casings would then be required to keep the shafts from caving in.

The amount and type of dewatering required during construction will depend on the weather and groundwater levels at the time of construction, and the effectiveness of the contractor’s techniques in preventing surface runoff from entering open excavations. Typically, groundwater levels are highest during winter and spring, and lower in summer and early fall.

4.7 Drainage

Adequate drainage should be provided at the site to minimize any increase in moisture content of the foundation soils during and after construction. The exterior grade including all pavements or parking areas should be sloped away from the new CTC Building and Bus Canopy foundations to keep water from ponding. All permanent foundation, wall, and below-grade floor drains should provide positive discharge away from the structures.

4.8 Pavement Recommendations

4.8.1 Pavement Subgrade Preparation Recommendations

We understand that as part of this project, a car and truck parking lot will be constructed at the site. The parking area will be constructed on the west side of the proposed building. Based on information from the borings performed, any proposed pavement areas is covered by undocumented and uncontrolled fill or topsoil that extends to the depths outlined in the first line of each boring on Table 4-1.

The fill or topsoil in the proposed pavement areas should be removed. The topsoil can be stockpiled for landscaping purposes. After the unreliable soil, including all foundations and slabs from any demolished buildings and structures, has been removed and any ground surface in the proposed pavement areas that is higher than the proposed subgrade has been re-graded, the top foot of the subgrade soil layer at the bottom of the excavation should be compacted to at least 90% of the maximum dry-unit weight as determined by the modified Proctor test (ASTM D1557) before any new fill or subgrade is placed. Any soft soil pockets should be undercut and replaced with newly compacted fill. Verification of the subgrade will have to be performed during the re-compaction of the top of the stripped ground surface. A soil technician under the supervision of the geotechnical engineer should be on-site to observe the compaction. Any additional backfill to be placed over the recompacted ground surface to support the granular base should be placed in eight-inch-thick lifts and compacted to at least 90% of the maximum dry-unit weight as determined by the modified Proctor test (ASTM D1557).

Any weak or loose soil layer encountered during the re-compaction of the subgrade soil layer should be undercut and replaced with newly compacted backfill. Any thin layer of soft clay can be scarified and recompacted to achieve the density to at least 90% of the maximum dry-unit weight as determined by the modified Proctor test. The recompacted subgrade should be firm with the deflection less than 1/2 inches under the compaction equipment.

Any additional subgrade fill, which is needed to reach the final proposed subgrade, can be placed and compacted to bring the ground to the desired grade, if needed. The newly placed fill should be placed in horizontal eight-inch-thick lifts and compacted to at least 90% of the maximum dry-unit weight with moisture contents within 2% of the optimum moisture content by the modified Proctor method (ASTM D1557). The granular base can be supported on the newly compacted soil or on the recompacted subgrade.

Silty or clayey soil at subgrade depth will tend to degrade quickly under construction traffic when wet. Degradation of the wet subgrade soils will result in a reduced support value. For this reason, all of the exposed subgrade should be graded to drain and should be protected against any detrimental change in condition such as from disturbances, rain, and freezing. The ground surface near the pavement area should slope away from the car parking so that surface runoff is not allowed to pond next to the pavement area. Adequate drainage should be provided at the site to avoid an increase in moisture content of the subgrade soils during and after construction.

4.8.2 Pavement Design Recommendations

Based on the results of the laboratory tests, the subgrade soils on the sites can be classified as A-4, A-2-4, and A-7-6 types in accordance with the AASHTO Soil Classification System. Our experience has been that the long-term performance records of these types of soils are less than what are predicted by standard design charts. For this reason, after this type of subgrade soil is compacted to 90% of the maximum dry unit weight as determined by the modified Proctor test, a California Bearing Ratio (CBR) value of 3 can be assigned for the pavement design. An equivalent soil support value (SSV) of 2.4 can be used for the asphalt pavement design, and a modulus of subgrade reaction (k) of 100 pci can be used for the concrete pavement design.

The pavement sections outlined in Table 4-2 are recommended only for car parking areas that will accommodate traffic with a gross vehicle weight of less than 4,000 pounds. The projected traffic counts and vehicular loading data were not provided. As a result, the pavement recommendations are only intended for low-impact areas, such as parking areas and driving lanes, where only lightweight passenger cars are anticipated.

Table 4-2. Recommended Car Parking Pavement Sections

Pavement Component	Alternative Pavement Sections (inches)		
	#1	#2	#3
448 Asphalt Concrete Surface Course, Type	3	2	--
301 Asphalt Concrete	--	3	--
304 Granular Base	8	6	6
Portland Cement Concrete	--	--	5

One additional inch of asphalt concrete or Portland cement concrete should be placed in the driving lanes in the car parking areas and in the proposed driveways to handle the channelized traffic conditions. We recommend that a Portland cement concrete pavement be used in front of trash bins and within any truck loading dock area to handle the large start-and-stop loads imposed by the heavy truck traffic.

Several items should be carefully considered during the selection of a final design cross section. These factors are:

- A. A tack coat should be applied between layers of bituminous concrete.
- B. The paved area should have a slope of at least 1.5% for adequate drainage. The base material and/or surface of the subgrade should be allowed to drain through holes in the catch basins or through the shoulders. No undrained granular fill area, including the utility trenches and base course, should be allowed.
- C. Before paving, the entire area should be thoroughly compacted or recompacted to a dry unit weight of 90% of the maximum modified Proctor value at no more than 2% over the optimum moisture content.

5.0 CLOSURE

5.1 Basis of Recommendations

The evaluations, conclusions, and recommendations in this report are based on our interpretation of the field and laboratory data obtained during the exploration, our understanding of the project and our experience with similar sites and subsurface conditions. Data used during this exploration included, but were not necessarily limited to:

- Eight exploratory borings performed during this study.
- Observations of the project site by our staff.
- Previous geotechnical soil studies. Bowser-Morner, Inc. Report No. 206830-1122-229, dated November 3, 2022 discusses the soil conditions for the facilities/engineering management building. Sixteen borings were made for that study. Bowser-Morner Report No. 206830-1122-229, dated November 3, 2022 discusses the soil conditions for the Clermont County Facilities. Ten borings were performed for that study.
- The results of the laboratory soil tests.
- The site plan provided by Clermont County Board of Commissioners.
- Published soil or geologic data of this area.

In the event that changes in the project characteristics are planned, or if additional information or differences from the conditions anticipated in this report become apparent, Bowser-Morner, Inc. should be notified so that the conclusions and recommendations contained in this report can be reviewed and, if necessary, modified or verified in writing.

5.2 Limitations and Additional Services

The subsurface conditions discussed in this report and those shown on the boring logs represent an estimate of the subsurface conditions based on interpretation of the boring data using normally accepted geotechnical engineering judgments. Although individual test borings are representative of the subsurface conditions at the boring locations on the dates shown, they are not necessarily indicative of subsurface conditions at other locations or at other times.

Regardless of the thoroughness of a subsurface exploration, there is the possibility that conditions between borings will differ from those at the boring locations, that conditions are not as anticipated by designers, or that the construction process has altered the soil conditions. As variations in the soil profile are encountered, additional subsurface sampling and testing may be necessary to provide data required to reevaluate the recommendations of this report. Consequently, after submission of this report, it is recommended that Bowser-Morner, Inc. be authorized to perform additional services to work with the designer(s) to minimize errors and omissions regarding the interpretation and implementation of this report.

Before construction begins, we recommend that Bowser-Morner, Inc.:

- Work with the designers to implement the recommended geotechnical design parameters into plans and specifications.
- Consult with the design team regarding interpretation of this report.
- Establish criteria for the construction observation and testing for the soil conditions encountered at this site.
- Review final plans and specifications pertaining to geotechnical aspects of design.

During construction, we recommend that Bowser-Morner, Inc.:

- Observe the construction, particularly the site preparation, fill placement, and foundation excavation or installation.
- Perform in-place density testing of all compacted fill.
- Perform materials testing of soil and other materials as required.
- Consult with the design team to make design changes in the event that differing subsurface conditions are encountered.

If Bowser-Morner, Inc. is not retained for these services, we shall assume no responsibility for construction compliance with the design concepts, specifications or recommendations.

5.3 Warranty

Our professional services have been performed, our findings obtained and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. No other warranty, express or implied, is made.

The scope of this study did not include an environmental assessment for the presence or absence of hazardous or toxic materials in the soil, surface water, groundwater or air, on, within or beyond the site studied. Any statements in the report or on the boring logs regarding odors, staining of soils or other unusual items or conditions observed are strictly for the information of our client.

To evaluate the site for possible environmental liabilities, we recommend an environmental assessment, consisting of a detailed site reconnaissance, a record review, and report of findings. Additional subsurface drilling and sampling, including groundwater sampling, may be required. Bowser-Morner, Inc. can provide this service and would be pleased to provide a cost proposal to perform such a study, if requested.

This report has been prepared for the exclusive use of Clermont County Board of Commissioners for specific application to the building and bus canopy on Filager Road in Batavia, Ohio (see Figure 1 in Section III of this report). Specific design and construction recommendations have been provided in the various sections of the report. The report shall therefore, be used in its entirety. This report is not a bidding document and shall not be used for that purpose. Anyone reviewing this report must interpret and draw their own conclusions regarding specific construction techniques and methods chosen. Bowser-Morner, Inc. is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.



Section II

Specifications

CLEARING AND GRADING SPECIFICATIONS

I. GENERAL CONDITIONS

The contractor shall furnish all labor, materials, and equipment, and perform all work and services necessary to complete in a satisfactory manner the site preparation, excavation, filling, compaction and grading as shown on the plans and as described therein.

This work shall consist of all clearing and grading, removal of existing structures unless otherwise stated, preparation of the land to be filled, filling of the land, spreading and compaction of the fill, and all subsidiary work necessary to complete the grading of the cut and fill areas to conform with the lines, grades, slopes, and specifications.

This work is to be accomplished under the constant and continuous supervision of the Owner or his designated representative.

In these specifications the terms "approved" and "as directed" shall refer to directions to the Contractor from the Owner or his designated representative.

II. SUBSURFACE CONDITIONS

Prior to bidding the work, the Contractor shall examine, investigate and inspect the construction site as to the nature and location of the work, and the general and local conditions at the construction site, including, without limitation, the character of surface or subsurface conditions and obstacles to be encountered on and around the construction site; and shall make such additional investigation as he may deem necessary for the planning and proper execution of the work. Borings and/or soil investigations shall have been made. Results of these borings and studies will be made available by the Owner to the Contractor upon his request, but the Owner is not responsible for any interpretations or conclusions with respect thereto made by the Contractor on the basis of such information, and the Owner further has no responsibility for the accuracy of the borings and the soil investigations.

If conditions other than those indicated are discovered by the Contractor, the Owner should be notified immediately. The material which the Contractor believes to be a changed condition should not be disturbed so that the Owner can investigate the condition.

III. SITE PREPARATION

Within the specified areas, all trees, brush, stumps, logs, tree roots, and structures scheduled for demolition shall be removed and disposed of.

All cut and fill areas shall be properly stripped. Topsoil will be removed to its full depth and stockpiled for use in finish grading. Any rubbish, organic and other objectionable soils, and other deleterious material, shall be disposed of off the site, or as directed by the Owner or his designated representative if on site disposal is provided. In no case shall such objectionable material be allowed in or under the fill unless specifically authorized in writing.

Prior to the addition of fill, the original ground shall be compacted to job specifications as outlined below. Special notice shall be given to the proposed fill area at this time. If wet spots, spongy conditions, or ground water seepage is found, corrective measures must be taken before the placement of fill.

IV. FORMATION OF FILL AREAS

Fills shall be formed of satisfactory materials placed in successive horizontal layers of not more than eight (8) inches in loose depth for the full width of the cross section. The depth of lift may be increased if the Contractor can demonstrate the ability to compact a larger lift. If compaction is accomplished using hand-tamping equipment, lifts will be limited to 4-inch loose lifts.

All material entering the fill shall be free of organic matter such as leaves, grass, roots, and other objectionable material.

The operations on earth work shall be suspended at any time when satisfactory results cannot be obtained because of rain, freezing weather, or other unsatisfactory conditions. The Contractor shall keep the work areas graded to provide the drainage at all times.

The fill material shall be of the proper moisture content before compaction efforts are started. Wetting or drying of the material and manipulation to secure a uniform moisture content throughout the layer shall be required. Should the material be too wet to permit proper compaction or rolling, all work on all portions of the embankment thus affected shall be delayed until the material has dried to the required moisture content. The moisture content of the fill material should be no more than two (2) percentage points higher or lower than optimum unless otherwise authorized. Sprinkling shall be done with equipment that will satisfactorily distribute the water over the disced area.

Compaction operations shall be continued until the fill is compacted to not less than 90% above foundation elevation and 95% below foundation elevation, of the maximum density as determined in accordance with the latest ASTM D-1557 (Modified). Any areas inaccessible to a roller shall be consolidated and compacted by mechanical tampers. The equipment shall be operated in such a manner that hardpan, cemented gravel, clay or other chunky soil material will be broken up into small particles and become incorporated with the other material in the layer.

In the construction of filled areas, starting layers shall be placed in the deepest portion of the fill, and as placement progresses, additional layers shall be constructed in horizontal planes. If directed, original slopes shall be continuously, vertically benched to provide horizontal fill planes. The size of the benches shall be formed so that the base of the bench is horizontal and the back of the bench is vertical. As many benches as are necessary to bring the site to final grade shall be constructed. Filling operations shall begin on the lowest bench, with the fill being placed in horizontal eight (8) inch loose lifts unless otherwise authorized. The filling shall progress in this manner until the entire first bench has been filled, before any fill is placed on the succeeding benches. Proper

drainage shall be maintained at all times during benching and filling of the benches, to insure that all water is drained away from the fill area.

When rock and other embankment material are excavated at approximately the same time, the rock shall be incorporated into the outer portion of the areas. Stones or fragmentary rock larger than four (4) inches in their greatest dimensions will not be allowed in the fill unless specifically authorized in writing. Rock fill shall be brought up in layers as specified or as directed, and every effort shall be exerted to fill the voids with the finer material to form a dense, compact mass. Rock or boulders shall be disposed of as deleterious material per Item III.

Frozen material shall not be placed in the fill nor shall the fill be placed upon frozen material.

The Contractor shall be responsible for the stability of all fills made under the contract, and shall replace any portion, which in the opinion of the Owner or his designated representative, has become displaced due to carelessness or negligence on the part of the Contractor. Fill damaged by inclement weather shall be repaired at the Contractor's expense.

V. SLOPE RATIO AND STORM WATER RUN-OFF

Slopes shall not be greater than 2 (horizontal) to 1 (vertical) in both cut and fill, and storm water shall not be drained over the slopes.

VI. GRADING

The Contractor shall furnish, operate, and maintain such equipment as is necessary to construct uniform layers, and control smoothness of grade for maximum compaction and drainage.

VII. COMPACTING

The compaction equipment shall be approved equipment of such design, weight, and quantity to obtain the required density in accordance with these specifications.

VIII. TESTING AND INSPECTION SERVICES

Testing and inspection services will be provided by the Owner.

IX. SPECIAL CONDITIONS



Section III

Boring Log Terminology, Boring Logs, Laboratory Data, And Prints

BORING LOG TERMINOLOGY

Stratum Depth:

Distance in feet and/or inches below ground surface.

Stratum Elevation:

Elevation in feet below ground surface elevation.

Description of Materials:

Major types of soil material existing at boring location. Soil classification based on one of the following systems: Unified Soil Classification System, Ohio State Highway Classification System, Highway Research Board Classification System, Federal Aviation Authority Classification System, Visual Classification.

Sample No.:

Sample numbers are designated consecutively, increasing with depth for each boring.

Sample Type:

“A” Split spoon, 2” O.D., 1-3/8” I.D., 18” in length.

“B” Rock Core

“C” Shelby Tube 3” O.D. except where noted

“D” Soil Probe

“E” Auger Cuttings

“F” Sonic

Sample Depth:

Depth below top of ground at which appropriate sample was taken.

Blows per 6” on Sampler:

The number of blows required to drive a 2” O.D., 1-3/8” I.D., split spoon sampler, using a 140 pound hammer with a 30-inch free fall, is recorded for 6” drive increments. (Example: 3/8/9).

“N” Blows/Ft.:

Standard penetration resistance. This value is based on the total number of blows required for the last 12” of penetration. (Example: 3/8/9: $N = 8 + 9 = 17$)

Water Observations:

Depth of water recorded in test boring is measured from top of ground to top of water level. Initial depth indicates water level during boring, completion depth indicates water level immediately after boring, and depth after "X" number hours indicates water level after letting water rise or fall over a time period. Water observations in pervious soil are considered reliable ground water levels for that date. Water observations in impervious soils can not be considered accurate ground water measurements for that date unless records are made over several days' time. Factors such as weather, soil porosity, etc., will cause the ground water level to fluctuate for both pervious and impervious soils.

