Construction Quality Assurance Certification Report

Garland County Class 4 Landfill

Phase 3, Cell 1 Construction

Permit No. 0300-S4
AFIN: 26-00405

December 12, 2025 | Project No. 35247264

Prepared for:

Garland County Class 4 Landfill
1040 Cedar Glades Rd
Hot Springs, Arkansas 71913

Prepared for:

Crafton Tull
928 Airport Rd
Hot Springs, Arkansas 71913
(501) 767-2366

Terracon

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- Geotechnical
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Professional Engineer's Certification

"I certify to the best of my professional judgement that the bottom liner system (4.7 Acre Cell) of the Garland County Class 4 Landfill (**Permit No. 0300-S4**) was constructed in accordance with the project specifications, plans, and applicable Arkansas Division of Environmental Quality regulations. This certification is contingent on the fact that all information supplied to the signatory authority, at the time of this certification is unquestionably accurate and was provided in good faith."





F. Owen Carpenter, P.E., P.G.
Arkansas Professional Engineer Registration No.

December 12, 2025
Certification Date

Arkansas Certificate of Authorization No. 223

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1.0 Introduction

Garland County, Arkansas owns and operates the Garland County Cedar Glades Class 4 Landfill located in Garland County, Arkansas near the city of Hot Springs. The Landfill address is 1040 Cedar Glades Rd, Hot Springs, Arkansas. **FIGURE 1** in **APPENDIX A** illustrates the geographic location of the facility. The landfill consists of approximately 61 acres separated into five phases with a sixth phase completed to the permitted final grades over the top of the first five phases.

This construction quality assurance (CQA) report summarizes testing and documentation activities performed by Terracon Consultants, Inc. (Terracon) to certify the construction of the bottom liner system and related work associated with the 4.7-acre first cell within the Northeast expansion area (Phase 3). The document summarizes the subgrade, clay liner, and other related components of the bottom liner system. Quality control testing and certification associated with the construction are also provided.

This document, in conjunction with the project record drawings, is intended to satisfy the requirements of Arkansas Rule 2, Section 22.428/22.624 and Permit No. 0300-S4.

1.1 General

The construction of the bottom liner system was conducted in accordance with the following documents:

- *"Rule Number 22, Solid Waste Management Rules" (8 CAR Part 60)*, Arkansas Pollution Control and Ecology Commission, March 2007.
- *"Project Manual: Phase 3 – Cell 1 & Partial Closure"*, Garland County Class 4 Landfill Phase 3 – Cell 1 & Partial Closure, Terracon Consultants, Inc., March 2025.
- *"Construction Drawings for the Phase 3 – Cell 1 & Partial Closure",* Garland County Cedar Glades Class 4 Landfill, Terracon Consultants, Inc., March 2025.

1.2 Site Description

The Landfill is separated into five area phases of cells separating the permitted footprint into areas of varying size arranged in a clockwise construction sequence with multiple phases of cell construction. The Phase 3, Cell 1 construction is the first part of the eastward expansion from existing Cell 2. Phase 3, Cell 1 is approximately 4.7 acres. The facility, Garland County Class 4 Landfill (Permit No. 0300-S4) was originally permitted in 2001. **FIGURE 2** illustrates

the location and orientation of the 4.7 acre construction area in relation to the rest of the site.

1.3 Project Description

This project involved the construction of approximately 4.7 acres of bottom liner system and related site work. The following information summarizes the construction sequence associated with the construction of the bottom liner system.

- Site preparation, excavation/fill to subgrade, and grading of cell area;
- CQA testing of 18-inch compacted clay liner (CCL) placed in 6-inch lifts at a minimum of 90% of Standard Proctor maximum dry density and moisture content between 1% and 6% above optimum moisture; and
- Installation of perimeter stormwater ditches and berms.

This CQA Report is organized using tables, figures, and appendices to provide documentation of the observations and material testing during the construction of the bottom liner system. Daily project field records are presented in **APPENDIX B**. A photographic log of construction procedures is shown in **APPENDIX D**.

As required by Reg.22.624 the certification report shall conform to the requirements of Reg.22.428. In accordance with **Rule.22.428(i)** (**8 CAR § 60-428(i)**) this CQA Report includes record drawings of the bottom liner system and the appendices and figures identify the following:

- **Rule.22.428(i)(1) – The limits of liner or final cover barrier construction;**

  The as-built drawings in **APPENDIX A** depict the limits of the constructed bottom liner system for Phase 3, Cell 1.

- **Rule.22.428(i)(2) – The top and bottom liner or final cover barrier elevations at 50’ intervals referenced to the site grid coordinate system;**

  APPENDIX A provides the top and bottom elevations of the constructed clay liner system at 50’ intervals referenced to the site grid coordinate system.

- **Rule.22.428(i)(3) – If a granular drainage blanket is utilized in the design, top of blanket elevation should be identified at 50’ elevations;**

  Phase 3, Cell 1 is located in a Class 4 Landfill and as a result a granular drainage blanket is not required.

- **Rule.22.428(i)(4) – The location and elevation of slope breaks, leachate piping, leachate sumps and trenches, berms, and any other features which are material to the disposal area construction;**

  APPENDIX A provides the location and elevation information and other features of Phase 3, Cell 1 construction.

- **Rule.22.428(i)(5) – A key map showing the location of the construction in relation to the permitted design, along with an identification of areas previously constructed and areas yet to be constructed;**

  FIGURE 2 and the as-built drawing in **APPENDIX A** depict the limits of the constructed bottom liner system in relation to the permitted design, along with an identification of areas previously constructed.

- **Rule.22.428(i)(6) – Compaction testing locations;**

  Field logs and Forms in **APPENDIX C-3 and C-4 and FIGURE 3 through FIGURE 8** provide compaction test locations for the compacted clay liner and related work.

- **Rule.22.428(i)(7) – If necessary to document leachate head level compliance (subsections (a)(2) and (g)(6) of this section), the report should also indicate the lowest point of the liner constructed not including leachate trenches and sumps.**

  A leachate collection system is not required in Class 4 Landfills. However, **APPENDIX A** provides the lowest point of the liner constructed.

- **Rule.22.428(i)(8) – In addition, the certifying professional shall make a statement that the cell was constructed in accordance with the permit drawings and narrative. The report should also include a list of any deviations from the permitted drawings, if they exist, and reasons for the deviations.**

  The Phase 3, Cell 1 bottom liner system was constructed as close as possible to and in accordance with the permit drawings and the project plans and specifications. A signed certification by a professional engineer in the state of Arkansas can be found at the beginning of this report.

1.4 Key Personnel

James A. Rogers Excavating, LLC. was contracted to perform the earthwork for the project including excavation and/or fill to top of the subgrade layer and placement of the compacted clay barrier. The key personnel for each participating firm and supplier in the project are listed below.

- **Owner:**
  Garland County – Garland County, Arkansas
  - Honorable Darryl Mahoney, Garland County Judge
  - Billy Sawyer, Director, Environmental Services

- **Engineering and CQA Consultants:**
  Crafton Tull – Hot Springs, AR
  - Project Manager: John Rogers, P.E.

  Terracon Consultants, Inc. – Bryant, AR
  - Certifying Engineer: F. Owen Carpenter, P.E.
  - Project Engineer: Tony Bardella
  - Staff Engineer: Drew Potter, Allie Storment
  - Staff Geologist: Matt Acree
  - CQA Monitors: Fernando Ocampo, Shawn Young, Tyler Farnsworth

- **Earthwork Contractor:**
  James A. Rogers Excavating, LLC
  - Site-Superintendent: Michael Richardson

- **Survey Control:**
  Crafton Tull – Hot Springs, AR
  - Jonathan Hamner, P.S.

- **Soils Testing Laboratory:**
  Terracon Consultants, Inc. – Baton Rouge, LA
  - Matt Minton, Laboratory Manager

2.0 Subgrade Preparation

This section summarizes the excavation and establishment of the subgrade surface corresponding to the Phase 3, Cell 1 bottom liner system. The subgrade preparation was performed according to the approved plans and specifications.

2.1 Project Specifications

The project specifications called for the subgrade layer to be established at or below the lines and grades shown on the project construction plans. The elevations associated with the subgrade surface established are provided in **APPENDIX A**.

2.2 Construction Procedures

The subgrade preparation and excavation and/or fill for placement of the CCL associated with the bottom liner system occurred during August 2025 to September 2025. During this period, the construction consisted of excavation of the native soils and placement of structural fill to the new subgrade elevation. The elevations associated with the subgrade surface established are provided in **APPENDIX A**.

3.0 Compacted Clay Liner Installation

The following section describes the construction of the compacted clay liner (CCL) system. The 18-inch-thick CCL corresponding to Phase 3, Cell 1 was completed during September 2025 to November 2025 using imported off-site clay soils.

3.1 Project Specifications

The project specifications called for the compacted clay barrier layer to be established to the lines and grades shown on the project construction plans at the start of construction. The project construction plans for the CCL indicated that the clay liner was constructed in three compacted lifts to form a minimum 18-inch thick re-compacted clay liner. Moisture-density tests were performed at depths of 6-inch increments using a Troxler moisture-density gauge. Each clay lift was to be placed and compacted to at least 90% of the Standard Proctor maximum dry density at moisture content from 1% to 6% above the optimum moisture for the clay material. As required by Rule 22.621(c)(1), the hydraulic conductivity of the clay was not to exceed 1.0×10^{-5} cm/sec.

3.2 Construction Procedures

The compacted clay barrier layer was installed on top of the prepared subgrade, to the lines and grades shown on the plans and specifications. Haul trucks were utilized to transport clay barrier soils from the on-site borrow area to the construction area. After transport, the earthwork contractor used a bulldozer to spread the clay material into approximately 8-inch to 10-inch loose lifts across the site. After placement, a sheepsfoot compactor was used to compact the thickness of each layer down to approximately 6 inches and to achieve the required density, moisture and permeability in the soils. A water truck moisture conditioned the soil, as necessary, to aid in compaction and meet permeability requirements. After the compacted clay liner was completed, the surveyor recorded the final thickness as summarized in **APPENDIX A**.

3.3 Pre-Construction Testing of Clay Liner Materials

Field and Laboratory testing of the clay liner system was completed as specified in the project specifications, the facility CQA plan, and in accordance with the requirements of Arkansas Rule No. 22.

Before construction began, 4 soil samples were obtained from the clay stockpiles at a minimum frequency of one test per 20,000 cubic yards of soil placed. **APPENDIX C-1** contains the results of the clay liner materials pre-construction testing. The results indicate the materials meet or exceed the minimum project standards.

3.4 Construction Testing of CCL Materials

During the construction of the CCL, four (4) additional clay samples were obtained for laboratory testing to verify the consistency of the materials during construction. The results of the construction laboratory testing are included in **APPENDIX C-2**. Table 2 summarizes the results obtained from laboratory testing of the clay liner material. Based upon the results of the construction testing performed, the CCL material samples comply with project specifications.

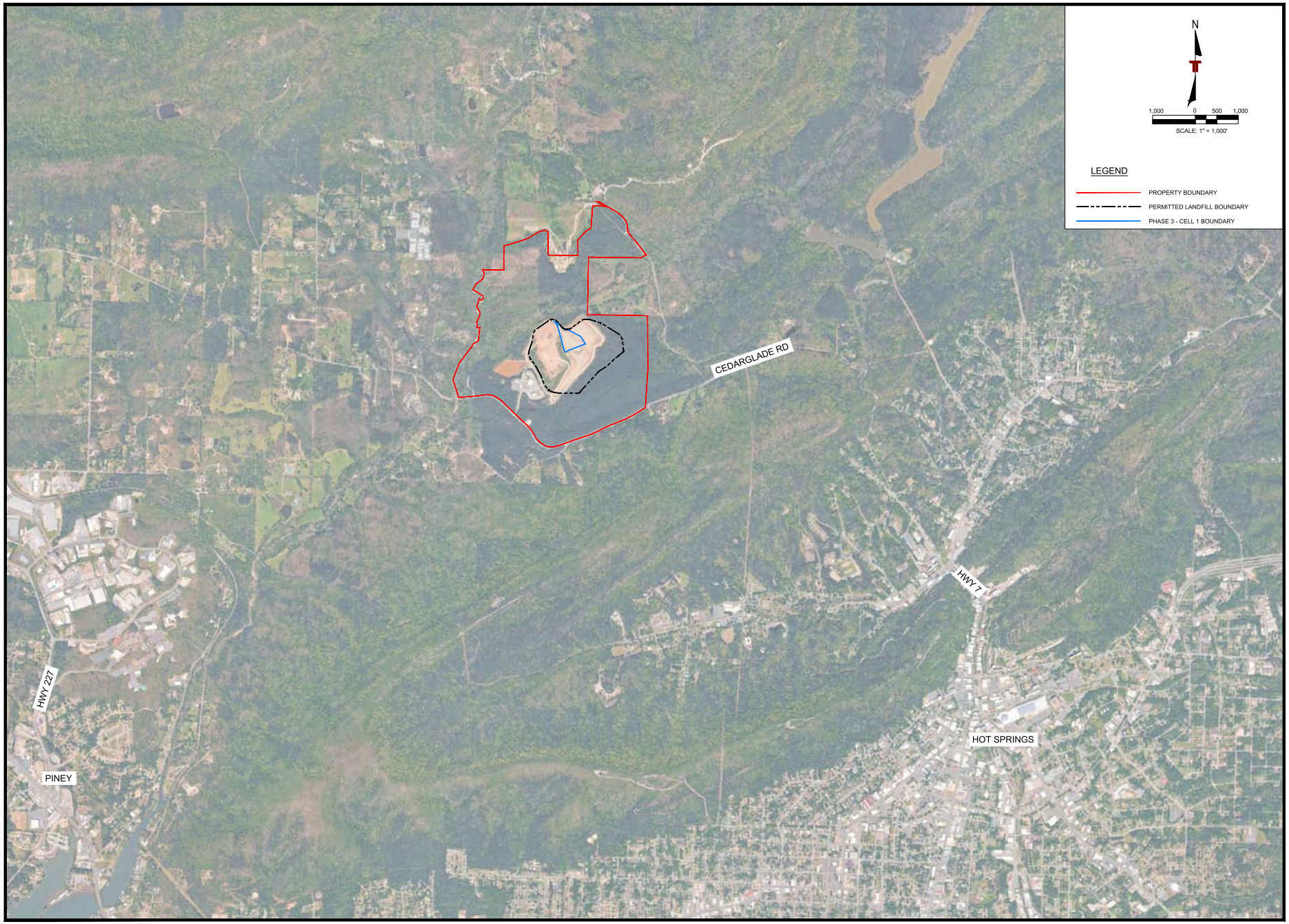
Field moisture and density tests in accordance with ASTM D2487 were performed at a minimum rate of one test for every 10,000 square feet per compacted lift of newly emplaced clay liner. **FIGURE 7** and **FIGURE 8** illustrate the locations of the field moisture and density tests for each compacted lift of new clay liner. **APPENDIX C-3** includes the field logs for the moisture and density testing performed in association with the Phase 3, Cell 1 construction. Based upon the results of the moisture and density tests performed by Terracon, the 18-inch-thick CCL complies with the project specifications.

Shelby tube samples were obtained from each lift at a minimum rate of one test for every 40,000 square feet. **FIGURE 7** and **FIGURE 8** illustrate the locations where the Shelby Tube samples were obtained for each compacted lift of clay. The tubes were sealed and delivered to the laboratory for permeability testing using a flexible-wall permeameter (ASTM D-5084). Permeability results for the completed CCL met the project requirements (less than 1.0 x 10-5 cm/s). **APPENDIX C-4** contains the CCL permeability test results.

4.0 Test Pad

The CQA plan required construction of a test pad for any earthwork contractor that did not have a minimum of 500,000 square feet of clay liner placement in the previous 3 years. James A. Rogers Excavating did not demonstrate this qualification, thus a test pad was required and performed for this project. Six permeability samples were taken on the test pad, two per lift. Lifts were bonded by kneading the top lift into the second lift. Moisture was added as needed. To verify bonding of lifts, material was dug out for visual observation. A summary of the test pad construction permeability testing is included in **APPENDICES C-3 AND C-4**.

