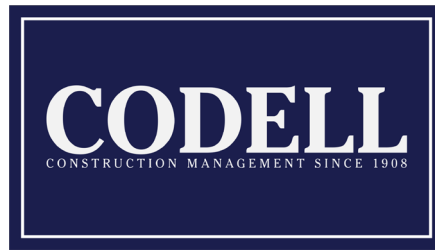


**For all other addenda related
to this project, please visit
Lynn Imaging's Planroom.**



CAMPBELLSVILLE FIRE & EMS

Addendum # 2

Issued August 7, 2026

Bid Date: August 18, 2026 @ 2:00 PM EDT/ 1:00 PM CDT

Please see the attached addendum which includes the following:

Codell Construction Addendum #1 (9 Pages)

PLEASE NOTE REVISED BID DATE AND LOCATION.

Pre-Bid Meeting Minutes (7 Pages)

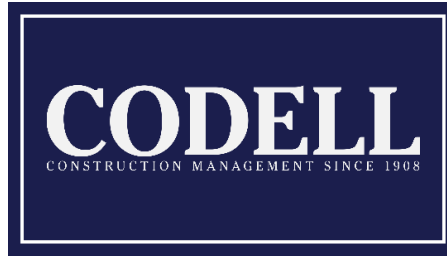
Pre-Bid Meeting Sign In Sheet (1 Page)

CESB Addendum #1 (3 PAGES)

BFW Geotechnical Report (49 Pages)

Marcum Addendum #1 (2 Pages)

End.



CAMPBELLSVILLE FIRE & EMS

Addendum # 2

Date of Issue: August 7, 2026

General Notes:

1. Please refer to SPECIFICATION SECTION 00010:
 - a. Please see revised Invitation to Bid, altering the location and date of the bid opening.
 - b. Bids will be due by August 18, 2026, AT 2:00 PM EDT/1:00 PM CDT and will be opened at 109 WEST MAIN STREET, CAMPBELLSVILLE, KY 42718 (Public Works Building).**
2. Please refer to SPECIFICATION SECTION 01010:
 - a. See attached project schedule.
3. Please refer to SPECIFICATION SECTION 01900:
 - a. BP #9 - PAINTING
 - i. DELETE Specification Section 096723 - Resinous Flooring and all associated notes.
 - b. BP #11 - PLUMBING & HVAC :
 - i. The City of Campbellsville will not charge tap fees for water or sewer connections to the building. Atmos Gas will have their costs identified within the next week and shall be included in BP #11 - PLUMBING & HVAC's base bid.
 - ii. For clarification, Note #6 applies to all MEP Scopes. Contractor is responsible for fees, permits, and inspections as it relates to their work.
 - iii. For clarification regarding Note #18 - BIM is NOT required for coordination drawings. The objective is for all trades to communicate and coordinate to alleviate any rework on-site. Format to be determined at the Pre-Coordination Meeting between all involved parties.

- c. BP #12 - ELECTRICAL:
 - i. Contractor is to include an allowance of \$20,000.00 to cover connection fees.
- d. ADD BP #13 - RESINOUS FLOORING.
- e. ADD BP #14 - COMBINATION.

End

SECTION 00010
ADVERTISEMENT FOR BIDS

CITY OF CAMPBELLSVILLE (OWNER) will receive proposals through Codell Construction Company (CONSTRUCTION MANAGER AS CONSTRUCTOR (AT RISK)) to furnish all labor and materials to complete the CAMPBELLSVILLE FIRE & EMS located at 235 KY-55 BYPASS, CAMPBELLSVILLE, KY 42718. Work is to be performed in accordance with plans, specifications, and addenda prepared by INTEGRITY ARCHITECTURE, PLLC (ARCHITECT), MARCUM ENGINEERING, LLC (M/E ENGINEER), BACON FARMER WORKMAN ENGINEERING & TESTING, INC. (STRUCTURAL ENGINEER), and BACON FARMER WORKMAN ENGINEERING & TESTING, INC. (CIVIL ENGINEER).

Bid opening will be public, and the Owner will tender bids to the Construction Manager as Constructor (At-Risk) and Subcontracts will be with the Construction Manager as Constructor (At-Risk). Bids shall be awarded based upon Best Value Criteria included in Section 00201 of the bidding documents. The Construction Manager as Constructor (At-Risk) reserves the right to reject any or all bids and to waive all informalities and/or technicalities where the best interest of the Owner and Construction Manager as Constructor (At-Risk) can be served. The Owner may reasonably object to any contractor or supplier proposed by the Construction Manager as Constructor (At-Risk).

Bids will be due by August 18, 2026, AT 2:00 PM EDT/1:00 PM CDT and will be opened at 109 WEST MAIN STREET, CAMPBELLSVILLE, KY 42718. Each bid must be accompanied by a 5% Bid Bond. The bid will be submitted in duplicate on copies of the Form of Proposal located in the Volume One Project Manual Bidding and Contract Documents. Both copies of the Form of Proposal and Bid Bond shall be placed in a manila envelope and have the Project Name and Proposed Bid Package number affixed. Electronic Bids will not be allowed. No Bidder may withdraw a bid submitted for a period of sixty (60) days after the date set for the opening of bids.

All questions related to the bidding documents should be directed to the Construction Manager and the Architect.

LEWIS OWENBY
Codell Construction Company
4475 Rockwell Road
Winchester, KY 40391
(859) 744-2222
(859) 490-9250

ED TRAMMELL
INTEGRITY ARCHITECTURE, PLLC
203 E. FOURTH STREET
LEXINGTON, KY 40508
(859) 368-9712

LOWENBY@CODELLCONSTRUCTION.COM ED@INTEGRITYARCH.COM

An electronic copy of the complete set of Drawings, Specifications, and the Project Manual are available at no cost from Lynn Imaging, lynnimaging.com. If bidder desires hard copy of Drawings and Specifications, bidder will be responsible for paying the printing cost.

A pre-bid conference was held July 22, 2026 AT 2:00 PM EDT/1:00 PM CDT at 110 S. COLUMBIA AVE. STE. B, CAMPBELLSVILLE, KY 42718. All bidders were urged to attend this meeting.

The Project Schedule will be issued via addendum. The contract will include liquidated damages assessed at \$1,000.00/day if the completion date is not met. **Successful Bidders are required to furnish a 100% Performance and Labor and Material Payment Bond for this Project.**

SECTION 00010
ADVERTISEMENT FOR BIDS

The following bids are requested:

BID PACKAGE #1	GENERAL TRADES
BID PACKAGE #2	ASPHALT
BID PACKAGE #3	MASONRY
BID PACKAGE #4	STEEL
BID PACKAGE #5	ROOFING
BID PACKAGE #6	WINDOWS & STOREFRONTS
BID PACKAGE #7	DRYWALL & CEILINGS
BID PACKAGE #8	TILING & FLOORING
BID PACKAGE #9	PAINTING
BID PACKAGE #10	FIRE SUPPRESSION
BID PACKAGE #11	PLUMBING & HVAC
BID PACKAGE #12	ELECTRICAL
BID PACKAGE #13	RESINOUS FLOORING
BID PACKAGE #14	COMBINATION



ID	Task Name	Duration	Start	Finish
1	Campbellsville Fire & EMS	362 days	Mon 9/21/26	Thu 2/24/28
2	Project Administration	71 days	Mon 9/21/26	Mon 1/4/27
3	Receive Notice to Proceed	1 day	Mon 9/21/26	Mon 9/21/26
4	Mobilization	3 days	Tue 9/22/26	Thu 9/24/26
5	Quick Ship Shop Drawings - Site Storm (Piping and Structures)	5 days	Tue 9/22/26	Mon 9/28/26
6	Quick Ship Shop Drawings - Site Sanitary	5 days	Tue 9/22/26	Mon 9/28/26
7	Quick Ship Shop Drawings - Domestic Water	5 days	Tue 9/22/26	Mon 9/28/26
8	Quick Ship Shop Drawings - Site Electric	5 days	Tue 9/22/26	Mon 9/28/26
9	Quick Ship Shop Drawings - Concrete Reinforcement	5 days	Tue 9/22/26	Mon 9/28/26
10	Quick Ship Shop Drawings - Concrete Mix Design	5 days	Tue 9/22/26	Mon 9/28/26
11	Shop Drawings - Exclude Quick Ship Shop Drawings	45 days	Tue 9/22/26	Mon 11/23/26
12	Architect/Engineer Review of Site Storm, Sanitary, Domestic Water, Site Electric, and Concrete	5 days	Tue 9/29/26	Mon 10/5/26
13	Quick Ship Shop Drawings - CMU	15 days	Tue 10/6/26	Mon 10/26/26
14	Quick Ship Shop Drawings - Grout Mix Design	15 days	Tue 10/6/26	Mon 10/26/26
15	Quick Ship Shop Drawings - Structural Steel	15 days	Tue 10/6/26	Mon 10/26/26
16	Quick Ship Shop Drawings - Joists and Decking	15 days	Tue 10/6/26	Mon 10/26/26
17	Quick Ship Shop Drawings - MEP Underslab Piping	15 days	Tue 10/6/26	Mon 10/26/26
18	Quick Ship Shop Drawings - PEMB	15 days	Tue 10/6/26	Mon 10/26/26
19	Quick Ship Shop Drawings - Switchgear	15 days	Tue 10/6/26	Mon 10/26/26
20	Quick Ship Shop Drawings - Fire Suppression	15 days	Tue 10/6/26	Mon 10/26/26
21	Architect/Engineer Review of Remaing Shop Drawings	60 days	Tue 10/6/26	Mon 1/4/27
22	Architect/Engineer Review of CMU, Grout, Steel, PEMB, and MEP Items	7 days	Tue 10/27/26	Wed 11/4/26
23	SHOP DRAWINGS COMPLETE	0 days	Mon 1/4/27	Mon 1/4/27
24				
25	Site Work	358 days	Fri 9/25/26	Thu 2/24/28
26	Submit Notice of Intent - BMP	1 day	Fri 9/25/26	Fri 9/25/26
27	Install Best Management Plan Work and Temp Construction Entrance	5 days	Fri 9/25/26	Thu 10/1/26
28	Site Demo	10 days	Fri 10/2/26	Thu 10/15/26
29	Install Site Protections	5 days	Wed 10/14/26	Tue 10/20/26
30	Strip Topsoil/Site Grading	10 days	Wed 10/14/26	Tue 10/27/26
31	Install Storm Structures, Piping, and New Construction Entrance	20 days	Tue 10/27/26	Mon 11/23/26
32	Install Domestic Water Piping, Vaults, etc.	30 days	Tue 11/3/26	Wed 12/16/26
33	Install Fire Water Piping and All Appurtenances	30 days	Thu 12/17/26	Mon 2/1/27
34	Install Site Electric, Transformers, etc.	30 days	Tue 2/2/27	Mon 3/15/27
35	Install Generator	20 days	Tue 3/16/27	Mon 4/12/27
36	Fine Grade Parking Lots and Drive Lines/Stone Base	20 days	Fri 8/6/27	Thu 9/2/27
37	Install Curb and Gutter	15 days	Fri 8/20/27	Fri 9/10/27
38	Exterior Site Concrete	25 days	Mon 9/13/27	Fri 10/15/27
39	Asphalt Placement/Striping	30 days	Mon 9/27/27	Fri 11/5/27
40	Grading/Topsoil/Landscaping	75 days	Mon 11/8/27	Thu 2/24/28
41				
42	Main Building	326 days	Tue 11/10/26	Thu 2/24/28
43	Footers - Main Building	8 days	Tue 11/10/26	Thu 11/19/26
44	Poured in Place Walls - Main Building	12 days	Wed 11/18/26	Mon 12/7/26
45	Underslab Utility Entrances - Main Building	7 days	Wed 12/2/26	Thu 12/10/26
46	Underslab Plumbing Rough-In - Main Building	10 days	Mon 12/7/26	Fri 12/18/26
47	Underslab CMU Placement - Storm Shelter	3 days	Tue 12/8/26	Thu 12/10/26



ID	Task Name	Duration	Start	Finish
48	Underslab Stone Placement - Main Building	5 days	Wed 12/16/26	Tue 12/22/26
49	Underslab Electric Rough-In - Main Building	3 days	Mon 12/21/26	Wed 12/23/26
50	Prep and Pour Slab - Main Building	8 days	Mon 12/28/26	Thu 1/7/27
51	Set HM Door Frames - Storm Shelter	3 days	Wed 1/13/27	Fri 1/15/27
52	Load Bearing CMU Placement - Main Building	18 days	Tue 1/19/27	Thu 2/11/27
53	Plumbing & Electric CMU In Wall Rough-In - Main Building	18 days	Tue 1/19/27	Thu 2/11/27
54	Set Structural Steel	25 days	Fri 2/5/27	Thu 3/11/27
55	Joists and Decking	15 days	Fri 3/5/27	Thu 3/25/27
56	CFMF and Sheathing at Exterior Walls	25 days	Wed 3/17/27	Tue 4/20/27
57	Prep and Pour Slab - Storm Shelter Roof	5 days	Wed 3/24/27	Tue 3/30/27
58	CMU Placement at Parapet Walls	5 days	Wed 3/31/27	Tue 4/6/27
59	Wood Blocking at Roof	5 days	Mon 4/12/27	Fri 4/16/27
60	Install Brick Veneer	30 days	Wed 4/14/27	Tue 5/25/27
61	Interior Wall CFMF	15 days	Fri 4/16/27	Thu 5/6/27
62	Install Roofing	30 days	Mon 4/19/27	Fri 5/28/27
63	Plumbing Above Ceiling and In-Wall Rough-In	30 days	Fri 4/30/27	Fri 6/11/27
64	Exterior EIFS Installation	30 days	Wed 5/26/27	Thu 7/8/27
65	HVAC Above Ceiling Rough-In	30 days	Mon 6/7/27	Mon 7/19/27
66	Install Storefront, Windows, and Doors	10 days	Fri 7/9/27	Thu 7/22/27
67	Sprinkler Above Ceiling Rough-In	30 days	Tue 7/13/27	Mon 8/23/27
68	Main Building Dried-In	0 days	Thu 7/22/27	Thu 7/22/27
69	Install Exterior Metal Panels - Main Building	30 days	Fri 7/23/27	Thu 9/2/27
70	Set HVAC Equipment & Controls	20 days	Fri 7/23/27	Thu 8/19/27
71	Plumbing & HVAC Insulation	20 days	Fri 8/6/27	Thu 9/2/27
72	Electric Above Ceiling and In-Wall Rough-In	30 days	Tue 8/17/27	Tue 9/28/27
73	Permanent Power	0 days	Tue 9/28/27	Tue 9/28/27
74	Drywall	12 days	Wed 9/29/27	Thu 10/14/27
75	Prime & First Coat Paint	12 days	Fri 10/8/27	Mon 10/25/27
76	Install Devices	8 days	Tue 10/26/27	Thu 11/4/27
77	Install Ceiling Grid	15 days	Tue 10/26/27	Mon 11/15/27
78	Drop Light Fixtures, GRDS, Sprinklerheads, Etc.	10 days	Tue 11/9/27	Mon 11/22/27
79	Conditioned Air	0 days	Mon 11/22/27	Mon 11/22/27
80	Above Ceiling Punch List	3 days	Tue 11/23/27	Mon 11/29/27
81	Contractors Work Off Above Ceiling Punch List	5 days	Tue 11/30/27	Mon 12/6/27
82	Drop Ceiling Tile	10 days	Tue 12/7/27	Mon 12/20/27
83	Tiling	7 days	Tue 12/21/27	Thu 12/30/27
84	Epoxy Flooring/Base	12 days	Tue 1/4/28	Wed 1/19/28
85	Install Casework	5 days	Fri 1/14/28	Thu 1/20/28
86	Set Plumbing Fixtures	6 days	Fri 1/14/28	Fri 1/21/28
87	Doors and Hardware/Misc. Accessories	7 days	Wed 1/19/28	Thu 1/27/28
88	Air Balance	12 days	Thu 1/20/28	Fri 2/4/28
89	Install LVT/Base	20 days	Fri 1/28/28	Thu 2/24/28
90				
91	Apparatus Bay	283 days	Tue 12/8/26	Thu 1/20/28
92	Footers - Apparatus Bay	10 days	Tue 12/8/26	Mon 12/21/26
93	Poured in Place Walls - Apparatus Bay	10 days	Tue 12/22/26	Thu 1/7/27
94	Underslab Plumbing Rough-In - Apparatus Bay	10 days	Fri 1/8/27	Thu 1/21/27