SOIL DESCRIPTION

Color:

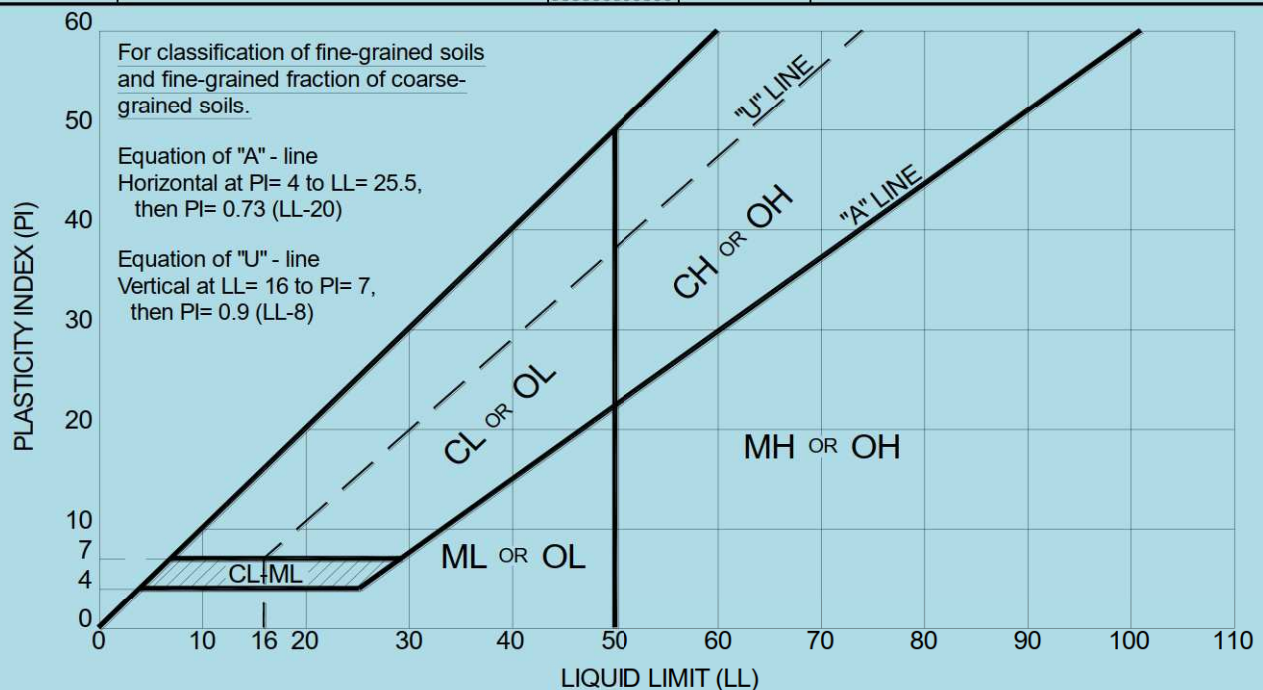
When the color of the soil is uniform throughout, the color recorded will be such as brown, gray, or black and may be modified by adjectives such as light and dark. If the soil's predominant color is shaded by a secondary color, the secondary color precedes the primary color, such as: gray-brown, yellow-brown. If two major and distinct colors are swirled throughout the soil, the colors will be modified by the term mottled, such as: mottled brown and gray.

Particle Size		Visual	Soil Components	
			Major Component:	Minor Component Term
Boulders		Larger than 8"		
Cobbles		8" to 3"	Gravel	Trace 1-10%
Gravel – Coarse		3" to 3/4"	Sand	Some 11-35%
– Fine		2 mm. To 3/4"	Silt	And 36-50%
Sand – Coarse		2 mm. – 0.6 mm.	Clay	
		(Pencil lead size)		
– Medium		0.6 mm. – 0.2mm.		
		Table sugar and salt size)		
– Fine		0.2 mm. – 0.06 mm.	Term	Relative Moisture
		(Powdered sugar and	Dry	Powdery
		human hair size)	Damp	Moisture content
Silt		0.06 mm. – 0.002 mm.	Moist	below plastic limit
Clay		0.002 and smaller		Moisture content
		(Particle size of both		above plastic limit
		Silt and Clay not visible		but below liquid
		To naked eye		limit
			Wet	Moisture content
				Above liquid limit

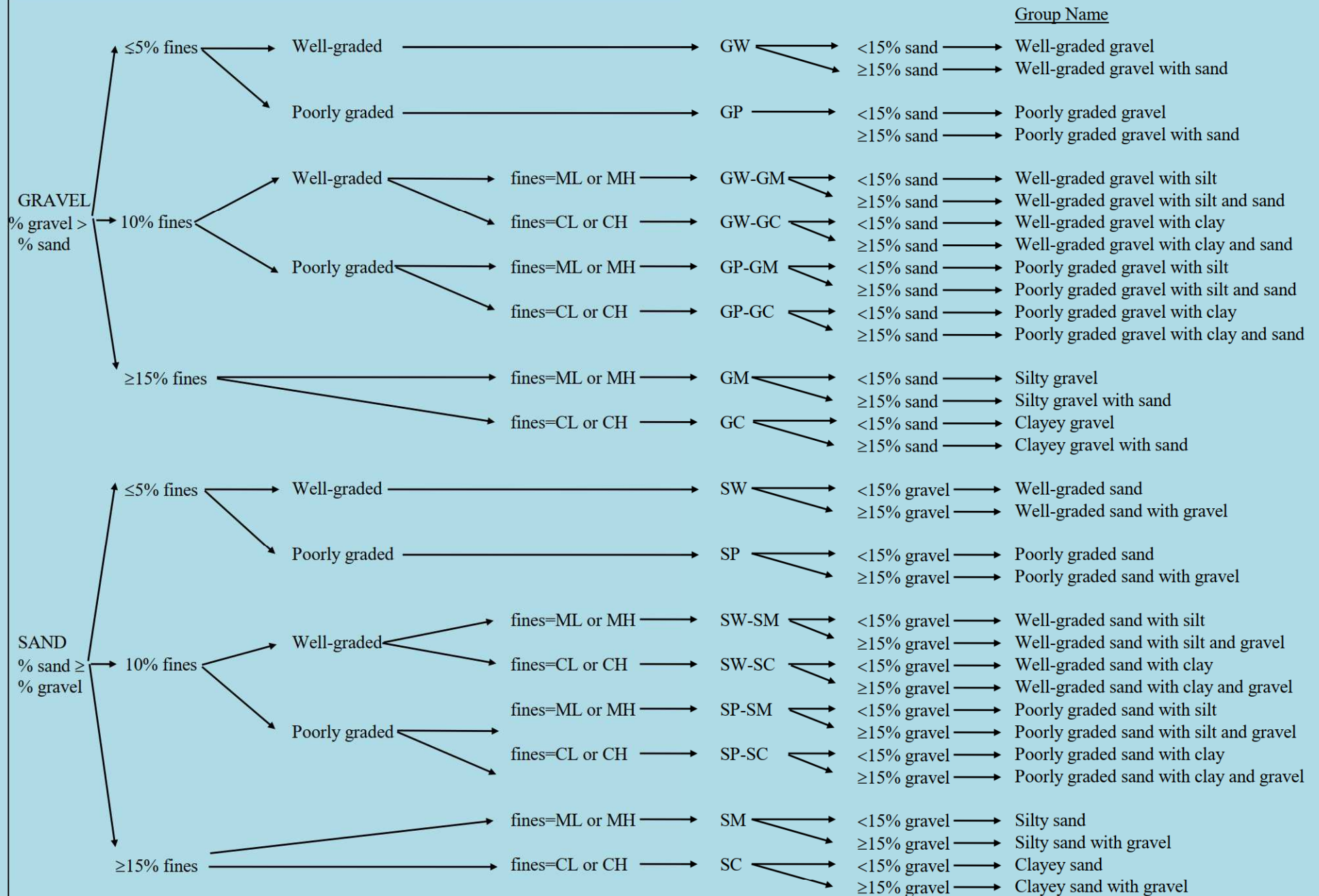
Condition of Soil Relative to Compactness Granular Material		Condition of Soil Relative to Consistency Cohesive Material	
Very Loose	5 blows/ft. or less	Very Soft	3 blows/ft. or less
Loose	6 to 10 blows/ft.	Soft	4 to 5 blows/ft.
Medium Dense	11 to 30 blows/ft.	Medium Stiff	6 to 10 blows/ft.
Dense	30 to 50 blows/ft.	Stiff	11 to 15 blows/ft.
Very Dense	51 blows/ft. or more	Very stiff	16 to 30 blows/ft.
		Hard	31 blows/ft. or more

UNIFIED CLASSIFICATION SYSTEM

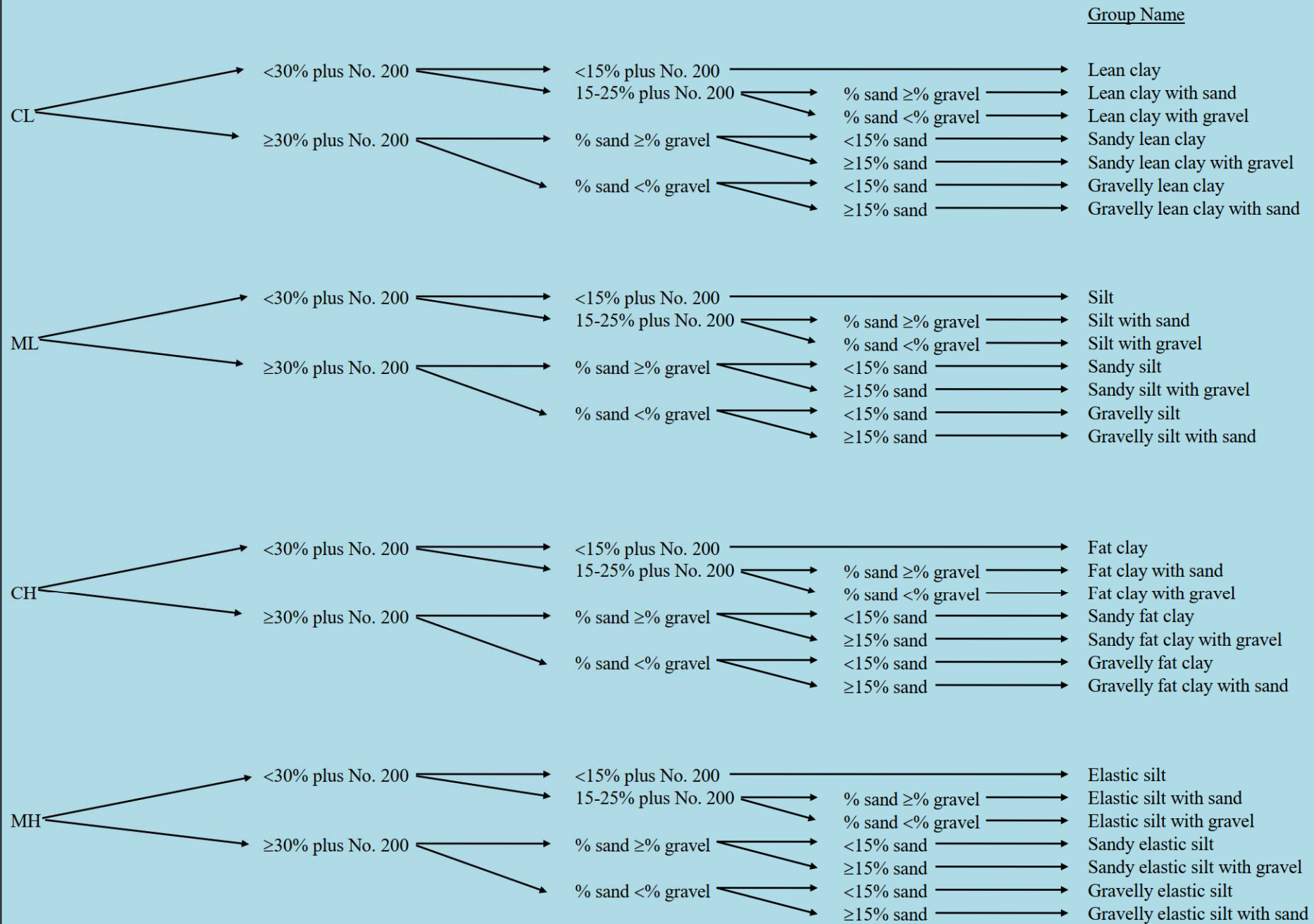
MAJOR DIVISIONS			GRAPH SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVEL WELL-GRADED GRAVEL WITH SAND	
				GP	POORLY GRADED GRAVEL POORLY GRADED GRAVEL WITH SAND	
		MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES APPRECIABLE AMT. OF FINES)		GM	SILTY GRAVEL SILTY GRAVEL WITH SAND
					GC	CLAYEY GRAVEL CLAYEY GRAVEL WITH SAND
	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SAND WELL-GRADED SAND WITH GRAVEL	
				SP	POORLY GRADED SAND POORLY GRADED SAND WITH GRAVEL	
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMT. OF FINES)		SM	SILTY SAND SILTY SAND WITH GRAVEL	
				SC	CLAYEY SAND CLAYEY SAND WITH GRAVEL	
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILT AND CLAYS	LIQUID LIMIT <u>LESS</u> THAN 50		ML	SILT, SILT WITH SAND, SANDY SILT GRAVELLY SILT, GRAVELLY SILT WITH SAND	
				CL	LEAN CLAY WITH SAND, SANDY LEAN CLAY GRAVELLY LEAN CLAY WITH SAND	
				OL	ORGANIC CLAY, SANDY ORGANIC CLAY ORGANIC SILT, SANDY ORGANIC SILT WITH GRAVEL	
	SILT AND CLAYS	LIQUID LIMIT <u>GREATER</u> THAN 50		MH	ELASTIC SILT WITH SAND, SANDY ELASTIC SILT GRAVELLY ELASTIC SILT WITH SAND	
				CH	FAT CLAY WITH SAND, SANDY FAT CLAY GRAVELLY FAT CLAY WITH SAND	
				OH	ORGANIC CLAY WITH SAND, SANDY ORGANIC CLAY, ORGANIC SILT, SANDY ORGANIC SILT	
	HIGHLY ORGANIC SOILS		PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS		



Flow Chart for Visually Identifying Soils Based on ASTM D-2488



Flow Chart for Visually Identifying Soils Based on ASTM D-2488



STANDARD PENETRATION RESISTANCE (ASTM D1586)

The purpose of this test is to determine the relative consistency of the soils in a boring, or from boring over the site. This method consists of making a hole in the ground and driving a 2-inch O.D. split spoon sampler into the soil with a 140-pound hammer dropped from a height of 30 inches. The sampler is driven 18 inches and the number of blows recorded for each 6 inches of penetration. Values of standard penetration (N) are determined in blows per foot, summarizing the flows required for the last two 6-inch increments of penetration.

Example : 2-6-8; N = 14

THIN-WALLED SAMPLER (ASTM D1587)

The purpose of the thin-walled sampler is to recover a relatively undisturbed soil sample for laboratory tests. The sampler is a thin-walled seamless tube with a 3-inch outside diameter, which is hydraulically pressed into the ground, at a constant rate. The ends are then sealed to prevent soil moisture loss, and the tube is returned to the laboratory for tests.



UNCONFINED COMPRESSION OR TRIAXIAL TESTS (ASTM D 2166)



The unconfined compression test and the triaxial tests are performed to determine the shearing strength of the soil, to use in establishing its safe bearing capacity. In order to perform the unconfined compression test, it is necessary that the soil exhibit sufficient cohesion to stand in an unsupported cylinder. These tests are normally performed on samples which are 6.0 inches in height and 2.85 inches in diameter. In the triaxial test, various lateral stresses can be applied to more closely simulate the actual field conditions. There are several different types of triaxial tests. These are, however, normally performed on constant strain apparatus with a deformation rate of 0.05 inches per minute.

CONSOLIDATION TEST (ASTM D 2435)



The purpose of this test is to determine the compressibility of the soil. This test is performed on a sample of soil which is 2.5 inches in diameter and 1.0 inch in height, and has been trimmed from relatively “undisturbed” samples. The test is performed with a lever system or an air activated piston for applying load. The loads are applied in increments and allowed to remain on the sample for a period of 24 hours. The consolidation of the sample under each individual load is measured and a curve of void ratio vs. Pressure is obtained. From the information obtained in this manner and the column loads of the structure, it is possible to calculate the settlement of each individual building column. This information, together with the shearing strength of the soil, is used to determine the safe bearing capacity for a particular structure.

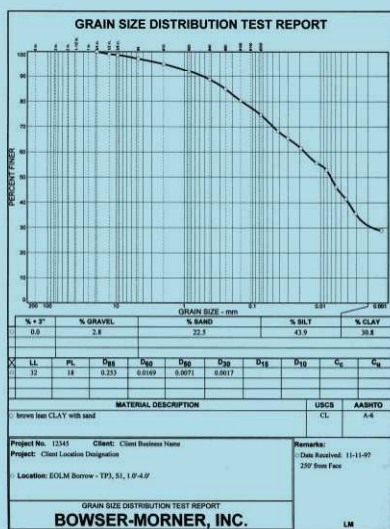
REVISED TO ASTM D4318
ATTERBERG LIMITS (ASTM D423 AND D424)

These tests determine the liquid and plastic limits of soils having a predominant percentage of fine particle (silt and clay) sizes. The liquid limit of a soil is the moisture content expressed as a percent at which the soil changes from a liquid to a plastic state, and the plastic limit is the moisture content at which the soil changes from a plastic to a semi-solid state. Their difference is defined as the plasticity index ($P.I. = L.L. - P.L.$), which is the change in moisture content required to change the soil from a “semi-solid” to a liquid. These tests furnish information about the soil properties which is important in determining their relative swelling potential and their classifications.



MECHANICAL ANALYSIS (ASTM D422)

This test determines the percent of each particle size of a soil. A sieve analysis is conducted on particle sizes greater than a No. 200 sieve (0.074 mm), and a hydrometer test on particles smaller than the No.200 sieve. The gradation curve is drawn through the points of cumulative percent of particle size, and plotted on semi-logarithmic paper for the combined sieve and hydrometer analysis. This test, together with the Atterberg Limits tests, is used to classify a soil.



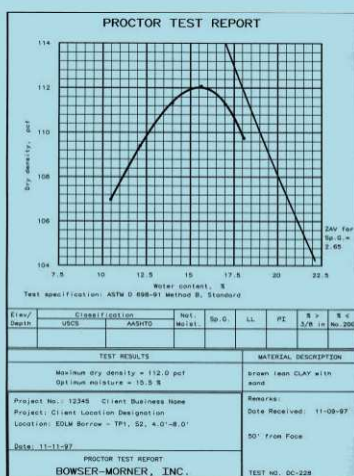
NATURAL MOISTURE CONTENT (ASTM D2216)

The purpose of this test is to indicate the range of moisture contents present in the soil. A wet sample is weighed, placed in the constant temperature oven at 105° for 24 hours, and re-weighed. The moisture content is the change in weight divided by the dry weight.



PROCTOR TESTS

The purpose of these tests is to determine the maximum density and optimum moisture content of a soil. The Modified Proctor test is performed in accordance with ASTM D1557. The test is performed by dropping a 10-pound hammer 25 times from an 18-inch height on each of 5 equal layers of soil in a 1/30 cubic foot mold, which represents a compaction effort of 56,250 foot pounds per cubic foot. The moisture content is then raised, and this procedure is repeated. A moisture density curve is then plotted, with the density on the ordinate axis and the moisture on the abscissa axis. The moisture content at which the maximum density requirement can be achieved with a minimum compactive effort is designated as the optimum moisture content (O.M.C.). The Standard Proctor test is performed in accordance with ASTM D698. This test is similar to the Modified Proctor test and is performed by dropping a 5.5 pound hammer 25 times from a height of 12 inches on 3 equal layers of soil in a 1/30 cubic foot mold, which represents a compaction effort of 12,375 foot pounds per cubic foot. This test gives proportionately lower results than the Modified Proctor test.