Appendix A
Record Drawings & Figures



928 AIRPORT ROAD
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STATE OF ARKANSAS
BRENT ROGERS
LICENSED PROFESSIONAL ENGINEER
No. 11260

PHASE 3 - CELL 1 CONSTRUCTION

1040 CEDAR GLADES ROAD
HOT SPRINGS, ARKANSAS

Key Plan

SITE LOCATION MAP

No.	Description	Date
1	NOD Response	12.24.2025

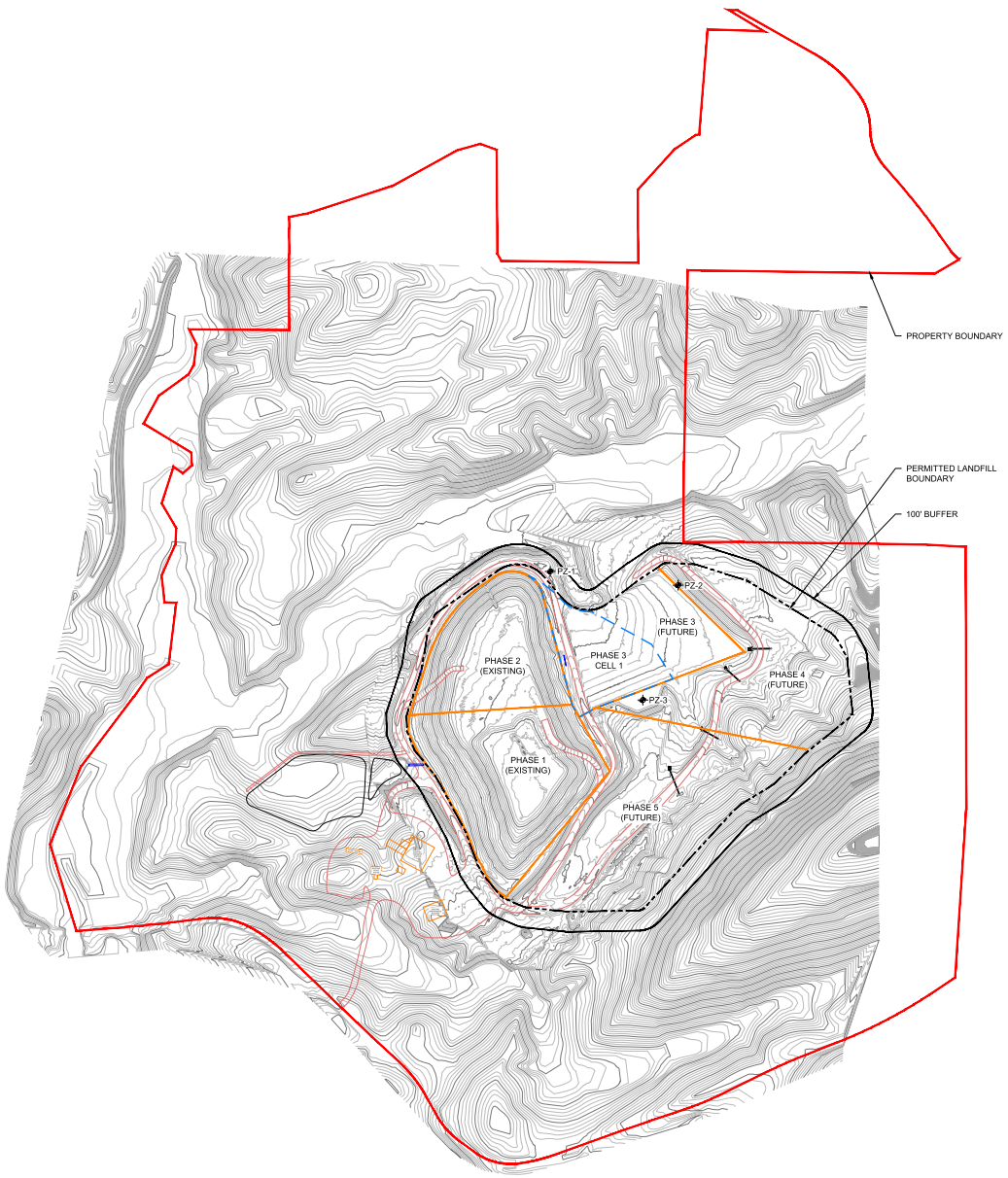
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PROJECT NO: 35247264
ISSUE DATE: DECEMBER 2025
CONTACT: J. ROGERS
QC by:
QC Date:

CERTIFICATE OF AUTHORIZATION
B & F ENGINEERING, INC.
No. 110
ARKANSAS

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FIGURE 1



N

300 0 150 300

SCALE: 1" = 300'

LEGEND

- PROPERTY BOUNDARY
- PERMITTED LANDFILL BOUNDARY
- PERMITTED LANDFILL BOUNDARY (100' BUFFER)
- 520 EXISTING TOPOGRAPHY (2' CONTOURS)
- EXISTING ROADS / PARKING
- PHASE BOUNDARY
- PHASE 3 - CELL 1 BOUNDARY
- EXISTING PIEZOMETERS

GENERAL NOTES:

1. EXISTING TOPOGRAPHY PROVIDED BY CRAFTON TULL USING DRONE SURVEY ON AUGUST 30, 2024 AND JANUARY 2, 2025.

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STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 11260
Jason Rogers (AR)

PHASE 3 - CELL 1 CONSTRUCTION

1040 CEDAR GLADES ROAD
HOT SPRINGS, ARKANSAS

Key Plan

EXISTING CONDITIONS

No.	Description	Date
1	NOD Response	12.24.2025

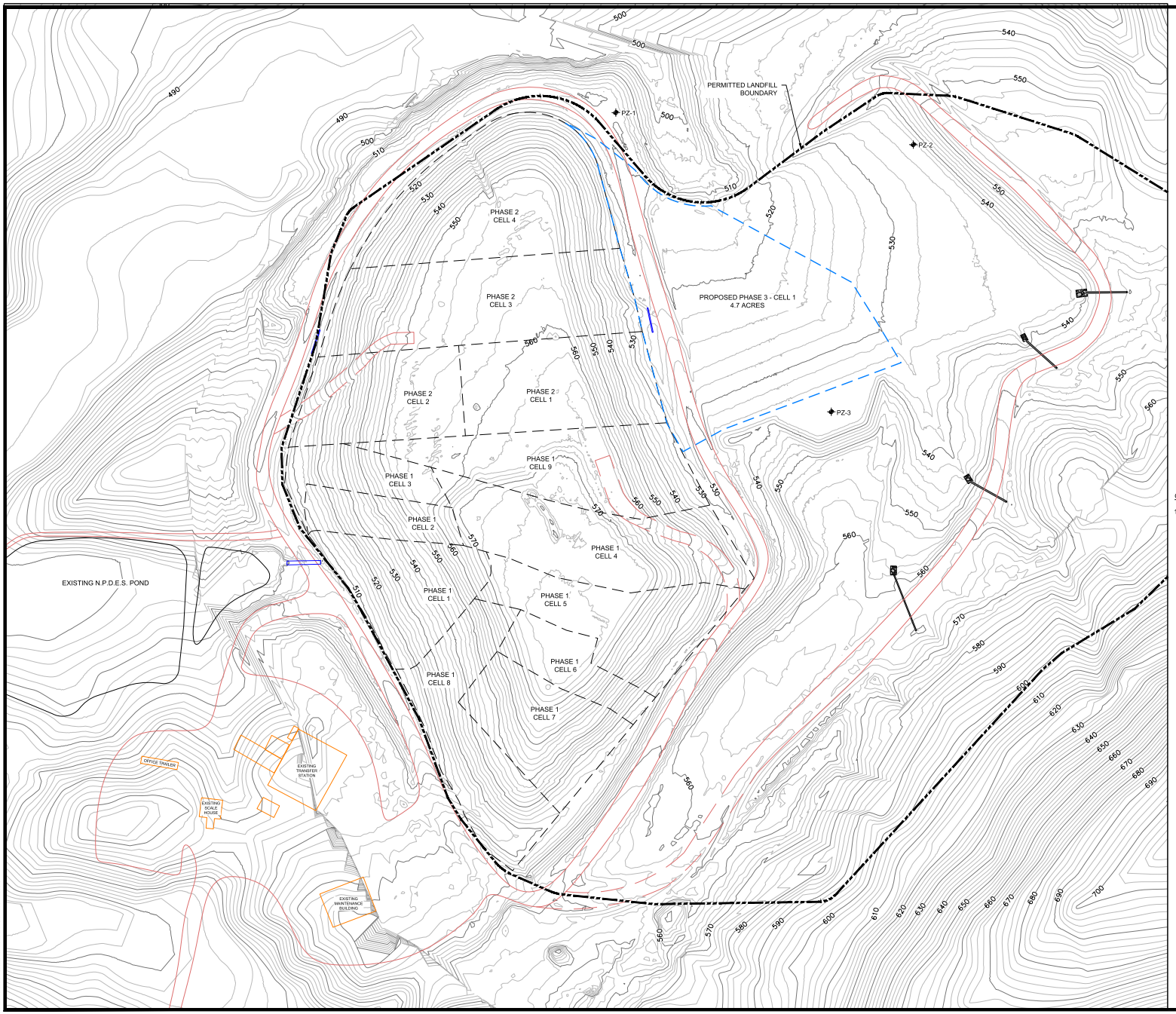
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FIGURE 2A



N

100 0 50 100

SCALE: 1" = 100'

LEGEND

- 520 — EXISTING TOPOGRAPHY (2' CONTOURS)
- EXISTING ROADS / PARKING
- PERMITTED LANDFILL BOUNDARY
- PHASE BOUNDARY
- PHASE 3 - CELL 1 BOUNDARY
- EXISTING PIEZOMETERS

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PHASE 3 - CELL 1 CONSTRUCTION

1040 CEDAR GLADES ROAD
HOT SPRINGS, ARKANSAS

Key Plan

EXISTING CONDITIONS (CONTINUED)

No.	Description	Date
1	NOD Response	12.24.2025

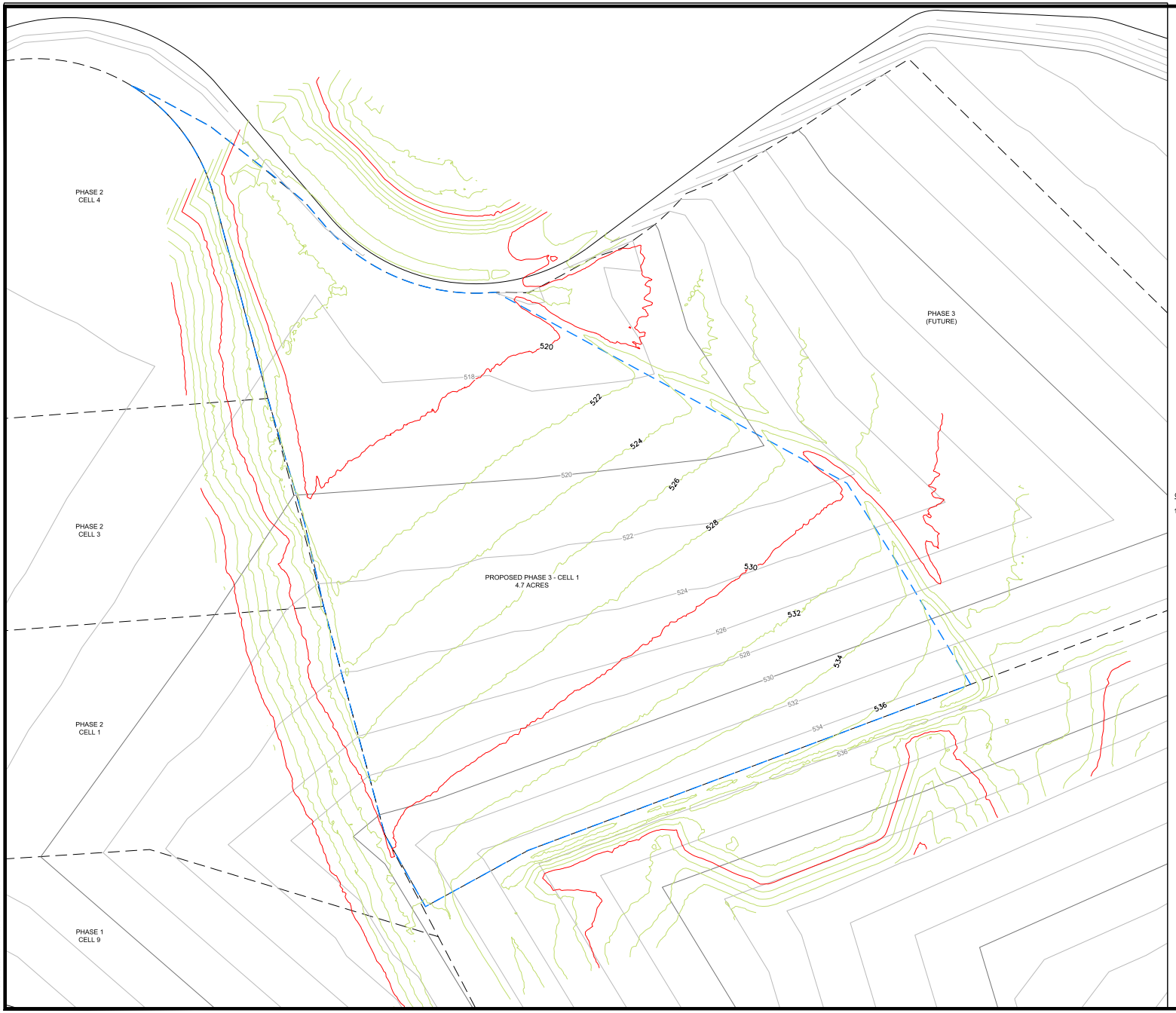
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FIGURE 2B



N

40 0 20 40

SCALE: 1" = 40'

LEGEND

- PERMITTED BOTTOM LINER (2' CONTOURS)
- TOP OF CLAY BOTTOM LINER AS-BUILT (11.12.25)
- PERMITTED LANDFILL BOUNDARY
- PHASE BOUNDARY
- PHASE 3 - CELL 1 BOUNDARY

GENERAL NOTES:

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Key Plan

EXISTING CONDITIONS

No.	Description	Date
1	NOD Response	12.24.2025

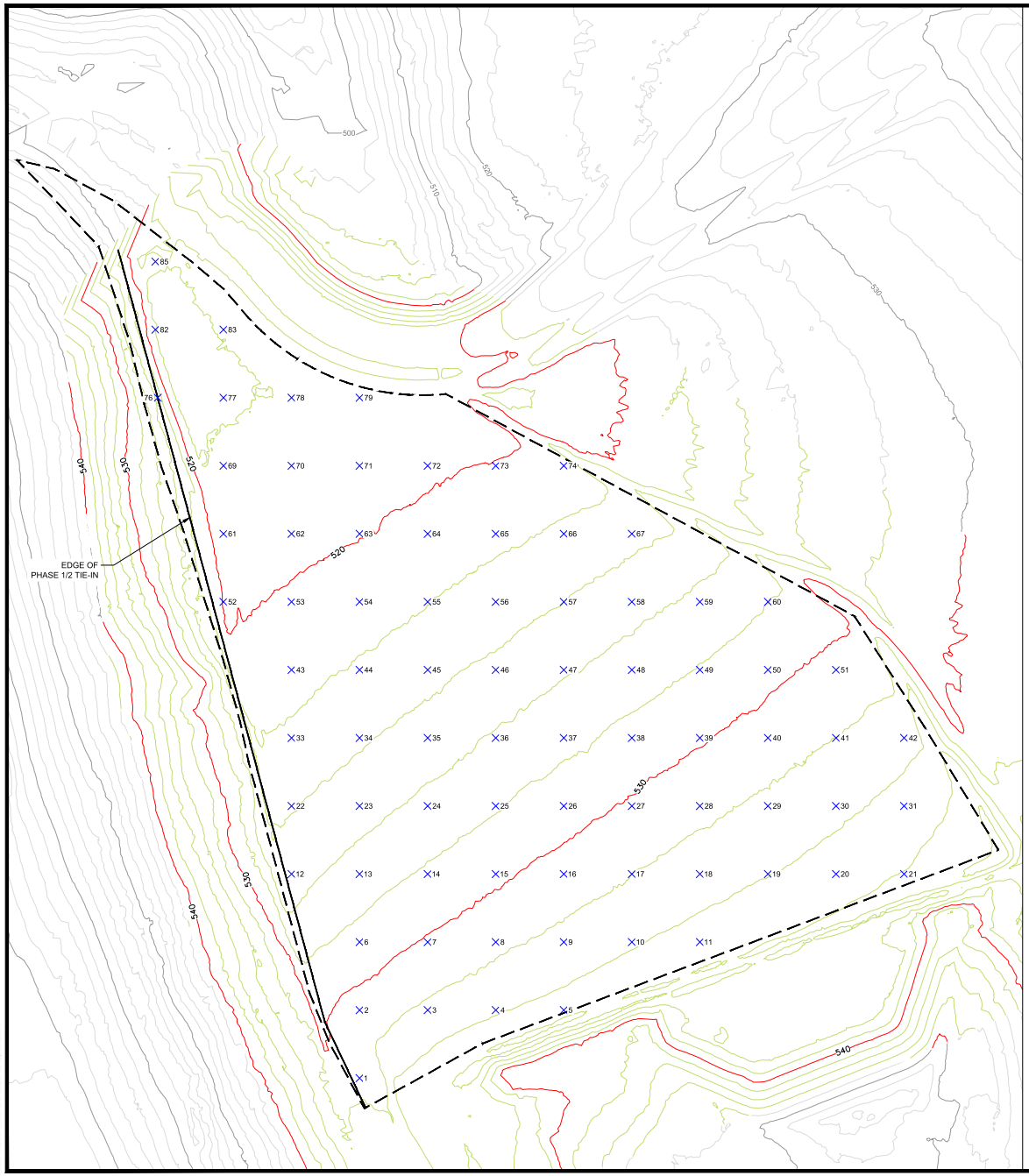
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FIGURE A



N

40' 0 20' 40'

SCALE: 1" = 40'

LEGEND

- 530 — AS-BUILT SUBGRADE (2' CONTOURS)
- 530 — AS-BUILT COMPACTED CLAY LINER (2' CONTOURS)
- CELL 1 BOUNDARY
- ×1 CONSTRUCTION POINTS