ID	Task Name	Duration	Start	Finish
95	Underslab Stone Placement - Apparatus Bay	8 days	Wed 1/20/27	Fri 1/29/27
96	Prep and Pour Slab - Apparatus Bay	12 days	Thu 1/28/27	Fri 2/12/27
97	PEMB Available to Site	0 days	Wed 3/31/27	Wed 3/31/27
98	Install PEMB Main Framing, Secondary Framing, Insulation, Wall, and Roof Panels	50 days	Thu 4/1/27	Thu 6/10/27
99	CMU Placement - Apparatus Bay (Includes Setting of Door Frames)	10 days	Thu 5/27/27	Thu 6/10/27
100	Plumbing & Electric CMU In Wall Rough-In - Apparatus Bay	10 days	Thu 5/27/27	Thu 6/10/27
101	CFMF and Sheathing- Apparatus Bay	10 days	Thu 5/27/27	Thu 6/10/27
102	Install Overhead Doors, Exterior Doors	14 days	Fri 6/11/27	Wed 6/30/27
103	Paint PEMB Structure	10 days	Fri 6/11/27	Thu 6/24/27
104	Above Ceiling Plumbing Rough-In - Apparatus Bay	8 days	Mon 6/14/27	Wed 6/23/27
105	Apparatus Bay Dried-In	0 days	Wed 6/30/27	Wed 6/30/27
106	Above Ceiling Electrical Rough-In and Hang Fixtures - Apparatus Bay	12 days	Wed 9/29/27	Thu 10/14/27
107	Above Ceiling HVAC Rough-In - Apparatus Bay	15 days	Fri 10/8/27	Thu 10/28/27
108	Drywall	8 days	Mon 10/11/27	Wed 10/20/27
109	Above Ceiling Sprinkler Rough-In & Upright Heads	15 days	Fri 10/22/27	Thu 11/11/27
110	Prime & First Coat Paint/Touchup Paint Steel Structure	7 days	Tue 10/26/27	Wed 11/3/27
111	Install Devices	7 days	Mon 11/1/27	Tue 11/9/27
112	Install Ceiling Grid	5 days	Tue 11/16/27	Mon 11/22/27
113	Drop Light Fixtures, GRDS, Sprinklerheads, Etc.	5 days	Tue 11/23/27	Wed 12/1/27
114	Above Ceiling Punch List	3 days	Thu 12/2/27	Mon 12/6/27
115	Contractors Work Off Above Ceiling Punch List	5 days	Tue 12/7/27	Mon 12/13/27
116	Conditioned Air	0 days	Mon 12/13/27	Mon 12/13/27
117	Drop Ceiling Tile	3 days	Tue 12/14/27	Thu 12/16/27
118	Epoxy Flooring/Base	10 days	Fri 12/17/27	Mon 1/3/28
119	Install Casework/Set Plumbing Fixtures	3 days	Tue 1/4/28	Thu 1/6/28
120	Doors and Hardware	3 days	Fri 1/7/28	Tue 1/11/28
121	Air Balance	10 days	Fri 1/7/28	Thu 1/20/28
122	Misc. Accessories	3 days	Wed 1/12/28	Fri 1/14/28
123				
124	Sprinkler Certificate	30 days	Tue 11/23/27	Fri 1/7/28
125	Fire Alarm Certificate	30 days	Thu 12/2/27	Fri 1/14/28
126	Electrical Certificate	30 days	Thu 12/2/27	Fri 1/14/28
127	Plumbing Certificate	15 days	Mon 1/24/28	Fri 2/11/28
128	HVAC Certificate	5 days	Mon 2/7/28	Fri 2/11/28
129	State Inspection/COO Permit	5 days	Mon 2/14/28	Fri 2/18/28
130	Achieve Substantial Completion	0 days	Mon 2/21/28	Mon 2/21/28
131	Closeout and Owner Training	20 days	Mon 2/21/28	Fri 3/17/28
132	Interim Cleaning	5 days	Fri 2/25/28	Thu 3/2/28
133	Architect Punch List	3 days	Fri 2/25/28	Tue 2/29/28
134	Distribute Punch List	2 days	Wed 3/1/28	Thu 3/2/28
135	Contractors Work off Punch List	5 days	Fri 3/3/28	Thu 3/9/28
136	Final Cleaning	7 days	Fri 3/10/28	Mon 3/20/28
137	Final Review by Architect	1 day	Tue 3/21/28	Tue 3/21/28
138	Achieve Final Completion	0 days	Tue 3/21/28	Tue 3/21/28

SECTION 01900

LANGUAGE SPECIFIC TO INDIVIDUAL BIDS

(CONTRACTOR/SUBCONTRACTOR/SUPPLIER)

BID PACKAGE: #13 RESINOUS FLOORING

INCLUDED:

1. The requirements of all Division 0 and Division 1 Sections apply to this and all Contract Packages.
2. Furnish, install, and warrant all work shown on the drawings and described in the following specification sections:

096723 Resinous Flooring

3. Layout
4. Cleanup
5. Coordination with other trades
6. Contractor is responsible for installing temporary protection over the resinous flooring immediately after completing a room. The temporary protection is required to be builders board taped. Contractor is responsible for removing temporary protection at the direction of the CM.
7. Contractor is responsible for incidental floor prep (shrinkage, cracks, control joints etc....) **BP #1 - General Trades** is responsible for remediation floor prep if concrete slabs do not meet industry standards. Meeting with **BP #1 - General Trades, BP #13 - Resinous Flooring**, and CM is required prior to **BP #13 - Resinous Flooring** commencing work.

BREAKOUT ITEMS:

Resinous Flooring	
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SPECIAL INSTRUCTIONS:

1. Refer to Alternates Section 01030. It is the responsibility of the Bidder to include any alternates that are applicable to their bid package.
2. Review all pages of the plans and specifications to ensure coordination of your work with other trades.
3. Bidder is advised that all work to be performed will be governed solely by the plans, specifications, and addenda. Bidder is directed to the above specification sections for technical information and any additional items of work involved.
4. It shall be the responsibility of the bidder to determine which Bid Package or combination of Bid Packages the Bidder desires to bid.
5. **REFER TO THE FRONT OF SECTION 01900-LANGUAGE SPECIFIC TO INDIVIDUAL BIDS.**

SECTION 01900

LANGUAGE SPECIFIC TO INDIVIDUAL BIDS

(CONTRACTOR/SUBCONTRACTOR/SUPPLIER)

BID PACKAGE: #14 COMBINATION

INCLUDED:

1. The requirements of all Division 0 and Division 1 Sections apply to this and all Contract Packages.
2. Furnish, install, and warrant all work shown on the drawings and described in the following specification sections:

Combination Bid Package – This package can be used for any combination of packages (MAXIMUM OF 4 PACKAGES) except Plumbing/HVAC and Electrical cannot be used in a combination package. Bidders must provide an individual bid package for each bid package included in the combination package. Plumbing/Mechanical and Electrical must be bid as individual bid package only.

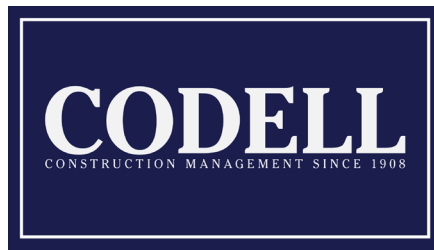
3. Layout
4. Cleanup
5. Coordination with other trades

BREAKOUT ITEMS:

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SPECIAL INSTRUCTIONS:

1. Refer to Alternates Section 01030. It is the responsibility of the Bidder to include any alternates that are applicable to their bid package.
2. Review all pages of the plans and specifications to ensure coordination of your work with other trades.
3. Bidder is advised that all work to be performed will be governed solely by the plans, specifications, and addenda. Bidder is directed to the above specification sections for technical information and any additional items of work involved.
4. It shall be the responsibility of the bidder to determine which Bid Package or combination of Bid Packages the Bidder desires to bid.
5. **REFER TO THE FRONT OF SECTION 01900-LANGUAGE SPECIFIC TO INDIVIDUAL BIDS.**



July 22, 2026

City of Campbellsville
110 S. Columbia Ave., STE B
Campbellsville KY 42718

Attn: Josh Pedigo

Re: Campbellsville Fire & EMS

The Pre-Bid Meeting for the above referenced project was held July 22, 2026. See attached sign-in sheet for attendees.

Introduction

Owner Representative(s):	<u>Josh Pedigo - City Administrator</u>
Design Team Representative(s):	<u>Ed Trammell - Integrity Architecture</u> <u>Adam Gillett - Integrity Architecture</u>
Engineer(s)/Consultant(s):	<u>Jwain White - Marcum Engineering</u> <u>Nikki Gregory - BFW</u>
Codell Representative(s):	<u>Lewis Owenby - Project Manager</u>

- This project consists of a new Fire & EMS constructed with conventional steel on the main portion with the apparatus bay being a pre-engineered metal building. There is a storm shelter component, a community room, and residential sleeping quarters as parts of the main building.

Review of Volume I Project Manual & Instructions to Bidders:

1. Section 00010: Advertisement for Bids:

- Bids are due **August 18, 2026, AT 2:00 PM EDT/1:00 PM CDT** and will be opened at 109 W. MAIN STREET, CAMPBELLSVILLE, KY 42718.
 - i. The bid opening location will be changed to the Public Works Conference Room located at 109 W. MAIN STREET, CAMPBELLSVILLE, KY 42718.
- Hard copy bids should be delivered to 109 W. MAIN STREET, CAMPBELLSVILLE, KY 42718 and opening will be public.

- If mailing your bid, send to same address indicated above.
 - i. Be sure if you are mailing your bid, allow plenty of time for it to go through the postal service. Bids that arrive late due to issues with the mail cannot be accepted.
- Two copies of the Form of Proposal and 5% Bid Bond must be placed in a manila envelope with the Project Name and Bid Package number affixed.
- No Bidder may withdraw a bid submitted for a period of sixty (60) days after the date of Bid Opening.
- No exclusions or qualifications of bids are permitted. Bidders must submit bids for the entire scope of work included in the Bid Package(s) for which they are bidding.
- Successful bidders will enter into Contracts and Purchase Order Agreements per Specification Section 00400.

2. Questions:

- Requests for Materials Substitutions shall be submitted via email to Codell Construction and the Design team and must utilize the Certificate of Product Compliance Form found in Specification Section 00103.
- All questions regarding this project must be submitted via e-mail to Codell Construction lowenby@codellconstruction.com AND the Design Team ed@integrityarch.com. The deadline for questions is the close of business (5:00pm Eastern Time, 4:00pm Central) August 5th, 2026. These questions will be issued in an addendum on August 7th, 2026.

3. Form of Proposal & Supplementary Documents:

- The Form of Proposal is located in Volume One, Section 00200 of the Specifications. The Form of Proposal must be completed in its entirety and shall not be modified in any manner.
- Be certain to identify all Addenda individually on the Form of Proposal (1,2,3,4 etc.).
- Write out in words the dollar figure as well as insert the numeric dollar figure of your Base Bid. The Base Bid must include all labor and materials necessary to

perform the work, including break-out materials that you may list for the Owner to purchase directly on your behalf.

- Be certain to indicate your price for all Alternates. Bidders are required to mark the appropriate column without omission.
- Section 2: List of Proposed Subcontractors:
 - Complete and submit with your bid.
 - All subcontractors will be required to obtain local business license, etc., and abide by all terms of the contract.
 - The City of Campbellsville does not require a business license, since the work is for the city, but all contractors must pay the occupational tax.
- Section 3: Unit Prices:
 - Complete and submit with your bid.
 - These amounts, upon acceptance, will be utilized to determine any adjustment to the contract price due to changes in the scope of work.
- Section 4A: Materials, Equipment, Manufacturers, and Suppliers:
 - Complete and submit within one (1) hour of the bid.
 - Bidders are at a minimum required to provide this information for those materials or divisions of work identified.
 - Bidders must complete this section even when not applicable to their bid and shall indicate by checking the appropriate box.
- Section 4B: Materials, Equipment, Manufacturers, and Suppliers.
 - Complete and submit within four (4) days of the bid.
 - Bidders must complete this section even when not utilizing Purchase Orders and shall indicate by checking the appropriate box.
 - List each of the materials you intend for the Owner to purchase directly from suppliers on separate line items.
 - The information listed here shall match exactly the information listed in Section 11, the Material Supplier Authorization Form.
 - Make sure the name on the W-9 matches on all these forms.
 - Following formal approval of Bids and Alternates, the bidder will have the opportunity to formalize the listing of Purchase Orders and amounts.
 - Your contract amount will be written for the total cost of your bid less the amount of the direct purchase orders for the materials.
 - The Owner is a tax-exempt entity; therefore, the amount of your purchase orders should not include sales tax.
 - The value of Direct Purchase Orders cannot be less than \$5,000.
- Section 5: Bid Bond:

- Complete and submit with your bid.
 - A Bid Bond or a certified check equaling 5% of the bid including direct purchase materials is required.
 - Successful bidders will be required to provide 100% Performance and Payment Bonds for full value of bid.
- Section 6: Conflict of Interest:
 - Complete and submit with your bid.
- Section 7: Affidavit of Assurances:
 - Complete and submit with your bid.
 - This form must be notarized.
- Section 8: Business Identification:
 - Complete and submit within four (4) days of the bid.
 - If none apply, bidder shall indicate as such.
- Section 9: Contractor Contact Information:
 - Complete and submit with your bid.
 - Please ensure the person whom you list on the contact sheet is able to speak for your company and clarify any questions that may arise in reviewing your bid.
- Section 10: W-9:
 - Complete and submit with your bid.
 - W-9 must be dated the day of the bid.
 - Each Supplier utilizing a Purchase Order will also need to submit within four (4) days of the bid a W-9 dated the day of the bid.
- Section 11: Material Supplier Authorization:
 - Complete and submit within four (4) days of the bid.
 - Each supplier listed in Section 4B is required to complete this form indicating the cost of materials for the Base Bid and any applicable Alternates.
 - The information listed here shall match exactly the information listed in Section 4B.
 - This form must be notarized.
- Section 12: Signature Page:
 - Be certain to sign your bid on the last page of the Form of Proposal.
- Section 00201: Best Value Bid Selection Forms and Criteria:
 - Will not be utilized on this project.

4. Section 01000: Site Conditions:

- Contractors are responsible for examining the site for existing conditions.
- At the conclusion of the meeting, contractors were invited to visit the site.
- It was mentioned that the Geotechnical Report is needed for pricing scopes.

5. Section 01010: Project Schedule:

- The Project Schedule(s) will be issued by Addendum. Bidders shall bid the project according to the schedule. The Schedule is based on a 5-day (8 hours per day) work week. Weekend work or additional shifts will be required if Contractors cannot meet durations listed in schedule during normal work week. Some phased work may overlap, and it is required that enough manpower be utilized to perform the work concurrently. It is expected if bids come in on budget we will commence as shown on the project schedule. Plan is to procure material ASAP and commence work as shown on Schedule.
- Weather days will be handled on a Day for a Day basis.
- The contracts will include liquidated damages assessed at \$1,000/day if the completion date is not met.
- The anticipated construction schedule is an 18-month timeline.