CLIENT Clermont County Board of Commissioners					JOB NO. 20009948		B-1 Boring No. Sheet 1 OF 1	
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio					BORING STARTED 6/12/26 COMPLETED 6/12/26			
					DRILLER Central Star Drilling			
					TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
				(FILL) ASPHALT (5")					
1.0				(FILL) GRAVEL Base (9.4")					
2.0	SS-1		6	(ORIGINAL) Medium stiff, brown, sandy lean CLAY (trace silt, trace gravel) – moist	4 4 3	7			
3.0									
4.0	SS-2		12		3 2 4	6			
5.0									
6.0									
7.0	SS-3		12		4 2 4	6			
8.0									
9.0	SS-4		12	(Soft at 8.5')	3 2 3	5			
10.0									
11.0									
12.0									
13.0									
14.0	SS-5		18	Soft, gray lean CLAY with silt – moist	2 2 3	5			
B-1 Terminated at 15 Ft									

WATER LEVEL MEASUREMENTS				 A – SPLIT SPOON B – ROCK CORE C – SHELBY TUBE D – SOIL PROBE E – AUGER CUTTINGS F – SONIC		Bowser-Morner, Inc.	
DEPTH DATE INITIAL <u>N/A</u> <u>N/A</u> AT COMPLETION <u>3</u> <u>06/12/2026</u> OTHER <u>N/A</u> <u>N/A</u>						Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800	
						BOWSER MORNER	

CLIENT Clermont County Board of Commissioners					JOB NO. 20009948		B-2 Boring No. Sheet 1 OF 2	
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio					BORING STARTED 6/12/26 COMPLETED 6/12/26			
					DRILLER Central Star Drilling			
					TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
					TOPSOIL (6")				
1.0	SS-1		10		Medium stiff, dark brown, sandy lean CLAY – moist	5			
2.0						5			
						6			
3.0	SS-2		12		Medium stiff, brown, sandy lean CLAY (trace silt, trace gravel) – moist	5			
4.0						4			
						5			
5.0	SS-3		12			3			
6.0						4			
7.0						4			
8.0	SS-4		12		Soft, brown lean CLAY with sand (trace silt) – moist	3			
9.0						2			
						3			
10.0									
11.0									
12.0									
13.0	SS-5		18		Soft, gray lean CLAY with silt – moist	3			
14.0						2			
						3			
15.0									
16.0									
17.0									
18.0	SS-6		18		(Very soft at 18.5')	2			
19.0						1			
						2			
20.0									
21.0									
22.0									
23.0	SS-7		18		(Soft at 23.5')	2			

WATER LEVEL MEASUREMENTS				A – SPLIT SPOON B – ROCK CORE C – SHELBY TUBE D – SOIL PROBE E – AUGER CUTTINGS F – SONIC		Bowser-Morner, Inc.	
DEPTH		DATE				Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 	
INITIAL <u>N/A</u>		<u>N/A</u>					
AT COMPLETION <u>16</u>		<u>06/12/2026</u>					
OTHER <u>N/A</u>		<u>N/A</u>					

CLIENT Clermont County Board of Commissioners					JOB NO. 20009948		B-2 Boring No. Sheet 2 OF 2	
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio					BORING STARTED 6/12/26 COMPLETED 6/12/26			
					DRILLER Central Star Drilling			
					TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
	SS-7		18		(Soft at 23.5')	2 2 3			
B-2 Terminated at 25 Ft									

WATER LEVEL MEASUREMENTS				DEPTH DATE INITIAL <u>N/A</u> <u>N/A</u> AT COMPLETION <u>16</u> <u>06/12/2026</u> OTHER <u>N/A</u> <u>N/A</u> A — SPLIT SPOON B — ROCK CORE C — SHELBY TUBE D — SOIL PROBE E — AUGER CUTTINGS F — SONIC		Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 BOWSER MORNER	
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CLIENT Clermont County Board of Commissioners					JOB NO. 20009948		B-3 Boring No. Sheet 1 OF 2	
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio					BORING STARTED 6/11/26 COMPLETED 6/11/26			
					DRILLER Central Star Drilling			
					TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
					(FILL) TOPSOIL (6")				
1.0	SS-1		12		(FILL) Very stiff, brown, sandy lean CLAY (trace silt, trace gravel, some cobbles) – moist	11	21		
2.0						12			
						9			
3.0	SS-2		12		(ORIGINAL) Medium stiff, brown, sandy lean CLAY (trace silt, trace gravel) – moist	4	9		
4.0						5			
5.0						4			
6.0	SS-3		12		(Soft at 6.0')	2	5		
7.0						2			
						3			
8.0	SS-4		12		(Medium stiff at 8.5')	3	7		
9.0						3			
10.0						4			
11.0									
12.0									
13.0									
14.0	SS-5		18		Medium stiff, gray lean CLAY with silt – moist	3	6		
15.0						3			
16.0						3			
17.0									
18.0									
19.0									
19.0	SS-6		18		(Water encountered. Soft at at 18.5")	2	4		
20.0						2			
21.0						2			
22.0									
23.0									
	SS-7		12			3			

WATER LEVEL MEASUREMENTS				■ A – SPLIT SPOON ■ B – ROCK CORE ⊠ C – SHELBY TUBE ▨ D – SOIL PROBE ▩ E – AUGER CUTTINGS ▤ F – SONIC	Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 	
DEPTH	DATE					
INITIAL <u>18.5</u>	<u>06/11/2026</u>	▽				
AT COMPLETION <u>12</u>	<u>06/11/2026</u>	▽				
OTHER <u>N/A</u>	<u>N/A</u>	▽				

CLIENT Clermont County Board of Commissioners						JOB NO. 20009948			
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio						BORING STARTED 6/11/26		BORING COMPLETED 6/11/26	
						DRILLER Central Star Drilling			
						TYPED BY DO		ELEVATION (FT) 576.3	
								B-3 Boring No.	
								Sheet 2 OF 2	
DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
	SS-7		12		(Water encountered. Soft at at 18.5")	3 2 3			
25.0									
26.0									
27.0									
28.0									
29.0	SS-8		12		(Stiff at 28.5')	5 6 5	11♦		
30.0									
31.0									
32.0									
33.0									
34.0	SS-9		18		Medium dense gray silty SAND – wet	4 9 11	20♦		
					B-3 Terminated at 35 Ft				
WATER LEVEL MEASUREMENTS									
DEPTH DATE									
INITIAL 18.5 ▽ 06/11/2026									
AT COMPLETION 12 ▽ 06/11/2026									
OTHER N/A ▽ N/A									
					A — SPLIT SPOON B — ROCK CORE C — SHELBY TUBE D — SOIL PROBE E — AUGER CUTTINGS F — SONIC			Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 BOWSER MORNER.	

CLIENT Clermont County Board of Commissioners					JOB NO. 20009948		B-4 Boring No. Sheet 1 OF 1	
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio					BORING STARTED 6/12/26 COMPLETED 6/12/26			
					DRILLER Central Star Drilling			
					TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
					(FILL) TOPSOIL (6")				
1.0	SS-1		12		(FILL) Medium stiff, brown, sandy lean CLAY (trace silt, trace gravel, some cobbles) – moist	4	8		
2.0					4				
3.0					4				
4.0	SS-2		12			6	7		
5.0					4				
6.0					3				
7.0	SS-3		12		(Becomes brown and gray at 5.5')	3	5		
8.0					3				
9.0					2				
10.0	SS-4		12		Medium stiff, brown lean CLAY (trace sand, trace silt) – moist	3	8		
11.0					3				
12.0					5				
13.0	SS-5		12			4	8		
14.0					3				
					5				
					B-4 Terminated at 15 Ft				

WATER LEVEL MEASUREMENTS				A – SPLIT SPOON B – ROCK CORE X C – SHELBY TUBE D – SOIL PROBE X E – AUGER CUTTINGS F – SONIC Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 BOWSER MORNER	
DEPTH	DATE				
INITIAL <u>N/A</u>	<u>N/A</u>		<u>N/A</u>		
AT COMPLETION <u>N/A</u>	<u>N/A</u>		<u>N/A</u>		
OTHER <u>N/A</u>	<u>N/A</u>		<u>N/A</u>		

CLIENT Clermont County Board of Commissioners					JOB NO. 20009948		B-5 Boring No. Sheet 1 OF 1	
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio					BORING STARTED 6/12/26 COMPLETED 6/12/26			
					DRILLER Central Star Drilling			
					TYPED BY DO		ELEVATION (FT) 580.4	

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
					(FILL) TOPSOIL (6")				
1.0	SS-1		8		(FILL) Medium stiff, brown, sandy lean CLAY (trace silt, some gravel, trace cobbles) – moist	3 2 4			
2.0									
3.0									
4.0	SS-2		12			3 3 4			
5.0									
6.0	SS-3		12		(ORIGINAL) Soft, gray, sandy lean CLAY (trace silt, trace gravel) – moist	3 2 3			
7.0									
8.0					(Becomes brown at 8.0') (Stiff at 8.5')				
9.0	SS-4		12			7 7 6			
10.0									
11.0									
12.0									
13.0									
14.0	SS-5		12		Stiff, brown lean CLAY with silt – moist (Water encountered at 13.5')	3 5 6			
15.0									
16.0									
17.0									
18.0									
19.0	SS-6		12		(Becomes gray at 18.0') (Medium stiff at 18.5')	4 3 4			
					B-5 Terminated at 20 Ft				

WATER LEVEL MEASUREMENTS				■ A – SPLIT SPOON ■ B – ROCK CORE ⊠ C – SHELBY TUBE ▨ D – SOIL PROBE ▩ E – AUGER CUTTINGS ▤ F – SONIC		Bowser-Morner, Inc.	
DEPTH		DATE				Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 BOWSER MORNER	
INITIAL <u>N/A</u>		<u>N/A</u>					
AT COMPLETION <u>10</u>		<u>06/12/2026</u>					
OTHER <u>N/A</u>		<u>N/A</u>					

CLIENT Clermont County Board of Commissioners					JOB NO. 20009948		B-6 Boring No. Sheet 1 OF 1	
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio					BORING STARTED 6/12/26 COMPLETED 6/12/26			
					DRILLER Central Star Drilling			
					TYPED BY DO		ELEVATION (FT) 572.6	

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
					(FILL) TOPSOIL (6")				
1.0	SS-1		4		(FILL) Very soft, brown, sandy lean CLAY (trace silt, some gravel, trace cobbles) – moist	3			
2.0						2			
						1			
3.0									
4.0	SS-2		5			2			
5.0						2			
						3			
6.0									
7.0	SS-3		10		(ORIGINAL) Medium stiff, brown, sandy lean CLAY (trace silt) – moist	2			
						3			
						3			
8.0									
9.0	SS-4		12		(Water encountered at 8.5")	3			
						4			
						4			
10.0									
11.0									
12.0									
13.0									
14.0	SS-5		18		Soft, gray lean CLAY with silt – wet	3			
						1			
						3			
15.0									
16.0									
17.0									
18.0									
19.0	SS-6		18		(Medium stiff at 18.5')	3			
						4			
						5			
					B-6 Terminated at 20 Ft				

WATER LEVEL MEASUREMENTS				 A – SPLIT SPOON B – ROCK CORE C – SHELBY TUBE D – SOIL PROBE E – AUGER CUTTINGS F – SONIC		Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 	
DEPTH	DATE						
INITIAL <u>N/A</u>	<u>N/A</u>						
AT COMPLETION <u>5</u>	<u>06/12/2026</u>						
OTHER <u>N/A</u>	<u>N/A</u>						

CLIENT Clermont County Board of Commissioners					JOB NO. 20009948		B-7 Boring No. Sheet 1 OF 1	
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio					BORING STARTED 6/11/26 COMPLETED 6/11/26			
					DRILLER Central Star Drilling			
					TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ◆	WATER	REMARKS
				(FILL) ASPHALT (5") (FILL) GRAVEL Base (13")					
1.0	SS-1		8		(ORIGINAL) Stiff, dark-brown, sandy lean CLAY (trace silt, trace gravel) – moist	5	◆		
2.0									
3.0									
4.0	SS-2		10		(Soft at 3.5')	2	◆		
5.0									
6.0									
7.0	SS-3		10		Soft, brown and gray lean CLAY with silt – moist	2	◆		▽
8.0									
9.0									
10.0	SS-4		12		Soft, brown, sandy lean CLAY (trace sand seams) – wet	3	◆		▽
11.0									
12.0									
13.0					Soft, gray lean CLAY with silt – wet	2	◆		
14.0									
					B-7 Terminated at 15 Ft				

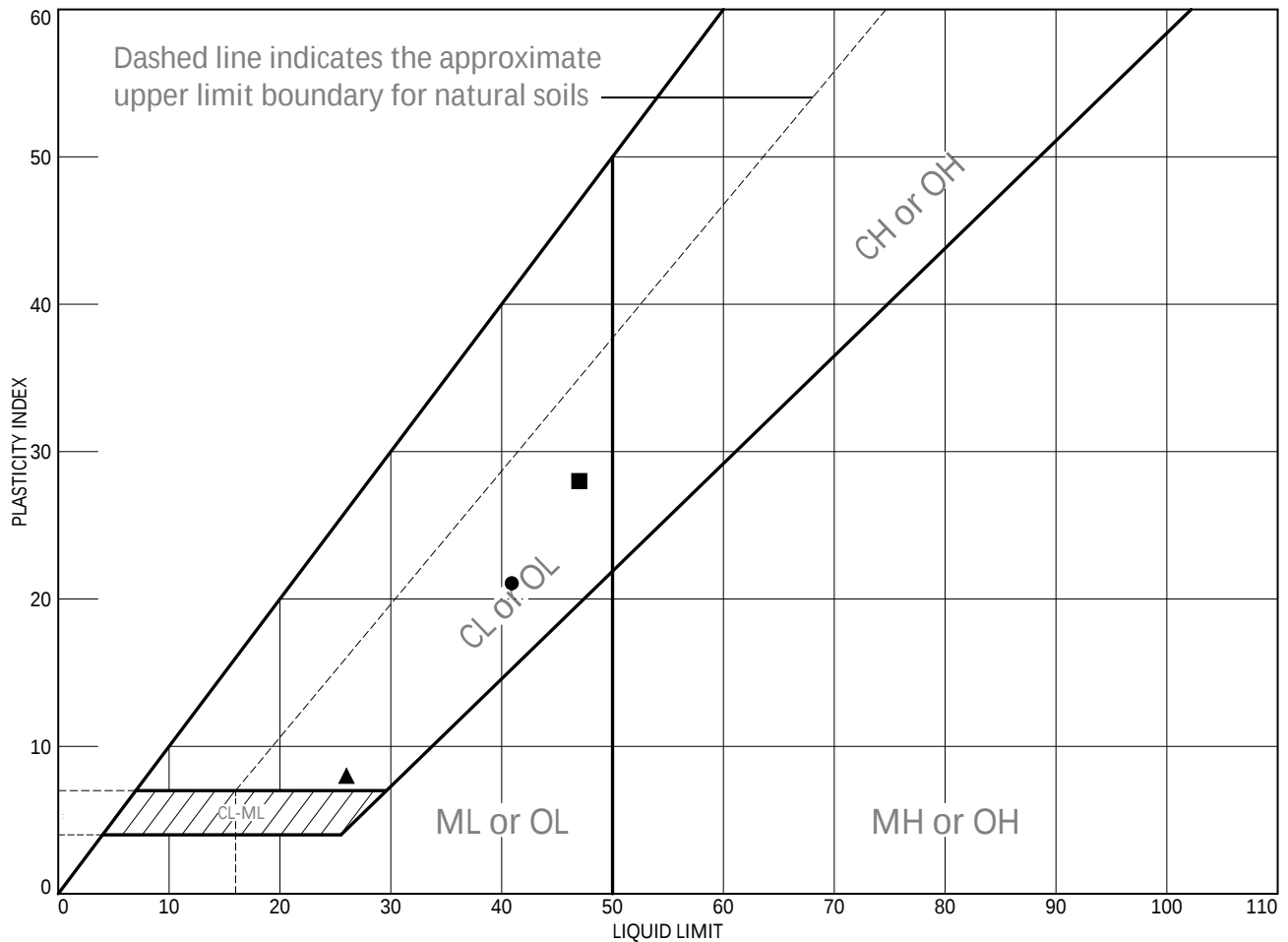
WATER LEVEL MEASUREMENTS				 A – SPLIT SPOON B – ROCK CORE X C – SHELBY TUBE D – SOIL PROBE / E – AUGER CUTTINGS F – SONIC		Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 	
DEPTH		DATE					
INITIAL 8.5		06/11/2026					
AT COMPLETION 7		06/11/2026					
OTHER N/A		N/A					

CLIENT Clermont County Board of Commissioners					JOB NO. 20009948		B-8 Boring No. Sheet 1 OF 1	
PROJECT Proposed CTC Building and Bus Canopy Project, Filager Rd, Batavia, Ohio					BORING STARTED 6/12/26 COMPLETED 6/12/26			
					DRILLER Central Star Drilling			
					TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ◆	WATER	REMARKS
					(FILL) ASPHALT (5.5")				
1.0	SS-1		18		(FILL) GRAVEL Base (24.5")	27			
2.0					17				
					29				
3.0					(ORIGINAL) Medium stiff, dark gray, sandy lean CLAY (trace silt) – moist			▼	
4.0	SS-2		12		(Water encountered at 3.0')	5			
5.0					4				
				5					
6.0					Medium stiff, brown lean CLAY with sand (trace silt) – moist-to-wet	4			
7.0	SS-3		12			3			
					5				
8.0									
9.0					(Very soft at 8.5')	3			
10.0	SS-4		12			2			
					1				
11.0									
12.0									
13.0									
14.0	SS-5		12		(Becomes gray at 13.0')	3			
				4					
					B-8 Terminated at 15 Ft				

WATER LEVEL MEASUREMENTS				 A – SPLIT SPOON B – ROCK CORE C – SHELBY TUBE D – SOIL PROBE E – AUGER CUTTINGS F – SONIC	Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 	
DEPTH		DATE				
INITIAL <u>3</u>		<u>06/12/2026</u>				
AT COMPLETION <u>3</u>		<u>06/12/2026</u>				
OTHER <u>N/A</u>		<u>N/A</u>				

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	B-1, SS 3	41	20	21			
■	B-6, SS 3	47	19	28			
▲	B-7, SS 4	26	18	8			

Project No. 20009948 Client: Clermont County Board of Commissioners

Project: Building and Bus Canopy

● Location: B-01 Depth: 6.0' - 7.5' Sample Number: SS-3
 ■ Location: B-06 Depth: 6.0' - 7.5' Sample Number: SS-3
 ▲ Location: B-07 Depth: 8.5' - 10.0' Sample Number: SS-4

Remarks:

● As Received Moisture Content: 20.6%
 ■ As Received Moisture Content: 25.3%
 ▲ As Received Moisture Content: 25.9%

BOWSER-MORNER, INC.