CCL 50-ft Grid

POINT#	NORTHING	EASTING	AS-BUILT SG	AS-BUILT CCL	DIFFERENCE	DESCRIPTION
1	1992857.527	985204.4177	529.32	531.42	2.1	GRID
2	1992907.527	985204.4177	529.05	530.73	1.7	GRID
3	1992907.527	985254.4177	530.69	532.43	1.7	GRID
4	1992907.527	985304.4177	532.09	533.78	1.7	GRID
5	1992907.527	985354.4177	533.24	535.13	1.9	GRID
6	1992957.527	985204.4177	527.00	528.72	1.7	GRID
7	1992957.527	985254.4177	528.54	530.23	1.7	GRID
8	1992957.527	985304.4177	529.91	531.51	1.6	GRID
9	1992957.527	985354.4177	531.11	532.60	1.5	GRID
10	1992957.527	985404.4177	532.29	533.74	1.5	GRID
11	1992957.527	985454.4177	533.19	534.75	1.6	GRID
12	1993007.527	985154.4177	523.37	525.11	1.7	GRID
13	1993007.527	985204.4177	525.16	526.87	1.7	GRID
14	1993007.527	985254.4177	526.60	528.30	1.7	GRID
15	1993007.527	985304.4177	527.98	529.48	1.5	GRID
16	1993007.527	985354.4177	529.29	530.76	1.5	GRID
17	1993007.527	985404.4177	530.51	531.99	1.5	GRID
18	1993007.527	985454.4177	531.51	533.04	1.5	GRID
19	1993007.527	985504.4177	532.43	533.96	1.5	GRID
20	1993007.527	985554.4177	533.33	534.94	1.6	GRID
21	1993007.527	985604.4177	534.54	536.14	1.6	GRID
22	1993057.527	985154.4177	522.01	523.83	1.8	GRID
23	1993057.527	985204.4177	523.58	525.21	1.6	GRID
24	1993057.527	985254.4177	524.88	526.53	1.7	GRID
25	1993057.527	985304.4177	526.29	527.82	1.5	GRID
26	1993057.527	985354.4177	527.55	529.09	1.5	GRID
27	1993057.527	985404.4177	528.77	530.23	1.5	GRID
28	1993057.527	985454.4177	529.85	531.41	1.6	GRID
29	1993057.527	985504.4177	531.01	532.49	1.5	GRID
30	1993057.527	985554.4177	532.01	533.48	1.5	GRID
31	1993057.527	985604.4177	533.24	534.75	1.5	GRID
33	1993107.527	985154.4177	520.80	522.48	1.7	GRID
34	1993107.527	985204.4177	522.12	523.70	1.6	GRID
35	1993107.527	985254.4177	523.25	524.86	1.6	GRID
36	1993107.527	985304.4177	524.61	526.24	1.6	GRID
37	1993107.527	985354.4177	525.86	527.45	1.6	GRID
38	1993107.527	985404.4177	527.05	528.65	1.6	GRID
39	1993107.527	985454.4177	528.20	529.75	1.6	GRID
40	1993107.527	985504.4177	529.46	530.96	1.5	GRID
41	1993107.527	985554.4177	530.65	532.20	1.6	GRID
42	1993107.527	985604.4177	531.78	533.28	1.5	GRID
43	1993157.527	985154.4177	519.65	521.26	1.6	GRID
44	1993157.527	985204.4177	520.77	522.28	1.5	GRID
45	1993157.527	985254.4177	521.80	523.34	1.5	GRID
46	1993157.527	985304.4177	523.00	524.48	1.5	GRID
47	1993157.527	985354.4177	524.16	525.79	1.6	GRID
48	1993157.527	985404.4177	525.33	526.94	1.6	GRID
49	1993157.527	985454.4177	526.65	528.13	1.5	GRID
50	1993157.527	985504.4177	527.85	529.48	1.6	GRID
51	1993157.527	985554.4177	529.11	530.89	1.8	GRID
52	1993207.527	985104.4177	519.86	519.72	-0.1	PHASE 1/2 TIE-IN
53	1993207.527	985154.4177	518.69	520.30	1.6	GRID
54	1993207.527	985204.4177	519.51	521.01	1.5	GRID
55	1993207.527	985254.4177	520.41	521.91	1.5	GRID
56	1993207.527	985304.4177	521.43	522.93	1.5	GRID
57	1993207.527	985354.4177	522.50	523.99	1.5	GRID
58	1993207.527	985404.4177	523.68	525.20	1.5	GRID
59	1993207.527	985454.4177	524.96	526.60	1.6	GRID
60	1993207.527	985504.4177	526.51	527.96	1.5	GRID
61	1993257.527	985104.4177	517.21	518.89	1.7	GRID
62	1993257.527	985154.4177	517.83	519.42	1.6	GRID
63	1993257.527	985204.4177	518.41	519.89	1.5	GRID
64	1993257.527	985254.4177	519.11	520.62	1.5	GRID
65	1993257.527	985304.4177	519.92	521.52	1.6	GRID
66	1993257.527	985354.4177	520.86	522.36	1.5	GRID
67	1993257.527	985404.4177	521.85	523.35	1.5	GRID
69	1993307.527	985104.4177	516.54	518.19	1.7	GRID
70	1993307.527	985154.4177	517.21	518.73	1.5	GRID
71	1993307.527	985204.4177	517.62	519.16	1.5	GRID
72	1993307.527	985254.4177	518.06	519.69	1.6	GRID
73	1993307.527	985304.4177	518.65	520.11	1.5	GRID
74	1993307.527	985354.4177	519.11	521.10	2.0	GRID
76	1993357.527	985156.0662	523.49	523.36	-0.1	PHASE 1/2 TIE-IN
77	1993357.527	985104.4177	516.18	517.77	1.6	GRID
78	1993357.527	985154.4177	516.63	518.19	1.6	GRID
79	1993357.527	985204.4177	517.07	518.55	1.5	GRID
82	1993407.527	985054.4177	517.76	518.65	0.9	PHASE 1/2 TIE-IN
83	1993407.527	985104.4177	516.59	518.15	1.6	GRID
85	1993457.527	985054.4177	517.08	519.05	2.0	GRID

928 AIRPORT ROAD
HOT SPRINGS, AR 71913
Crafton Tull
1.501.767.2366 1.501.767.6859
www.craftontull.com

PHASE 3 - CELL 1
CONSTRUCTION

1040 CEDAR GLADES ROAD
HOT SPRINGS, ARKANSAS

Key Plan

PHASE 3 CELL 1
CLAY LINER
VERIFICATION

No.	Description	Date
1	NOD Response	12.04.2025

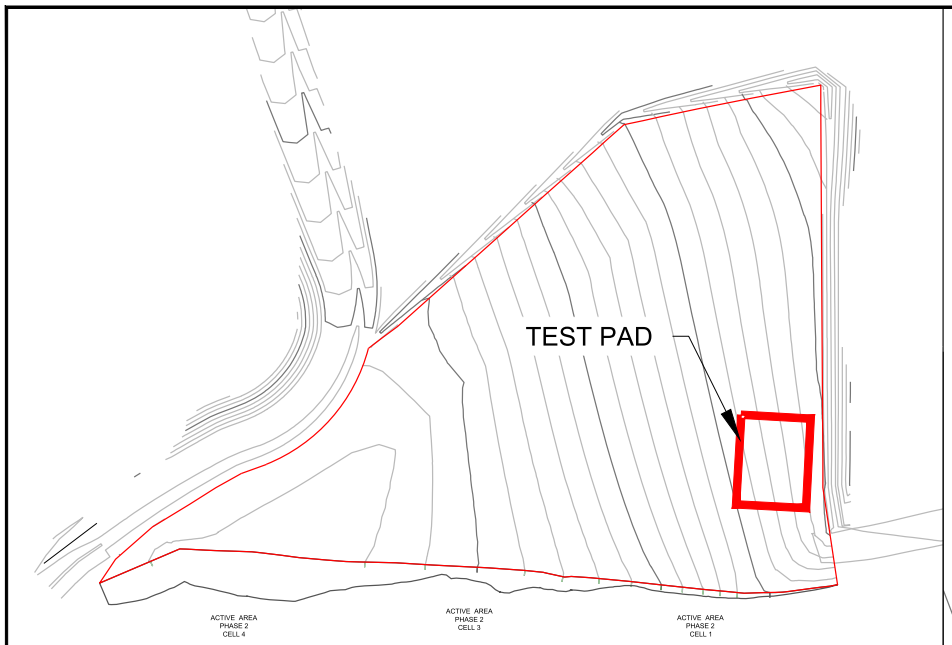
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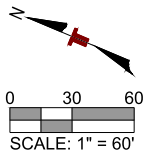
PROJECT NO: 35247264
ISSUE DATE: NOVEMBER 2025
CONTACT: J. ROGERS
QC by:
QC Date:

CERTIFICATE OF AUTHORIZATION
B & F ENGINEERING, INC.
No. 110
ARKANSAS

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DRAWING 1



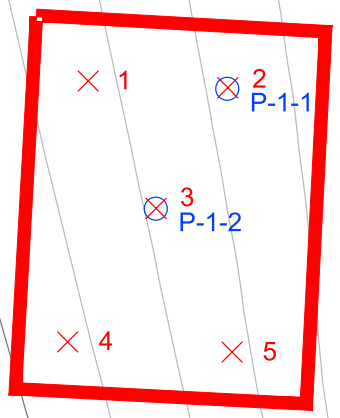


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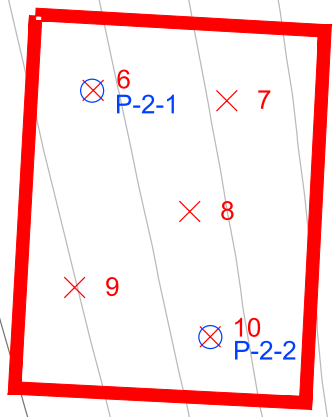
× 1 DENSITY TEST LOCATION

○ P1 PERMEABILITY TEST LOCATION

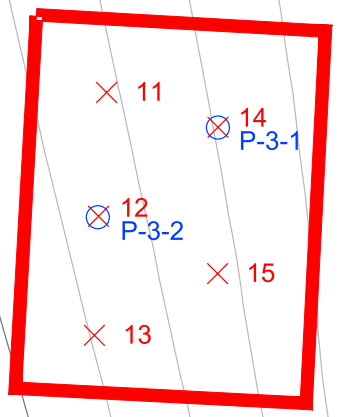
LIFT 1



LIFT 2



LIFT 3



REV.	DATE	BY	DESCRIPTION

PHASE 3-1 TEST PAD DENSITY/PERM TEST LOCATIONS - LIFTS 1-3

PHASE 3 - CELL 1 CONSTRUCTION

GARLAND COUNTY CLASS 4 LANDFILL

GARLAND COUNTY CLASS 4 LANDFILL

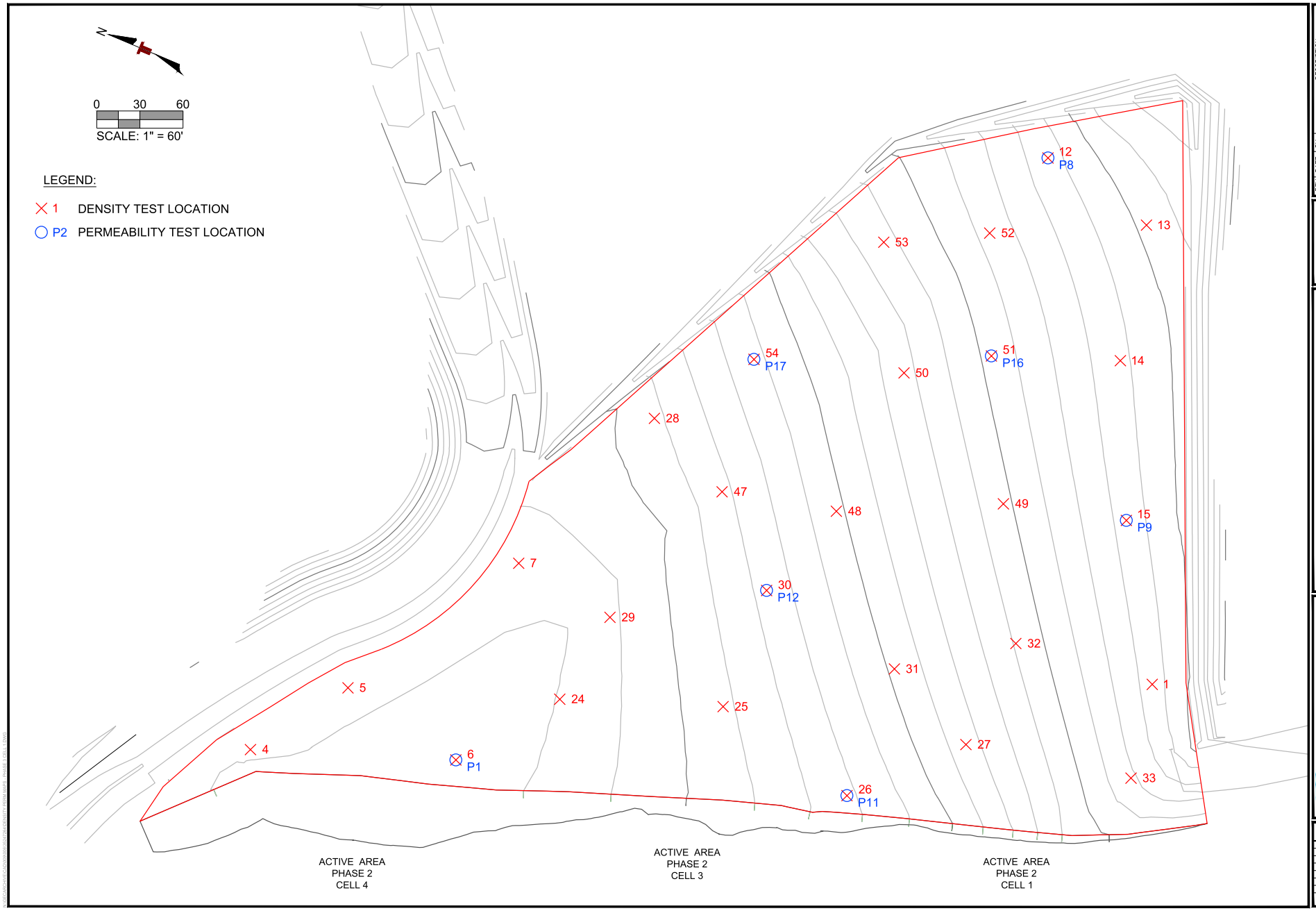
HOT SPRINGS ARKANSAS

Terracon
Consulting Engineers and Scientists
28801 I-30 SOUTH
BRYANT, AR 72022
PH: (501) 847-9202
FAX: (501) 847-9210

FIGURE 3

DESIGNED BY:	OC
DRAWN BY:	AJS
APP'D. BY:	OC
SCALE:	SEE BARSCALE
DATE:	09/11/2025
JOB NO.	009-006-35247264
ACAD NO.	101
SHEET NO.:	- OF -

N:\GEC\ARKANSAS\GARLAND\009006247264\CONSTR\FIGS\MAPS - PHASE 3 CELL 1.DWG



REV	DATE	BY	DESCRIPTION

CLAY LINER DENSITY/PERM TEST LOCATION - LIFTS 1

PHASE 3 - CELL 1 CONSTRUCTION

GARLAND COUNTY CLASS 4 LANDFILL

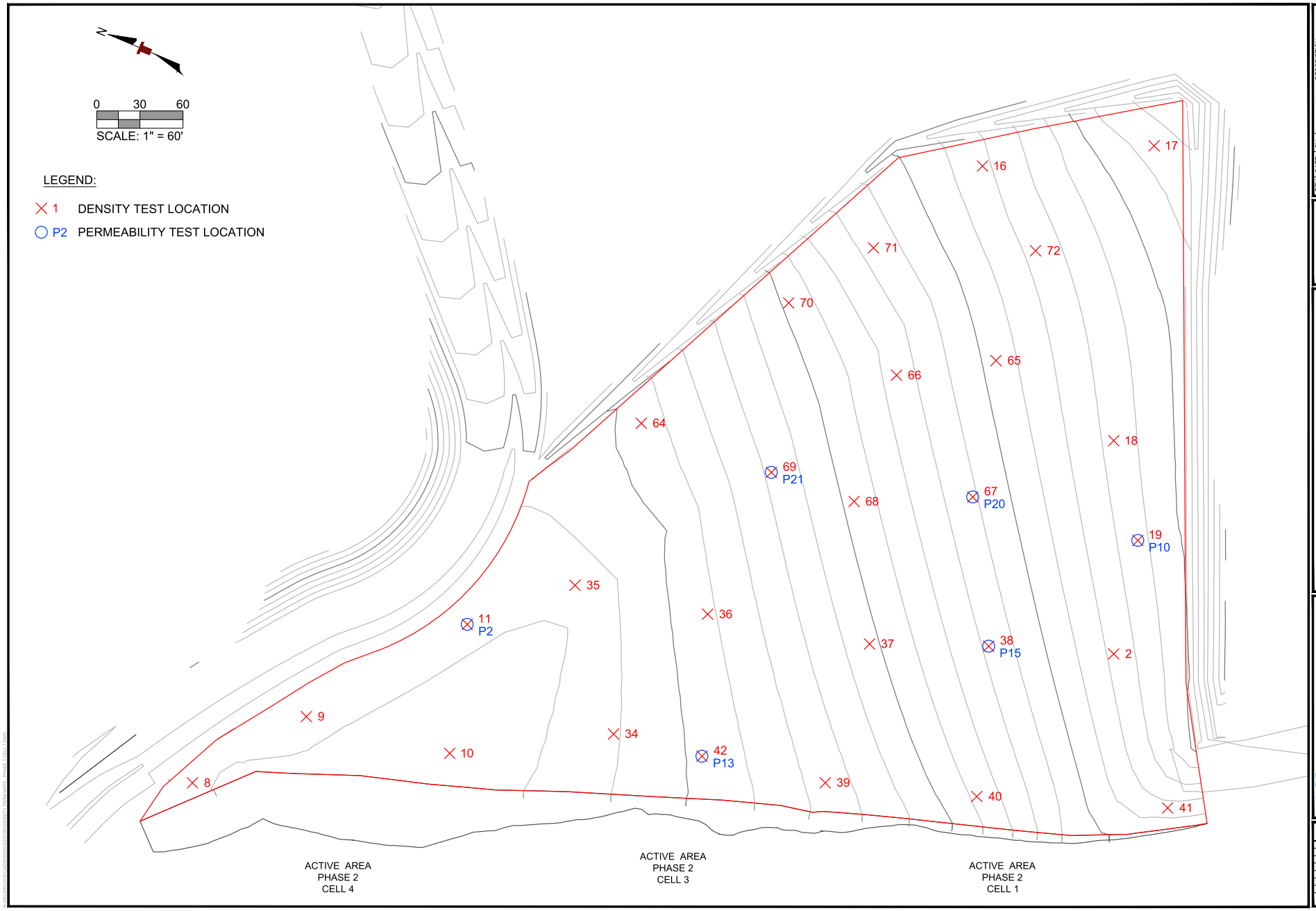
GARLAND COUNTY CLASS 4 LANDFILL

HOT SPRINGS ARKANSAS

Terracon
Consulting Engineers and Scientists
BRYANT, AR 72022
PH: (501) 847-9282
FAX: (501) 847-9210