6. Section 01030: Alternates and Allowances:

- ALTERNATE #1 - VEHICLE EXHAUST EXTRACTION SYSTEM TO BE OWNER-PREFERRED VENDOR PLYMOVENT

7. Section 01400: Codes, Standards, and Industry Specifications:

- Each Contractor is responsible for quality control for their own work.
- Owner shall employ and pay for services of independent testing laboratories to perform specified inspections and testing that is noted under separate sections.

8. Section 01500: Construction Facilities and Temporary Controls:

- Bidders shall review this section for additional requirements specific to bid packages. This section includes items relating to barriers, enclosures, temporary signage, cleaning, temporary facilities, temporary water, heating, and electric, et cetera.

9. Section 01900: Language Specific to Individual Bids:

- Bidders shall review the scope description of all Bid Packages to ensure your bid includes all labor and materials as well as coordination with other trades to complete the scope of work.
- A Combination Bid Package will be released via Addendum. Contractors may combine up to 4 bid packages; however, they must also bid the individual packages. MEP scopes are not eligible to be combined.

10. General Comments:

- Site Safety will be a point of emphasis on the project. Successful bidders will be required to provide a copy of their Company Safety Policy and a Site-Specific Safety Plan.
- Any change to the scope of work will be issued formally via addenda.
- The minutes from this meeting will be issued in a forthcoming Addendum along with any questions that are to be addressed.

11. Architect and Consultant Comments:

- Josh Pedigo stated that this project will be the standard of how the city handles erosion control and MS4 requirements. Make sure responsible bid packages are staying on top of these items so that they are leading by example. There is a SWPP plan provided that should be considered as the minimum.
- There is a separate project extending the city water main to the site. This project has been awarded and is expected to be completed prior to this project starting.
- The site is considered "Unclassified Soils". The geotechnical report will be released via addendum.
- The location of this project is highly visible to the public, city officials, etc. Make sure housekeeping items are maintained (Safety, site appearance, no tracking mud, etc.).
- Codell Construction utilizes Project Sight, which all contractors are required to interact with. Codell Construction will maintain all correspondence, documents, RFIs, ASIs, PRs, etc. through this platform.

12. Q/A Session:

- Is there a tentative start date for this project?

- i. The project is expected to commence in mid-September.
- Is Codell Construction pursuing any of the bid packages?
 - i. No, Codell is purely construction management on this project.

13. Adjourn/Site Walk-Through:

Should there be any additions, clarifications, or corrections needed to these minutes please notify me in writing within three (3) working days upon receipt of this document.

If you have any questions, please contact me directly.

Sincerely,

Lewis Owenby
Project Manager

ADDENDUM NO. 01

August 7, 2026

To the drawings and specifications of the material and labor to be used and employed in the erection and completion of the:

Campbellsville Emergency Services Building

This Addendum supersedes all conflicting portions of the drawings and specifications. Contractors shall include all omissions, additions and adjustments of all trades as may be necessary because of each change, substitution or omission. Such omission, addition or adjustment shall conform to recognized and accepted engineering practice.

CLARIFICATION

1. Electrical utility fees: The design team is not able to provide accurate allowance for the work associated with the power company. TRECC will need to provide fee. – Marcum
2. Gas pricing / utility fees inquiry: *Has the gas company, Atmos Energy, been contacted by the Customer/Engineer/Codell in order to ascertain the availability of gas service to the building? I have contacted Atmos to get their pricing on getting the gas service to the building, but they cannot complete such without a Availability Request. Evidently if I were to put one in (and there already be one from someone else), it would mess up the whole process, according to Atmos.*
 - a. Yes, the Design Team contacted Atmos Energy to verify gas availability:
Address: 235 KY-55 Bypass, 42718. Case #79745239. Local contact is indicated on U0.1. – Marcum
3. HVLS fans, blade count: 5 blades are specified, 8 blade versions are not acceptable. – Marcum
4. Piping size inquiry: *The gas piping, as well as some water and waste piping, seems to have inconsistent sizing. Are the sizing callouts on the gas, water, and waste correct in those instances where they "telescope" or restrict? Please refer to isometric drawings of the gas, water, and waste.*
 - a. We reviewed the water, DWV and gas diagrams and do not see discrepancies. We did notice that some of the gas pipe labels were shifted slightly from the pipes, but it is clear what the label leaders point to. Note that some gas pipe sizes increase downstream of pressure regulators; that is intentional. – Marcum
5. Plumbing submittal / permit: Plans have been submitted by Marcum to the local health department and state plumbing for review. – Marcum

6. Pole Lighting Conductor: The Contractor is required to size the conduit and wire according to the requirements for voltage drop according to General Electrical Note 5 on Drawing E0.1. – Marcum
7. Seismic Design Category D, seismic restraints: Provide seismic restraints per Section 230548, P0.1 Plumbing General Note 33, and H0.1 HVAC General Note 10. – Marcum
8. After reviewing the plans and specs for this project, we would like to request clarification on the code year requirements for 83490 Tornado Resistant Assemblies. The specification calls for ICC-500 (2020) while note 2 on sheet A7.1 calls for ICC-500 (2014): ICC-500 (2014) code year requirements are to be followed – iA.
9. There is no spec for Baby Drop Box: The Safe Haven Baby Drop Box organization does not have a technical specification document for the product. Additional information regarding the product can be found at www.shbb.org
10. Casework questions:
 - a. Will pvc edges be allowed in lieu of laminate edging, more durable and cost effective? Yes, pvc edges are allowed – iA
 - b. Are dust panels necessary between drawers? No, dust panels are not necessary –iA.
 - c. Will 120 degree hinges be acceptable? Yes, 120 degree hinges are acceptable – iA
 - d. What is the project schedule? Codell to provide project schedule.
 - e. Casework section 2/A8.1 calls for wood drawers, spec section calls for white melamine, please clarify? White melamine is acceptable – iA.
 - f. Do we price laminate and solid surface in standard range of colors? Yes – iA
 - g. Spec 064100 2.03 calls for pencil stops, please clarify where this occurs? Disregard pencil stop reference in specifications –iA.
 - h. Window E on A7.1, calls out detail 27/A7.2, is the top laminate or solid surface or part of the window assembly? Solid surfacing with single bevel edges on $\frac{3}{4}$ " plywood – iA.
11. Can an allowance be given for gas/water/sanitary meters/tap fees, etc.. so that all bidders are equal on this scope?
 - a. The city will waive the sewer and water tap fees due to this being a city owned building. – City of Campbellsville
 - b. Water utility fee: the City of Campbellsville is currently constructing a water line extension that will provide service to this site. – Marcum
12. Brick allowance is to be \$1,300 per 1,000 brick – iA.

PROJECT MANUAL (INCLUDING PRODUCT SUBSTITUTION REQUESTS)

1. CSI Division 05 – Metal Ladder: Substitution request proposing O’Keefe’s as alternate manufacturer. Approved As Noted on 7/29/26 – Contractor is responsible for verifying product meets specification requirements.

2. CSI Division 07 – Air Barriers: Substitution request proposing WR Meadows Air-shield LSR System as alternate product. Approved As Noted on 8/7/26 – Contractor is responsible for verifying product meets specification requirements.
3. CSI Division 07 – Air Barriers: Substitution request proposing Henry Air Bloc 16MR as alternate product. Approved As Noted on 8/7/26 – Contractor is responsible for verifying product meets specification requirements.
4. CSI Division 08 – Hollow Metal Doors and Frames: Substitution request proposing De La Fontaine as alternate manufacturer. Approved As Noted on 7/29/26 – Contractor is responsible for verifying product meets specification requirements.
5. CSI Division 08 – Flush Wood Doors: Substitution request proposing Oshkosh Door Company as alternate manufacturer. Approved As Noted on 7/29/26 – Contractor is responsible for verifying product meets specification requirements.

ATTACHMENTS

1. BFW Geotechnical Exploration Report dated 08/30/24, provided by Contractor request.
2. Marcum mechanical and electrical addendum 1.00-rev dated 08/07/26



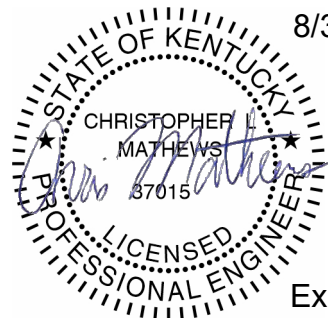
BACON | FARMER | WORKMAN
ENGINEERING & TESTING, INC.

GEOTECHNICAL EXPLORATION REPORT

**Campbellsville EOC
Campbellsville, Kentucky**

Submittal Date:

August 29, 2024



8/30/2024

Exp. 6/30/2026



BACON | FARMER | WORKMAN

ENGINEERING & TESTING, INC.

521 WEST MAIN STREET | SUITE 200 | BELLEVILLE, IL 62220

August 29, 2024

Mr. Edward Trammell
Integrity Architecture, PLLC
203 East Fourth Street
Lexington, Kentucky 40508

Re: *Geotechnical Exploration Report*
 Campbellsville EOC
 Campbellsville, Kentucky
 BFW Project No: 24146

Dear Mr. Trammell:

Bacon Farmer Workman Engineering & Testing, Inc. (BFW), is pleased to present the attached Geotechnical Exploration Report for the referenced site.

The geotechnical exploration was conducted in accordance with our proposal and applicable ASTM Standards. The attached report includes a review of pertinent project information provided to us, descriptions of site and subsurface conditions encountered, and our general recommendations for foundations, site preparation and construction phase concerns. The appendices contain a boring location plan, site plan and results of all field and laboratory tests conducted for the project.

We appreciate the opportunity to serve you and look forward to future association with you on this and other projects. If you have questions concerning this report, please call our office.

Sincerely,

BACON | FARMER | WORKMAN
ENGINEERING & TESTING, INC.

Shelby N. Livingstone, EIT
Staff Engineer

Christopher L. Mathews, P.E.
Branch Manager/ Geotechnical Engineer

Attachments: Geotechnical Exploration Report

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- Appendix B – Subsurface Boring Logs
- Appendix C – Soil Laboratory Data

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ABBREVIATIONS

amsl	above mean sea level
ASTM	American Society for Testing and Materials
BFW	Bacon Farmer Workman Engineering & Testing, Inc.
bgs	below ground surface
ksf	kips per square foot
LL	Liquid Limit
NRCS	Natural Resource Conservation Service
pcf	pounds per cubic foot
PI	Plasticity Index
PL	Plastic Limit
psf	pounds per square foot
psi	pounds per square inch
SPT	standard penetration test
USCS	Unified Soil Classification System
USGS	United States Geologic Survey

1. PROJECT INFORMATION AND OBJECTIVE

The purpose of this geotechnical study was to explore the subsurface conditions present at the site, determine pertinent engineering properties of the materials encountered and provide recommendations for foundation and earthwork related portions of the project. Our services were provided in general accordance with our proposal dated March 18, 2024.

The project involves the construction of a new Emergency Services Center for a site located northeast of the intersection of Route 55 and Campbellsville Bypass in Campbellsville, Kentucky. The new structure will contain facilities for the fire and police departments and will be located in the southern half of the site with parking and drive areas surrounding the structure. Additionally, an optional storage building may be located north of the building. The provided plans indicate the structures will be predominately single-store slab-on-grade with a portion being two stories. The building will have a footprint of approximately 30,000 square feet. A grading plan was not available; however, the site is relatively flat, and we anticipate minimal grade changes will be required. The existing site conditions and proposed improvements are shown on the *Aerial Photograph* and *Site Plan* in Appendix A.

Structural loads were not provided; however, it is anticipated that the building will be lightly to moderately loaded with column loads of less than 200 kips and wall loads of less than 4 kips per lineal foot. If these loads are to be exceeded, then BFW should be contacted to review the scope outlined herein.

1.1 EXISTING SITE DESCRIPTION

The project site is located northeast of the intersection of Route 55 and Campbellsville Bypass in Campbellsville, Kentucky (37.311349 °, -85.352432°). Prior to drilling activities, the site had been cleared of trees. The lot is bounded by farm fields to the north and east, an access road to the south, and green space to the west. The project location is shown in Figure 1.1.



Figure 1.1. Project Location

1.2 SUBSURFACE EXPLORATORY METHOD

Fifteen (15) test borings were advanced in support of this geotechnical exploration. Borings B-1 through B-9 were located within or near the proposed building footprint and advanced to depths of 10.5 to 15 feet below ground surface (bgs). Boring 10 was advanced within or near the optional storage building and was advanced 8.5 feet bgs. Borings B-11 through B-15 were advanced to 5 feet bgs within or near the proposed pavement areas.

The procedures used by Bacon Farmer Workman Engineering & Testing, Inc. (BFW), Inc. for field and laboratory sampling and testing are in general accordance with American Society for Testing and Materials (ASTM) procedures, and established engineering practice. The boring locations were located in the field by BFW personnel using a handheld GPS unit. Surface boring elevations were interpolated from publicly available LiDAR obtained from the U.S. Geological Survey and should be considered approximate in nature. See the *Aerial Photograph*, *Site Plan*, and *Subsurface Boring Logs* in Appendices A and B, respectively, for more detail.

A CME 550X ATV rotary-drilling rig was used to advance the soil test borings and to obtain soil samples for laboratory evaluation. The test borings were advanced in accordance with geotechnical investigative procedures outlined in ASTM D-1452. The borings were backfilled with native soil cuttings at the completion of the subsurface investigation.

Disturbed samples were retrieved during Standard Penetration Tests (SPT) [ASTM D-1586] using an automatic hammer assembly at various depths in the underlying stratum. The SPT consists of driving a 2-inch outside diameter split-barrel sampler (split-spoon) into the soil with a 140-pound weight falling freely through 30 inches. The sampler was driven in three (3) successive 6-inch increments, with the number of blows per increment being recorded. The number of blows required to advance the sampler the last 12 inches is termed the Standard Penetration Resistance (N).

Undisturbed samples were also collected by advancing steel Shelby Tubes into the underlying soils. Shelby tubes are approximately 3-inches in diameter and have a knife edge along one end of the tube. After advancing Shelby Tube by hydraulically pushing into the soils, the “undisturbed” soil core remains inside the tube and is sealed to preserve the natural moisture content. Once at the in-house laboratory, the soil core is pushed out of the tube in the same direction as initially advanced and is preserved for further testing. Unconfined compressive strength tests are typically conducted on the preserved soil cores.

Drilling operations and visual classification of soil samples were in accordance with Unified Soil Classification System (USCS) and ASTM D-2488 guidelines. Records of the conditions encountered, and visual soil classification were prepared and incorporated in *Subsurface Boring Logs* included in Appendix B.

The *Subsurface Boring Logs* represent BFW’s interpretation of the conditions encountered within the soil test borings. It should be noted that strata changes may vary from those encountered within the soil test borings, transitions may be gradual or abrupt, and conditions may vary significantly at other locations. The groundwater information listed represents conditions at the time of drilling activities. Representative soil samples obtained from the borings were preserved in plastic bags, sealed, and taken to the laboratory for testing.

2. SUBSURFACE CONDITIONS

2.1 REGIONAL GEOLOGY

The Natural Resource Conservation Service (NRCS) online web soil database was reviewed to determine the type of soil underlying the area of interest. Based on the available published data, surficial soils at the subject property are comprised of the Dickson and Mountview silt loams with 2 to 6 percent slopes. The Dickson silt loam is described as moderately well drained and belonging to hydrologic soil group C/D. The Mountview silt loam is described as well drained and belonging to hydrologic soil group B. The parent materials of both silt loams are defined as fine-silty noncalcareous loess over clayey residuum weathered from limestone.

2.2 SITE-SPECIFIC SUBSURFACE CONDITIONS

Borings B-1 through B-9 were located within or near the proposed building footprint and advanced to depths of 10.5 to 15 feet below ground surface (bgs). Boring 10 was advanced within or near the optional storage building and was advanced 8.5 feet bgs. Borings B-11 through B-15 were advanced to 5 feet bgs within or near the proposed pavement areas.