Dayton, Ohio

Tested By: ☐ JW ☐ CC ☐ KA _____ Checked By: BLC

Moisture Content of Soil

ASTM (D-2216)



Client: Clermont County Board of Commissioners

Project: Building & Bus Canopy

Work Order No.: 20009948

Date: 07/11/26

Boring Number	Sample Number	Depth, (ft)	Depth, (m)	Moisture Content, (%)
B-01	SS 1	1.0 - 2.5	0.3 - 0.8	7.9
	SS 2	3.5 - 5.0	1.1 - 1.5	19.8
	SS 3	6.0 - 7.5	1.8 - 2.3	20.6
	SS 4	8.5 - 10.0	2.6 - 3.0	28.3
	SS 5	13.5 - 15.0	4.1 - 4.6	Not Tested
B-02	SS 1	1.0 - 2.5	0.3 - 0.8	15.1
	SS 2	3.5 - 5.0	1.1 - 1.5	17.9
	SS 3	6.0 - 7.5	1.8 - 2.3	23.1
	SS 4	8.5 - 10.0	2.6 - 3.0	Not Tested
	SS 5	13.5 - 15.0	4.1 - 4.6	Not Tested
	SS 6	18.5 - 20.0	5.6 - 6.1	Not Tested
	SS 7	23.5 - 25.0	7.2 - 7.6	Not Tested
B-03	SS 1	1.0 - 2.5	0.3 - 0.8	12.4
	SS 2	3.5 - 5.0	1.1 - 1.5	18.7
	SS 3	6.5 - 7.0	2.0 - 2.1	18.9
	SS 4	8.5 - 10.0	2.6 - 3.0	Not Tested
	SS 5	13.5 - 15.0	4.1 - 4.6	Not Tested
	SS 6	18.5 - 20.0	5.6 - 6.1	Not Tested
	SS 7	23.5 - 25.0	7.2 - 7.6	Not Tested
	SS 8	28.5 - 30.0	8.7 - 9.1	Not Tested
	SS 9	33.5 - 35.0	10.2 - 10.7	Not Tested
B-04	SS 1	1.0 - 2.5	0.3 - 0.8	12.2
	SS 2	3.5 - 5.0	1.1 - 1.5	15.7
	SS 3	6.5 - 7.0	2.0 - 2.1	15.2
	SS 4	8.5 - 10.0	2.6 - 3.0	Not Tested
	SS 5	13.5 - 15.0	4.1 - 4.6	Not Tested
B-05	SS 1	1.0 - 2.5	0.3 - 0.8	Not Tested
	SS 2	3.5 - 5.0	1.1 - 1.5	18.5
	SS 3	6.5 - 7.0	2.0 - 2.1	20.4
	SS 4	8.5 - 10.0	2.6 - 3.0	16.3
	SS 5	13.5 - 15.0	4.1 - 4.6	Not Tested
	SS 6	18.5 - 20.0	5.6 - 6.1	Not Tested
B-06	SS 1	1.0 - 2.5	0.3 - 0.8	12.9
	SS 2	3.5 - 5.0	1.1 - 1.5	16.7
	SS 3	6.0 - 7.5	1.8 - 2.3	25.3
	SS 4	8.5 - 10.0	2.6 - 3.0	25.5
	SS 5	13.5 - 15.0	4.1 - 4.6	Not Tested

Moisture Content of Soil

ASTM (D-2216)



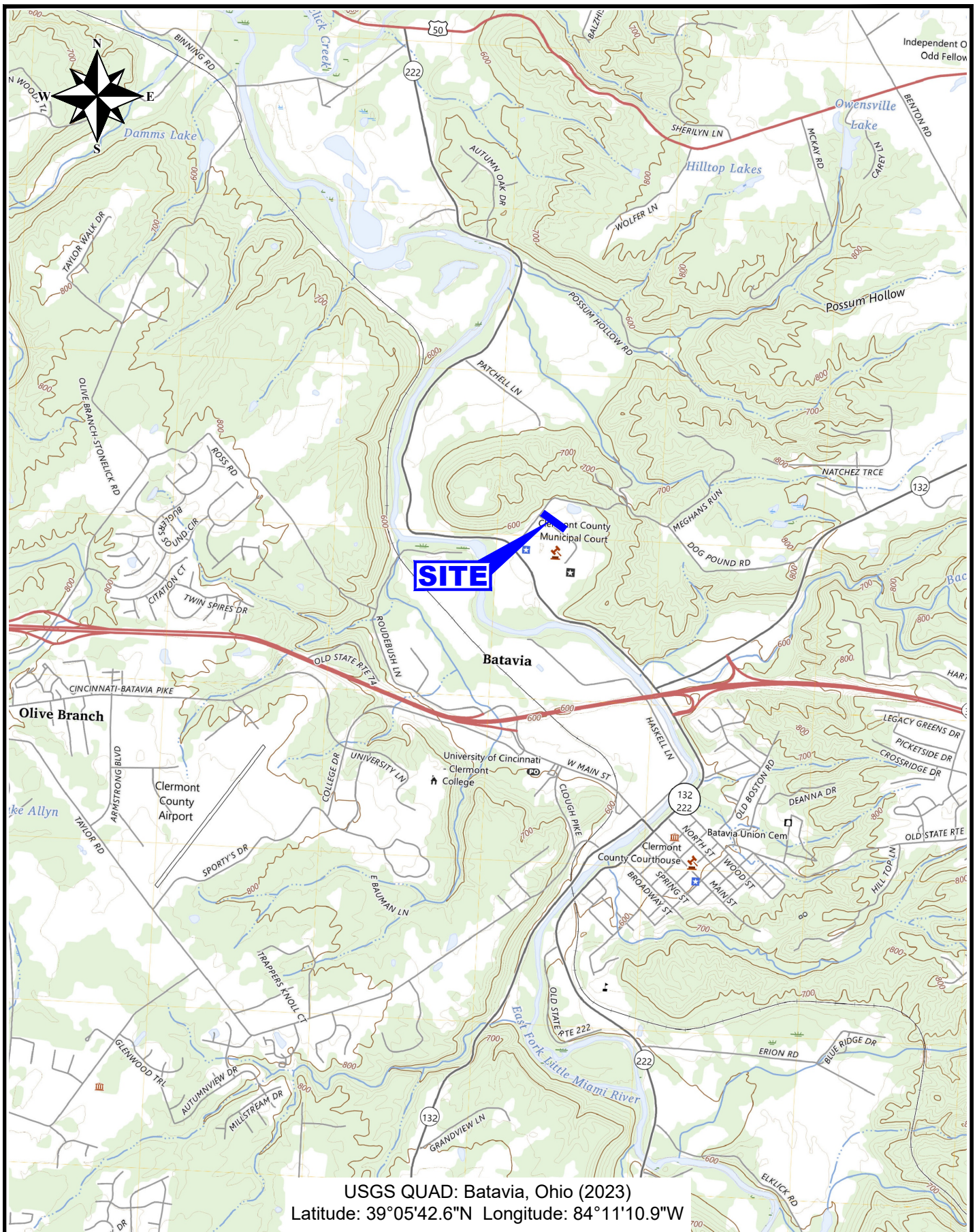
Client: Clermont County Board of Commissioners

Project: Building & Bus Canopy

Work Order No.: 20009948

Date: 07/11/26

Boring Number	Sample Number	Depth, (ft)	Depth, (m)	Moisture Content, (%)
B-06	SS 6	18.5 - 20.0	5.6 - 6.1	Not Tested
B-07	SS 1	1.0 - 2.5	0.3 - 0.8	Not Tested
	SS 2	3.5 - 5.0	1.1 - 1.5	27.9
	SS 3	6.5 - 7.0	2.0 - 2.1	27.6
	SS 4	8.5 - 10.0	2.6 - 3.0	25.9
	SS 5	13.5 - 15.0	4.1 - 4.6	62.7
B-08	SS 1	1.0 - 2.5	0.3 - 0.8	6.3
	SS 2	3.5 - 5.0	1.1 - 1.5	25.1
	SS 3	6.5 - 7.0	2.0 - 2.1	23.9
	SS 4	8.5 - 10.0	2.6 - 3.0	Not Tested
	SS 5	13.5 - 15.0	4.1 - 4.6	48.8



VICINITY MAP

Soil Study for Proposed CTC Building
 and CTC Bus Canopy Project
 4003 Filager Road
 Batavia, Clermont County, Ohio
 For: Clermont County Board of Commissioners

PROJECT NO.
20009948

SCALE
1" = 1/2 Mile

FIGURE

1



**BOWSER
MORNER**

07/2026 EM



BORING LOCATION PLAN
Soil Study for Proposed CTC Building
and CTC Bus Canopy Project
4003 Filager Road
Batavia, Clermont County, Ohio
For: Clermont County Board of Commissioners

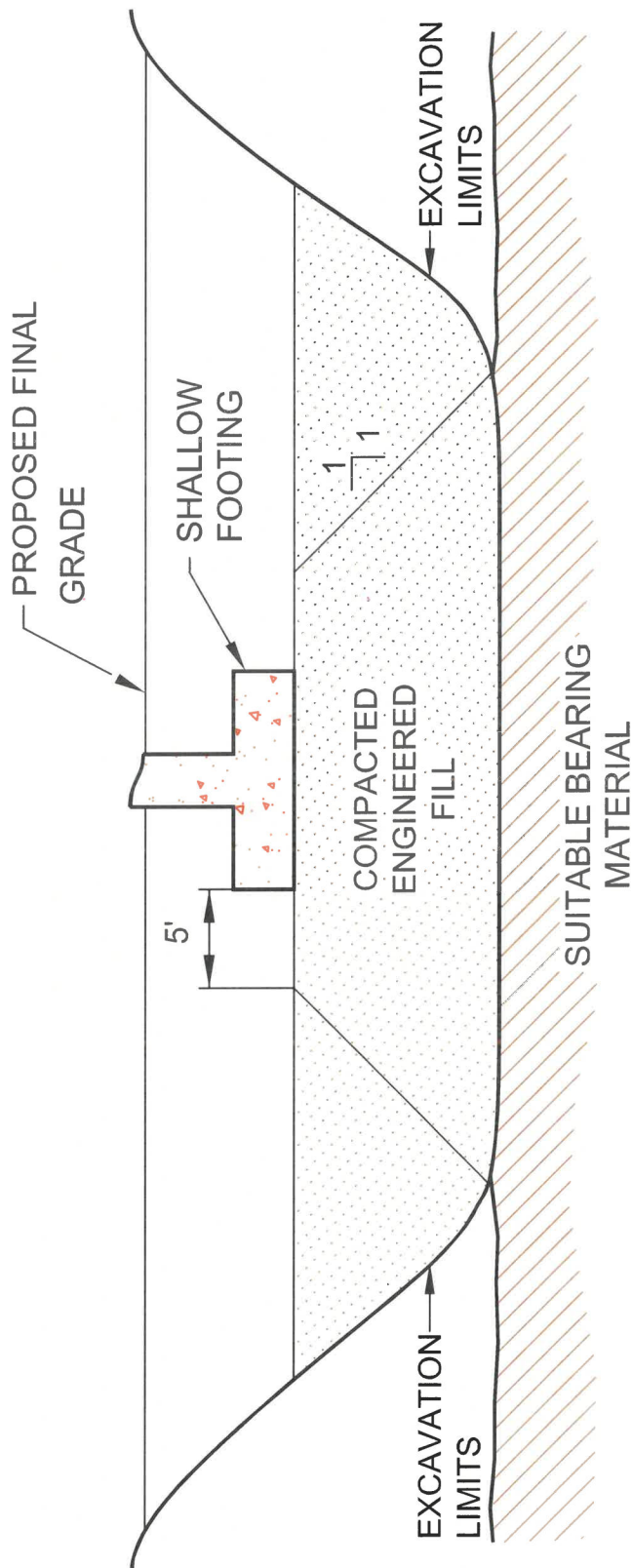
PROJECT NO.
20009948

SCALE
1" = 50'

FIGURE
2

**BOWSER
MORNER**

07/2026 EM



DESIGN ILLUSTRATION SHALLOW FOOTINGS IN AN UNDERCUT AREA

SCALE
NONE

FIGURE NO.
3



**BOWSER
MORNER**

ENGINEERING & ENVIRONMENTAL SERVICES:

Geotechnical Engineering
Subsurface Exploration
Civil Engineering
Environmental Services
Due Diligence
Permitting

LABORATORY SERVICES:

Geotechnical Laboratories
Construction Materials Laboratories
Mineral Aggregates
Concrete
Stone & Masonry
Asphalt
Analytical Services Laboratories
Industrial Minerals
Product Testing
Mechanical/Metallurgical Testing
Calibration Services
Chemistry Laboratory
Consulting Geology
Radon Reference Laboratory

CONSTRUCTION SUPPORT SERVICES:

General Construction
Construction Quality Assurance
Building Code Special Inspections
Transportation Projects:
- Contractor QA/QC
- Material Supplier QA/QC
- Owner Quality Assurance
Materials Consulting:
- Construction Engineering





**GARMANN
MILLER**

☎ 419.628.4240

📍 Ohio
Indiana
Pennsylvania
Maryland
Delaware

@ creategm.com



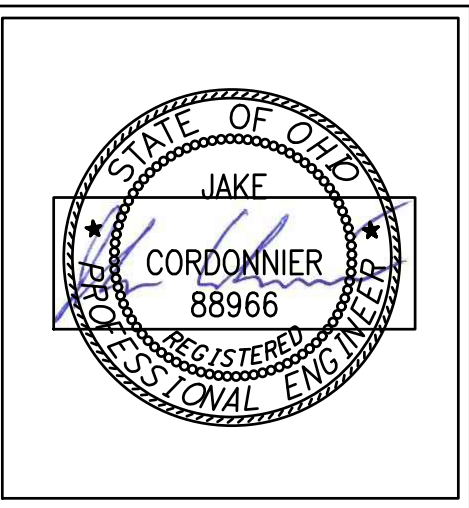
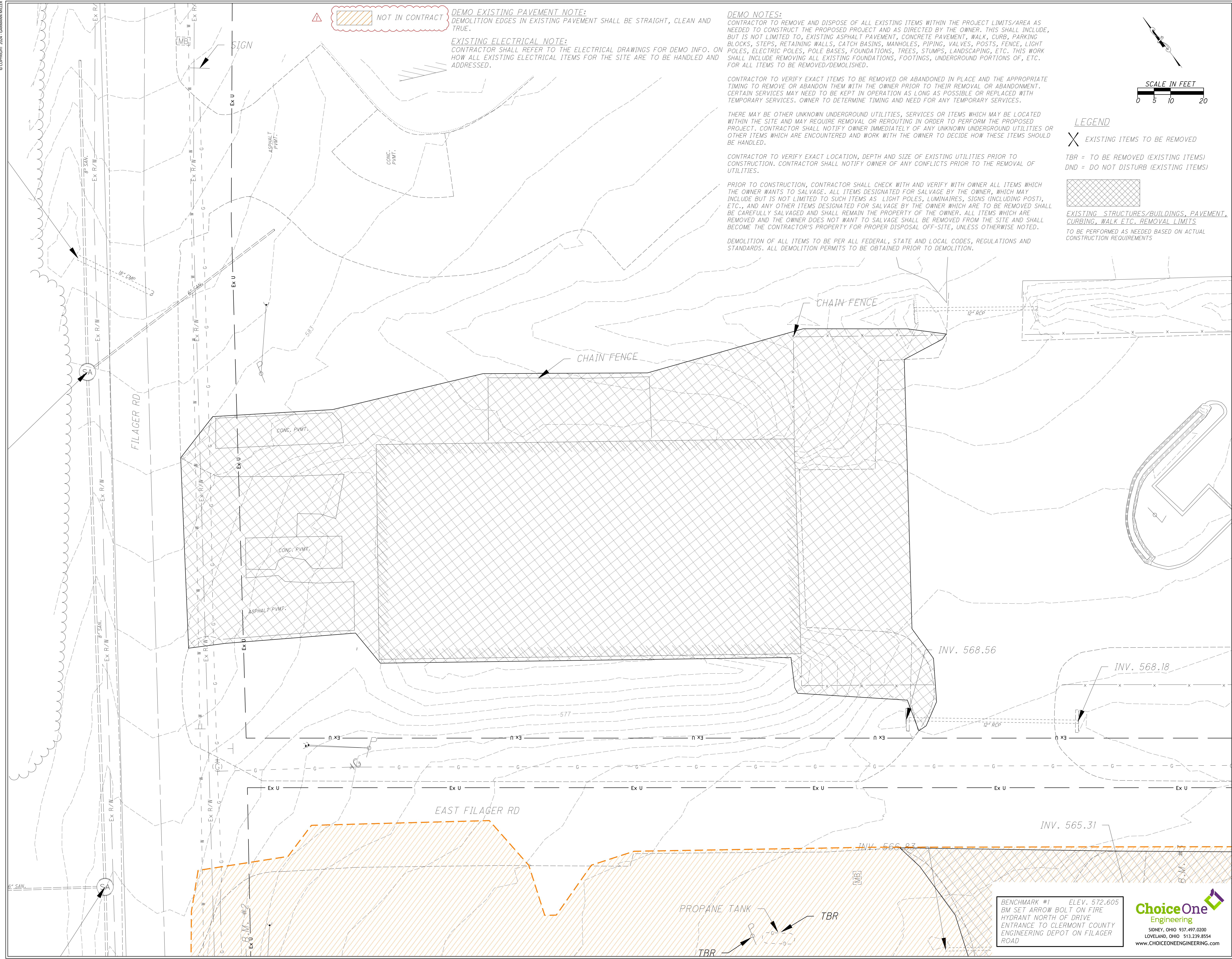
CLERMONT
COUNTY_{OHIO}