FIGURE 4

DESIGNED BY:	OC
DRAWN BY:	AJS
APPVD. BY:	OC
SCALE:	SEE BARSCALE
DATE:	12/03/2025
JOB NO.:	009-006-35247264
ACAD NO.	101
SHEET NO.:	- OF -



REV	DATE	BY	DESCRIPTION

CLAY LINER DENSITY/PERM TEST LOCATION - LIFTS 2

PHASE 3 - CELL 1 CONSTRUCTION

GARLAND COUNTY CLASS 4 LANDFILL

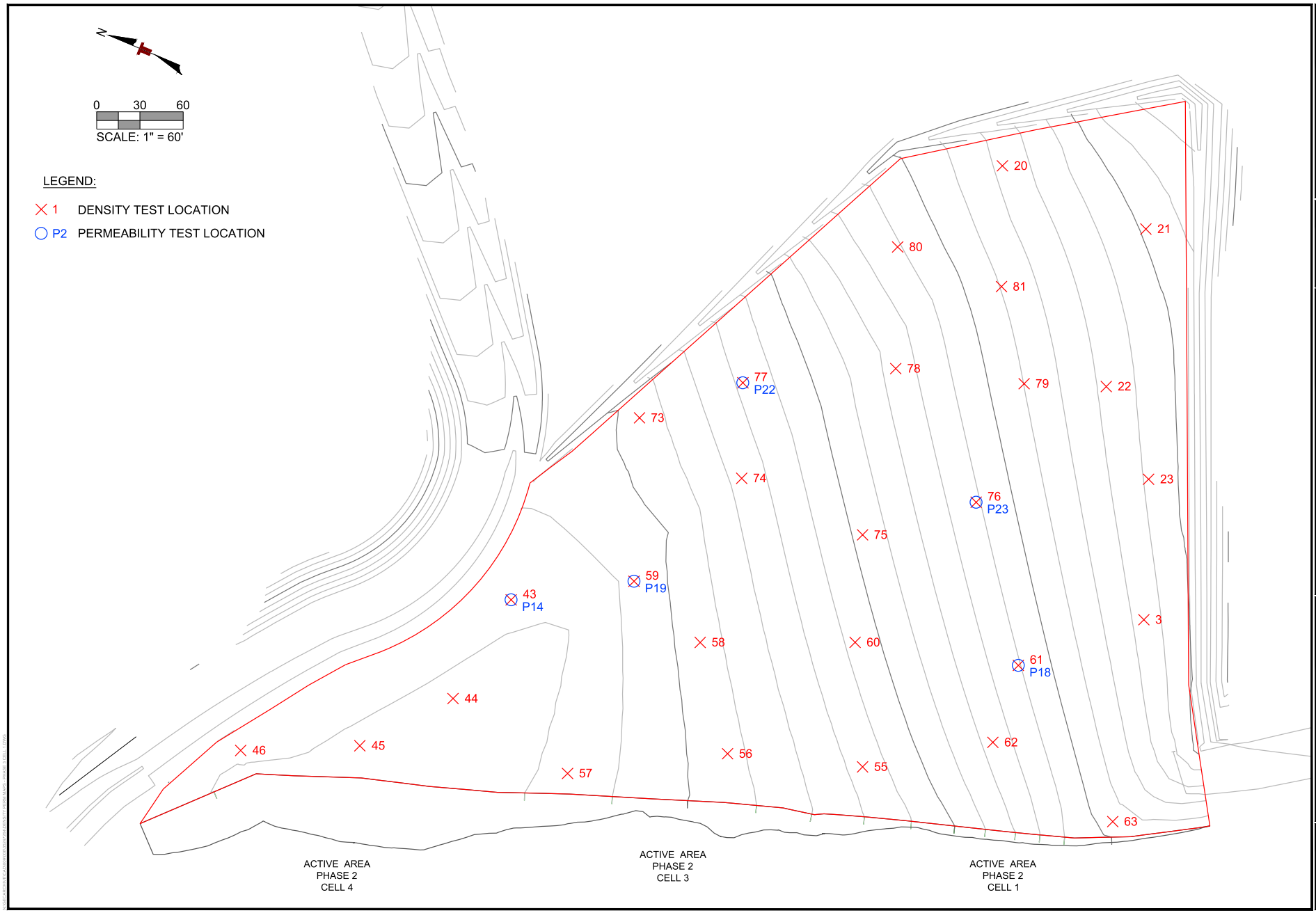
GARLAND COUNTY CLASS 4 LANDFILL

HOT SPRINGS ARKANSAS

Terracon
Consulting Engineers and Scientists
25809-I-39 SOUTH
BRYANT, AR 72022
PH: (501) 847-9282
FAX: (501) 847-9210

FIGURE 5

DESIGNED BY:	OC
DRAWN BY:	AJS
APPVD. BY:	OC
SCALE:	SEE BARSCALE
DATE:	12/03/2025
JOB NO.:	009-006-35247264
ACAD NO.	101
SHEET NO.:	- OF -



REV.	DATE	BY	DESCRIPTION

CLAY LINER DENSITY/PERM TEST LOCATION - LIFTS 3

PHASE 3 - CELL 1 CONSTRUCTION

GARLAND COUNTY CLASS 4 LANDFILL

GARLAND COUNTY CLASS 4 LANDFILL

HOT SPRINGS ARKANSAS

Terracon
Consulting Engineers and Scientists
28950 I-30 SOUTH
BRYANT, AR 72022
PH: (501) 847-9282
FAX: (501) 847-9210

FIGURE 6

DESIGNED BY:	OC
DRAWN BY:	AJS
APPV'D. BY:	OC
SCALE:	SEE BARSCALE
DATE:	12/03/2025
JOB NO.	009-006-35247264
ACAD NO.	101
SHEET NO.:	- OF -

Appendix B
Daily Field Logs

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/14/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

___	Clear	___	Cloudy
___	Partly Cloudy	___	Rain
___	Windy	___	Foggy / Misty
___	Low Temp. (°F)	___	High Temp. (°F)

REPORTING TIMES:

Arrive Site: _____
Depart Site: _____

FIELD TESTING PERFORMED:

___	Moisture/Density	___	Bridge Lift
___	Shelby Tube(s)	___	Clay Liner

EQUIPMENT ONSITE:

___	Dozer(s)	___	Tractor & Pans
___	Excavator(s)	___	Skidsteer
___	Backhoe(s)	___	Water Truck
___	Haul Truck(s)	___	Sheeps Foot Compactor
___	Motor Grader(s)	___	Smooth Drum Compactor

PERSONNEL ONSITE:

___	Client	___	Liner Crew
___	Contractor	___	Liner Installer
___	CQA Consultant	___	Concrete Crew
___	Design Engineer	___	Pipe Installer
___	Surveyor	___	Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor does not work on Sundays.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/15/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
77	Low Temp. (°F)	91	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 2:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on test pad lift 1.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/16/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo, Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
74	Low Temp. (°F)	89	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 12:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on test pad lift 1.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/17/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo, Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

	Clear	X	Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
71	Low Temp. (°F)	90	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 7:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

	Moisture/Density		Bridge Lift
	Shelby Tube(s)		Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on test pad lift 1.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/18/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

	Clear		Cloudy
X	Partly Cloudy		Rain
	Windy		Foggy / Misty
72	Low Temp. (°F)	94	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on test pad lift 1.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/19/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo, Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
72	Low Temp. (°F)	91	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
2	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on test pad lift 1.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/20/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

	Clear		Cloudy
X	Partly Cloudy		Rain
	Windy		Foggy / Misty
82	Low Temp. (°F)	93	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 7:45 AM
Depart Site: 1:00 PM

FIELD TESTING PERFORMED:

	Moisture/Density		Bridge Lift
	Shelby Tube(s)		Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor worked on test pad lift 1.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/21/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

___	Clear	___	Cloudy
___	Partly Cloudy	___	Rain
___	Windy	___	Foggy / Misty
___	Low Temp. (°F)	___	High Temp. (°F)

REPORTING TIMES:

Arrive Site: _____
Depart Site: _____

FIELD TESTING PERFORMED:

___	Moisture/Density	___	Bridge Lift
___	Shelby Tube(s)	___	Clay Liner

EQUIPMENT ONSITE:

___	Dozer(s)	___	Tractor & Pans
___	Excavator(s)	___	Skidsteer
___	Backhoe(s)	___	Water Truck
___	Haul Truck(s)	___	Sheeps Foot Compactor
___	Motor Grader(s)	___	Smooth Drum Compactor

PERSONNEL ONSITE:

___	Client	___	Liner Crew
___	Contractor	___	Liner Installer
___	CQA Consultant	___	Concrete Crew
___	Design Engineer	___	Pipe Installer
___	Surveyor	___	Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor does not work on Sunday.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/22/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
77	Low Temp. (°F)	91	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 2:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on lift 1 and sifted clay through portable shaker. Rain event.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/23/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
74	Low Temp. (°F)	89	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 12:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on lift 1 and sifted clay through portable shaker. Rain event.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/24/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

	Clear	X	Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
71	Low Temp. (°F)	90	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 7:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

	Moisture/Density		Bridge Lift
	Shelby Tube(s)		Clay Liner

EQUIPMENT ONSITE:

	Dozer(s)		Tractor & Pans
	Excavator(s)		Skidsteer
	Backhoe(s)		Water Truck
	Haul Truck(s)		Sheeps Foot Compactor
	Motor Grader(s)		Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
	Contractor		Liner Installer
	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on lift 2 of test pad.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/25/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo, Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

	Clear		Cloudy
X	Partly Cloudy		Rain
	Windy		Foggy / Misty
72	Low Temp. (°F)	94	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on test pad (Lift-2 and Lift-3).

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/26/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
72	Low Temp. (°F)	91	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
2	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractors worked on lift-1 and spread clay.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/27/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

___	Clear	___	Cloudy
___	Partly Cloudy	___	Rain
___	Windy	___	Foggy / Misty
___	Low Temp. (°F)	___	High Temp. (°F)

REPORTING TIMES:

Arrive Site: _____
Depart Site: _____

FIELD TESTING PERFORMED:

___	Moisture/Density	___	Bridge Lift
___	Shelby Tube(s)	___	Clay Liner

EQUIPMENT ONSITE:

___	Dozer(s)	___	Tractor & Pans
___	Excavator(s)	___	Skidsteer
___	Backhoe(s)	___	Water Truck
___	Haul Truck(s)	___	Sheeps Foot Compactor
___	Motor Grader(s)	___	Smooth Drum Compactor

PERSONNEL ONSITE:

___	Client	___	Liner Crew
___	Contractor	___	Liner Installer
___	CQA Consultant	___	Concrete Crew
___	Design Engineer	___	Pipe Installer
___	Surveyor	___	Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor did not work.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/28/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

___	Clear	___	Cloudy
___	Partly Cloudy	___	Rain
___	Windy	___	Foggy / Misty
___	Low Temp. (°F)	___	High Temp. (°F)

REPORTING TIMES:

Arrive Site: _____
Depart Site: _____

FIELD TESTING PERFORMED:

___	Moisture/Density	___	Bridge Lift
___	Shelby Tube(s)	___	Clay Liner

EQUIPMENT ONSITE:

___	Dozer(s)	___	Tractor & Pans
___	Excavator(s)	___	Skidsteer
___	Backhoe(s)	___	Water Truck
___	Haul Truck(s)	___	Sheeps Foot Compactor
___	Motor Grader(s)	___	Smooth Drum Compactor

PERSONNEL ONSITE:

___	Client	___	Liner Crew
___	Contractor	___	Liner Installer
___	CQA Consultant	___	Concrete Crew
___	Design Engineer	___	Pipe Installer
___	Surveyor	___	Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor does not work on Sundays.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/29/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 9/30/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/1/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/2/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/3/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/4/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician:
Test Location: Phase 3 - Cell 1

WEATHER:

___	Clear	___	Cloudy
___	Partly Cloudy	___	Rain
___	Windy	___	Foggy / Misty
___	Low Temp. (°F)	___	High Temp. (°F)

REPORTING TIMES:

Arrive Site: _____
Depart Site: _____

FIELD TESTING PERFORMED:

___	Moisture/Density	___	Bridge Lift
___	Shelby Tube(s)	___	Clay Liner

EQUIPMENT ONSITE:

___	Dozer(s)	___	Tractor & Pans
___	Excavator(s)	___	Skidsteer
___	Backhoe(s)	___	Water Truck
___	Haul Truck(s)	___	Sheeps Foot Compactor
___	Motor Grader(s)	___	Smooth Drum Compactor

PERSONNEL ONSITE:

___	Client	___	Liner Crew
___	Contractor	___	Liner Installer
___	CQA Consultant	___	Concrete Crew
___	Design Engineer	___	Pipe Installer
___	Surveyor	___	Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor did not work.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/5/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

___	Clear	___	Cloudy
___	Partly Cloudy	___	Rain
___	Windy	___	Foggy / Misty
___	Low Temp. (°F)	___	High Temp. (°F)

REPORTING TIMES:

Arrive Site: _____
Depart Site: _____

FIELD TESTING PERFORMED:

___	Moisture/Density	___	Bridge Lift
___	Shelby Tube(s)	___	Clay Liner

EQUIPMENT ONSITE:

___	Dozer(s)	___	Tractor & Pans
___	Excavator(s)	___	Skidsteer
___	Backhoe(s)	___	Water Truck
___	Haul Truck(s)	___	Sheeps Foot Compactor
___	Motor Grader(s)	___	Smooth Drum Compactor

PERSONNEL ONSITE:

___	Client	___	Liner Crew
___	Contractor	___	Liner Installer
___	CQA Consultant	___	Concrete Crew
___	Design Engineer	___	Pipe Installer
___	Surveyor	___	Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor does not work on Sundays.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/6/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo, Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/7/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/8/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/9/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/10/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/11/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

	Clear		Cloudy
X	Partly Cloudy		Rain
	Windy		Foggy / Misty
82	Low Temp. (°F)	93	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 7:45 AM
Depart Site: 1:00 PM

FIELD TESTING PERFORMED:

	Moisture/Density		Bridge Lift
	Shelby Tube(s)		Clay Liner

EQUIPMENT ONSITE:

	Dozer(s)		Tractor & Pans
	Excavator(s)		Skidsteer
	Backhoe(s)		Water Truck
	Haul Truck(s)		Sheeps Foot Compactor
	Motor Grader(s)		Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
X	Contractor		Liner Installer
	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/12/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

___	Clear	___	Cloudy
___	Partly Cloudy	___	Rain
___	Windy	___	Foggy / Misty
___	Low Temp. (°F)	___	High Temp. (°F)

REPORTING TIMES:

Arrive Site: _____
Depart Site: _____

FIELD TESTING PERFORMED:

___	Moisture/Density	___	Bridge Lift
___	Shelby Tube(s)	___	Clay Liner

EQUIPMENT ONSITE:

___	Dozer(s)	___	Tractor & Pans
___	Excavator(s)	___	Skidsteer
___	Backhoe(s)	___	Water Truck
___	Haul Truck(s)	___	Sheeps Foot Compactor
___	Motor Grader(s)	___	Smooth Drum Compactor

PERSONNEL ONSITE:

___	Client	___	Liner Crew
___	Contractor	___	Liner Installer
___	CQA Consultant	___	Concrete Crew
___	Design Engineer	___	Pipe Installer
___	Surveyor	___	Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor does not work on Sundays.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/13/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/14/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/15/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/16/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/17/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/18/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

	Clear		Cloudy
X	Partly Cloudy		Rain
	Windy		Foggy / Misty
82	Low Temp. (°F)	93	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 7:45 AM
Depart Site: 1:00 PM

FIELD TESTING PERFORMED:

	Moisture/Density		Bridge Lift
	Shelby Tube(s)		Clay Liner

EQUIPMENT ONSITE:

	Dozer(s)		Tractor & Pans
	Excavator(s)		Skidsteer
	Backhoe(s)		Water Truck
	Haul Truck(s)		Sheeps Foot Compactor
	Motor Grader(s)		Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
X	Contractor		Liner Installer
	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor did not work Saturday.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/19/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

___	Clear	___	Cloudy
___	Partly Cloudy	___	Rain
___	Windy	___	Foggy / Misty
___	Low Temp. (°F)	___	High Temp. (°F)

REPORTING TIMES:

Arrive Site: _____
Depart Site: _____

FIELD TESTING PERFORMED:

___	Moisture/Density	___	Bridge Lift
___	Shelby Tube(s)	___	Clay Liner

EQUIPMENT ONSITE:

___	Dozer(s)	___	Tractor & Pans
___	Excavator(s)	___	Skidsteer
___	Backhoe(s)	___	Water Truck
___	Haul Truck(s)	___	Sheeps Foot Compactor
___	Motor Grader(s)	___	Smooth Drum Compactor

PERSONNEL ONSITE:

___	Client	___	Liner Crew
___	Contractor	___	Liner Installer
___	CQA Consultant	___	Concrete Crew
___	Design Engineer	___	Pipe Installer
___	Surveyor	___	Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Contractor did not work on Sundays.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/20/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/21/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/22/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/23/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo, Allie Storment
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/24/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

X	Clear		Cloudy
	Partly Cloudy		Rain
	Windy		Foggy / Misty
40	Low Temp. (°F)	60	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 8:00 AM
Depart Site: 4:00 PM

FIELD TESTING PERFORMED:

X	Moisture/Density		Bridge Lift
	Shelby Tube(s)	X	Clay Liner

EQUIPMENT ONSITE:

X	Dozer(s)		Tractor & Pans
X	Excavator(s)		Skidsteer
	Backhoe(s)	X	Water Truck
X	Haul Truck(s)	X	Sheeps Foot Compactor
	Motor Grader(s)	X	Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
4	Contractor		Liner Installer
1	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Worked on clay liner.