Layers of silt (ML) and lean clay (CL) with silt and occasionally chert was predominately encountered throughout the borings. This material exhibited moisture contents of 11 to 32 percent with SPT N-values of 4 to 25 blows per foot (bpf), indicating a soft to very stiff consistency.

A layer of fat clay (CH) was encountered in boring B-5 at about 7.5 feet bgs. The moisture content of this material was 35 percent and may be present in other areas on site.

Weathered shale was encountered in borings B-6, B-7, B-8, and B-9 at about 11.5 to 13.5 feet bgs. The moisture contents of this material ranged from 14 to 23 percent with blow counts of over 50 bpf. Auger refusal was encountered between 8.5 and 15 feet bgs in borings B-1 through B-8 and B-10, likely due to shale bedrock. Borings B-11 through B-15 did not encounter weathered shale or auger refusal. Table 2.1 summarizes the approximate depths and elevations of weathered shale and auger refusal encountered in the borings.

Table 2.1 – Weathered Shale and Auger Refusal

Boring	Depth of Weathered Shale (ft)	Elevation of Weathered Shale	Depth of Auger Refusal (ft)	Elevation of Auger Refusal
B-1	-	-	10.5	835.5
B-2	-	-	11.5	834.5
B-3	-	-	11.0	836.0
B-4	-	-	12.0	836.0
B-5	-	-	11.0	838.0
B-6	12.0	837.0	15.0	834.0
B-7	11.5	837.5	15.0	834.0
B-8	13.5	835.5	15.0	834.0
B-9	13.5	834.5	-	-
B-10	-	-	8.5	836.5

2.3 GROUNDWATER

Groundwater was not encountered at the time of drilling operations. It should be noted that groundwater levels are highly dependent upon seasonal and climatic variations and may be present at different depths in the future.

3. LABORATORY TESTING

Laboratory soil tests were conducted in accordance with applicable ASTM Standards. Natural moisture contents were determined for all samples collected. Atterberg Limits tests were conducted on selected soil samples to verify field classification of the soils. In addition, these tests evaluate the potential for volumetric changes in the soil. Unconfined compressive strength tests were performed on select samples. Complete laboratory test results are included in Appendix C.

3.1 NATURAL MOISTURE CONTENTS

Natural moisture contents were determined for the soil samples collected. Table 3.1 provides the range of moisture content derived from the soil samples analyzed.

Table 3.1 – Natural Moisture Content

Depth (ft)	Soil Moisture Content (%)
0.0 – 8.5	16.5 – 35.1
13.5 – 18.5	14.2 – 23.0

3.2 ATTERBERG LIMITS

Atterberg Limit tests were performed on representative samples. Table 3.2 provides the results of the Atterberg Limits testing.

Table 3.2 – Atterberg Limits

Boring	Depth (ft)	LL	PL	PI	Classification
B-4	6.0	50	25	25	CL
B-5	8.0	58	28	30	CH
B-9	3.0	47	29	18	ML
B-10	1.0	39	24	15	CL

3.3 UNCONFINED COMPRESSIVE STRENGTH

Unconfined compressive strength tests were performed on select Shelby tube samples. Table 3.3 provides the results of the unconfined compressive strength tests.

Table 3.3 – Unconfined Compressive Strength

Boring	Depth (ft)	Compressive Strength (psf)	Strain at Failure (%)
B-4	6.0	2,910	3
B-5	8.0	4,430	4
B-9	3.0	5,620	3

4. GEOTECHNICAL CONSIDERATIONS AND RECOMMENDATIONS

Based on the results of the subsurface exploration, current site conditions observed, and laboratory results, items of geotechnical interest and considerations are discussed in the following sections.

4.1 BASIS FOR RECOMMENDATIONS

The following recommendations are based on data from this exploration and the stated project information. In our evaluations, we have utilized both subsurface data from this exploration and our experience with similar structures and subsurface conditions. If the structural information is incorrect or changed after our reporting, if the siting or building components have been changed, or if the subsurface conditions encountered during the construction vary from those reported, our recommendations should be reviewed considering the changed conditions.

Experience indicates that the actual subsoil conditions at a site could vary from those generalized based on soil test borings made at specific locations. Therefore, it is essential that a geotechnical engineer be retained to provide soil-engineering services during the site preparation, excavation, and foundation construction phases of the proposed project. The geotechnical engineer should observe compliance with the design concepts, specifications, and recommendations, and allow design changes in the event subsurface conditions differ from those anticipated prior to the start of construction.

4.2 UPPER SILTY ZONES

Based on the subsurface data encountered, the in-situ shallow soils often consist of relatively silty soils. It should be noted that silty soils can be very susceptible to degrading into unsuitable soils in the presence of excess moisture and construction traffic. In addition, silty soils are typically difficult to properly compact when significantly wet of the optimum moisture content as determined by a Standard Proctor test. It is anticipated that extra care will be needed to properly provide and maintain a suitable subgrade.

It is recommended that heavy construction equipment be detoured around any areas where a decrease in stability is found to be developing. Depending upon grading requirements and specific site conditions, solutions to a persistent decrease in stability may include removal and replacement or soil modification by means of cement stabilization.

4.3 EXPANSIVE CLAY AND SOFT SOILS

Potentially expansive fat clay soils were encountered in boring B-5 at about 7.5 feet bgs. Isolated layers of soft soils, exhibited by blow counts of 4 bpf or less, were encountered in borings B-4, B-13, B-14, and B-15. These materials may be present in other areas on site. A grading plan was not supplied; however, we expect required cuts and fills to be minimal across the site and it is not anticipated that the floor slabs or footings bearing near existing grade will require expansive clay remediation. Soft soils may be encountered during foundation excavations. It is recommended that if expansive clay or soft soils are found to be present at the base of foundation excavations, they should be undercut a minimum of 2 feet and replaced with properly placed structural backfill as described below in Section 4.5.

4.4 ROCK EXCAVATIONS

Weathered shale was encountered in various borings between 11.5 and 13.5 feet below ground surface (bgs) with auger refusal met between 8.5 and 15 feet bgs. We do not anticipate bedrock will affect building construction. However, if deeper utility excavations are required that exceed these depths, rock cuts may be required.

In excavations, removal of weathered rock typically requires the use of large backhoes, pneumatic spades, or blasting. The difficulty of excavation will depend on the actual composition of the rock and the location and orientation of discontinuities and bedding, which may vary significantly from our exploration locations.

4.5 FOUNDATION RECOMMENDATIONS

Based on the anticipated structural loadings and the typical settlement criteria assumed for the project, traditional shallow foundations and slabs-on-grade bearing on the in-place natural soils or newly placed structural fill are suitable options for foundation support of the proposed structures.

It is recommended that shallow foundations be used for structural support of the structures proposed for the site. Shallow foundations should be seated in the existing in-situ soils or properly compacted engineered fill and bear at a minimum depth of 24-inches below ground surface for frost protection. A net allowable soil bearing pressure of 2,000 pounds per square foot (psf) should be used for both continuous and spread foundations. Any continuous and isolated footings should have a minimum width of at least 24 inches and 36 inches, respectively. These values assume a Factor of Safety of 3. An increase of one-third may be permitted for transient loadings, including wind and earthquake loads.

All foundation bearing soils should be inspected by a geotechnical engineer prior to steel and concrete placement. We anticipate that some localized areas of inadequate bearing materials may be encountered during construction; therefore, we recommend that an allowance be made in the construction budget for selected footing overexcavations.

If required, the base of foundation overexcavations should exceed footing dimensions 6 inches along each side for every foot of overdig. Replacement materials may consist of crushed stone, crushed gravel, or recycled concrete between $\frac{1}{4}$ and 3 inches in size containing no fines. This material should be placed in lifts with each lift compacted into place using vibratory compaction equipment or by tamping with a backhoe bucket. Alternatively, foundation overexcavations may be backfilled with lean concrete. If lean concrete is utilized, overexcavations should extend a minimum of 6 inches on each side.

For footings designed and constructed in accordance with our recommendations, total settlement should be less than 1 inch, and differential settlement between adjacent footings should be less than $\frac{3}{4}$ inch.

4.6 SEISMIC DESIGN PARAMETERS

According to the International Building Code (IBC 2015), as adopted by the 2018 Kentucky Building Code, structures are required to be designed for seismic accelerations. A seismic site class is used to classify a site according to specific site soil conditions. The Site Class accounts for the effect of local soil conditions on the ground motion and shall be based on the types of soils present and their engineering properties. The Seismic Site Class is designated by letters A through E. These letter designations are based on specific in-situ soil properties within the upper 100 feet of the soil stratum

and can be chosen based on one of the following methods including: a direct measurement of the soil shear wave velocity or correlation based on weighted averages of the Standard Penetration Data and/or Soil Undrained Shear Strength values. For the subject site, the Seismic Site Class was evaluated by SPT N-values.

Seismic Design Parameters are determined based on the Seismic Site Class, the structure Risk Category and the Earthquake accelerations to an earthquake with a 2 percent Probability of Exceedance (PE) over a 50-year exposure period (i.e., a 2,475-year design earthquake). The 2,475-year design earthquake has a Moment Magnitude (M_w) of 7.7 and a Modified Peak Ground Acceleration (PGAM) of 0.14g as determined from data provided by IBC 2015 and the United States Geological Survey (USGS) National Seismic Hazard Mapping Project.

Based on the procedures outlined in IBC 2015 and the results of our subsurface exploration, a Site Class C should be used for foundation design. Seismic design parameters, as determined from IBC 2015, are presented in Table 4.1.

Table 4.1 – Seismic Design Parameters

Site Class	C
F_A	1.60
F_V	2.38
F_{PGA}	1.60
S_S	0.19
S_1	0.12
PGA	0.09
PGA_M	0.14
S_{DS}	0.21
S_{D1}	0.17

4.7 CONCRETE SLABS

If subgrade soils are properly compacted as described in this report, then a modulus of subgrade reaction (k) of 200 pounds per cubic inch (pci) may be used for floor slab design. Given the subgrade has been properly compacted and inspected, a minimum of 4-inch-thick layer of free-draining compacted granular aggregate should be placed beneath the proposed floor slab. The compacted aggregate will provide a better load distribution from the floor slab to the soil, and it will provide additional protection against the migration of moisture upward through the floor slab.

4.8 PAVEMENT DESIGN

Areas that are proposed to be paved must have stable subgrades and sufficient soil strength in order for the pavement to perform satisfactorily. The following pavement recommendations given below are based on the assumptions that: proof-rolling activities have taken place to delineate soft and unsuitable soils; pavement subgrade soils have been compacted to at least 95 percent of the soil's standard maximum dry density or have been lime modified as recommended in this report. The subgrade soils should not be allowed to pond water or become rutted. Proper daily site subgrade maintenance will be required to properly maintain the subgrade soils.

All pavement materials should conform to and be placed/compacted in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, current edition.

4.8.1 Flexible (Asphalt) Pavement Design

Lime modified soils or approved soils within range of optimum moisture content should have a minimum equivalent California Bearing Ratio (CBR) value of 4.0 for design.

4.8.2 Standard Duty Pavement – Asphalt

- 1.5" Compacted Depth Hot Mix Asphalt Surface Course
- 2.5" Compacted Depth Hot Mix Asphalt Binder Course
- 6.0" Compacted Aggregate Base Course

4.8.3 Moderate Duty Pavement – Asphalt

- 1.5" Compacted Depth Hot Mix Asphalt Surface Course
- 3.5" Compacted Depth Hot Mix Asphalt Binder Course
- 8.0" Compacted Aggregate Base Course

4.8.4 Rigid (Concrete) Pavements

For the native, untreated subgrade soils, a modulus of subgrade reaction (k) of 200 pci may be used for rigid pavement design. Concrete pavements should be supported on at least 6 inches of clean granular material to reduce pumping at the joints.

Typical concrete paving section should be at least 6-inches in thickness for standard duty roadway/parking areas and 8-inches for dumpster pad and heavy-duty areas.

In areas where concrete is subject to higher rates of freeze/thaw, a minimum concrete strength of 4,000 pound per square inch (psi) is recommended. Site plans should include thickened slabs at entrances and dumpster pads.

All parking lot subgrade should be proof-rolled in the presence of a geotechnical engineer prior to any fill or granular backfill placement.

4.9 GENERAL SITE PREPARATION RECOMMENDATIONS

4.9.1 Clearing / Grubbing / Stripping

The subject site should be cleared, stripped, and grubbed of topsoil/organics, old footings/foundations, basement walls/floors, historic septic systems, asphalt, deleterious materials, and soft/unsuitable soils. Any extensive soft soil deposits encountered should be evaluated by extensive proof rolling and/or shallow excavations to determine the amount of undercutting required. Under no circumstances should the stripped material (i.e., old fill, trees, topsoil) be used as fill for any excavations, low-lying areas, or for any subsurface structural element.

4.9.2 Subgrade Preparation

After stripping and clearing, the areas intended to support floor slabs, new fill, and pavements should be carefully inspected by qualified geotechnical personnel. Soft soils, characterized by blow counts of 4 bpf or less, were encountered at the surface of boring B-4, extending about 3

feet bgs. Any soft or unsuitable soils should be undercut and replaced with properly compacted engineered fill. Competent geotechnical personnel should be present during any undercutting activities to determine when adequate subgrade bearing has been achieved.

The site subgrade should be proof rolled in the presence of competent geotechnical personnel. Proof-rolling activities should occur after a suitable period of dry weather to avoid degrading the subgrade. Proof-rolling should be performed by making repeated passes over the subgrade with a 20 to 30-ton loaded truck or other pneumatic-tired vehicle of similar size and weight. The vehicle should make enough passes in each of two perpendicular directions covering the proposed development area.

Any areas judged to deflect excessively during, proof rolling should be undercut and rerolled. This process should be repeated until all soft soils are removed, or the geotechnical engineer recommends an alternate stabilization method such as lime or cement stabilization.

Any proof rolling activities should occur immediately before fill placement. If fill material is not immediately placed and subgrade can stand unprotected, then additional proof-rolling activities will be required in the same area to verify subgrade stability.

It is important to note that at the end of each day or prior to any rainfall events that the site subgrade be smoothed and rolled to minimize any surface water infiltration. The site grading should always provide for positive site drainage away from the project site even during construction activities. Surface water / storm water should not be allowed to pond on the surface or in tire ruts.

4.9.3 Engineered Fill Placement

Prior to any fill activities taking place, we recommend that representative samples of the proposed fill material be collected (minimum 5-gallon container of material) and tested to determine the laboratory compaction characteristics, plasticity, and natural moisture contents. The tests should be conducted to determine the suitability of the proposed fill material. Based on the subsurface data obtained, the in-situ soils should be acceptable for use as engineered fill material once stripped of topsoil / organics and rootballs.

Proposed fill materials should be free of organics, deleterious debris, or rocks larger than 3 inches in diameter. Suitable fill soil should have a plasticity index (PI) of less than 30 and a maximum dry density according to the standard Proctor compaction test of at least 100 pounds per cubic foot (pcf). All fill soils and fill pads should be properly compacted and tested.

The fill should be compacted to at least 98 percent of the soil maximum dry density (ASTM D-698 "Standard Proctor") under structures, building slabs and proposed paved areas. Fill materials in lawn area should be compacted to at least 92 percent of the soil's maximum dry density. The moisture contents of the fill materials should be maintained to within ± 2 percent of the soil's optimum.

The soil should be placed in lifts of 8 inches or less for materials compacted by heavy equipment and not more than 4 inches loose depth for hand compaction equipment. Each lift should be compacted and tested by nuclear density gauge methods prior to placing additional lifts every 2,500 square feet. All fill pads should extend laterally at least 10 feet beyond the building before sloping down. In-place density testing should be conducted for each lift placed to check the compaction achieved.