Clermont County Facilities

Filager Campus Improvements
Phase 3 CTC Building

4019 Filager Road Batavia, OH

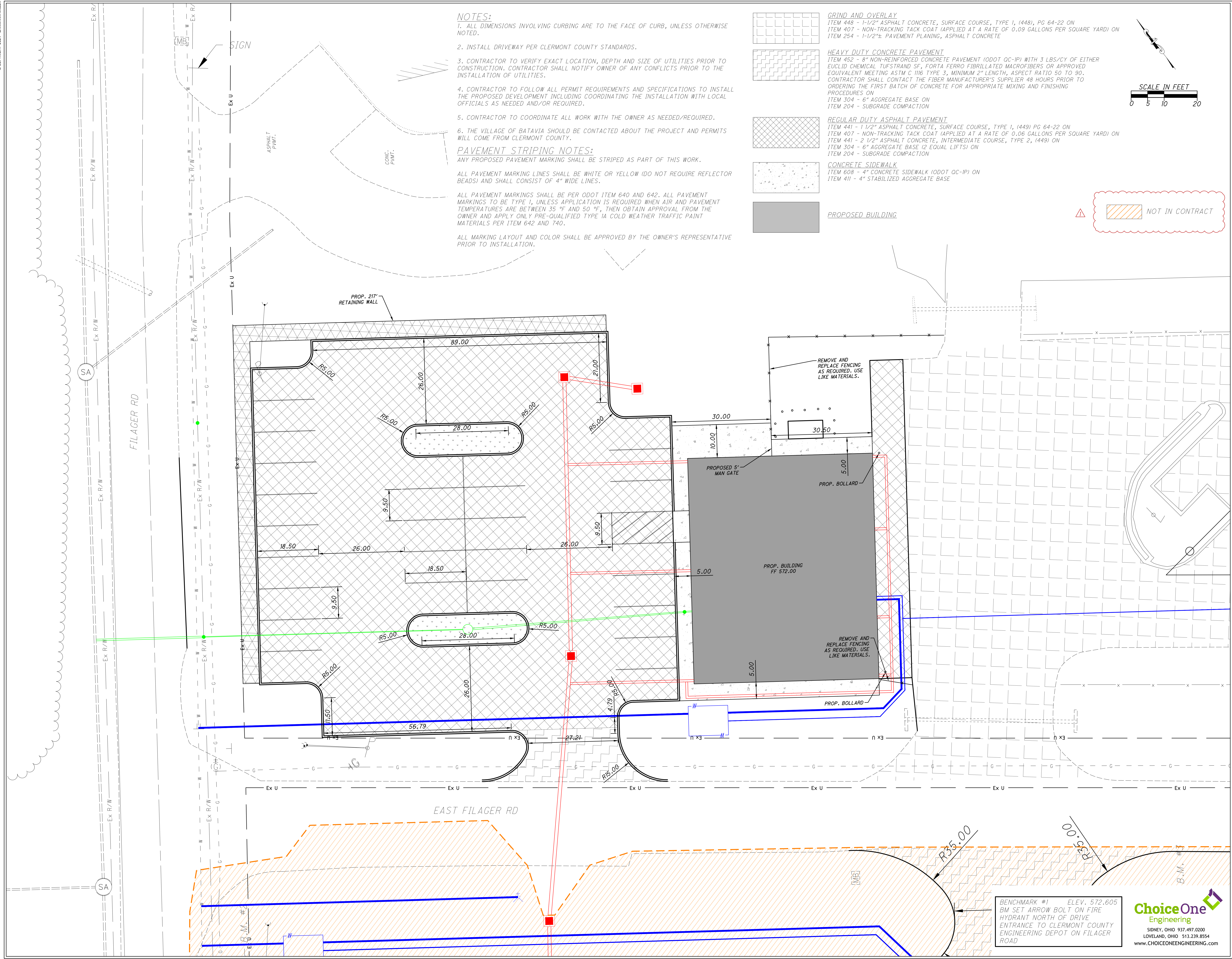
General
Contractor's
Logo



CLERMONT COUNTY FACILITIES PHASE 3 CTC BUILDING AND CANOPY

ISSUANCES/REVISIONS		
PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
22001.00	JAC	NJS

SHEET NUMBER:		
C1.1		



NOTES:

1. ALL DIMENSIONS INVOLVING CURBING ARE TO THE FACE OF CURB, UNLESS OTHERWISE NOTED.
2. INSTALL DRIVEWAY PER CLERMONT COUNTY STANDARDS.
3. CONTRACTOR TO VERIFY EXACT LOCATION, DEPTH AND SIZE OF UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY OWNER OF ANY CONFLICTS PRIOR TO THE INSTALLATION OF UTILITIES.
4. CONTRACTOR TO FOLLOW ALL PERMIT REQUIREMENTS AND SPECIFICATIONS TO INSTALL THE PROPOSED DEVELOPMENT INCLUDING COORDINATING THE INSTALLATION WITH LOCAL OFFICIALS AS NEEDED AND/OR REQUIRED.
5. CONTRACTOR TO COORDINATE ALL WORK WITH THE OWNER AS NEEDED/REQUIRED.
6. THE VILLAGE OF BATAVIA SHOULD BE CONTACTED ABOUT THE PROJECT AND PERMITS WILL COME FROM CLERMONT COUNTY.

PAVEMENT STRIPING NOTES:

ANY PROPOSED PAVEMENT MARKING SHALL BE STRIPED AS PART OF THIS WORK.

ALL PAVEMENT MARKING LINES SHALL BE WHITE OR YELLOW (DO NOT REQUIRE REFLECTOR BEADS) AND SHALL CONSIST OF 4" WIDE LINES.

ALL PAVEMENT MARKINGS SHALL BE PER ODOT ITEM 640 AND 642. ALL PAVEMENT MARKINGS TO BE TYPE 1, UNLESS APPLICATION IS REQUIRED WHEN AIR AND PAVEMENT TEMPERATURES ARE BETWEEN 35 °F AND 50 °F, THEN OBTAIN APPROVAL FROM THE OWNER AND APPLY ONLY PRE-QUALIFIED TYPE 1A COLD WEATHER TRAFFIC PAINT MATERIALS PER ITEM 642 AND 740.

ALL MARKING LAYOUT AND COLOR SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.

GRIND AND OVERLAY

ITEM 448 - 1-1/2" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (448), PG 64-22 ON ITEM 407 - NON-TRACKING TACK COAT (APPLIED AT A RATE OF 0.09 GALLONS PER SQUARE YARD) ON ITEM 254 - 1-1/2"± PAVEMENT PLANING, ASPHALT CONCRETE

HEAVY DUTY CONCRETE PAVEMENT

ITEM 452 - 8" NON-REINFORCED CONCRETE PAVEMENT (ODOT QC-IP) WITH 3 LBS/CY OF EITHER EUCLID CHEMICAL TUFSTRAND SF, FORTA FERRO FIBRILLATED MACROFIBERS OR APPROVED EQUIVALENT MEETING ASTM C 1116 TYPE 3, MINIMUM 2" LENGTH, ASPECT RATIO 50 TO 90. CONTRACTOR SHALL CONTACT THE FIBER MANUFACTURER'S SUPPLIER 48 HOURS PRIOR TO ORDERING THE FIRST BATCH OF CONCRETE FOR APPROPRIATE MIXING AND FINISHING PROCEDURES ON ITEM 304 - 6" AGGREGATE BASE ON ITEM 204 - SUBGRADE COMPACTION

REGULAR DUTY ASPHALT PAVEMENT

ITEM 441 - 1-1/2" ASPHALT CONCRETE, SURFACE COURSE, TYPE 1, (449) PG 64-22 ON ITEM 407 - NON-TRACKING TACK COAT (APPLIED AT A RATE OF 0.06 GALLONS PER SQUARE YARD) ON ITEM 441 - 2 1/2" ASPHALT CONCRETE, INTERMEDIATE COURSE, TYPE 2, (449) ON ITEM 304 - 6" AGGREGATE BASE (2 EQUAL LIFTS) ON ITEM 204 - SUBGRADE COMPACTION

CONCRETE SIDEWALK

ITEM 608 - 4" CONCRETE SIDEWALK (ODOT QC-IP) ON ITEM 411 - 4" STABILIZED AGGREGATE BASE

PROPOSED BUILDING

NOT IN CONTRACT

CLERMONT COUNTY FACILITIES PHASE 3
CTC BUILDING AND CANOPY

NEW BUILDING FOR

400 FILAGER ROAD BATAVIA, OH 45103

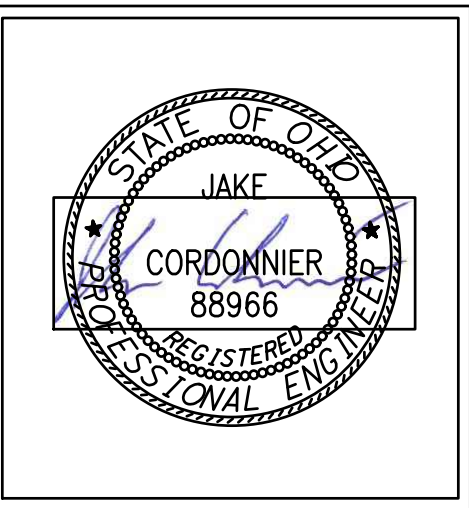
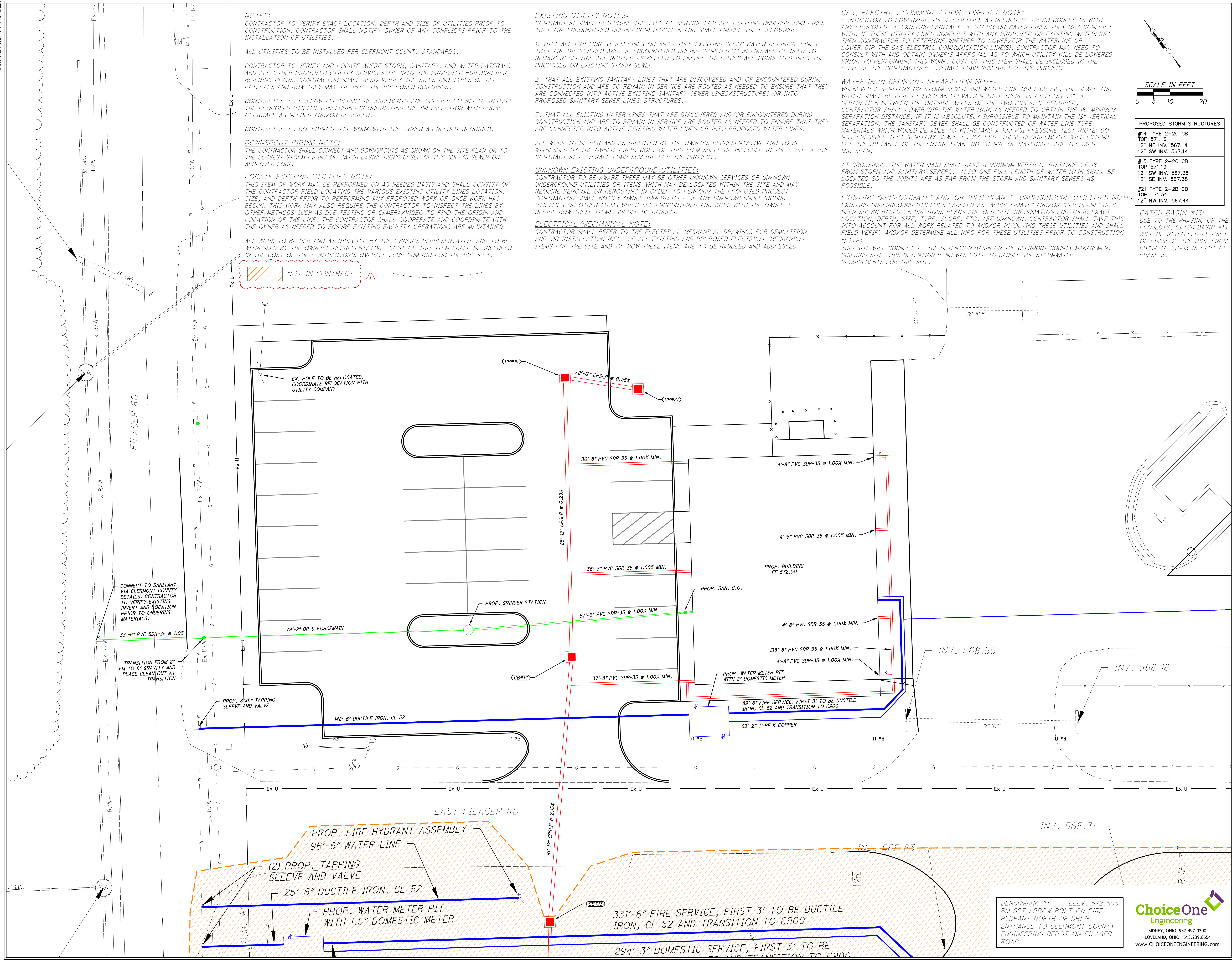
ISSUANCES/REVISIONS		
PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
22001.00	JAC	NIS

DIMENSIONING
AND PAVEMENT
PLAN

SHEET NUMBER:
C1.2

BENCHMARK #1 ELEV. 572.605
BM SET ARROW BOLT ON FIRE
HYDRANT NORTH OF DRIVE
ENTRANCE TO CLERMONT COUNTY
ENGINEERING DEPOT ON FILAGER
ROAD

ChoiceOne
Engineering
SIDNEY, OHIO 937.497.0200
LOVELAND, OHIO 513.239.8554
WWW.CHOICEONEENGINEERING.COM

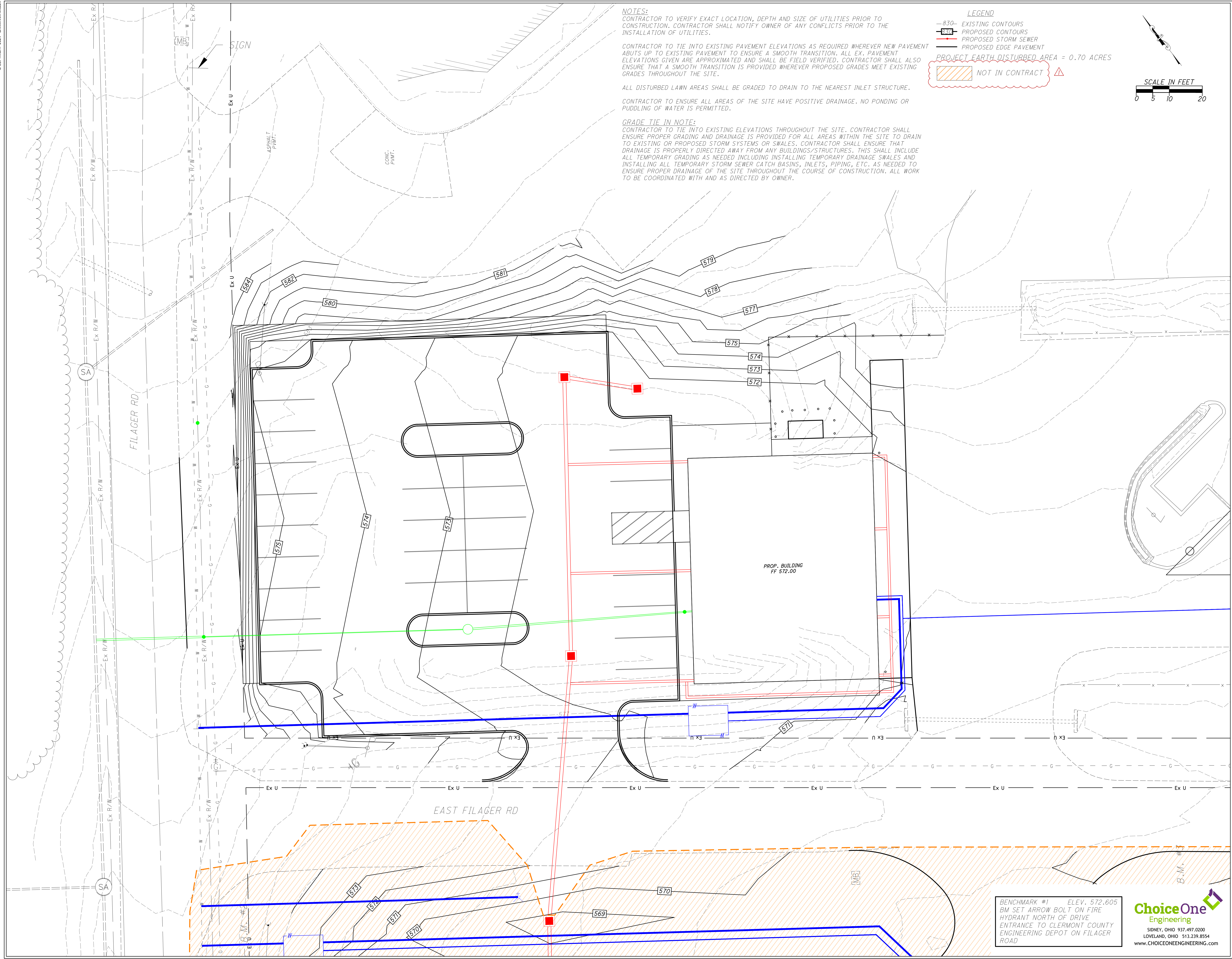


CLERMONT COUNTY FACILITIES PHASE 3 CTC BUILDING AND CANOPY

ISSUANCES/REVISIONS		
PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
22001.00	JAC	NIS

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
22001.00	JAC	NIS

SHEET NUMBER:
C2.1



NOTES:

CONTRACTOR TO VERIFY EXACT LOCATION, DEPTH AND SIZE OF UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY OWNER OF ANY CONFLICTS PRIOR TO THE INSTALLATION OF UTILITIES.