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Daily Project Construction Summary

Terracon
25809 Interstate 30 South
Bryant, AR 72022
(501) 847-9292

Project No: 35247264
Date of Report: 10/25/2025
Client Name: Garland County Class 4 Landfill
Contractor: James A. Rogers Excavating
Project Name: Phase 3 - Cell 1 & Partial Closure
Technician: Fernando Ocampo
Test Location: Phase 3 - Cell 1

WEATHER:

	Clear		Cloudy
X	Partly Cloudy		Rain
	Windy		Foggy / Misty
82	Low Temp. (°F)	93	High Temp. (°F)

REPORTING TIMES:

Arrive Site: 7:45 AM
Depart Site: 1:00 PM

FIELD TESTING PERFORMED:

	Moisture/Density		Bridge Lift
	Shelby Tube(s)		Clay Liner

EQUIPMENT ONSITE:

	Dozer(s)		Tractor & Pans
	Excavator(s)		Skidsteer
	Backhoe(s)		Water Truck
	Haul Truck(s)		Sheeps Foot Compactor
	Motor Grader(s)		Smooth Drum Compactor

PERSONNEL ONSITE:

	Client		Liner Crew
X	Contractor		Liner Installer
	CQA Consultant		Concrete Crew
	Design Engineer		Pipe Installer
	Surveyor		Gas Line Inst.

SUMMARY OF ACTIVITIES OBSERVED:

Note: Copies of all completed "Project Field Record Forms" are to be submitted to the Project Manager at the end of each day and should be maintained with the Project Records.

Appendix C
Soils Information

Appendix C-1
Pre-Construction Testing

Table 1
Garland County Cedar Glades Class 4 LF - Phase 3, Cell 1
Soils Lab Testing - Preconstruction Testing

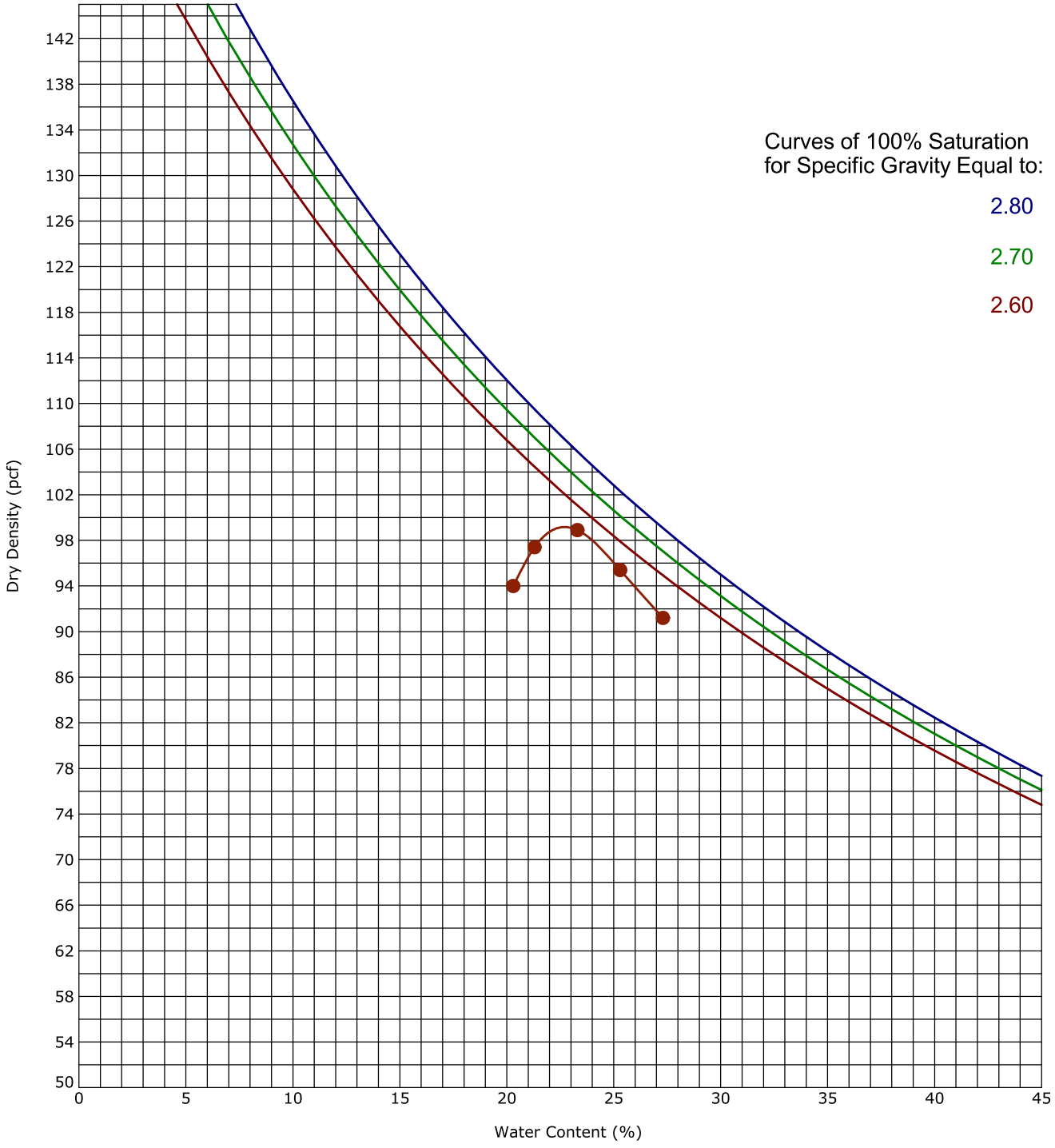
Material ID	Max Dry Density (PCF)	Optimum Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Passing #200	Permeability (cm/sec)	Description/Comment
JARE-CL1	99.2	22.7	48	27	21	80.1	5.20E-06	Lean Clay with Sand (CL) not used
Sub-PC1	109.1	16.6						Proctor for Subgrade Density Check
CL-PC1	105.7	19.1	60	30	30	72.0	1.18E-05	Fat Clay with Sand (CH)
CL-PC1							6.45E-06	Permeability retest at +0.9% OMC
CL-PC2	110.2	17.3	41	19	22	74.3	6.10E-07	Red Lean Clay with Sand (CL)
Clay Requirements					**>10**	**>30%**	**<1.00E-5 cm/sec**	

James A Rogers Soil Testing
16800 West Baseline | Little Rock, Arkansas
Terracon Project No. 35257128

2822 O'Neal Ln, Bldg B
Baton Rouge, LA

Moisture-Density Relationship

ASTM D698-Method A



Sample Identification	Description of Materials
JARE-CL1	LEAN CLAY with SAND(CL)

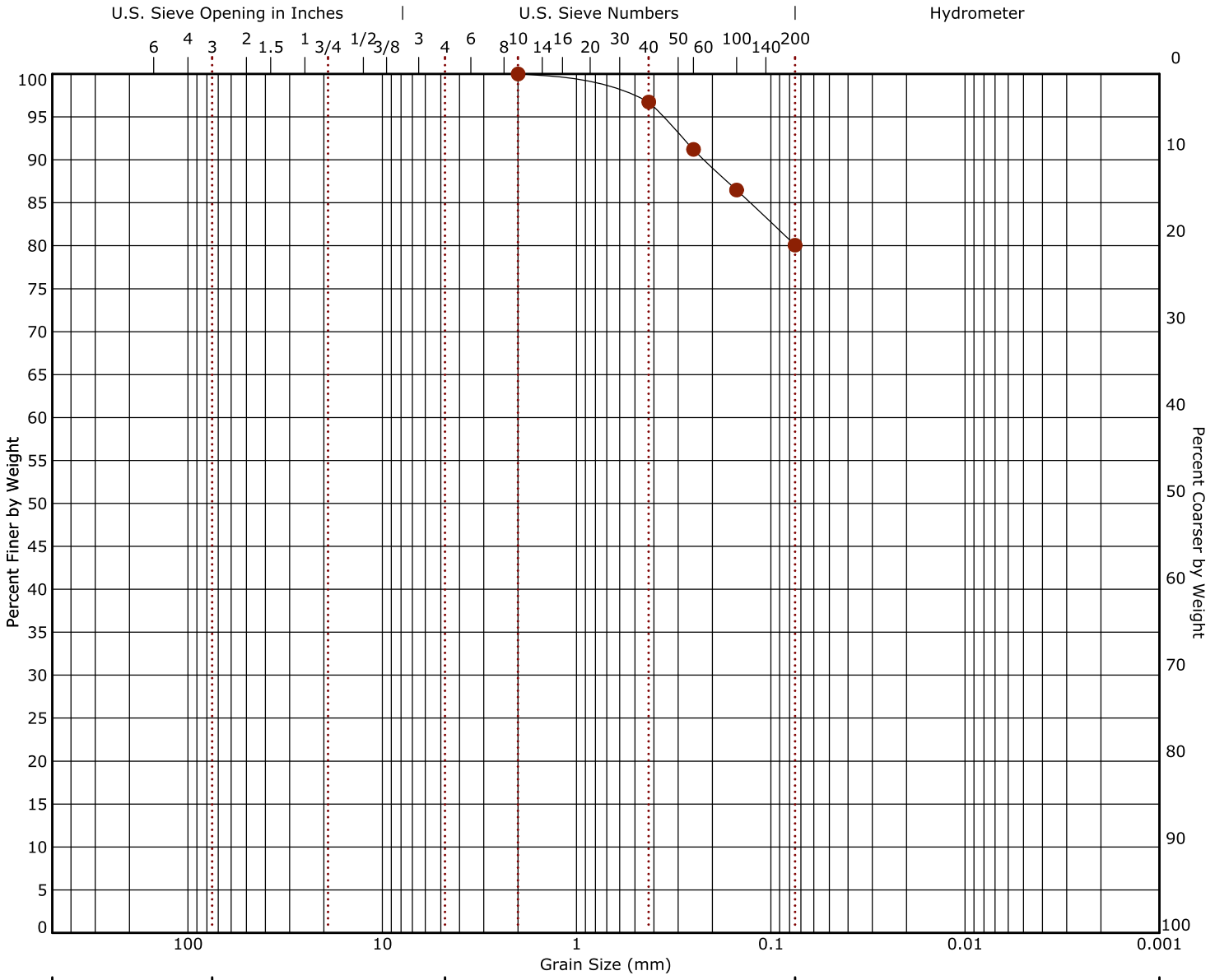
Fines (%)	Fraction > mm size	LL	PL	PI	Test Method	Maximum Dry Density (pcf)	Optimum Water Content (%)
80	0.0	48	27	21	ASTM D698-Method A	99.2	22.7

James A Rogers Soil Testing
16800 West Baseline | Little Rock, Arkansas
Terracon Project No. 35257128

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA

Grain Size Distribution

ASTM D422 / ASTM C136 / AASHTO T27



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Sample ID	% Cobbles	% Gravel	% Sand	% Fines	% Silt	% Clay	USCS
● JARE-CL1	0.0	0.0	19.9	80.1			CL

Description
● LEAN CLAY with SAND

Remarks
● Natural Moisture Content: 23.8%

● Sieve	● % Finer	Sieve	% Finer	Sieve	% Finer
#10	100.0				
#40	96.73				
#60	91.22				
#100	86.49				
#200	80.07				

Grain Size			
	●		
D_{60}			
D_{10}			

Coefficients			
	●		
C_C			
C_U			

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35257128

Project: James A Rogers Soil Testing

Boring No.: N/A Depth/Sample No.: JARE-CL1

Material: Red LEAN CLAY with SAND (CL)

Max Dry Density(pcf) = 99.2 OMC = 22.7

% of max = 90.0% +/- OMC = 0.0

	Before Test	After Test
Can No.	145	374
Wet Wt.&Tare	85.24	112.65
Dry Wt. & Tare	76.43	95.11
Tare Wt.	37.6	36.38
Wt. of Dry Soil	38.8	58.73
Water Content	22.7	29.9

Avg. Dia. 2.800 UWW: 109.6

Sample Ht. 2.000 UDW: 89.3

Sample Wt. 354.19 Pres. Diff. 5.0

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		J-S	53 PSI		cm/sec	
Date	**Time**	**Date**	**Time**	**H1**	**H2**	**PSI**	**H1**	**H2**		PV Ratio
05/30/25	9:52	05/30/25	9:56	2.7	5.7	60.0	23.2	20.1	4.40E-06	0.97
05/30/25	9:56	05/30/25	9:59	5.7	8.7	60.0	20.1	17.2	5.67E-06	1.03
05/30/25	9:59	05/30/25	10:02	8.7	11.5	60.0	17.2	14.5	5.29E-06	1.04
05/30/25	10:02	05/30/25	10:09	11.5	17.0	60.0	14.5	9.1	4.49E-06	1.02
05/30/25	10:09	05/30/25	10:12	17.0	20.2	60.0	9.1	5.9	6.15E-06	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: 48