Positive surface drainage should be maintained to prevent water from ponding on the surface during all earthwork operations. After each day's work or prior to any anticipated rainfall, the subgrade should be rolled with a rubber-tired or steel-drummed roller to improve surface runoff. The geotechnical engineer should be notified if the subgrade soils become excessively wet, dry, or frozen.

Extremely large tire loadings are typically present on construction sites from dump trucks, concrete trucks, masonry block and brick/masonry block forklifts (Pettybone). The tire loadings from these vehicles are usually the most significant concentrated loadings that the soil subgrades will most likely be encountered. In many cases these tire loadings will exceed the overall shear strength of the in-situ soils or recently placed engineered fill and rutting and pumping will occur as a result. This is especially true during repeated heavy tire loadings occur when the soil subgrade is wet or above its optimum moisture content. It is important that the site subgrade be properly maintained by the contractor for the extent of the entire project. The site should not be allowed to become rutted, or water allowed to pond.

4.9.4 Shallow Foundation Excavations

BFW should observe all footing and floor slab excavations for areas of soft or otherwise unsuitable soils. If the footings excavation become overly disturbed, remediation will be required. Over excavation and replacement with structural fill should be performed where inadequate bearing materials are present in footing excavations.

The base of all excavations should be clean, free of loose soil or uncompacted fill, relatively dry and maintained near their optimum moisture content. Excavations should be protected from extreme temperatures, precipitation, and construction disturbances. To reduce the possibility of desiccation or saturation of the foundation soils, we recommend that the concrete be placed as soon as possible after excavations are made.

4.9.5 Surface Water Control

Surface water should not be allowed to pond on the building subgrade surfaces. This is especially true during construction activities. Proper erosion and sedimentation control plans must be developed as per the City and State requirements.

4.10 OTHER DESIGN CONSIDERATIONS

4.10.1 Project Specifications

Specifications for this project should meet local building codes and OSHA guidelines. The observations, recommendations, and considerations presented in this report should be fully read and understood by the owner, project designer(s) and contractor(s) prior to final submittal of project plans and specifications.

4.10.2 Construction Monitoring

The implementation of a soil and concrete quality testing program aids in assuring that the product is that which was designed. Thorough testing also allows opportunity for correction before major problems develop. For these reasons, Bacon Farmer Workman Engineering & Testing, Inc. (BFW), recommends the retainage of a qualified testing laboratory (by the Owner) to conduct quality tests on structural fill, aggregate base course, and concrete placement.

5. QUALIFICATIONS OF RECOMMENDATIONS

Our evaluation of foundation and pavement design and construction conditions has been based on our understanding of the site and on conditions encountered in fifteen (15) borings at the time of investigation. The general subsurface conditions used were based on our interpolation of the subsurface data. Regardless of the thoroughness of a subsurface investigation, there is the possibility that conditions will differ from those at the boring locations, that conditions are not as anticipated by the designers, or that the construction process has altered the soil conditions. Therefore, experienced geotechnical engineers should observe earthwork and foundation construction to confirm that the conditions anticipated in design are noted. Otherwise, BFW assumes no responsibility for construction compliance with the design concepts, specifications, or recommendations.

The design recommendations in this report have been developed based on the previously described project characteristics and subsurface conditions. If project criteria or locations change, a qualified geotechnical engineer should be permitted to determine whether the recommendations must be modified. The findings of such a review will be presented in a supplemental report.

The nature and extent of variations between the borings may not become evident until the course of construction. If such variations are encountered, it will be necessary to reevaluate the recommendations of this report after on-site observations of the conditions.

Our professional services have been performed, our findings derived, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied. BFW is not responsible for the conclusions, opinions, or recommendations of others based on this data.

Appendix A
Aerial Photograph & Site Plan

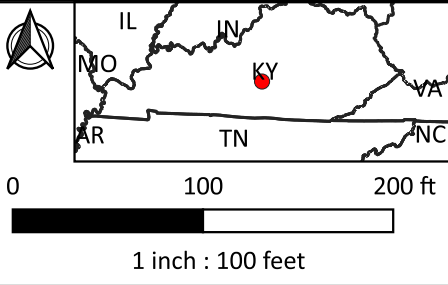


Figure A.1 - Aerial Photograph

Campbellsville EOC
Campbellsville, Taylor County, KY

Project Number:	Drafted/Checked:	Date:
24146	HK/SL	2024-08-21



Locations

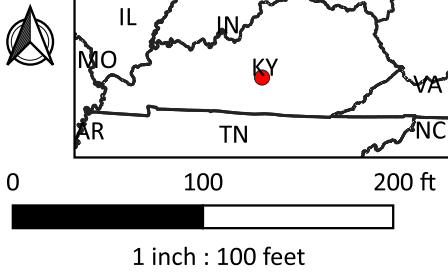


Figure A.2 - Site Plan		
Campbellsville EOC Campbellsville, Taylor County, KY		
Project Number: 24146	Drafted/Checked: HK/SL	Date: 2024-08-21



Appendix B

Subsurface Boring Logs

BORING LOG / LABORATORY PROCEDURE GUIDE

SUBSURFACE EXPLORATION

Bacon Farmer Workman Engineering & Testing, Inc., conducts soil test borings, field sampling and laboratory analysis in general accordance with methods of the American Society for Testing Materials (ASTM) and generally accepted engineering practices. Soil test borings were advanced with truck or track mounted rotary-type drilling rig equipment. Hollow stem or solid flight augers were used to advance soil test borings (ASTM D 1452). A series of soil samples are typically obtained for visual inspection and laboratory analysis during drilling activities. The samples collected may include disturbed, undisturbed or auger cutting samples.

BORING LOCATIONS / ELEVATIONS

Boring Locations are either selected by our project manager or have been selected by the client. The borings are typically located in the field by estimating right angles and measuring distances from site landmarks. Because of the locating methods used, the boring locations indicated on the Boring Location Plan (In Appendix) are approximate unless specifically noted. When topographic plans of the site are provided, the project engineer estimates the surface elevation of the boring locations using available information. Surveying to determine the locations and elevations of the borings is typically beyond the scope of the typical geotechnical study. Therefore, the boring locations and elevations should be considered approximate unless specifically noted.

BORING LOGS / RECORDS

The Subsurface Boring Logs included in this report are our interpretation of the conditions encountered at each boring location. The Subsurface Boring Logs are prepared on the basis of the field crew's observations during drilling, engineering review of the soil samples obtained, and laboratory testing on selected samples. Soil descriptions are made using the Unified Soil Classification System and ASMT D 2488 as guides. The depths designating strata changes on the Boring Records are estimations. In many geologic settings, the transition between strata is gradual.

GROUNDWATER LEVEL READINGS

Groundwater levels are monitored in each borehole upon the completion of drilling. In low permeability soils such as silts and clays, the groundwater level in the boreholes may take several or more hours to stabilize. Therefore, when possible, water level readings are also made at least 24-hours after drilling activities cease. Groundwater levels may be dependent upon recent rainfall activity and other site specific factors. Since these conditions may change with time, the water level information presented on the Subsurface Boring Logs represents the conditions only at the time each measurement is taken.

SAMPLING TECHNIQUES

Soil samples are typically obtained at selected depths during the drilling activities. Representative portions of the soil samples obtained are placed in sealed containers, labeled, and transported to the laboratory. The soil samples obtained are used for visual classification, and for strength, index and consistency testing. Samples obtained from the drilling activities include: Disturbed, undisturbed and bulk samples. Disturbed samples are collected during the Standard Penetration Tests using a split spoon sampler and hammer as described in the following section. Undisturbed samples are obtained by advancing a thin-walled Shelby tube with hydraulic pressure as described in the following section. Bulk samples are obtained from the auger cuttings generated during the advancement of the augers.

The **STANDARD PENETRATION TEST (ASTM D 1586)** is a method to obtain disturbed soil samples for examination and testing and to obtain relative density and consistency information. A standard 1.4-inch I.D. / 2-inch O. D. split-barrel (split spoon) sampler is driven three 6-inch increments with a 140 lb. hammer falling 30 inches. The hammer can either be of a trip, free-fall design or actuated by a rope and cathead. The hammer blows required to drive the sampler the final foot is the *standard penetration resistance (N-value)*. Standard penetration resistance, when properly evaluated, is an index to the soil's strength, consistency and density. Upon completion of each standard penetration test, the sampler is brought to the surface and the tube is split open to expose the soils penetrated. Our project manager / engineer examines the soil and places a representative portion of the soil into a sealed container for transportation to our laboratory.

BORING LOG / LABORATORY PROCEDURE GUIDE (Continued)

UNDISTURBED SOIL SAMPLING (ASTM D 1587) is a method used to obtain a relatively undisturbed soil sample for more precise laboratory analysis including unconfined compressive strengths, compressibility or permeability. Undisturbed soil sampling is conducted by advancing a 3-inch O. D., 16 gauge, steel tube (Shelby Tube) with a sharpened edge slowly and uniformly into the underlying soil stratum under constant hydraulic pressure to the desired sampling elevation. The tube is then removed from the ground and both ends are sealed to prevent loss of moisture. The depth at which the undisturbed samples were collected is indicated on the Subsurface Boring Logs.

SOIL LABORATORY TESTS

The **MOISTURE CONTENT (ASTM D 2216)** of soils is an indicator of various physical properties, including strength and compressibility. Each test sample is weighed and then placed in an oven ($110^{\circ}\text{C} \pm 5^{\circ}\text{C}$). The sample remains in the oven until the free moisture has evaporated. The dried sample is removed from the oven, allowed to cool and then reweighed. The moisture content is computed by dividing the weight of evaporated water by the weight of the dry sample. The results are expressed as a percent.

ATTERBERG LIMITS (ASTM D 4318) tests are used to help define the relationship between behavior changes in fine-grained soils at different moisture contents values. Depending upon the moisture content, a fine-grained soil may occur in a liquid, plastic, semi-solid, or solid state. These set of tests are used to establish the approximate moisture contents at which the soil changes its state. **LIQUID LIMIT** – a soil specimen is wetted until it is in a viscous fluid state. A portion of the soil is then placed in a standardized dimension brass cup, and a groove is made through the middle of the soil specimen with a grooving tool of standardized dimensions. The cup is attached to a cam that lifts it 10 mm, and then allows it to freefall and strike a hard rubber base. The cam is rotated at about 2 drops per second until the two halves of the soil specimen come in contact at the bottom of the groove along a distance of 13 mm. The number of blows required to close the groove is recorded, and a portion of the specimen is subjected to moisture content determination. Additional water is added to the remainder of the specimen, and the grooving process and cam action process repeated. After the third trial, the number of blows versus moisture content is plotted on semi-logarithmic graph paper. The moisture content corresponding to 25 blows is designated as the Liquid Limit.

The **Plastic Limit** is the lowest moisture content at which the soil is sufficiently plastic to be manually rolled into threads 3 mm in diameter. It is determined by taking a pat of soil remaining from the liquid limit test, and repeatedly rolling, kneading, and air drying the specimen until the soil breaks into threads about 3 mm in diameter and 3 to 10 mm long. The moisture content of these soil threads is then determined, and is designated the Plastic Limit.

A **PARTICLE SIZE ANALYSIS** determines the distribution of particles sizes in soils. Distribution of particle sizes larger than the No. 200 sieve is determined by the sieving process, while the distribution of particles smaller than the No. 200 sieve are determined by a sedimentation process, using a hydrometer. In the sieving process the soil is prepared by air drying and crushing, to separate clusters that clump together. A series of sieves, that consist of a square mesh woven-wire cloth having different size openings as per ASTM specifications are each weighed individually. They are stacked with the greatest size opening at the top with each successive lower sieve having smaller openings. A pan is placed on the bottom of the stack to catch soil finer than the # 200 sieve (0.75 mm). The soil is placed into the top sieve of the stack and is covered. The nest of sieves is placed and locked into a sieve shaker which is then agitated for approximately 10 minutes. Each sieve is reweighed with the retained soil. A semi-logarithmic graph is created showing the percent passing each specific sieve size.

The **UNCONFINED COMPRESSIVE STRENGTH TEST, (ASTM D 2166)** is a relatively quick method to obtain the approximate compressive strength of soils that possess sufficient cohesion to allow testing in the unconfined state. An undisturbed sample is obtained from the borehole with a Shelby Tube sampler. The tube is sealed in the field to retain natural moisture content. Once in the laboratory the undisturbed sample is extruded from the tube and cut to a specified length. The sample measurements are recorded. The sample is placed in its natural state in a compressive strength load frame. The sample is compressed under increasing load. Measurements of the load applied and the sample strain are recorded. Upon specimen failure the test is concluded and a graph of stress versus strain is plotted. The maximum stress applied is defined as the unconfined compressive strength.

Subsurface Boring Log Legend

Standard Penetration Test (N-Value Tables)

Fine Grained Soils (Silts & Clays)		
<u>N</u>	<u>Consistency</u>	<u>Qu, (tsf) Estimate Only</u>
0 - 1	Very Soft	0 - 0.25
2 - 4	Soft	0.25 - 0.5
5 - 8	Firm	0.5 - 1.0
9 - 15	Stiff	1.0 - 2.0
16 - 30	Very Stiff	2.0 - 4.0
Over 30	Hard	> 4.0

Coarse Grained Soils (Sands & Gravels)	
<u>N</u>	<u>Relative Density</u>
0 - 4	Very Loose
5 - 10	Loose
11 - 20	Firm
21 - 30	Very Firm
31 - 50	Dense
Over 50	Very Dense

Particle Sizes

Boulders	Greater than 300 mm (12 in)
Cobbles	75 mm to 300 mm (3 to 12 in)
Gravel	4.74 mm to 75 mm (3/16 to 3 in)
Coarse Sand	2 mm to 4.75 mm
Medium Sand	0.425 mm to 2 mm
Fine Sand	0.075 mm to 0.425 mm
Silts & Clays	Less than 0.075 mm

Relative Proportions

<u>Descriptive Term</u>	<u>Percent</u>
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

Boring Log Symbols / Abbreviations

N:	Blows per foot of a 140 lb. hammer falling 30-inches on a 2 inch O. D. split spoon
Qp:	Unconfined compressive strength, hand penetrometer, tsf
Qu:	Unconfined compressive strength, Shelby tube sample, ksf
Mc:	Percent of water in sample (%)
Dd:	Sample Dry Density, pcf
LL:	Liquid Limit
PL:	Plastic Limit
PI:	Plasticity Index
-# 200:	Percent of sample passing a # 200 sieve (0.075mm)
-#4:	Percent of sample passing a # 4 sieve



Bacon Farmer Workman Engineering & Testing, Inc.
500 S 17th St
Paducah, KY 42003
Telephone: 270-443-1995

BORING NUMBER B-1

PAGE 1 OF 1

CLIENT Integrity Architecture

PROJECT NAME Campbellsville EOC

PROJECT NUMBER 24146

PROJECT LOCATION Campebellsville, KY

DATE STARTED 7/19/24

COMPLETED 7/19/24

GROUND ELEVATION 846 ft

HOLE SIZE 6.25 inches

DRILLING CONTRACTOR MDI

DRILLED BY JT

GROUND WATER LEVELS:

AT TIME OF DRILLING ---

DRILLING METHOD Hollow Stem Auger (CME-550)

AT END OF DRILLING ---

LOGGED BY JT

CHECKED BY S. Livingstone

AFTER DRILLING ---

LATITUDE 37.3114085

LONGITUDE -85.3527257

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
								○ FINES CONTENT (%) ○			
								20	40	60	80
2.5		LEAN CLAY (CL): Pale brown and light gray, with silt	SPT SS-1	100	2-2-3 (5)						
5.0		With chert	ST ST-1	79							
7.5			SPT SS-2	100	4-4-4 (8)						
10.0		Yellowish brown, with chert and sand	SPT SS-3	100	7-13-12 (25)						

Refusal at 10.5 feet.
Bottom of borehole at 10.5 feet.