CONTRACTOR TO TIE INTO EXISTING PAVEMENT ELEVATIONS AS REQUIRED WHEREVER NEW PAVEMENT ABUTS UP TO EXISTING PAVEMENT TO ENSURE A SMOOTH TRANSITION. ALL EX. PAVEMENT ELEVATIONS GIVEN ARE APPROXIMATED AND SHALL BE FIELD VERIFIED. CONTRACTOR SHALL ALSO ENSURE THAT A SMOOTH TRANSITION IS PROVIDED WHEREVER PROPOSED GRADES MEET EXISTING GRADES THROUGHOUT THE SITE.

ALL DISTURBED LAWN AREAS SHALL BE GRADED TO DRAIN TO THE NEAREST INLET STRUCTURE.

CONTRACTOR TO ENSURE ALL AREAS OF THE SITE HAVE POSITIVE DRAINAGE. NO PONDING OR PUDDLING OF WATER IS PERMITTED.

GRADE TIE IN NOTE:

CONTRACTOR TO TIE INTO EXISTING ELEVATIONS THROUGHOUT THE SITE. CONTRACTOR SHALL ENSURE PROPER GRADING AND DRAINAGE IS PROVIDED FOR ALL AREAS WITHIN THE SITE TO DRAIN TO EXISTING OR PROPOSED STORM SYSTEMS OR SWALES. CONTRACTOR SHALL ENSURE THAT DRAINAGE IS PROPERLY DIRECTED AWAY FROM ANY BUILDINGS/STRUCTURES. THIS SHALL INCLUDE ALL TEMPORARY GRADING AS NEEDED INCLUDING INSTALLING TEMPORARY DRAINAGE SWALES AND INSTALLING ALL TEMPORARY STORM SEWER CATCH BASINS, INLETS, PIPING, ETC. AS NEEDED TO ENSURE PROPER DRAINAGE OF THE SITE THROUGHOUT THE COURSE OF CONSTRUCTION. ALL WORK TO BE COORDINATED WITH AND AS DIRECTED BY OWNER.

LEGEND

- 830- EXISTING CONTOURS
- 830- PROPOSED CONTOURS
- PROPOSED STORM SEWER
- PROPOSED EDGE PAVEMENT

PROJECT EARTH DISTURBED AREA = 0.70 ACRES

NOT IN CONTRACT

SCALE IN FEET
0 5 10 20

STATE OF OHIO
JAKE CORDONIER
88966
REGISTERED PROFESSIONAL ENGINEER
CIVIL

GARMANN
MILLER

UNSTER, OHIO COLUMBUS, OHIO INDIANAPOLIS, INDIANA ITA WATKE, INDIANA
cgmarmg.com

CLERMONT COUNTY FACILITIES PHASE 3
CTC BUILDING AND CANOPY

NEW BUILDING FOR

400 FILAGER ROAD, BATAVIA, OH 45303

ISSUANCES/REVISIONS

PROJECT NUMBER	DRAWN BY	CHECKED BY
22001.00	JAC	NJS

1
CONSTRUCTION DOCUMENTS
ADDITIONAL 1
07/30/2026
09/03/2026

SHEET TITLE:

GRADING PLAN

SHEET NUMBER:

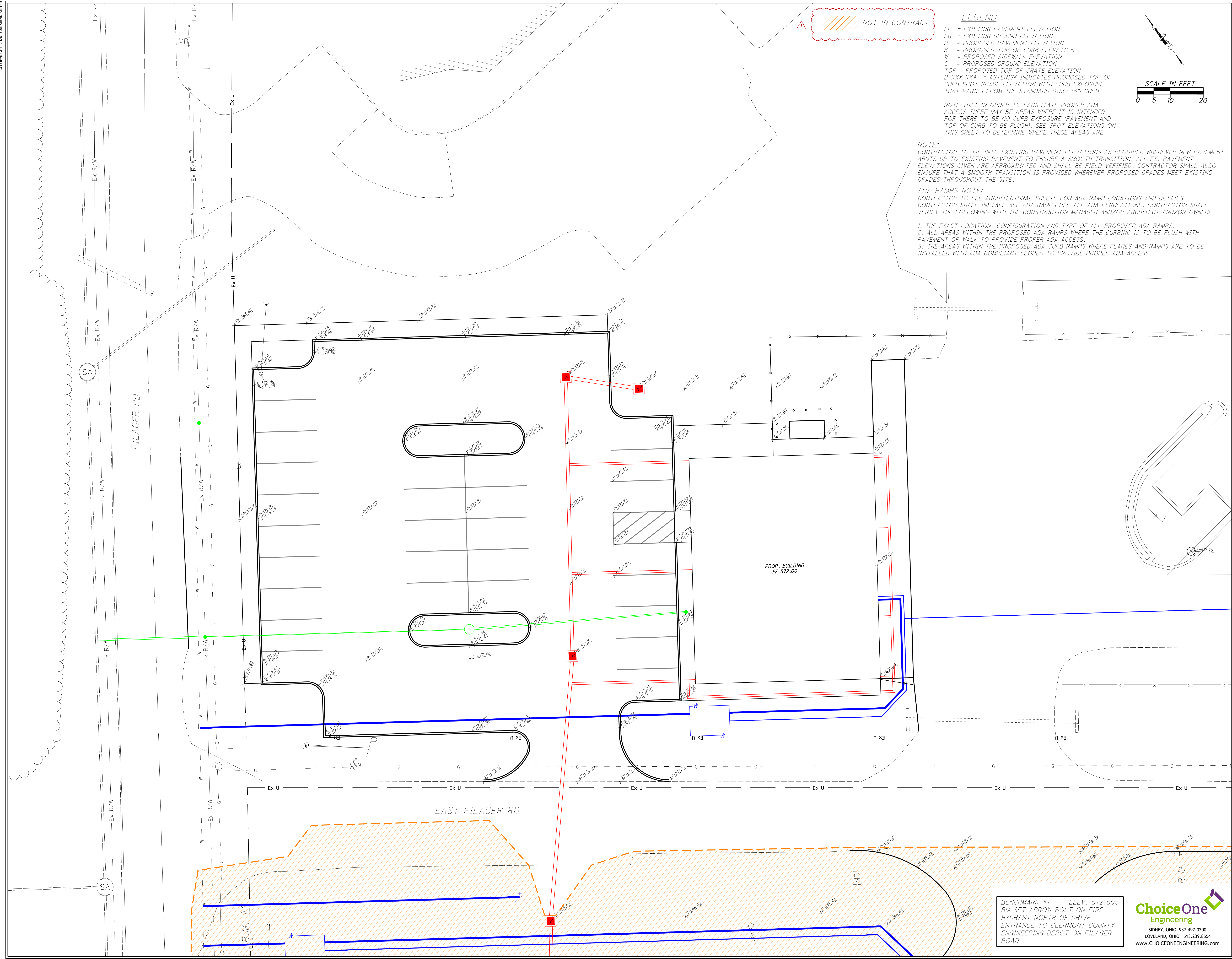
C3.1

BENCHMARK #1
BM SET ARROW BOLT ON FIRE
HYDRANT NORTH OF DRIVE
ENTRANCE TO CLERMONT COUNTY
ENGINEERING DEPOT ON FILAGER
ROAD

ELEV. 572.605

ChoiceOne
Engineering

SIDNEY, OHIO 937.497.0200
LOVELAND, OHIO 513.239.8554
WWW.CHOICEONEENGINEERING.COM



NOT IN CONTRACT

LEGEND

- EP = EXISTING PAVEMENT ELEVATION
- EG = EXISTING GROUND ELEVATION
- P = PROPOSED PAVEMENT ELEVATION
- B = PROPOSED TOP OF CURB ELEVATION
- W = PROPOSED SIDEWALK ELEVATION
- G = PROPOSED GROUND ELEVATION
- TOP = PROPOSED TOP OF GRATE ELEVATION
- B-XXX.XX* = ASTERISK INDICATES PROPOSED TOP OF CURB SPOT GRADE ELEVATION WITH CURB EXPOSURE THAT VARIES FROM THE STANDARD 0.50' (6") CURB

NOTE THAT IN ORDER TO FACILITATE PROPER ADA ACCESS THERE MAY BE AREAS WHERE IT IS INTENDED FOR THERE TO BE NO CURB EXPOSURE (PAVEMENT AND TOP OF CURB TO BE FLUSH). SEE SPOT ELEVATIONS ON THIS SHEET TO DETERMINE WHERE THESE AREAS ARE.

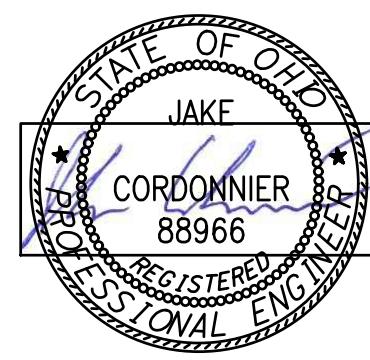
NOTE:

CONTRACTOR TO TIE INTO EXISTING PAVEMENT ELEVATIONS AS REQUIRED WHEREVER NEW PAVEMENT ABUTS UP TO EXISTING PAVEMENT TO ENSURE A SMOOTH TRANSITION. ALL EX. PAVEMENT ELEVATIONS GIVEN ARE APPROXIMATED AND SHALL BE FIELD VERIFIED. CONTRACTOR SHALL ALSO ENSURE THAT A SMOOTH TRANSITION IS PROVIDED WHEREVER PROPOSED GRADES MEET EXISTING GRADES THROUGHOUT THE SITE.

ADA RAMP NOTE:

CONTRACTOR TO SEE ARCHITECTURAL SHEETS FOR ADA RAMP LOCATIONS AND DETAILS. CONTRACTOR SHALL INSTALL ALL ADA RAMP PER ALL ADA REGULATIONS. CONTRACTOR SHALL VERIFY THE FOLLOWING WITH THE CONSTRUCTION MANAGER AND/OR ARCHITECT AND/OR OWNER:

1. THE EXACT LOCATION, CONFIGURATION AND TYPE OF ALL PROPOSED ADA RAMP.
2. ALL AREAS WITHIN THE PROPOSED ADA RAMP WHERE THE CURBING IS TO BE FLUSH WITH PAVEMENT OR WALK TO PROVIDE PROPER ADA ACCESS.
3. THE AREAS WITHIN THE PROPOSED ADA CURB RAMP WHERE FLARES AND RAMP ARE TO BE INSTALLED WITH ADA COMPLIANT SLOPES TO PROVIDE PROPER ADA ACCESS.



CLERMONT COUNTY FACILITIES PHASE 3
CTC BUILDING AND CANOPY

NEW BUILDING FOR

4000 FILAGER ROAD, DAYTON, OH 45424

ISSUANCES/REVISIONS

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
22001.00	JAC	NIS

CONSTRUCTION DOCUMENTS 07/30/2026

ADDENDUM 1 09/03/2026

SHEET TITLE:

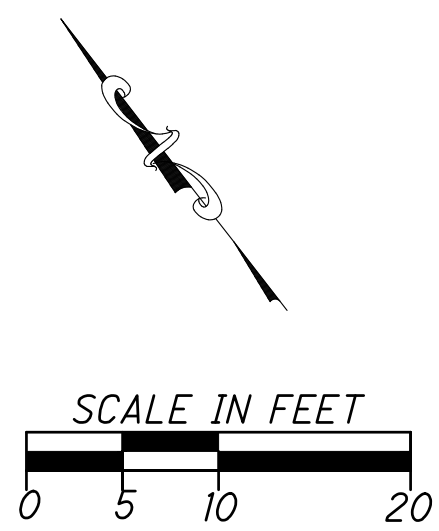
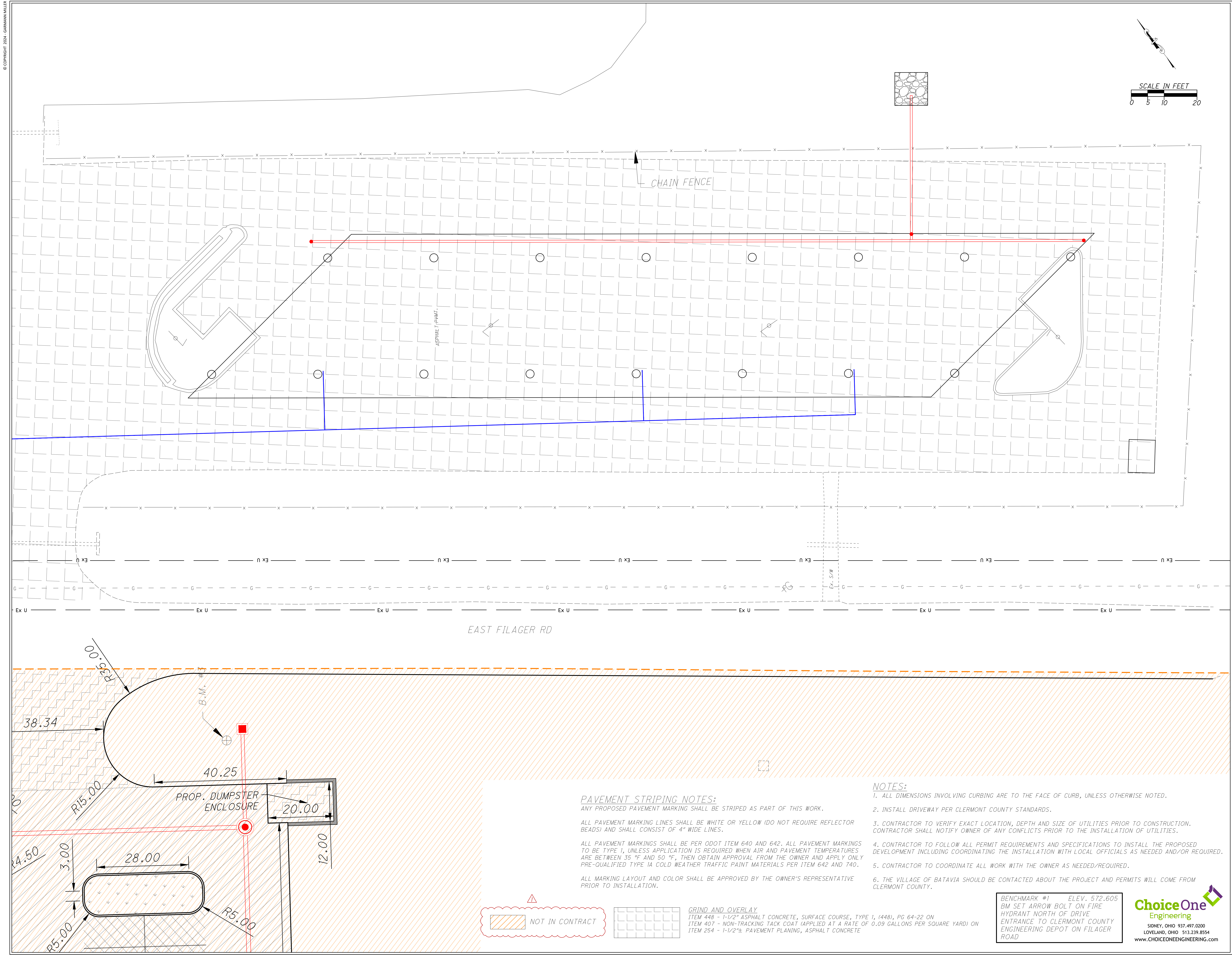
PAVEMENT
ELEVATIONS PLAN

SHEET NUMBER:

C3.2

BENCHMARK #1 ELEV. 572.605
BM SET ARROW BOLT ON FIRE
HYDRANT NORTH OF DRIVE
ENTRANCE TO CLERMONT COUNTY
ENGINEERING DEPOT ON FILAGER
ROAD

ChoiceOne
Engineering
SIDNEY, OHIO 937.497.0200
LOVELAND, OHIO 513.239.8554
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NEW BUILDING FOR

CLERMONT COUNTY FACILITIES PHASE 3
CTC BUILDING AND CANOPY

400 FILAGER ROAD, BATAVIA, OH 45103

ISSUANCES/REVISIONS

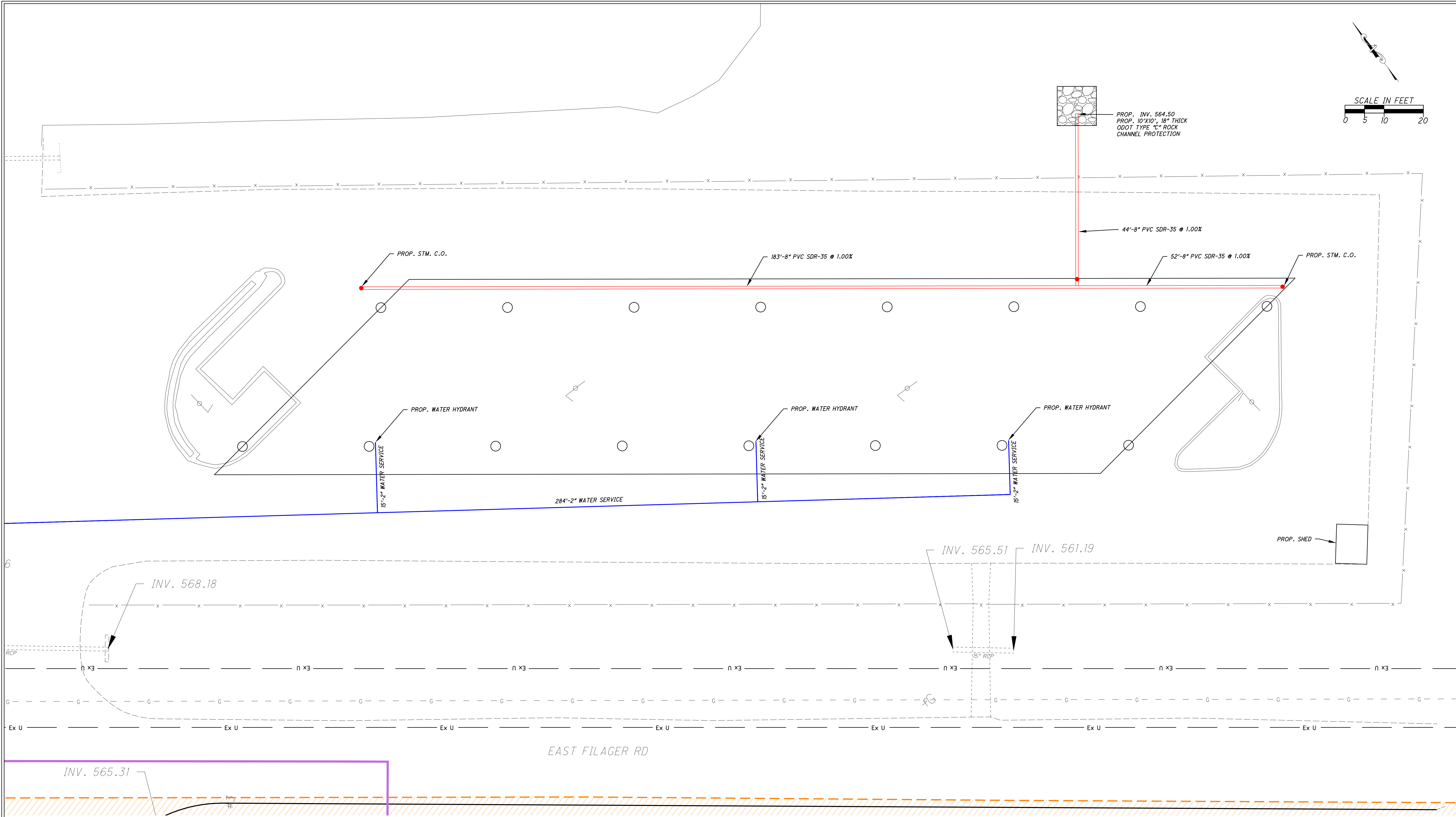
PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
22001.00	JAC	NIS

SHEET TITLE:

DIMENSIONING
AND PAVEMENT
PLAN - ALTERNATE
1

SHEET NUMBER:

C6.1



NOTES:
CONTRACTOR TO VERIFY EXACT LOCATION, DEPTH AND SIZE OF UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY OWNER OF ANY CONFLICTS PRIOR TO THE INSTALLATION OF UTILITIES.