Plastic Limit: 27

Plasticity Index: 21

ASTM D1140 Wash 200

Percent Fines (%): 80.1

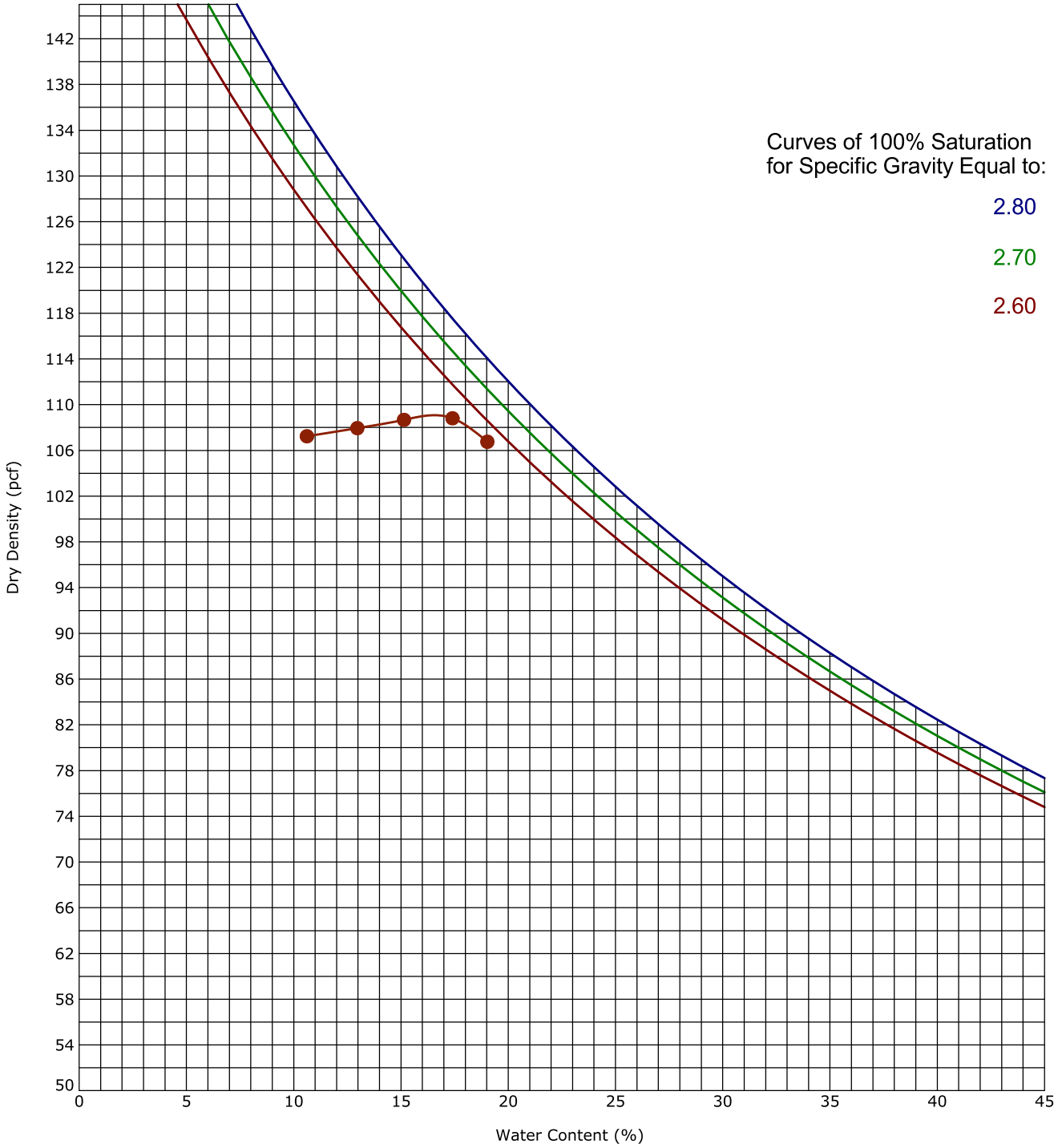
Avg. K_{20} = 5.20E-06 cm/sec

Remolded at 95% compaction of Standard Proctor and optimum moisture content

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA

Moisture-Density Relationship

ASTM D698-Method A



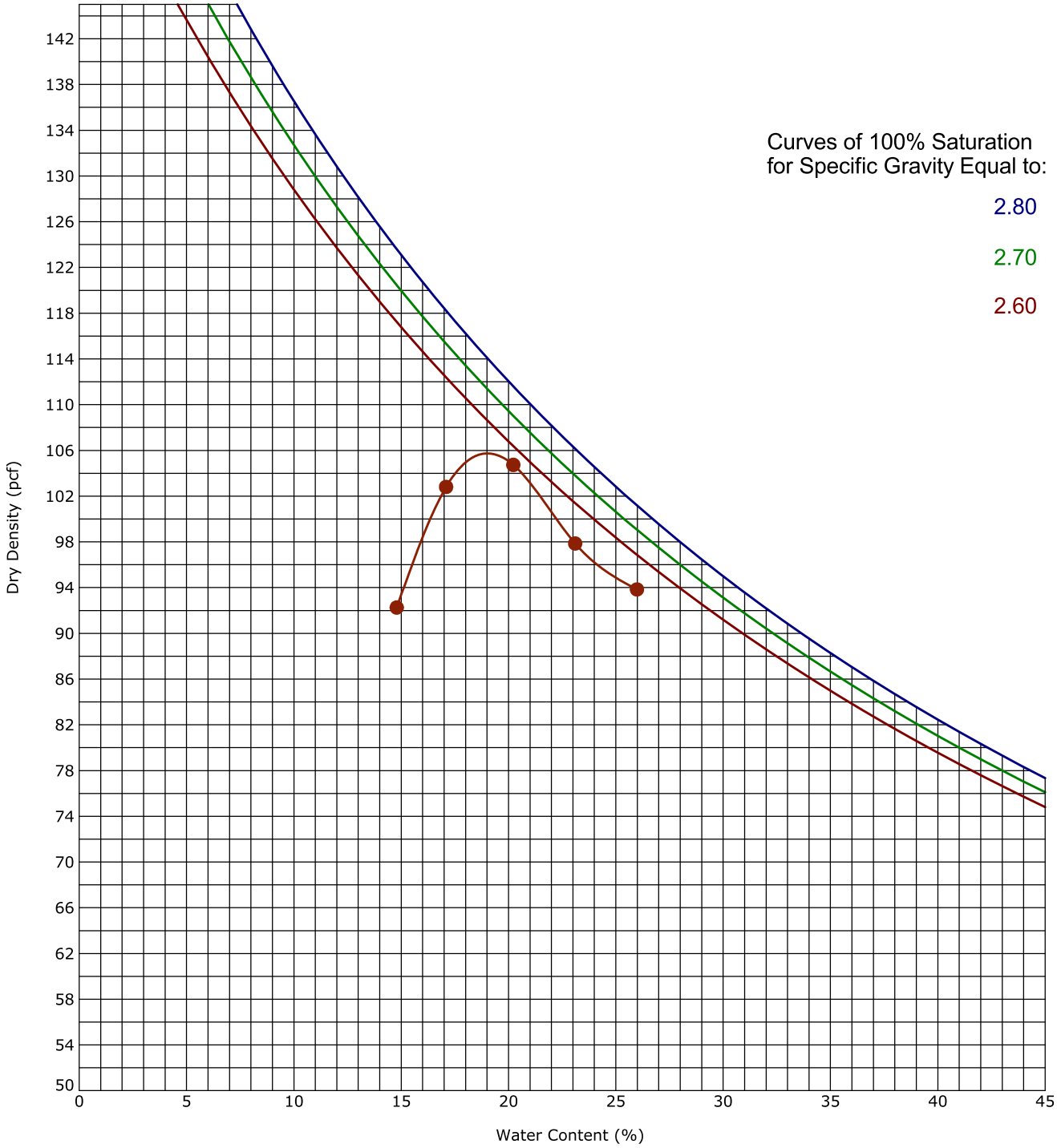
Sample Identification	Description of Materials
SUB-PC1	Tan Lean Clay

Fines (%)	Fraction > mm size	LL	PL	PI	Test Method	Maximum Dry Density (pcf)	Optimum Water Content (%)
N/A	0.0	N/A	N/A	N/A	ASTM D698-Method A	109.1	16.6

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA

Moisture-Density Relationship

ASTM D698-Method A



Sample Identification	Description of Materials
CL-PC1	FAT CLAY with SAND(CH)

Fines (%)	Fraction > mm size	LL	PL	PI	Test Method	Maximum Dry Density (pcf)	Optimum Water Content (%)
72	0.0	60	30	30	ASTM D698-Method A	105.7	19.1

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = 105.7 OMC = 19.1

Boring No.: N/A Depth/Sample No.: CL-PC1

% of max = 90.9% +/- OMC = 0.9

Material: Reddish-Brown Fat Clay with Sand

	Before Test	After Test
Can No.	136	186
Wet Wt.&Tare	99.27	447.52
Dry Wt. & Tare	90.98	359.52
Tare Wt.	49.6	49.64
Wt. of Dry Soil	41.4	309.88
Water Content	20.0	28.4

Avg. Dia. 2.825 UWW: 115.3

Sample Ht. 1.985 UDW: 96.0

Sample Wt. 376.50 Pres. Diff. 5.0

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910098	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
09/04/25	3:28:00	09/04/25	3:28:10	11.6	12.6	60.0	14.4	11.3	6.92E-05	0.32
09/04/25	3:28:10	09/04/25	3:28:20	12.6	13.7	60.0	11.3	10.2	1.24E-05	1.00
09/04/25	3:28:20	09/04/25	3:28:30	13.7	14.8	60.0	10.2	9.1	7.43E-06	1.00
09/04/25	3:28:30	09/04/25	3:28:40	14.8	15.9	60.0	9.1	8.0	5.30E-06	1.00
09/04/25	3:28:40	09/04/25	3:28:50	15.9	17.0	60.0	8.0	7.0	3.94E-06	1.10
09/04/25	3:28:50	09/04/25	3:29:00	17.0	18.1	60.0	7.0	6.0	3.22E-06	1.10

ASTM D4318 Atterberg Limits

Liquid Limit: 60

Plastic Limit: 30

Plasticity Index: 30

ASTM D1140 Wash 200

Percent Fines (%): 72.1

Avg. K_{20} = 6.45E-06 cm/sec

Remolded at 90% compaction of Standard Proctor and 1% - 2% above optimum moisture content

ASTM D2216 WATER CONTENT OF SOIL AND ROCK

Report Number: 35247264.0012
Service Date: 09/24/25
Report Date: 10/04/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264

Sample Location	CL-PC2
Method Used	B
Water Content (%)	23.1
Visual Description	Red Lean Clay with Sand
Date Tested	09/29/25
Sample Tested By	Desharnais, Diego

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

LABORATORY COMPACTION CHARACTERISTICS OF SOIL

Report Number: 35247264.0012
Service Date: 09/24/25
Report Date: 10/04/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

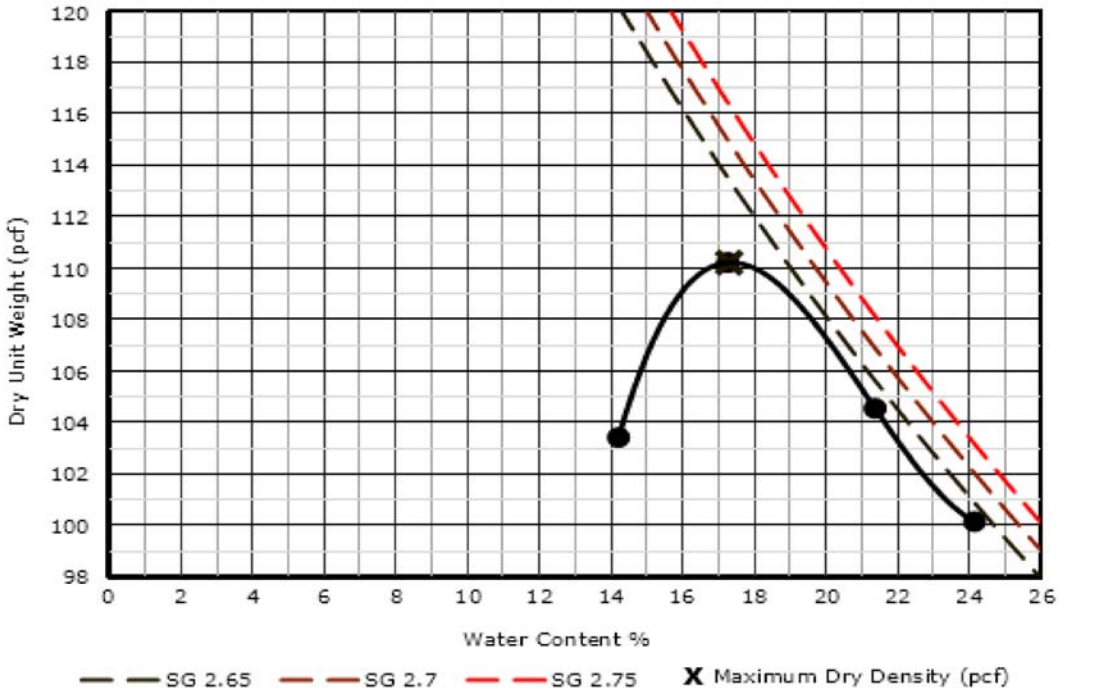
Project No. 35247264

Sample Information

Source of Material		**Test Designation / Method**	D698 / Method A
Sample Date		**Sample Preparation**	Wet
Sampled By		**Rammer Type**	Manual
As Received Water Content (%)	23.1	**Assumed Specific Gravity**	2.7
Sample Location			
Sample Description	Red Lean Clay with Sand		

Laboratory Test Results

Maximum Dry Unit Weight (pcf)	110.2	**Liquid Limit**	41
Optimum Water Content (%)	17.3	**Plastic Limit**	19
Fines (%)	74.3	**Plasticity Index**	22
USCS	CL	**Separating Sieve Size**	#4



Remarks

CL-PC2

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution

(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

ASTM D6913, SINGLE SIEVE SET, METHOD B

Report Number: 35247264.0012
Service Date: 09/24/25
Report Date: 10/04/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

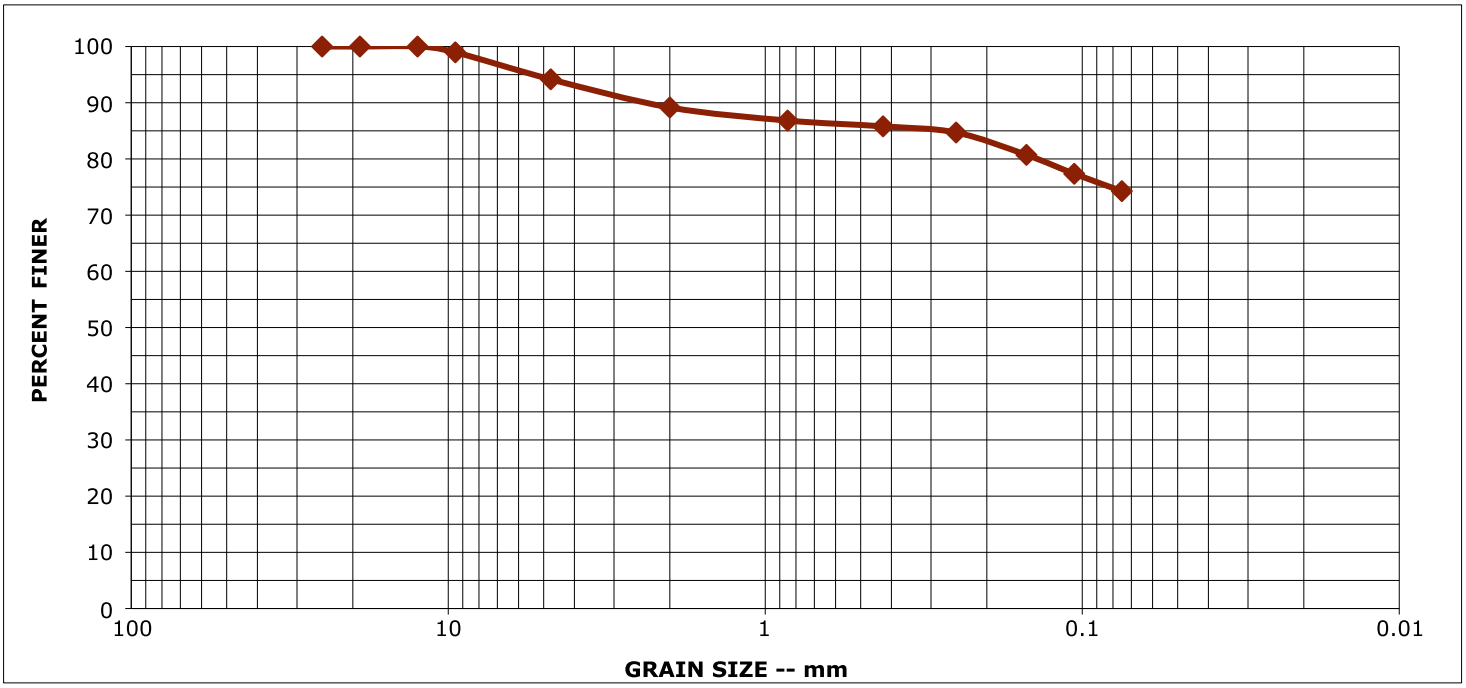
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Sample Location	Description	USCS	% Cobbles	% Gravel	% Sand	% Fines
CL-PC2	Red Lean Clay with Sand	CL	0.0	5.8	19.9	74.3

Sieve	% Finer	Sieve	% Finer	Coefficients	
1"	100.0	#100	80.7	C_C	
3/4"	100.0	#140	77.4	C_U	
1/2"	100.0	#200	74.3		
3/8"	99.0	Grain Size		Remarks	
#4	94.2				
#10	89.2	D_{100}	12.500	N/A	
#20	86.8	D_{60}			
#40	85.8	D_{30}			
#60	84.7	D_{10}			

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

ASTM D4318 LIQUID AND PLASTIC LIMIT, PI OF SOIL

Report Number: 35247264.0012
Service Date: 09/24/25
Report Date: 10/04/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