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500 S 17th St
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Telephone: 270-443-1995

BORING NUMBER B-2

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/19/24	COMPLETED	7/19/24
GROUND ELEVATION	846 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
GROUND WATER LEVELS:			
DRILLING METHOD	Hollow Stem Auger (CME-550)	AT TIME OF DRILLING	---
LOGGED BY	JT	AT END OF DRILLING	---
CHECKED BY	S. Livingstone	AFTER DRILLING	---
LATITUDE	37.3112294		
LONGITUDE	-85.3526683		

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
		LEAN CLAY (CL): Pale brown, with silt									
2.5			SPT SS-1	100	2-2-3 (5)						
		Reddish brown, trace chert									
5.0			SPT SS-2	94	2-2-4 (6)						
		Brownish yellow									
7.5			SPT SS-3	100	5-7-9 (16)						
		With chert									
10.0			SPT SS-4	94	6-10-11 (21)						

Refusal at 11.5 feet.
Bottom of borehole at 11.5 feet.

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500 S 17th St
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Telephone: 270-443-1995

BORING NUMBER B-3

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/18/24	COMPLETED	7/18/24
GROUND ELEVATION	847 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
DRILLING METHOD	Hollow Stem Auger (CME-550)	GROUND WATER LEVELS:	
LOGGED BY	JT	AT TIME OF DRILLING	---
CHECKED BY	S. Livingstone	AT END OF DRILLING	---
LATITUDE	37.3115208	AFTER DRILLING	---
LONGITUDE	-85.3522754		

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
		LEAN CLAY (CL): Brownish gray, with silt									
2.5			SPT SS-1	83	2-2-3 (5)						
		Pale gray									
5.0			SPT SS-2	100	3-4-5 (9)						
		Reddish brown									
7.5			SPT SS-3	100	5-5-6 (11)						
		Brownish yellow									
10.0			SPT SS-4	100	6-8-13 (21)						
		With chert									

Refusal at 11.0 feet.
Bottom of borehole at 11.0 feet.

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500 S 17th St
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Telephone: 270-443-1995

BORING NUMBER B-4

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/18/24	COMPLETED	7/18/24
GROUND ELEVATION	848 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
GROUND WATER LEVELS:			
DRILLING METHOD	Hollow Stem Auger (CME-550)	AT TIME OF DRILLING	---
LOGGED BY	JT	AT END OF DRILLING	---
CHECKED BY	S. Livingstone	AFTER DRILLING	---
LATITUDE	37.3113418		
LONGITUDE	-85.352218		

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
		LEAN CLAY (CL): Yellowish brown, with silt									
2.5			SPT SS-1	78	2-2-2 (4)						
		Reddish brown									
5.0			SPT SS-2	94	2-5-6 (11)						
7.5			ST ST-1	88							
		Brownish yellow, trace silt, trace organics									
10.0			SPT SS-3	100	4-5-8 (13)						
		With chert									

Refusal at 12.0 feet.
Bottom of borehole at 12.0 feet.

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Paducah, KY 42003
Telephone: 270-443-1995

BORING NUMBER B-5

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/18/24	COMPLETED	7/18/24
GROUND ELEVATION	849 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
DRILLING METHOD	Hollow Stem Auger (CME-550)	GROUND WATER LEVELS:	
LOGGED BY	JT	AT TIME OF DRILLING	---
CHECKED BY	S. Livingstone	AT END OF DRILLING	---
LATITUDE	37.3117174	AFTER DRILLING	---
LONGITUDE	-85.3521518		

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
		LEAN CLAY (CL): Pale brownish gray, with silt						○ FINES CONTENT (%) ○			
								20	40	60	80
2.5			SPT SS-1	83	5-5-6 (11)						
5.0			SPT SS-2	94	4-5-6 (11)						
		Reddish brown, trace silt									
7.5			SPT SS-3	83	5-7-8 (15)						
		FAT CLAY (CH): Reddish brown, trace silt									
10.0			ST ST-1	75							
		With chert									

Refusal at 11.0 feet.
Bottom of borehole at 11.0 feet.



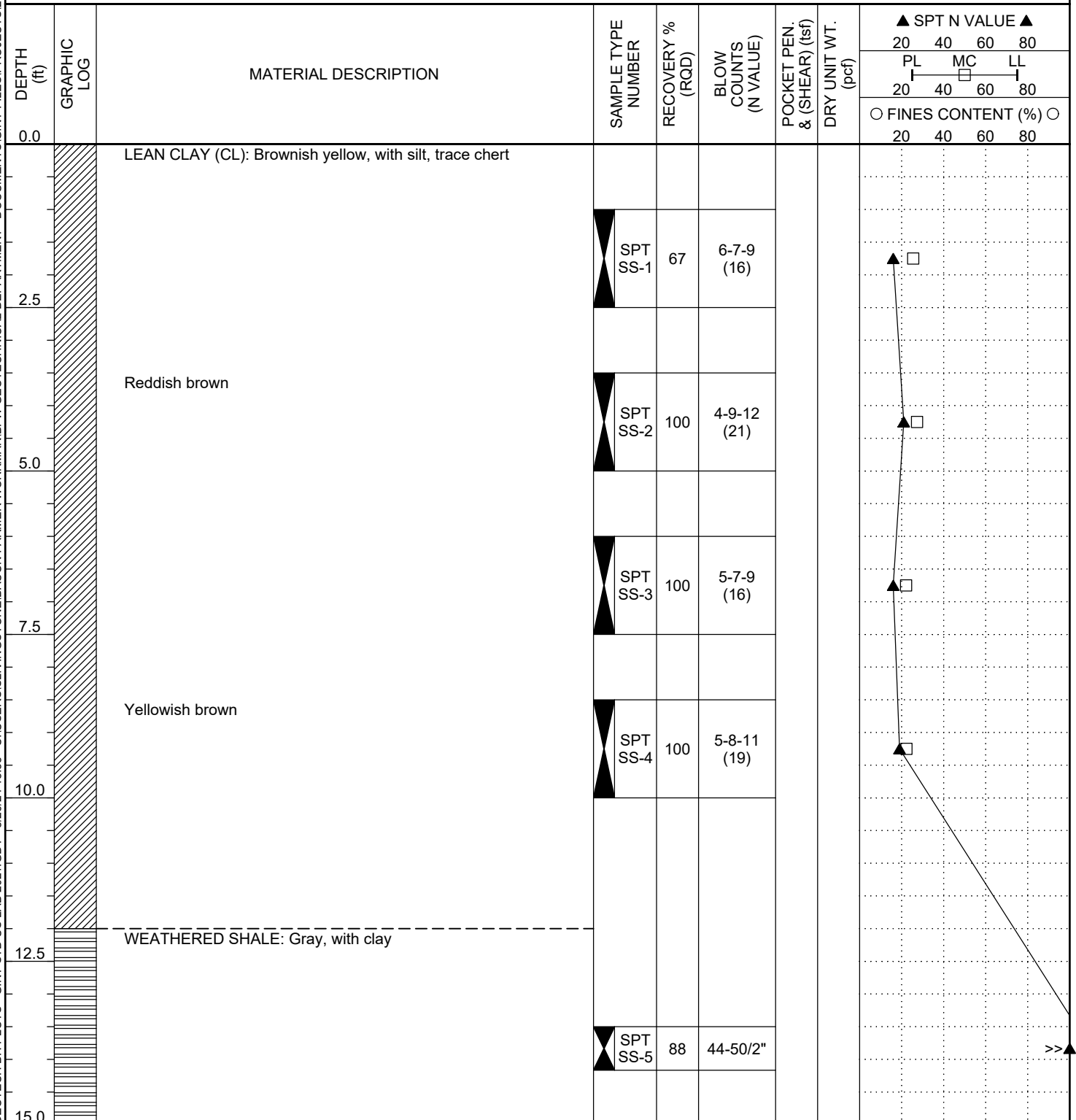
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Telephone: 270-443-1995

BORING NUMBER B-6

PAGE 1 OF 1

CLIENT Integrity Architecture PROJECT NAME Campbellsville EOC
PROJECT NUMBER 24146 PROJECT LOCATION Campebellsville, KY
DATE STARTED 7/18/24 COMPLETED 7/18/24 GROUND ELEVATION 849 ft HOLE SIZE 6.25 inches
DRILLING CONTRACTOR MDI DRILLED BY JT GROUND WATER LEVELS:
DRILLING METHOD Hollow Stem Auger (CME-550) AT TIME OF DRILLING ---
LOGGED BY JT CHECKED BY S. Livingstone AT END OF DRILLING ---
LATITUDE 37.3116051 LONGITUDE -85.3519444 AFTER DRILLING ---

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BORING NUMBER B-7

PAGE 1 OF 1

CLIENT Integrity Architecture

PROJECT NAME Campbellsville EOC

PROJECT NUMBER 24146

PROJECT LOCATION Campebellsville, KY

DATE STARTED 7/18/24

COMPLETED 7/18/24

GROUND ELEVATION 849 ft

HOLE SIZE 6.25 inches

DRILLING CONTRACTOR MDI

DRILLED BY JT

GROUND WATER LEVELS:

AT TIME OF DRILLING ---

DRILLING METHOD Hollow Stem Auger (CME-550)

AT END OF DRILLING ---

LOGGED BY JT

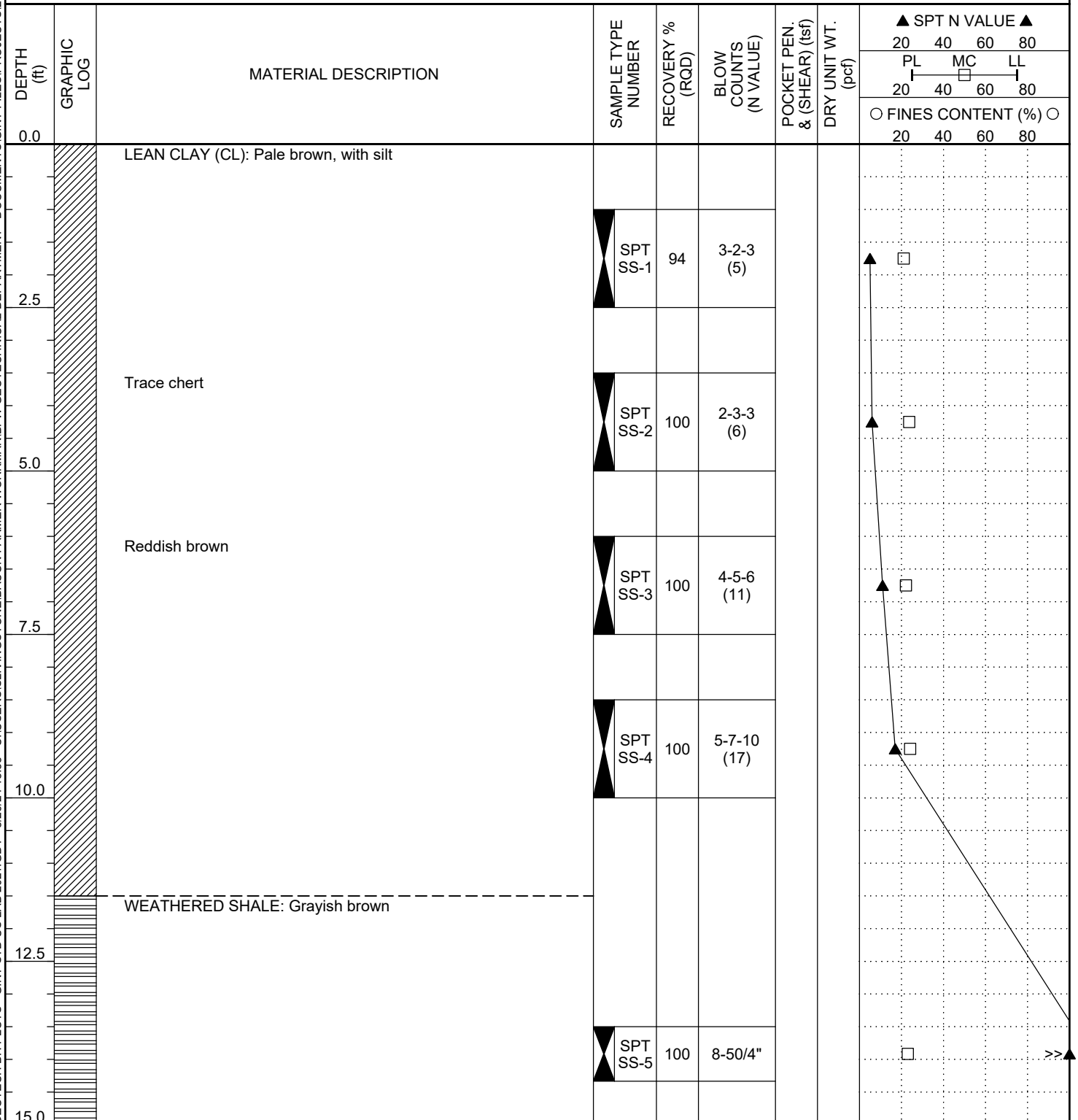
CHECKED BY S. Livingstone

AFTER DRILLING ---

LATITUDE 37.311433

LONGITUDE -85.3518737

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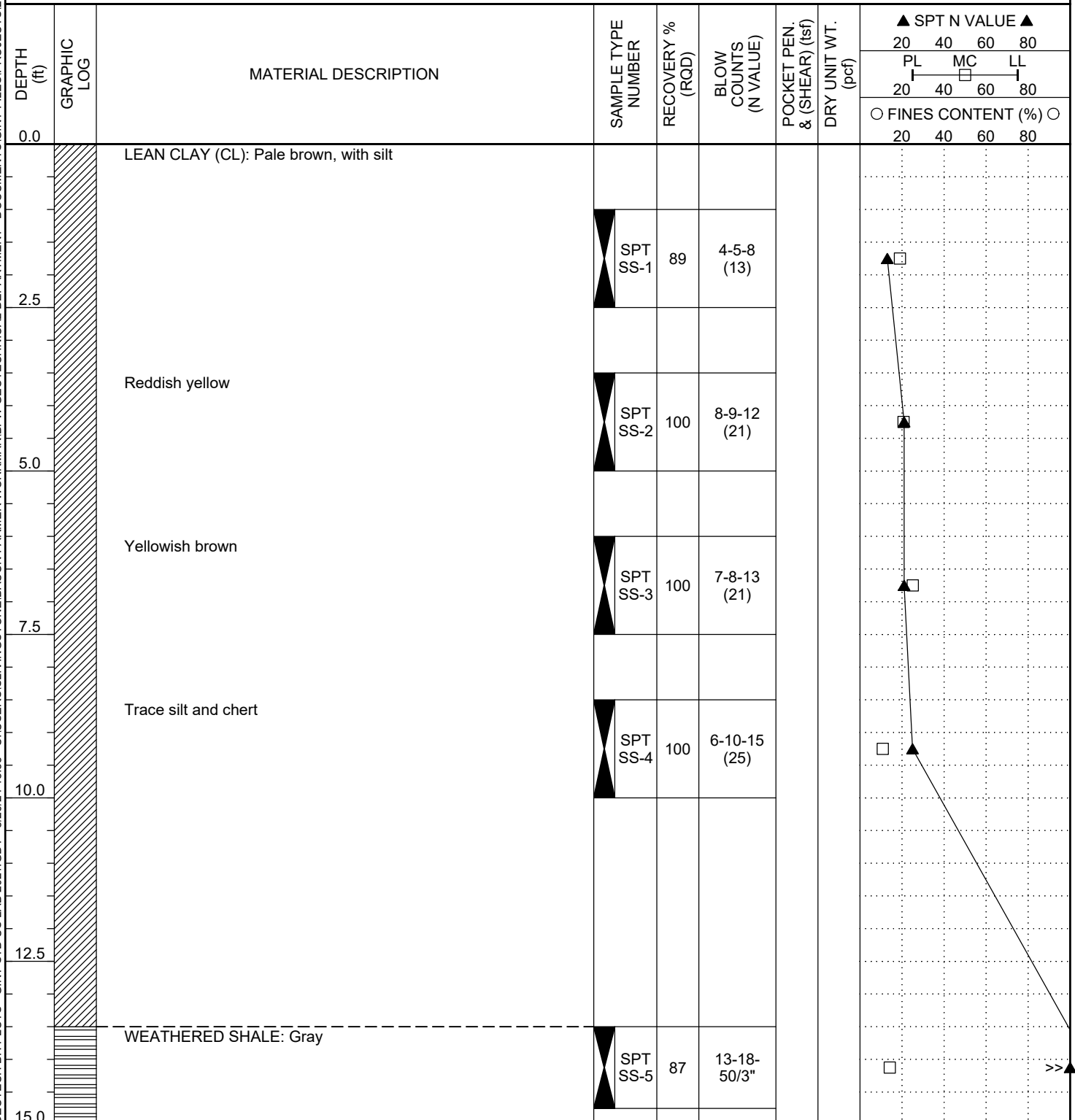
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BORING NUMBER B-8

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/18/24	COMPLETED	7/18/24
GROUND ELEVATION	849 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
DRILLING METHOD	Hollow Stem Auger (CME-550)	GROUND WATER LEVELS:	
LOGGED BY	JT	AT TIME OF DRILLING	---
CHECKED BY	S. Livingstone	AT END OF DRILLING	---
LATITUDE	37.3117174	AFTER DRILLING	---
LONGITUDE	-85.3517193		

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Bottom of borehole at 15.0 feet.