ALL UTILITIES TO BE INSTALLED PER CLERMONT COUNTY STANDARDS.

CONTRACTOR TO VERIFY AND LOCATE WHERE STORM, SANITARY, AND WATER LATERALS AND ALL OTHER PROPOSED UTILITY SERVICES TIE INTO THE PROPOSED BUILDING PER BUILDING PLANS. CONTRACTOR SHALL ALSO VERIFY THE SIZES AND TYPES OF ALL LATERALS AND HOW THEY MAY TIE INTO THE PROPOSED BUILDINGS.

CONTRACTOR TO FOLLOW ALL PERMIT REQUIREMENTS AND SPECIFICATIONS TO INSTALL THE PROPOSED UTILITIES INCLUDING COORDINATING THE INSTALLATION WITH LOCAL OFFICIALS AS NEEDED AND/OR REQUIRED.

CONTRACTOR TO COORDINATE ALL WORK WITH THE OWNER AS NEEDED/REQUIRED.

DOWNSPOUT PIPING NOTE:
THE CONTRACTOR SHALL CONNECT ANY DOWNSPOUTS AS SHOWN ON THE SITE PLAN OR TO THE CLOSEST STORM PIPING OR CATCH BASINS USING CPSP OR PVC SDR-35 SEWER OR APPROVED EQUAL.

LOCATE EXISTING UTILITIES NOTE:
THIS ITEM OF WORK MAY BE PERFORMED ON AS NEEDED BASIS AND SHALL CONSIST OF THE CONTRACTOR FIELD LOCATING THE VARIOUS EXISTING UTILITY LINES LOCATION, SIZE, AND DEPTH PRIOR TO PERFORMING ANY PROPOSED WORK OR ONCE WORK HAS BEGUN. THIS WORK MAY ALSO REQUIRE THE CONTRACTOR TO INSPECT THE LINES BY OTHER METHODS SUCH AS DYE TESTING OR CAMERA/VIDEO TO FIND THE ORIGIN AND LOCATION OF THE LINE. THE CONTRACTOR SHALL COOPERATE AND COORDINATE WITH THE OWNER AS NEEDED TO ENSURE EXISTING FACILITY OPERATIONS ARE MAINTAINED.

ALL WORK TO BE PER AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND TO BE WITNESSED BY THE OWNER'S REPRESENTATIVE. COST OF THIS ITEM SHALL BE INCLUDED IN THE COST OF THE CONTRACTOR'S OVERALL LUMP SUM BID FOR THE PROJECT.

EXISTING UTILITY NOTES:
CONTRACTOR SHALL DETERMINE THE TYPE OF SERVICE FOR ALL EXISTING UNDERGROUND LINES THAT ARE ENCOUNTERED DURING CONSTRUCTION AND SHALL ENSURE THE FOLLOWING:

1. THAT ALL EXISTING STORM LINES OR ANY OTHER EXISTING CLEAN WATER DRAINAGE LINES THAT ARE DISCOVERED AND/OR ENCOUNTERED DURING CONSTRUCTION AND ARE OR NEED TO REMAIN IN SERVICE ARE ROUTED AS NEEDED TO ENSURE THAT THEY ARE CONNECTED INTO THE PROPOSED OR EXISTING STORM SEWER.

2. THAT ALL EXISTING SANITARY LINES THAT ARE DISCOVERED AND/OR ENCOUNTERED DURING CONSTRUCTION AND ARE TO REMAIN IN SERVICE ARE ROUTED AS NEEDED TO ENSURE THAT THEY ARE CONNECTED INTO ACTIVE EXISTING SANITARY SEWER LINES/STRUCTURES OR INTO PROPOSED SANITARY SEWER LINES/STRUCTURES.

3. THAT ALL EXISTING WATER LINES THAT ARE DISCOVERED AND/OR ENCOUNTERED DURING CONSTRUCTION AND ARE TO REMAIN IN SERVICE ARE ROUTED AS NEEDED TO ENSURE THAT THEY ARE CONNECTED INTO ACTIVE EXISTING WATER LINES OR INTO PROPOSED WATER LINES.

ALL WORK TO BE PER AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND TO BE WITNESSED BY THE OWNER'S REP. COST OF THIS ITEM SHALL BE INCLUDED IN THE COST OF THE CONTRACTOR'S OVERALL LUMP SUM BID FOR THE PROJECT.

UNKNOWN EXISTING UNDERGROUND UTILITIES:
CONTRACTOR TO BE AWARE THERE MAY BE OTHER UNKNOWN SERVICES OR UNKNOWN UNDERGROUND UTILITIES OR ITEMS WHICH MAY BE LOCATED WITHIN THE SITE AND MAY REQUIRE REMOVAL OR REROUTING IN ORDER TO PERFORM THE PROPOSED PROJECT. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY OF ANY UNKNOWN UNDERGROUND UTILITIES OR OTHER ITEMS WHICH ARE ENCOUNTERED AND WORK WITH THE OWNER TO DECIDE HOW THESE ITEMS SHOULD BE HANDLED.

ELECTRICAL/MECHANICAL NOTE:
CONTRACTOR SHALL REFER TO THE ELECTRICAL/MECHANICAL DRAWINGS FOR DEMOLITION AND/OR INSTALLATION INFO. OF ALL EXISTING AND PROPOSED ELECTRICAL/MECHANICAL ITEMS FOR THE SITE AND/OR HOW THESE ITEMS ARE TO BE HANDLED AND ADDRESSED.

GAS, ELECTRIC, COMMUNICATION CONFLICT NOTE:
CONTRACTOR TO LOWER/DIP THESE UTILITIES AS NEEDED TO AVOID CONFLICTS WITH ANY PROPOSED OR EXISTING SANITARY OR STORM OR WATER LINES. THEY MAY CONFLICT WITH. IF THESE UTILITY LINES CONFLICT WITH ANY PROPOSED OR EXISTING WATERLINES THEN CONTRACTOR TO DETERMINE WHETHER TO LOWER/DIP THE WATERLINE OR LOWER/DIP THE GAS/ELECTRIC/COMMUNICATION LINE(S). CONTRACTOR MAY NEED TO CONSULT WITH AND OBTAIN OWNER'S APPROVAL AS TO WHICH UTILITY WILL BE LOWERED PRIOR TO PERFORMING THIS WORK. COST OF THIS ITEM SHALL BE INCLUDED IN THE COST OF THE CONTRACTOR'S OVERALL LUMP SUM BID FOR THE PROJECT.

WATER MAIN CROSSING SEPARATION NOTE:
WHENEVER A SANITARY OR STORM SEWER AND WATER LINE MUST CROSS, THE SEWER AND WATER SHALL BE LAID AT SUCH AN ELEVATION THAT THERE IS AT LEAST 18" OF SEPARATION BETWEEN THE OUTSIDE WALLS OF THE TWO PIPES. IF REQUIRED, CONTRACTOR SHALL LOWER/DIP THE WATER MAIN AS NEEDED TO OBTAIN THE 18" MINIMUM SEPARATION DISTANCE. IF IT IS ABSOLUTELY IMPOSSIBLE TO MAINTAIN THE 18" VERTICAL SEPARATION, THE SANITARY SEWER SHALL BE CONSTRUCTED OF WATER LINE TYPE MATERIALS WHICH WOULD BE ABLE TO WITHSTAND A 100 PSI PRESSURE TEST (NOTE: DO NOT PRESSURE TEST SANITARY SEWER TO 100 PSI). THESE REQUIREMENTS WILL EXTEND FOR THE DISTANCE OF THE ENTIRE SPAN. NO CHANGE OF MATERIALS ARE ALLOWED MID-SPAN.

AT CROSSINGS, THE WATER MAIN SHALL HAVE A MINIMUM VERTICAL DISTANCE OF 18" FROM STORM AND SANITARY SEWERS. ALSO ONE FULL LENGTH OF WATER MAIN SHALL BE LOCATED SO THE JOINTS ARE AS FAR FROM THE STORM AND SANITARY SEWERS AS POSSIBLE.

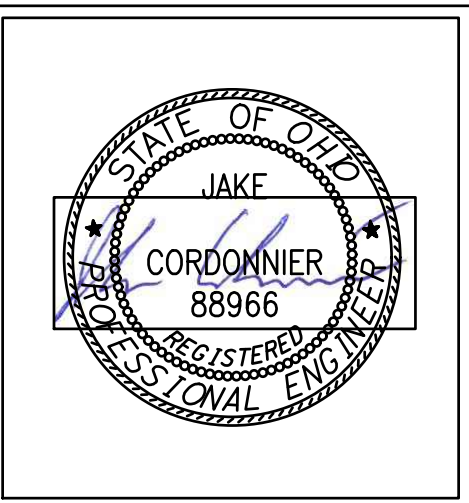
EXISTING "APPROXIMATE" AND/OR "PER PLANS" UNDERGROUND UTILITIES NOTE:
EXISTING UNDERGROUND UTILITIES LABELED AS "APPROXIMATE" AND/OR "PER PLANS" HAVE BEEN SHOWN BASED ON PREVIOUS PLANS AND OLD SITE INFORMATION AND THEIR EXACT LOCATION, DEPTH, SIZE, TYPE, SLOPE, ETC. ARE UNKNOWN. CONTRACTOR SHALL TAKE THIS INTO ACCOUNT FOR ALL WORK RELATED TO AND/OR INVOLVING THESE UTILITIES AND SHALL FIELD VERIFY AND/OR DETERMINE ALL INFO FOR THESE UTILITIES PRIOR TO CONSTRUCTION.

NOT IN CONTRACT

BENCHMARK #1 ELEV. 572.605
BM SET ARROW BOLT ON FIRE
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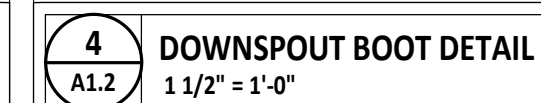
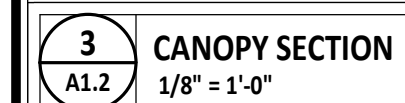
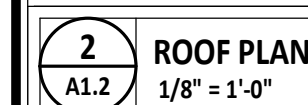
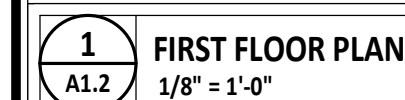


CLERMONT COUNTY FACILITIES PHASE 3 CTC BUILDING AND CANOPY

ISSUANCES/REVISIONS		
PROJECT NUMBER	DRAWN BY	CHECKED BY
22001.00	JAC	NJS

CONSTRUCTION DOCUMENTS	07/30/2025
1	ADDITIONAL 1

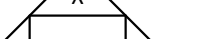
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UTILITY PLAN - ALTERNATE 1		
SHEET NUMBER:		
C7.1		



FLOOR PLAN SYMBOLS & LEGEND

A101

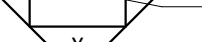
ROOM DESIGNATION - REFERENCE ROOM INDEX.



EXTERIOR ELEVATION

DETAIL NUMBER

SHEET NUMBER

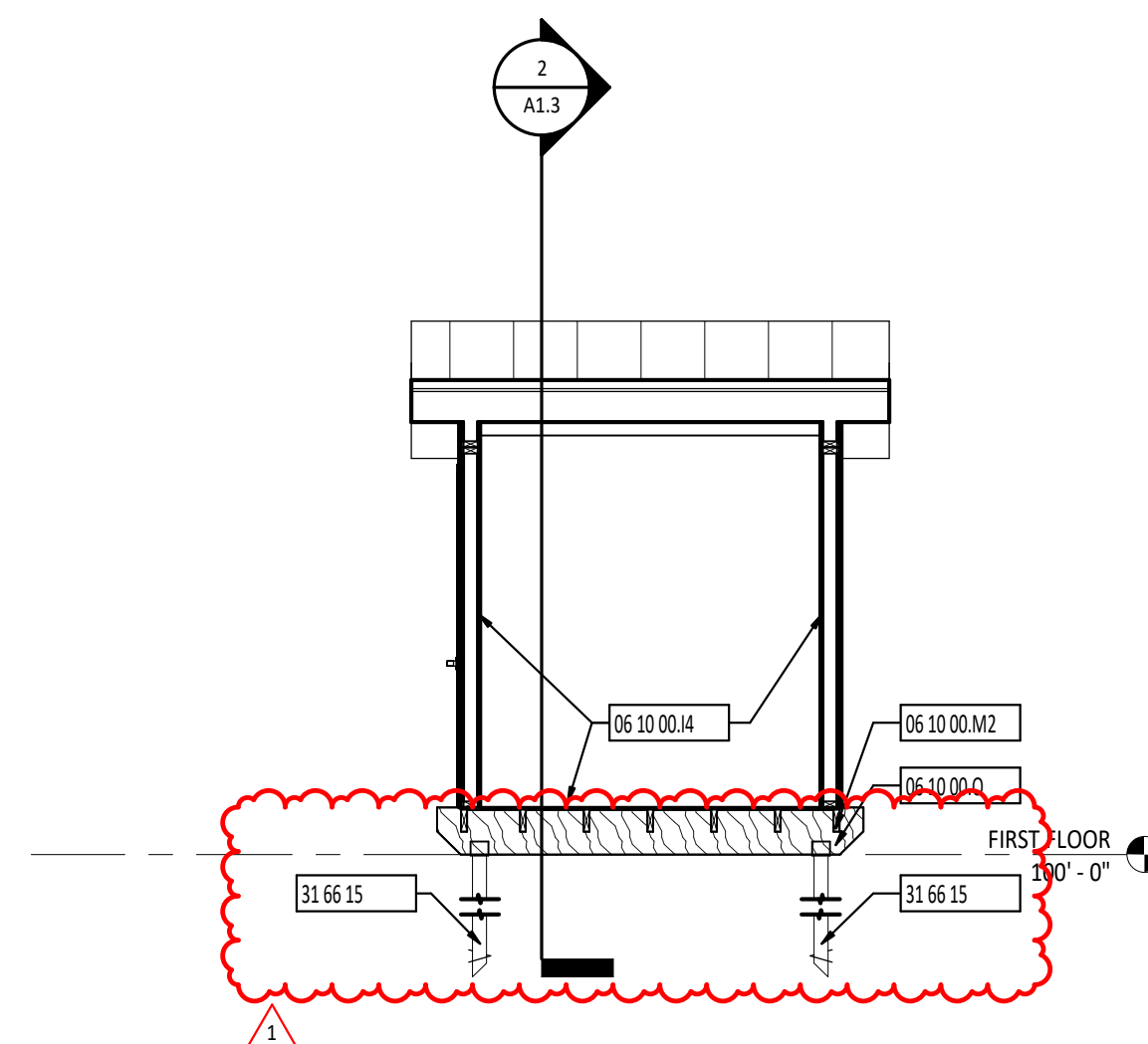
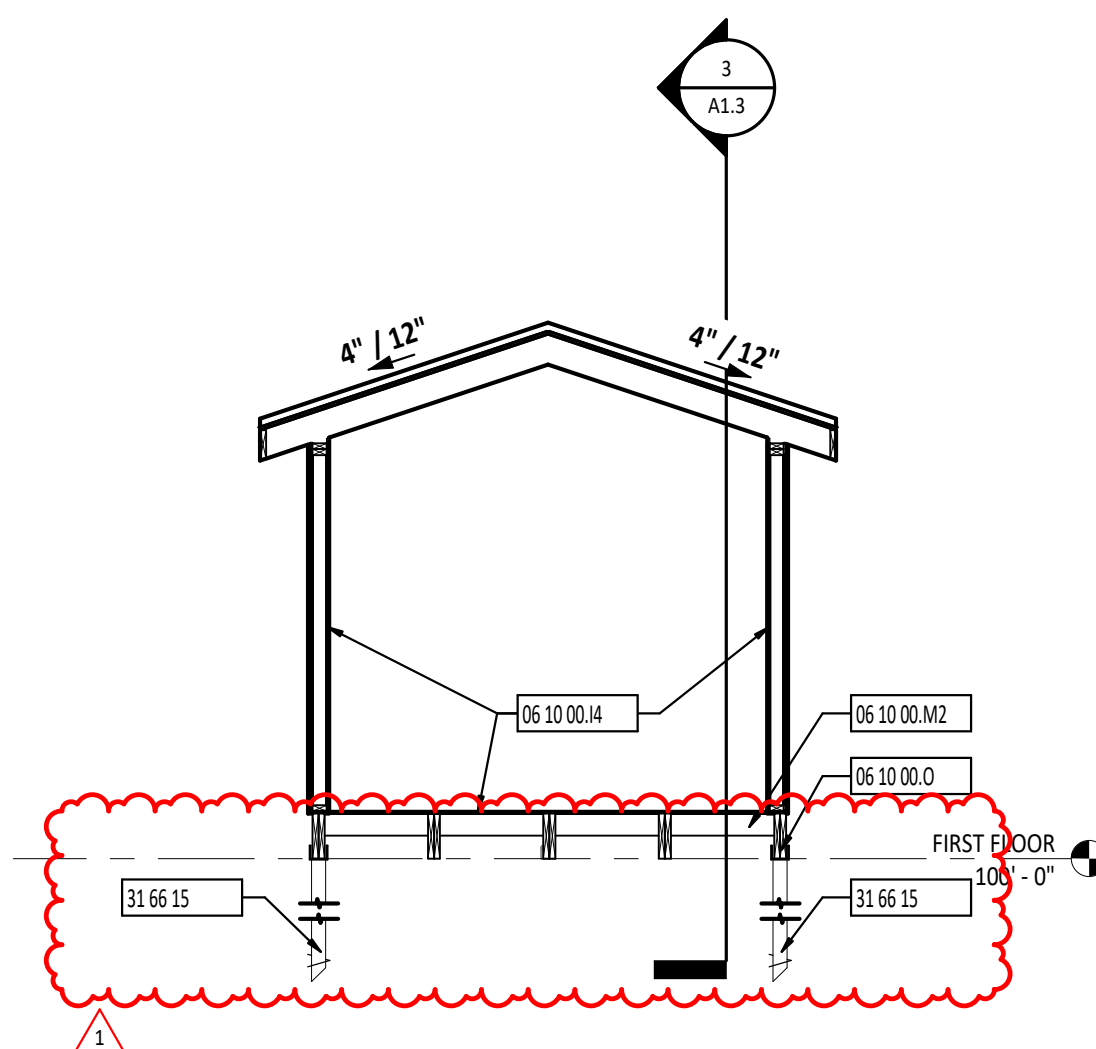