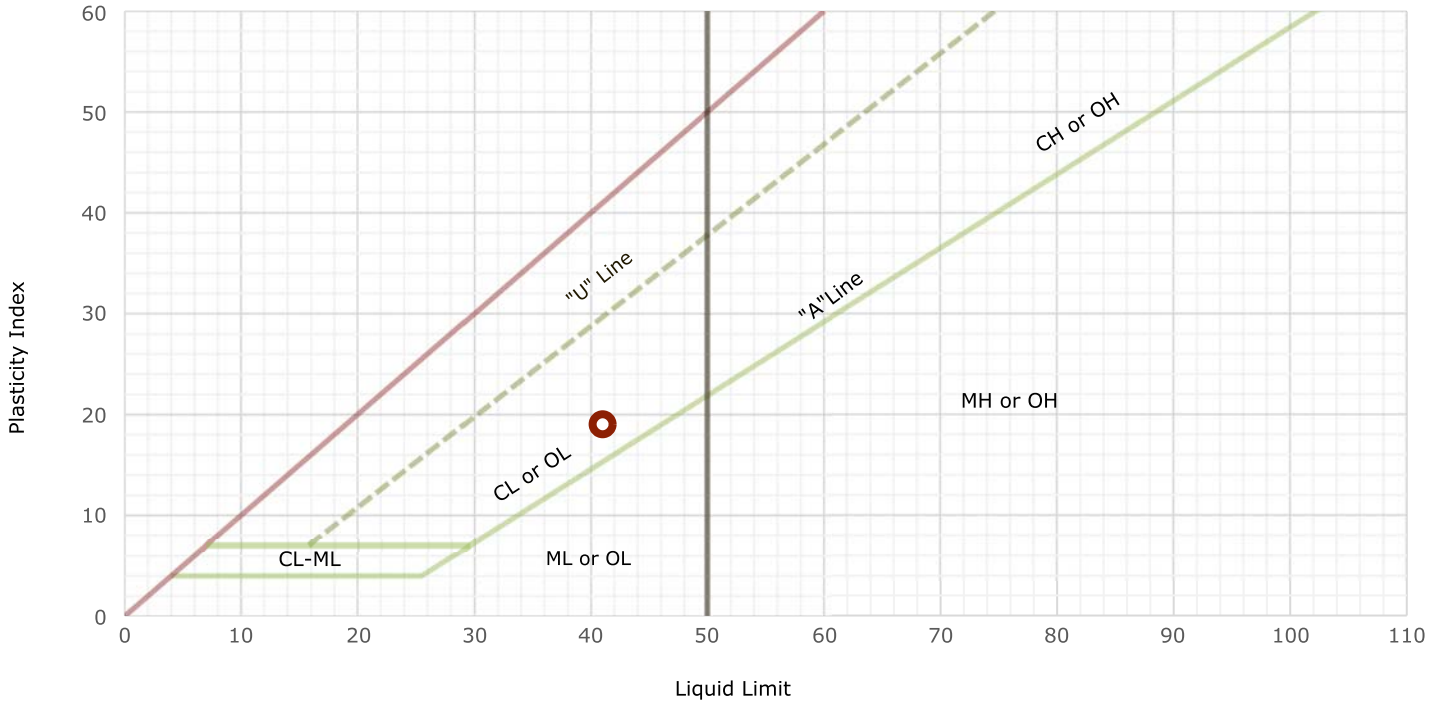
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Location	LL	PL	PI	Fines (%)	Description	USCS
CL-PC2	41	22	19	74.3	Red Lean Clay with Sand	CL

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Boring No.: N/A Depth/Sample No.: CL-PC2

Max Dry Density(pcf) = 110.2 OMC = 17.3

% of max = 90.4% +/- OMC = -0.3

Material: Red Lean Clay with Sand

	Before Test	After Test
Can No.	610	153
Wet Wt.&Tare(g)	72.05	458.15
Dry Wt. & Tare(g)	67.03	375.90
Tare Wt.(g)	37.5	49.63
Wt. of Dry Soil(g)	29.6	326.27
Water Content(%)	17.0	25.2

Avg. Dia. 2.815 in UWW: 116.5 pcf

Sample Ht. 2.000 in UDW: 99.6 pcf

Sample Wt. 380.70 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58 PSI		910098	53 PSI		Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
10/11/25	9:23	10/11/25	9:26	2.0	2.3	60.0	22.0	21.6	6.66E-07	0.75
10/11/25	9:26	10/11/25	9:29	2.3	2.6	60.0	21.6	21.3	5.71E-07	1.00
10/11/25	9:29	10/11/25	9:32	2.6	2.9	60.0	21.3	21.0	5.71E-07	1.00
10/11/25	9:32	10/11/25	9:35	2.9	3.2	60.0	21.0	20.7	5.71E-07	1.00
10/11/25	9:35	10/11/25	9:39	3.2	3.7	60.0	20.7	20.2	7.14E-07	1.00
10/11/25	9:39	10/11/25	9:42	3.7	4.0	60.0	20.2	19.9	5.71E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: 41

Plastic Limit: 19

Plasticity Index: 22

ASTM D1140 Wash 200

Percent Fines (%): 74.3

Avg. K_{20} = 6.10E-07 cm/sec

Remolded at 90% compaction of Standard Proctor and 0% - 2% above optimum moisture content

MTA ENGINEERS

Proctor Compaction Test

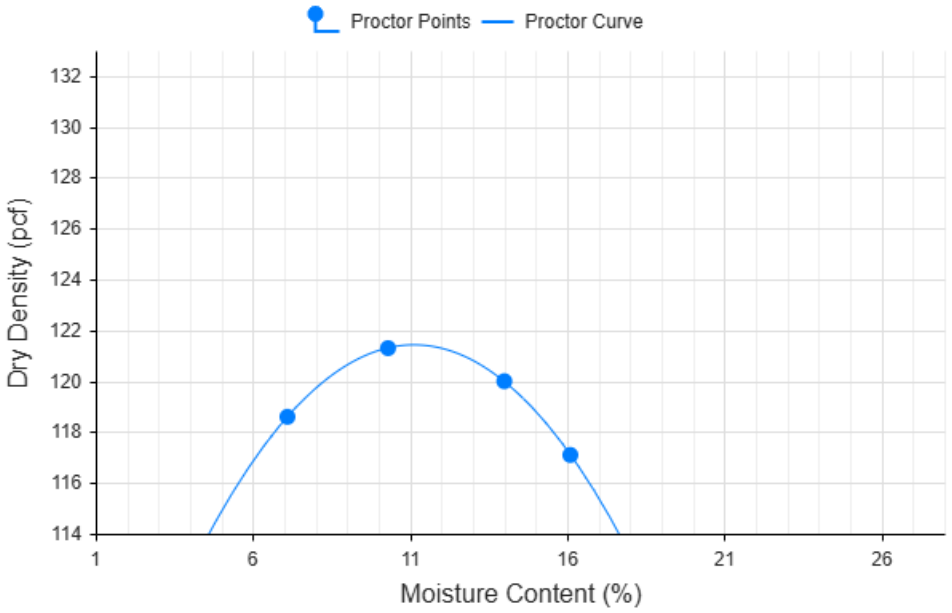
Report #: 004-L1

Client: MCHENRY AND MEYER COMPANIES, LLC
Project: GARLAND COUNTY LANDFILL
Location: 1040 CEDARGLADE RD, HOT SPRINGS, AR

Report Date: 08/05/2025 **Sample Date:** 07/28/2025
Project #: LR25-454

SAMPLE AND PROCTOR CURVE (MOISTURE DENSITY)

Sample No: 2 **Proctor #:** 004-L1
Sample Source / Location: On Site
Sample Description / Classification: Reddish-Light Brown Sandy Clay w/ Aggregate
Test Procedure: Modified Proctor (ASTM D1557) (Method B)
Preparation Method: Moist
Hammer: Manual
Max Dry Density (pcf): 121.4
Optimum Moisture (%): 11.1 %



Sieve Sizes	% Retained	% Passing	Spec Limits
2 in (50mm)	0	100	
1-1/2 in (37.5mm)	9.5	90	
3/4 in (19mm)	32	68	
3/8 in (9.5mm)	44	56	
#4 (4.75mm)	52	48	
#10 (2mm)	59	41	
#40 (0.425mm)	69	31	
#200 (0.075mm)	78	22	

Standard	Physical Properties	Results
D-4318 (Atterberg Limits)	Liquid Limit (LL)	36
	Plastic Limit (PL)	22
	Plasticity Index (PI)	14
	Non-Plastic	
D-2487 (Classification of Soil)	Percent Gravel	52
	Percent Sand	26
	Percent Fines	22

Remarks:
CTTP Lab #905100
USCS (ASTM D2487): GC
AASHTO: A-2-6 (0)
Soil Description: Clayey gravel with sand

Report Copied to: MCHENRY AND MEYER COMPANIES, LLC, PAT

MTA ENGINEERS

Proctor Compaction Test

Report #: 004-L1

Client: MCHENRY AND MEYER COMPANIES, LLC
Project: GARLAND COUNTY LANDFILL
Location: 1040 CEDARGLADE RD, HOT SPRINGS, AR

Report Date: 08/05/2025 **Sample Date:** 07/28/2025
Project #: LR25-454

Lab Representative: Connie Shearer CTTP
TECH # 3556
Cert No: 3556

Jim Stepp CTTP SUPVR #3348
FIELD/LAB SUPVR
MTA Engineers - Little Rock, AR
Date Signed: 08/05/2025 02:55 PM

Representative / Client:

Notes: The results above apply only to the specific samples noted using the aforementioned test method(s) and do not represent any other sample. Reports may not be reproduced except in full without permission.

MTA ENGINEERS

Proctor Compaction Test

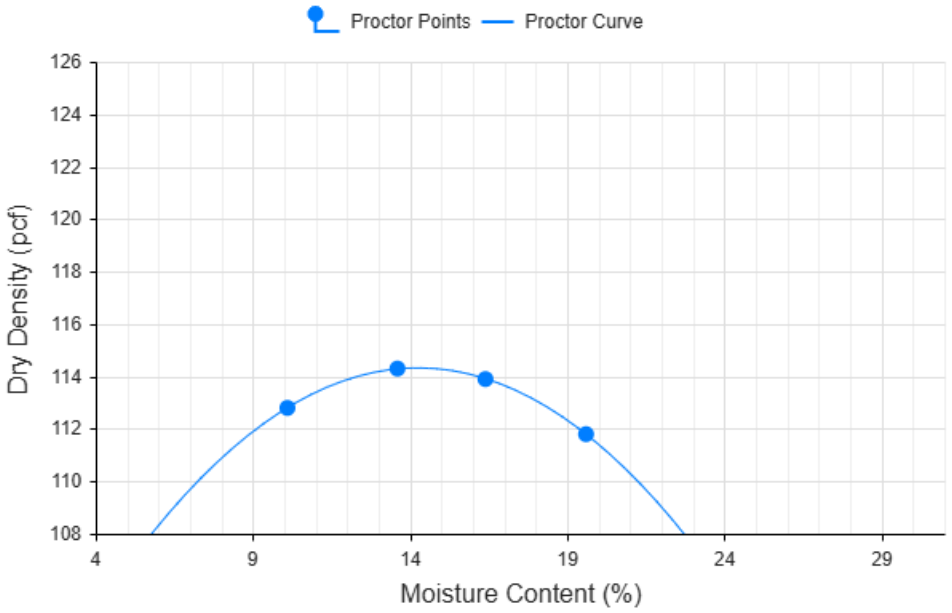
Report #: 004-L2

Client: MCHENRY AND MEYER COMPANIES, LLC
Project: GARLAND COUNTY LANDFILL
Location: 1040 CEDARGLADE RD, HOT SPRINGS, AR

Report Date: 08/05/2025 **Sample Date:** 07/28/2025
Project #: LR25-454

SAMPLE AND PROCTOR CURVE (MOISTURE DENSITY)

Sample No: 3 **Proctor #:** 004-L2
Sample Source / Location: On Site
Sample Description / Classification: Tan & Red Silty Clay w/ Shale Fragments & Sand
Test Procedure: Modified Proctor (ASTM D1557) (Method C)
Preparation Method: Moist
Hammer: Manual
Max Dry Density (pcf): 114.3
Optimum Moisture (%): 14.2 %



Sieve Sizes	% Retained	% Passing	Spec Limits
2 in (50mm)	0	100	
1-1/2 in (37.5mm)	1.9	98	
3/4 in (19mm)	12	88	
3/8 in (9.5mm)	20	80	
#4 (4.75mm)	25	75	
#10 (2mm)	30	70	
#40 (0.425mm)	34	66	
#200 (0.075mm)	43	57	

Standard	Physical Properties	Results
D-4318 (Atterberg Limits)	Liquid Limit (LL)	41
	Plastic Limit (PL)	25
	Plasticity Index (PI)	16
	Non-Plastic	
D-2487 (Classification of Soil)	Percent Gravel	25
	Percent Sand	18
	Percent Fines	57

Remarks:
CTTP Lab #905100
USCS (ASTM D2487): CL
Soil Description: Gravelly lean clay with sand

Report Copied to: MCHENRY AND MEYER COMPANIES, LLC, PAT

MTA ENGINEERS

Proctor Compaction Test

Report #: 004-L2

Client: MCHENRY AND MEYER COMPANIES, LLC
Project: GARLAND COUNTY LANDFILL
Location: 1040 CEDARGLADE RD, HOT SPRINGS, AR

Report Date: 08/05/2025 **Sample Date:** 07/28/2025
Project #: LR25-454

Lab Representative: Connie Shearer CTTP
TECH # 3556
Cert No: 3556

Jim Stepp CTTP SUPVR #3348
FIELD/LAB SUPVR
MTA Engineers - Little Rock, AR
Date Signed: 08/05/2025 02:55 PM

Representative / Client:

Notes: The results above apply only to the specific samples noted using the aforementioned test method(s) and do not represent any other sample. Reports may not be reproduced except in full without permission.

Appendix C-2
Construction Testing

Table 2
Garland County Cedar Glades Class 4 LF - Phase 3, Cell 1
Soils Lab Testing - Construction Testing

Material ID	Max Dry Density (PCF)	Optimum Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Passing #200	Permeability (cm/sec)	Sample Description
CL-C1	91.8	28.5	76	34	42	97.4	4.67E-06	Red Fat Clay (CH)
CL-C2	107	19.7	54	26	28	80.2	2.98E-06	Red Fat Clay with Sand (CH)
CL-C3	105.3	20.6	42	23	19	55.4	3.18E-06	Red Sandy Lean Clay (CL)
CL-C4	99.7	22.3	43	26	17	65.6	2.57E-07	Red Sandy Lean Clay (CL)
CL-C5	100.9	20.6	43	22	21	81.4	3.46E-06	Brown and Red Lean Clay with Sand (CL)
Clay Requirements					**>10**	**>30%**	**≤1.00E-5 cm/sec**	**Placed at ≥+1% and ≤+6% OMC**

ASTM D2216 WATER CONTENT OF SOIL AND ROCK

Report Number: 35247264.0009
Service Date: 09/15/25
Report Date: 10/02/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264

Sample Location	CL-C1
Method Used	B
Water Content (%)	32.5
Visual Description	Red Fat Clay
Date Tested	10/02/25
Sample Tested By	Desharnais, Diego

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

ASTM D4318 LIQUID AND PLASTIC LIMIT, PI OF SOIL

Report Number: 35247264.0009
Service Date: 09/15/25
Report Date: 10/02/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

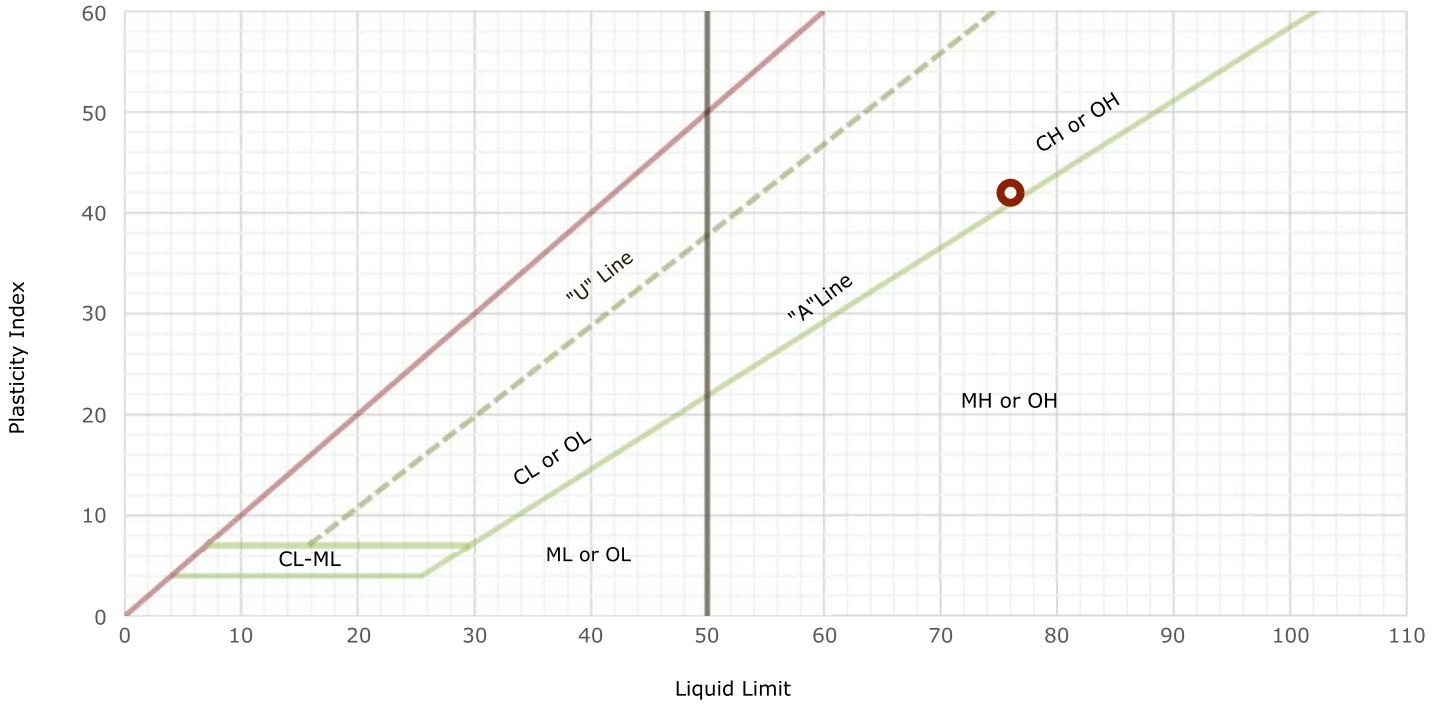
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Location	LL	PL	PI	Fines (%)	Description	USCS
CL-C1	76	34	42	97.4	Red Fat Clay	CH