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BORING NUMBER B-9

PAGE 1 OF 1

CLIENT Integrity Architecture

PROJECT NAME Campbellsville EOC

PROJECT NUMBER 24146

PROJECT LOCATION Campebellsville, KY

DATE STARTED 7/18/24

COMPLETED 7/18/24

GROUND ELEVATION 848 ft

HOLE SIZE 6.25 inches

DRILLING CONTRACTOR MDI

DRILLED BY JT

GROUND WATER LEVELS:

AT TIME OF DRILLING ---

DRILLING METHOD Hollow Stem Auger (CME-550)

AT END OF DRILLING ---

LOGGED BY JT

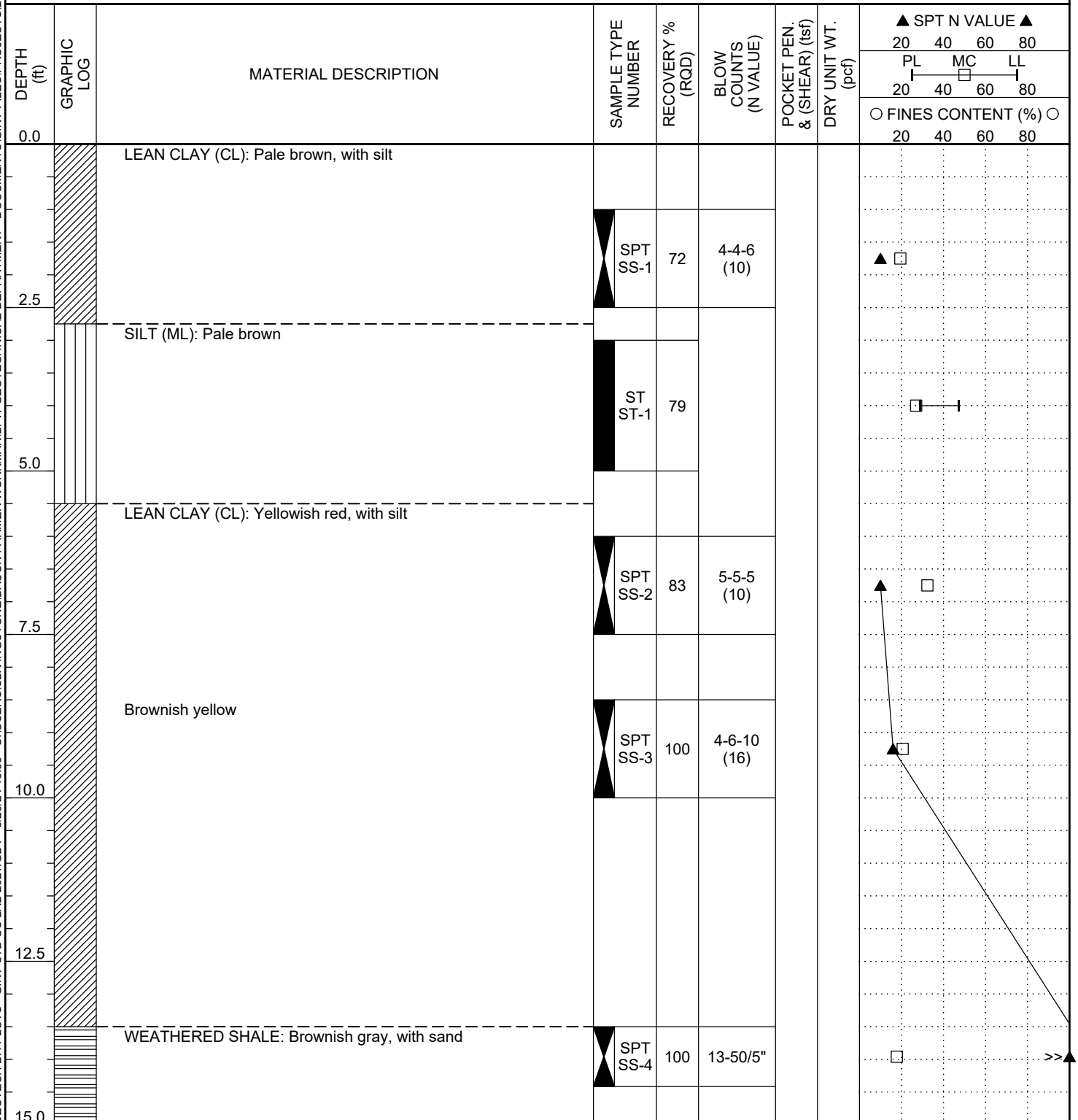
CHECKED BY S. Livingstone

AFTER DRILLING ---

LATITUDE 37.3114506

LONGITUDE -85.3516221

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BORING NUMBER B-10

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/19/24	COMPLETED	7/19/24
GROUND ELEVATION	845 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
GROUND WATER LEVELS:			
DRILLING METHOD	Hollow Stem Auger (CME-550)	AT TIME OF DRILLING	---
LOGGED BY	JT	AT END OF DRILLING	---
CHECKED BY	S. Livingstone	AFTER DRILLING	---
LATITUDE	37.3118824		
LONGITUDE	-85.3527389		

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
								○ FINES CONTENT (%) ○			
								20	40	60	80
		LEAN CLAY (CL): Yellowish brown, with silt									
2.5			SPT SS-1	89	3-3-4 (7)						
		Light gray									
5.0			SPT SS-2	100	2-3-4 (7)						
		Brown, with chert									
7.5			SPT SS-3	89	4-10-12 (22)						

Refusal at 8.5 feet.
Bottom of borehole at 8.5 feet.



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BORING NUMBER B-11

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/18/24	COMPLETED	7/18/24
GROUND ELEVATION	847 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
GROUND WATER LEVELS:			
DRILLING METHOD	Hollow Stem Auger (CME-550)	AT TIME OF DRILLING	---
LOGGED BY	JT	AT END OF DRILLING	---
CHECKED BY	S. Livingstone	AFTER DRILLING	---
LATITUDE	37.3115068		
LONGITUDE	-85.3531803		

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲
								20 40 60 80
								PL MC LL
0.0								20 40 60 80
		LEAN CLAY (CL): Yellowish brown, with silt						○ FINES CONTENT (%) ○
								20 40 60 80
2.5			SPT SS-1	94	4-5-5 (10)			
		Pale brown and gray						
			SPT SS-2	100	6-8-8 (16)			
5.0								

Bottom of borehole at 5.0 feet.



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BORING NUMBER B-12

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/19/24	COMPLETED	7/19/24
GROUND ELEVATION	845 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
GROUND WATER LEVELS:			
DRILLING METHOD	Hollow Stem Auger (CME-550)	AT TIME OF DRILLING	---
LOGGED BY	JT	CHECKED BY	S. Livingstone
AT END OF DRILLING			---
LATITUDE	37.3116367	LONGITUDE	-85.3526683
AFTER DRILLING			---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
								○ FINES CONTENT (%) ○			
								20	40	60	80
2.5		LEAN CLAY (CL): Pale brown, with silt	SPT SS-1	72	2-3-3 (6)						
		Trace sand	SPT SS-2	100	4-5-6 (11)						
5.0											

Bottom of borehole at 5.0 feet.



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BORING NUMBER B-13

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/18/24	COMPLETED	7/18/24
GROUND ELEVATION	849 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
GROUND WATER LEVELS:			
DRILLING METHOD	Hollow Stem Auger (CME-550)	AT TIME OF DRILLING	---
LOGGED BY	JT	AT END OF DRILLING	---
CHECKED BY	S. Livingstone	AFTER DRILLING	---
LATITUDE	37.3119807		
LONGITUDE	-85.3518473		

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
		LEAN CLAY (CL): Pale brown, with silt									
2.5			SPT SS-1	83	4-5-6 (11)						
		Brownish yellow									
5.0			SPT SS-2	83	2-2-2 (4)						

Bottom of borehole at 5.0 feet.

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BORING NUMBER B-14

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/19/24	COMPLETED	7/19/24
GROUND ELEVATION	846 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
GROUND WATER LEVELS:			
DRILLING METHOD	Hollow Stem Auger (CME-550)	AT TIME OF DRILLING	---
LOGGED BY	JT	CHECKED BY	S. Livingstone
AT END OF DRILLING			---
LATITUDE	37.311089	LONGITUDE	-85.3524387
AFTER DRILLING			---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
		LEAN CLAY (CL): Pale gray, with silt						○ FINES CONTENT (%) ○			
								20	40	60	80
2.5			SPT SS-1	100	2-2-2 (4)						
		Brownish yellow									
			SPT SS-2	100	3-3-3 (6)						
5.0											

Bottom of borehole at 5.0 feet.



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BORING NUMBER B-15

PAGE 1 OF 1

CLIENT	Integrity Architecture	PROJECT NAME	Campbellsville EOC
PROJECT NUMBER	24146	PROJECT LOCATION	Campebellsville, KY
DATE STARTED	7/18/24	COMPLETED	7/18/24
GROUND ELEVATION	847 ft	HOLE SIZE	6.25 inches
DRILLING CONTRACTOR	MDI	DRILLED BY	JT
GROUND WATER LEVELS:			
DRILLING METHOD	Hollow Stem Auger (CME-550)	AT TIME OF DRILLING	---
LOGGED BY	JT	CHECKED BY	S. Livingstone
AT END OF DRILLING			---
LATITUDE	37.3112154	LONGITUDE	-85.3518605
AFTER DRILLING			---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. & (SHEAR) (tsf)	DRY UNIT WT. (pcf)	▲ SPT N VALUE ▲			
								20	40	60	80
								PL	MC	LL	
0.0								20	40	60	80
		LEAN CLAY (CL): Pale brown, with silt									
2.5			SPT SS-1	100	2-2-2 (4)						
		Gray and yellowish red, trace chert									
5.0			SPT SS-2	100	1-2-3 (5)						

Bottom of borehole at 5.0 feet.

Appendix C

Soils Laboratory Test Results



ENGINEERING
& CONSULTING

Laboratory Testing Summary

Project Number:	24146
Project Name:	Campbellsville EOC
Date:	8/15/2024

Moisture Content

Depth (ft)	Min. %	Max. %
0.0 – 8.5	16.5	35.1
13.5 – 18.5	14.2	23.0

Atterberg Limits

Boring	Depth (ft)	LL	PL	PI	USCS
B-4	6.0	50	25	25	CL
B-5	8.0	58	28	30	CH
B-9	3.0	47	29	18	ML
B-10	1.0	39	24	15	CL

Unconfined

Boring	Depth (ft)	Strength (psf)	Strain %
B-4	6.0	2,910	3
B-5	8.0	4,430	4
B-9	3.0	5,620	3



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PAGE 1 OF 2

SUMMARY OF LABORATORY RESULTS

CLIENT Integrity Architecture

PROJECT NAME Campbellsville EOC

PROJECT NUMBER 24146

PROJECT LOCATION Campebellsville, KY

Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Classification	Water Content (%)	Dry Density (pcf)	Saturation (%)	Void Ratio
B-1	1.0							20.8			
B-1	6.0							20.6			
B-1	8.5							23.4			
B-2	1.0							25.8			
B-2	3.5							25.4			
B-2	6.0							24.1			
B-2	8.5							22.2			
B-3	1.0							21.8			
B-3	3.5							23.3			
B-3	6.0							25.0			
B-3	8.5							21.5			
B-4	1.0							26.1			
B-4	3.5							27.5			
B-4	6.0	50	25	25				31.1			
B-4	8.5							29.6			
B-5	1.0							22.2			
B-5	3.5							22.6			
B-5	6.0							27.0			
B-5	8.0	58	28	30				35.1			
B-6	1.0							25.5			
B-6	3.5							27.3			
B-6	6.0							22.1			
B-6	8.5							22.3			
B-7	1.0							21.0			
B-7	3.5							23.7			
B-7	6.0							22.1			
B-7	8.5							24.1			
B-7	13.5							23.0			
B-8	1.0							19.0			
B-8	3.5							20.7			
B-8	6.0							25.1			
B-8	8.5							10.8			
B-8	13.5							14.2			
B-9	1.0							19.5			
B-9	3.0	47	29	18				27.0			
B-9	6.0							32.4			
B-9	8.5							20.5			
B-9	13.5							17.8			
B-10	1.0	39	24	15				23.6			
B-10	3.5							22.7			
B-10	6.0							22.3			
B-11	1.0							19.4			
B-11	3.5							16.5			

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SUMMARY OF LABORATORY RESULTS

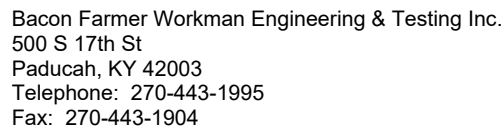
CLIENT Integrity Architecture

PROJECT NAME Campbellsville EOC

PROJECT NUMBER 24146

PROJECT LOCATION Campebellsville, KY

Borehole	Depth	Liquid Limit	Plastic Limit	Plasticity Index	Maximum Size (mm)	%<#200 Sieve	Class-ification	Water Content (%)	Dry Density (pcf)	Satur-ation (%)	Void Ratio
B-12	1.0							21.1			
B-12	3.5							19.9			
B-13	1.0							19.2			
B-13	3.5							32.3			
B-14	1.0							22.4			
B-14	3.5							23.0			
B-15	1.0							23.5			
B-15	3.5							31.5			

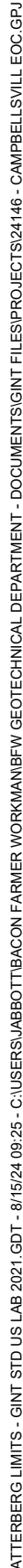


CLIENT Integrity Architecture

PROJECT NAME Campbellsville EOC

PROJECT NUMBER 24146

PROJECT LOCATION Campebellsville, KY

[illegible]



UNCONFINED COMPRESSION TEST

AASHTO: T-208

Page 1 of 2

Project Name : Campbellsville EOC			
Project # : 24146		Sample # : ST-1	
Project County :		Sample Loc. : Boring No. B-4	
Project State : Kentucky		Sample Depth : 6.0' to 8.0'	
Laboratory # : 10393461-006		Date Tested : 8/8/2024	
Submitted By : HDR		Date Reported : 8/13/2024	
Soil Type : N/A			
Wet Density : 120.7 pcf		Initial Height : 5.69 in	
Dry Density : 92.1 pcf		Initial Diameter : 2.85 in	
Moisture : 31.1 %		Proving Ring : #22734	