SECTION

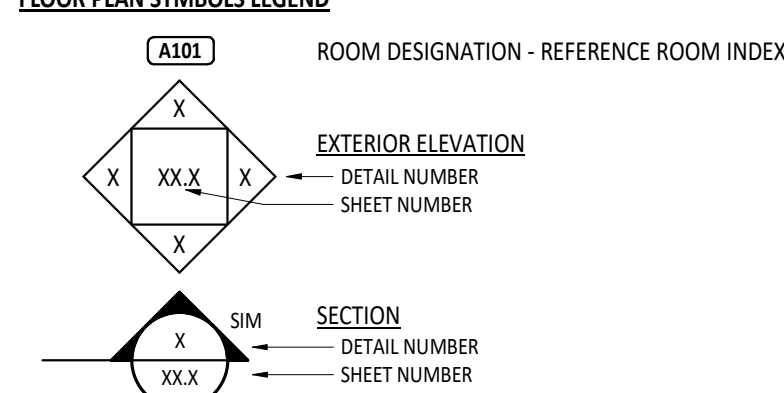
DETAIL NUMBER

SHEET NUMBER

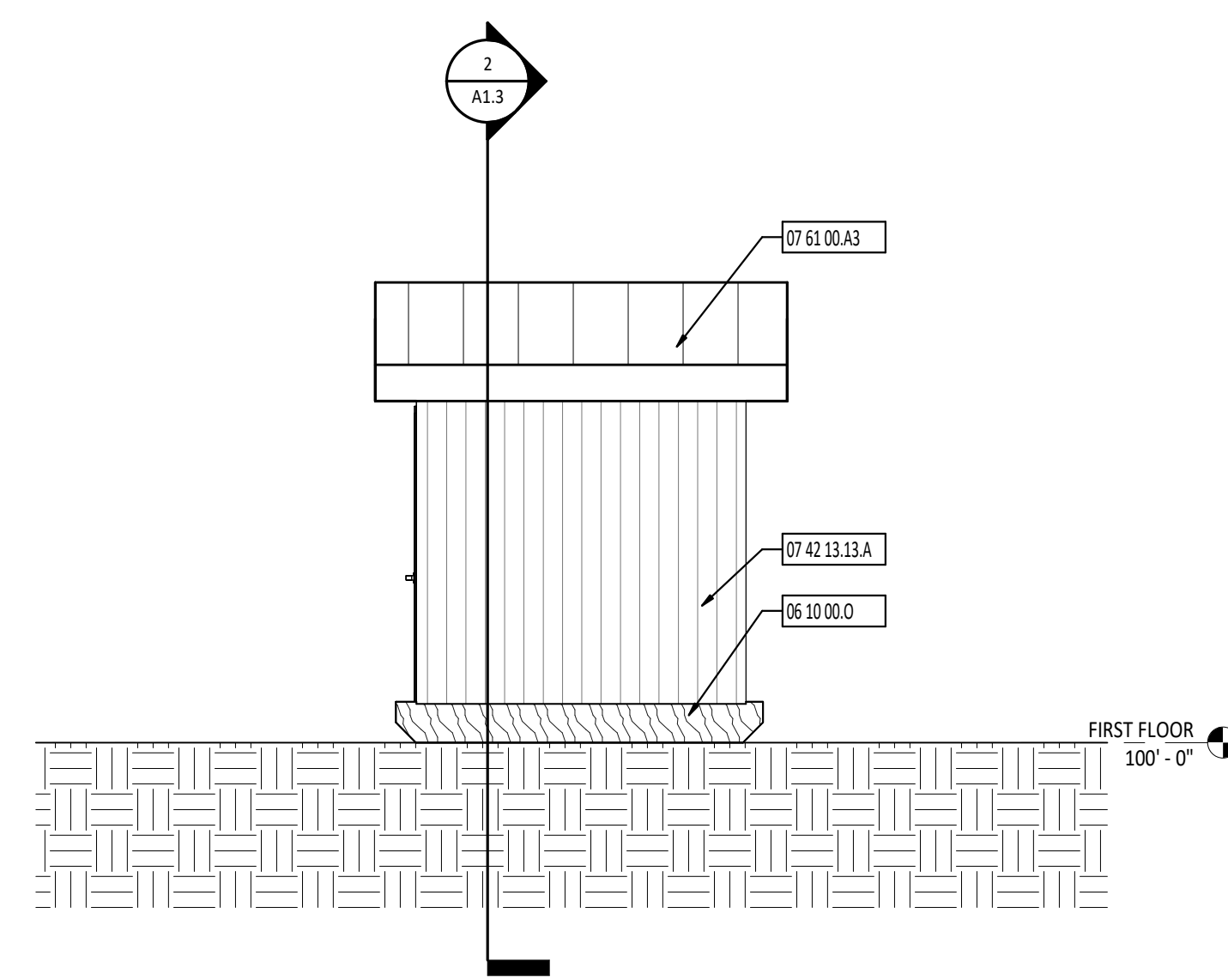
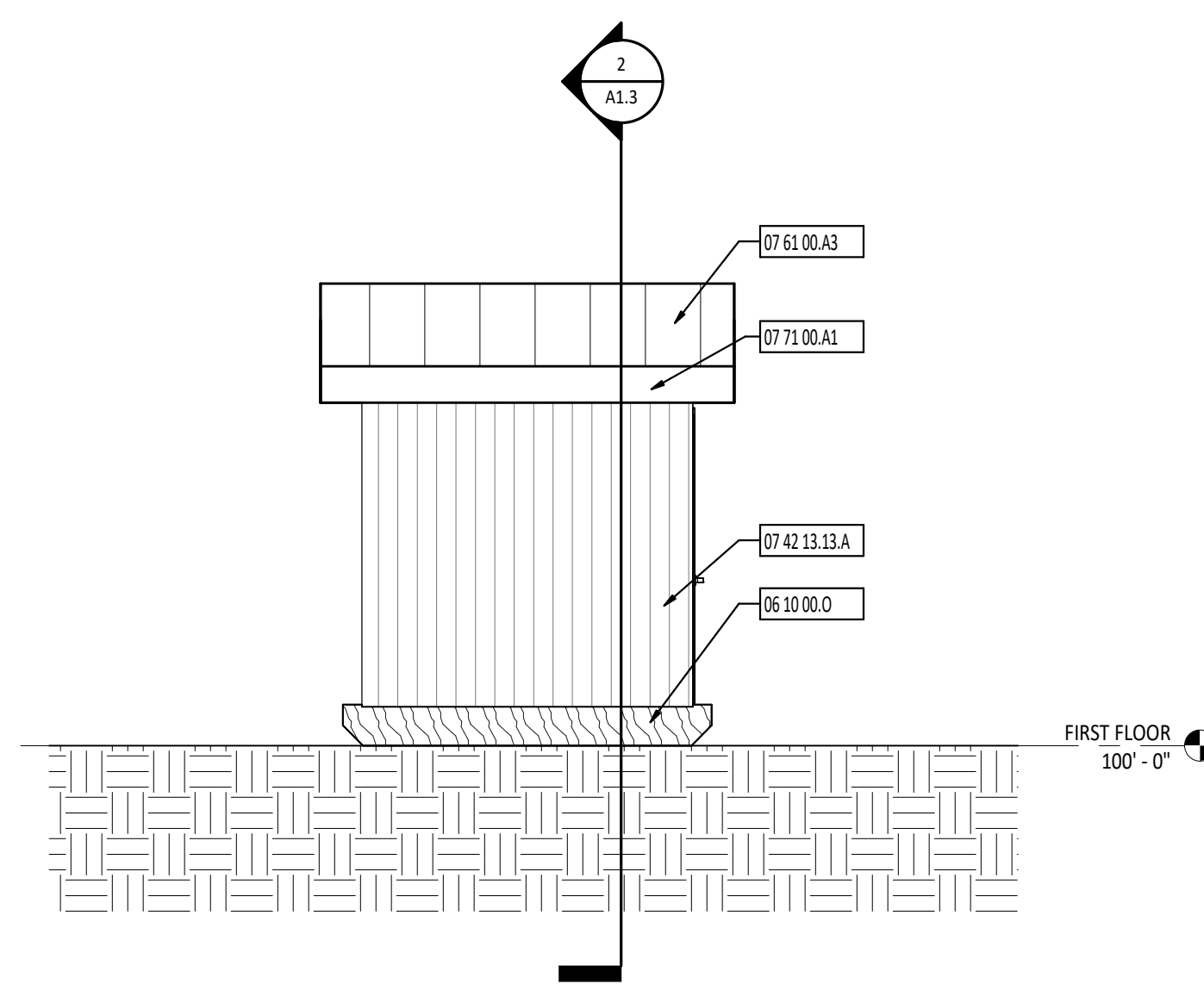
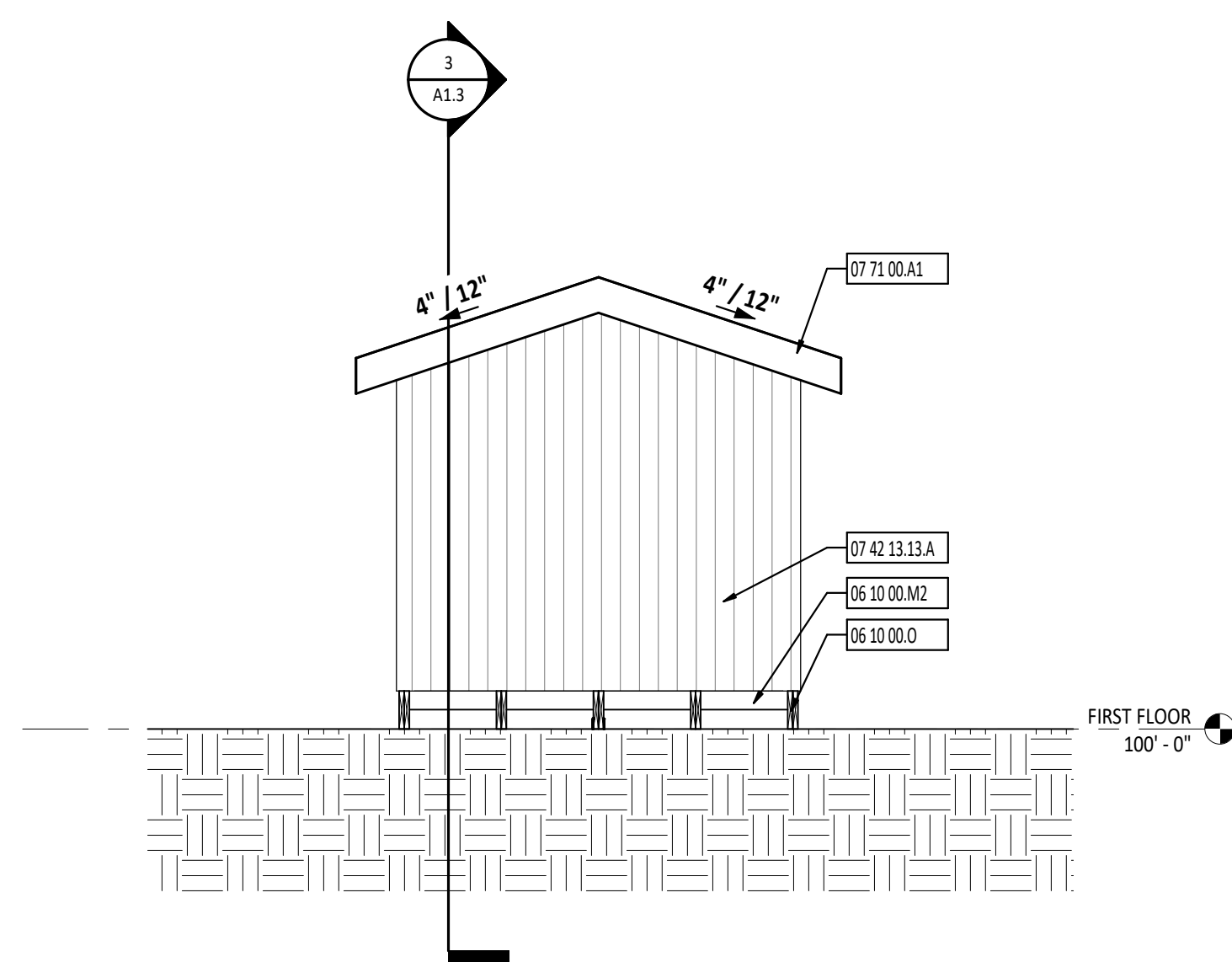
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A1.2



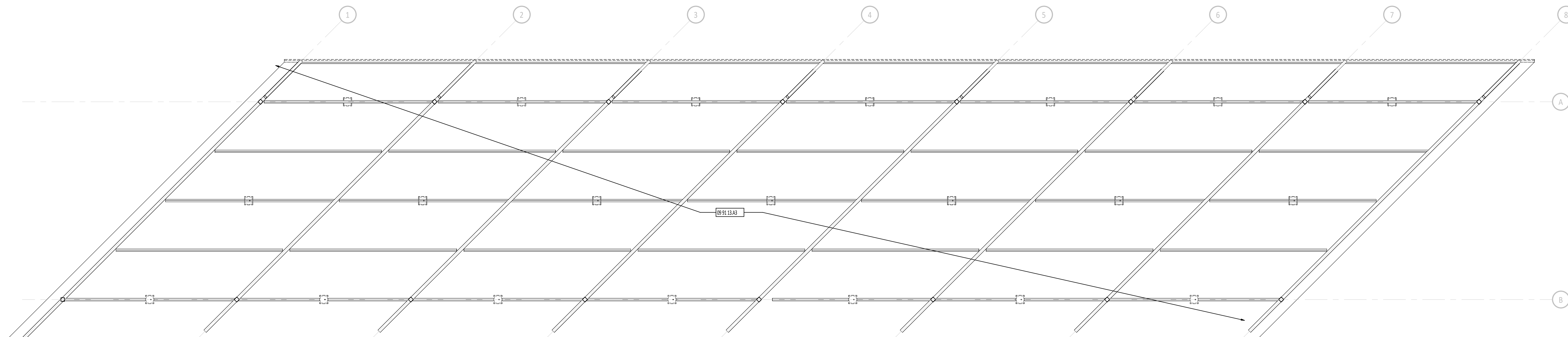
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06 10 00.04	5/8" PRESERVATIVE TREATED PLYWOOD
06 10 00.02	2X6 PRESERVATIVE TREATED WOOD FRAMING AT 16" OC
06 10 00.00	EXPOSED PRESERVATIVE TREATED WOOD FRAMING - (2) 2X12
07 42 13.3.A	PREFINISHED FORMED HORIZONTAL METAL PANEL - SHIM PANELS PLUMB
07 61 00.A3	SHEET METAL ROOF WITH CODE COMPLIANT ANCHORAGES, TRIM AND FLASHING AS REQUIRED
07 71 00.A1	REFINISHED FASCIA
08 01 24.A3	PAINT ALL EXPOSED STEEL BEAMS AND DECK PT
31 66 15	HELICAL FOUNDATION PILE ONE AT EACH CORNER



3 BUILDING SECTION - FOR REFERENCE
A1.3 1/4" = 1'-0"



7 BUILDING ELEVATION - FOR REFERENCE
A1.3 $1/4" = 1'-0"$



8 REFLECTED CEILING PLAN
A1.3 1/8" = 1'-0"



CLERMONT COUNTY FACILITIES PHASE 3 CTC BUILDING AND CANOPY

ISSUANCES/REVISIONS		
	CONSTRUCTION DOCUMENTS	07/30/2026
1	CONSTRUCTION DOCUMENTS - ADDENDUM #01	09/03/2026

PROJECT NUMBER:	DRAWN BY:	CHECKED BY:
22001.00	ZLW	MCN

SHEET TITLE:

**FLOOR PLAN,
SECTIONS &
ELEVATIONS -
ALTERNATE 1**

SHEET NUMBER:
A1.3