RESULTS:	Axial	Corrected	Unit	
	Load	Area	Strain	Stress
#	lbs	sf	%	Ksf
1	0.0	0.04	0.0	0.00
2	11.7	0.04	0.3	0.26
3	25.4	0.04	0.5	0.57
4	42.1	0.04	0.8	0.94
5	54.6	0.04	1.1	1.22
6	68.0	0.04	1.3	1.52
7	81.4	0.04	1.6	1.81
8	91.9	0.05	1.8	2.04
9	100.5	0.05	2.1	2.22
10	111.9	0.05	2.5	2.47
11	121.5	0.05	2.8	2.67
12	128.1	0.05	3.2	2.80
13	132.9	0.05	3.5	2.90
14	133.8	0.05	3.9	2.91
15	130.0	0.05	4.2	2.81
16	114.8	0.05	4.6	2.47
17	80.4	0.05	4.9	0.00



UNCONFINED COMPRESSION TEST

Page 2 of 2

Project Name : Campbellsville EOC

Project # : 24146

Project County :

Project State : Kentucky

Laboratory # : 10393461-006

Submitted By : HDR

Sample # : ST-1

Sample Loc. : Boring No. B-4

Sample Depth : 6.0' to 8.0'

Date Tested : 8/8/2024

Date Reported : 8/13/2024

Soil Type : N/A

Wet Density : 120.7 pcf

Dry Density : 92.1 pcf

Moisture : 31.1 %

Deg. of Sat. : 100.0 %

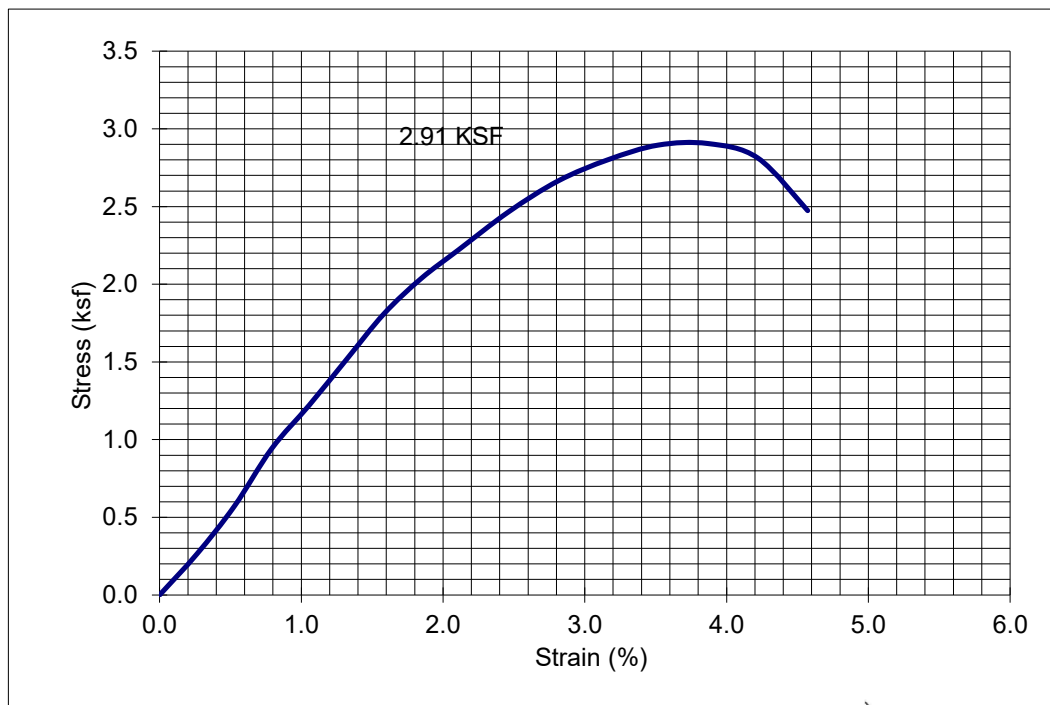
Initial Height : 5.69 in

Initial Diameter : 2.85 in

Proving Ring : #22734

SPECIFIC GRAVITY : 2.650

Comments : AASHTO: T-208 ; L / D Ratio < 2



APPROVED BY:

Ken E. Walker



UNCONFINED COMPRESSION TEST

AASHTO: T-208

Page 1 of 2

Project Name : Campbellsville EOC			
Project # : 24146		Sample # : ST-1	
Project County :		Sample Loc. : Boring No. B-5	
Project State : Kentucky		Sample Depth : 8.0' to 10.0'	
Laboratory # : 10393461-006		Date Tested : 8/8/2024	
Submitted By : HDR		Date Reported : 8/13/2024	
Soil Type : N/A			
Wet Density : 119.5 pcf		Initial Height : 5.81 in	
Dry Density : 88.4 pcf		Initial Diameter : 2.85 in	
Moisture : 35.1 %		Proving Ring : #22734	

RESULTS:	Axial	Corrected	Unit	
	Load	Area	Strain	Stress
#	lbs	sf	%	Ksf
1	0.0	0.04	0.0	0.00
2	16.6	0.04	0.3	0.37
3	35.2	0.04	0.5	0.79
4	66.1	0.04	0.8	1.48
5	96.7	0.04	1.0	2.16
6	124.3	0.04	1.3	2.77
7	149.1	0.05	1.5	3.31
8	170.0	0.05	1.8	3.76
9	189.0	0.05	2.1	4.17
10	201.2	0.05	2.4	4.43
11	189.0	0.05	2.8	4.14
12	135.7	0.05	3.1	2.97
13	72.8	0.05	3.4	0.00



UNCONFINED COMPRESSION TEST

Page 2 of 2

Project Name : Campbellsville EOC

Project # : 24146

Project County :

Project State : Kentucky

Laboratory # : 10393461-006

Submitted By : HDR

Sample # : ST-1

Sample Loc. : Boring No. B-5

Sample Depth : 8.0' to 10.0'

Date Tested : 8/8/2024

Date Reported : 8/13/2024

Soil Type : N/A

Wet Density : 119.5 pcf

Dry Density : 88.4 pcf

Moisture : 35.1 %

Deg. of Sat. : 100.0 %

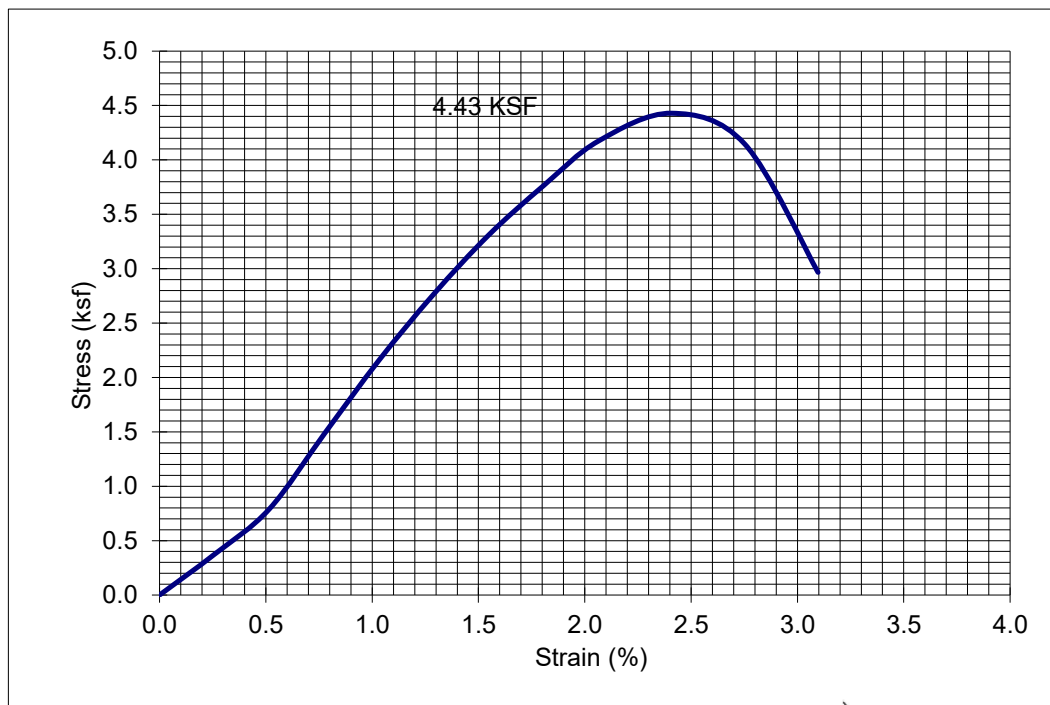
Initial Height : 5.81 in

Initial Diameter : 2.85 in

Proving Ring : #22734

SPECIFIC GRAVITY : 2.650

Comments : AASHTO: T-208



APPROVED BY:

Kevin E. Walker



UNCONFINED COMPRESSION TEST

AASHTO: T-208

Page 1 of 2

Project Name : Campbellsville EOC			
Project # : 24146		Sample # : ST-1	
Project County :		Sample Loc. : Boring No. B-9	
Project State : Kentucky		Sample Depth : 3.0' to 5.0'	
Laboratory # : 10393461-006		Date Tested : 8/8/2024	
Submitted By : HDR		Date Reported : 8/13/2024	
Soil Type : N/A			
Wet Density : 123.1 pcf		Initial Height : 5.86 in	
Dry Density : 97.0 pcf		Initial Diameter : 2.87 in	
Moisture : 27.0 %		Proving Ring : #22734	

RESULTS:	Axial	Corrected	Unit	
	Load	Area	Strain	Stress
#	lbs	sf	%	Ksf
1	0.0	0.04	0.0	0.00
2	9.8	0.05	0.3	0.22
3	29.3	0.05	0.5	0.65
4	50.8	0.05	0.8	1.12
5	76.6	0.05	1.0	1.69
6	110.0	0.05	1.3	2.42
7	145.3	0.05	1.5	3.19
8	178.5	0.05	1.8	3.90
9	207.8	0.05	2.0	4.53
10	238.8	0.05	2.4	5.19
11	255.7	0.05	2.7	5.54
12	260.4	0.05	3.1	5.62
13	259.5	0.05	3.4	5.58
14	229.4	0.05	3.8	4.92
15	168.1	0.05	4.1	0.00



UNCONFINED COMPRESSION TEST

Page 2 of 2

Project Name : Campbellsville EOC

Project # : 24146

Project County :

Project State : Kentucky

Laboratory # : 10393461-006

Submitted By : HDR

Sample # : ST-1

Sample Loc. : Boring No. B-9

Sample Depth : 3.0' to 5.0'

Date Tested : 8/8/2024

Date Reported : 8/13/2024

Soil Type : N/A

Wet Density : 123.1 pcf

Dry Density : 97.0 pcf

Moisture : 27.0 %

Deg. of Sat. : 100.0 %

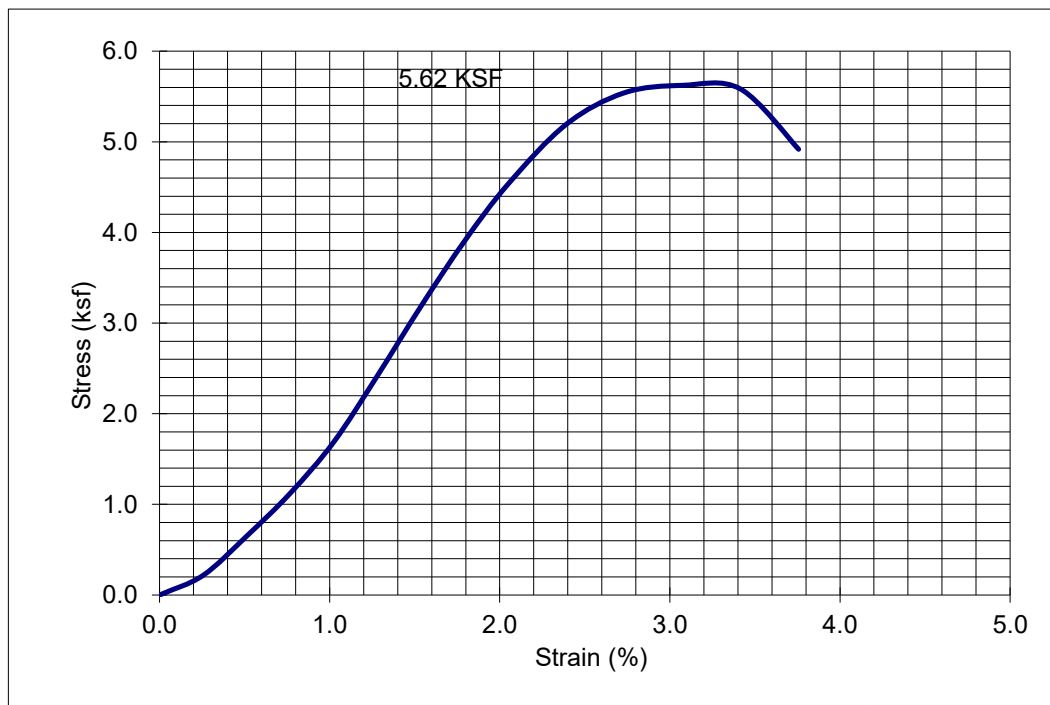
Initial Height : 5.86 in

Initial Diameter : 2.87 in

Proving Ring : #22734

SPECIFIC GRAVITY : 2.650

Comments : AASHTO: T-208



APPROVED BY: Kevin E. Walker

CAMPBELLSVILLE FIRE & EMS

CITY OF CAMPBELLSVILLE

CAMPBELLSVILLE, KENTUCKY

MARCUM NO. 24529

MECHANICAL AND ELECTRICAL ADDENDUM 1.00

August 07, 2026

The following Addendum Items shall be made part of the Contract Documents for the referenced project.

- 1.01 Refer to Section 223400 Fuel-Fired Domestic Water Heaters: Add Rheem to approved manufacturers under Paragraph 2.1 A. 1.
- 1.02 Refer to Section 263213.16 – Gas-Engine-Driven Generator Sets. All references to nickel-cadmium batteries within Section shall be omitted. All batteries shall be permitted to be lead acid.
- 1.03 Refer to Section 263600 – Transfer Switches. The transfer switch shall be NEMA 1 Rated as indicated on the Drawings. All references to the unit being NEMA 3R Rated shall be omitted.
- 1.04 Refer to Section 283111 – Digital, Addressable Fire Alarm System. Add Edwards/EST shall be listed as an approved manufacturer in Part 2.1.
- 1.05 Refer to Drawing P0.1 Specialty Items. Change TD-1 description to “Zurn Model # Z886-HDG-GDE 6-3/4” wide reveal trench drain system with galvanized steel frame, modular HDPE channel sections, Galvanized Ductile iron slotted grate - Class E, 4” no-hub bottom outlet, vandal proof, anchor studs.
- 1.06 Refer to Drawing U1.1 - Contractor shall maintain the 10 feet minimum clearance between the building and generator, between generator and Utility Transformer, and between generator and propane tank to omit blast wall requirements. If the 10 feet requirement cannot be met, a blast wall will be required.
- 1.07 Refer to Drawing U1.1 – Concrete Pads shall be provided and installed for Transformer and Generator within the fenced in concrete slab.

- 1.08 Refer to Drawing E0.1 - MC cabling will be permitted for lighting fixture whips only. All other applications will not be permitted.
- 1.09 Refer to Drawing E3.1 - Contractor shall provide and install three (3) 4" conduits for all primary installation with pull strings. The conduit shall be installed according to Utility company standards.

Attachments:

1. None

END OF ADDENDUM 1.00