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

ASTM D6913, SINGLE SIEVE SET, METHOD B

Report Number: 35247264.0009
Service Date: 09/15/25
Report Date: 10/02/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

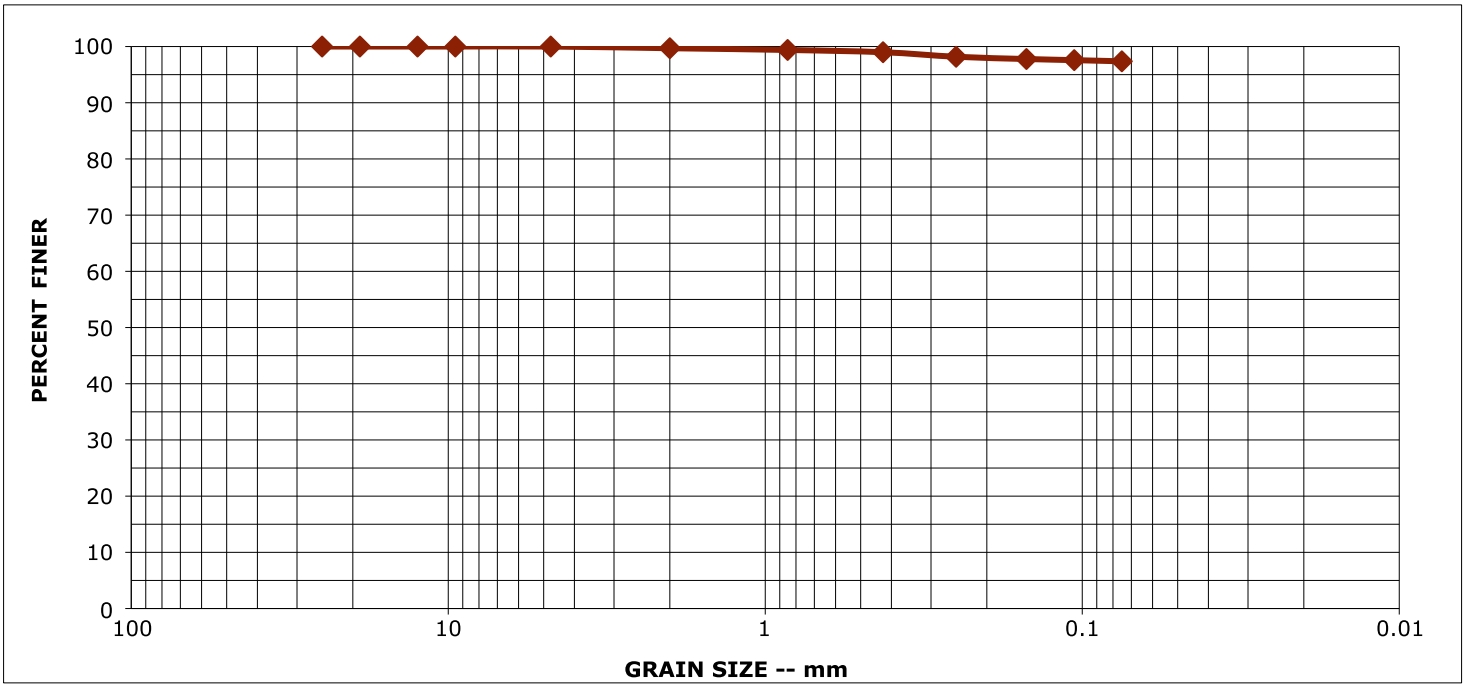
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Sample Location	Description	USCS	% Cobbles	% Gravel	% Sand	% Fines
CL-C1	Red Fat Clay	CH	0.0	0.0	2.6	97.4

Sieve	% Finer	Sieve	% Finer	Coefficients	
1"	100.0	#100	97.8	C_C	
3/4"	100.0	#140	97.6	C_U	
1/2"	100.0	#200	97.4		
3/8"	100.0	Grain Size		Remarks	
#4	100.0				
#10	99.7	D_{100}	4.750	N/A	
#20	99.4	D_{60}			
#40	99.0	D_{30}			
#60	98.2	D_{10}			

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

LABORATORY COMPACTION CHARACTERISTICS OF SOIL

Report Number: 35247264.0009A
Service Date: 09/24/25
Report Date: 10/02/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

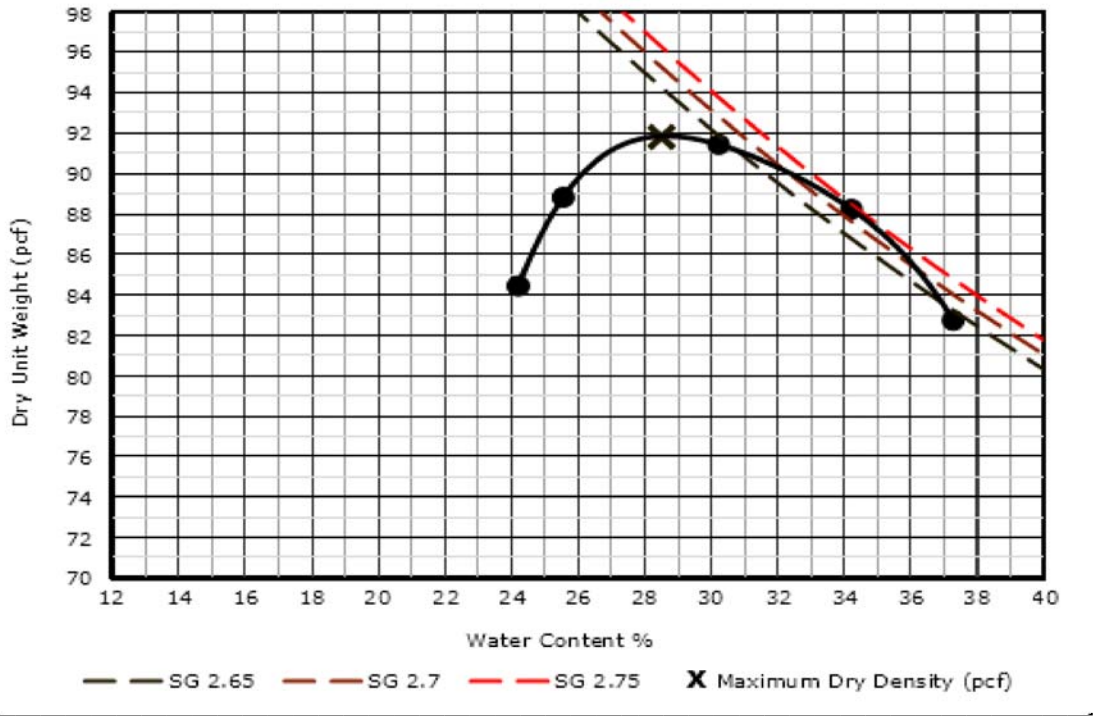
Project No. 35247264

Sample Information

Source of Material		**Test Designation / Method**	D698 / Method A
Sample Date		**Sample Preparation**	Wet
Sampled By	Diego Desharnais	**Rammer Type**	Manual
As Received Water Content (%)	32.5	**Assumed Specific Gravity**	2.7
Sample Location			
Sample Description	Red Fat Clay		

Laboratory Test Results

Maximum Dry Unit Weight (pcf)	91.8	**Liquid Limit**	76
Optimum Water Content (%)	28.5	**Plastic Limit**	34
Fines (%)	97.4	**Plasticity Index**	42
USCS	CH	**Separating Sieve Size**	#4



Services:
Terracon Rep: Diego Desharnais
Reported To:
Contractor:

Report Distribution

(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Boring No.: N/A Depth/Sample No.: CL-C1

Max Dry Density(pcf) = 91.8 OMC = 28.5

% of max = 89.7% +/- OMC = 0.4

Material: Reddish-Brown Fat Clay

	Before Test	After Test
Can No.	135	118
Wet Wt.&Tare(g)	89.83	434.69
Dry Wt. & Tare(g)	80.80	320.40
Tare Wt.(g)	49.6	49.63
Wt. of Dry Soil(g)	31.2	270.77
Water Content(%)	28.9	42.2

Avg. Dia. 2.815 in UWW: 106.2 pcf

Sample Ht. 2.000 in UDW: 82.4 pcf

Sample Wt. 347.00 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910098	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
09/26/25	15:16:20	09/26/25	15:16:30	10.6	11.6	60.0	11.8	10.8	6.85E-06	1.00
09/26/25	15:16:30	09/26/25	15:16:40	11.6	12.6	60.0	10.8	9.8	4.89E-06	1.00
09/26/25	15:16:40	09/26/25	15:16:50	12.6	13.6	60.0	9.8	8.8	3.81E-06	1.00
09/26/25	15:16:50	09/26/25	15:17:00	13.6	14.6	60.0	8.8	7.8	3.11E-06	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: 76

Plastic Limit: 34

Plasticity Index: 42

ASTM D1140 Wash 200

Percent Fines (%): 97.4

Avg. K_{20} = 4.67E-06 cm/sec

Remolded at 90% compaction of Standard Proctor and 0% - 2% above optimum moisture content

ASTM D2216 WATER CONTENT OF SOIL AND ROCK

Report Number: 35247264.0010
Service Date: 09/24/25
Report Date: 10/04/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264

Sample Location	CL-C2
Method Used	B
Water Content (%)	21.9
Visual Description	Red Fat Clay with Sand
Date Tested	10/04/25
Sample Tested By	Johnson, Jeremiah

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

ASTM D4318 LIQUID AND PLASTIC LIMIT, PI OF SOIL

Report Number: 35247264.0010
Service Date: 09/24/25
Report Date: 10/04/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

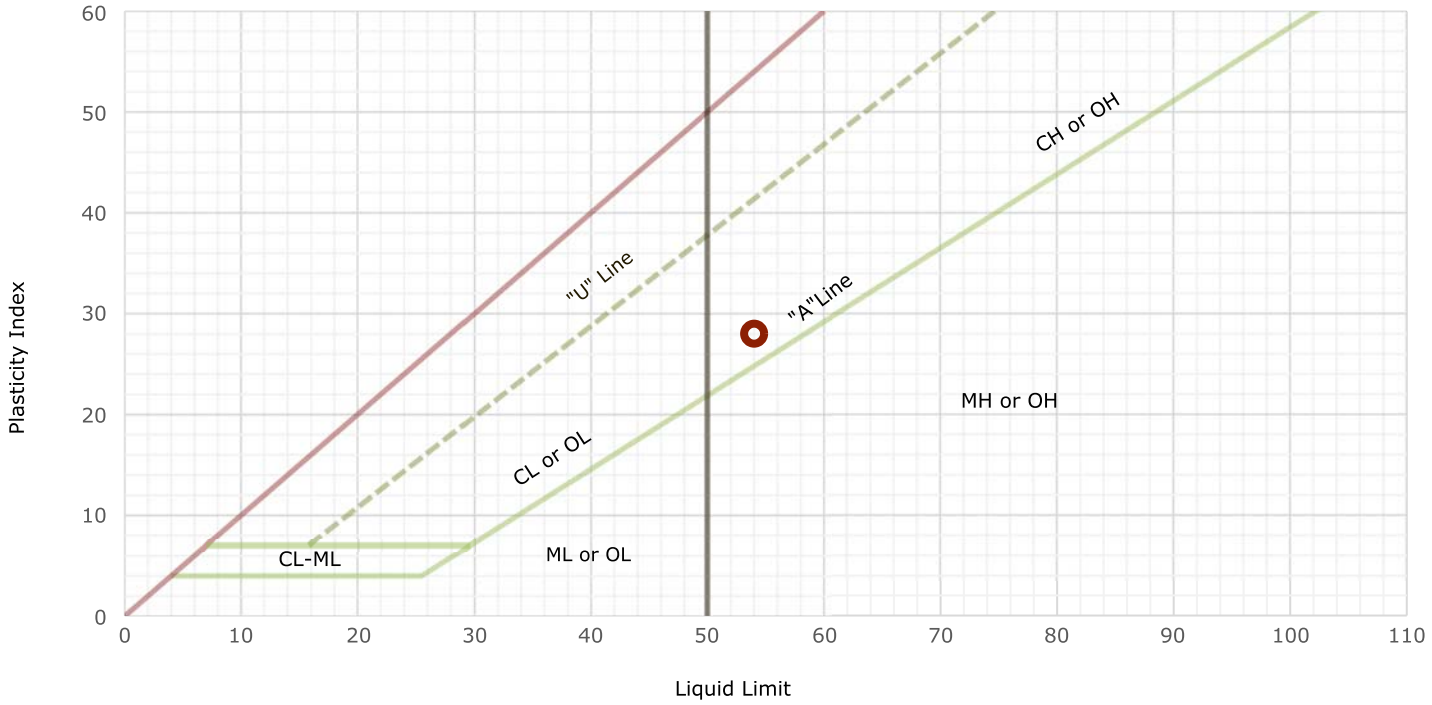
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Location	LL	PL	PI	Fines (%)	Description	USCS
n/a	54	26	28	80.2	Red Fat Clay with Sand	CH

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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ASTM D6913, SINGLE SIEVE SET, METHOD B

Report Number: 35247264.0010
Service Date: 09/24/25
Report Date: 10/04/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

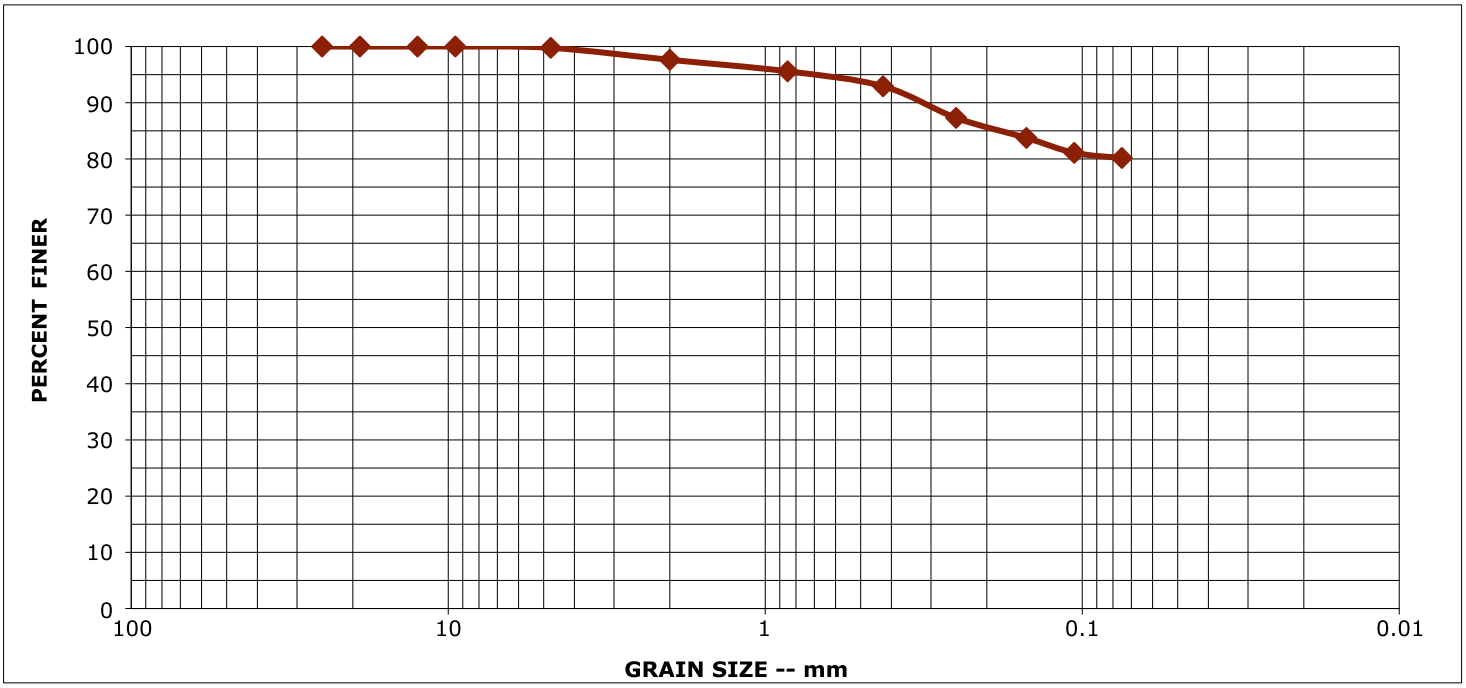
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Sample Location	Description	USCS	% Cobbles	% Gravel	% Sand	% Fines
	Red Fat Clay with Sand	CH	0.0	0.2	19.6	80.2

Sieve	% Finer	Sieve	% Finer	Coefficients	
1"	100.0	#100	83.7	C_C	
3/4"	100.0	#140	81.1	C_U	
1/2"	100.0	#200	80.2		
3/8"	100.0	Grain Size		Remarks	
#4	99.8				
#10	97.6	D_{100}	9.500	N/A	
#20	95.6	D_{60}			
#40	92.9	D_{30}			
#60	87.3	D_{10}			

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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LABORATORY COMPACTION CHARACTERISTICS OF SOIL

Report Number: 35247264.0010
Service Date: 09/24/25
Report Date: 10/04/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

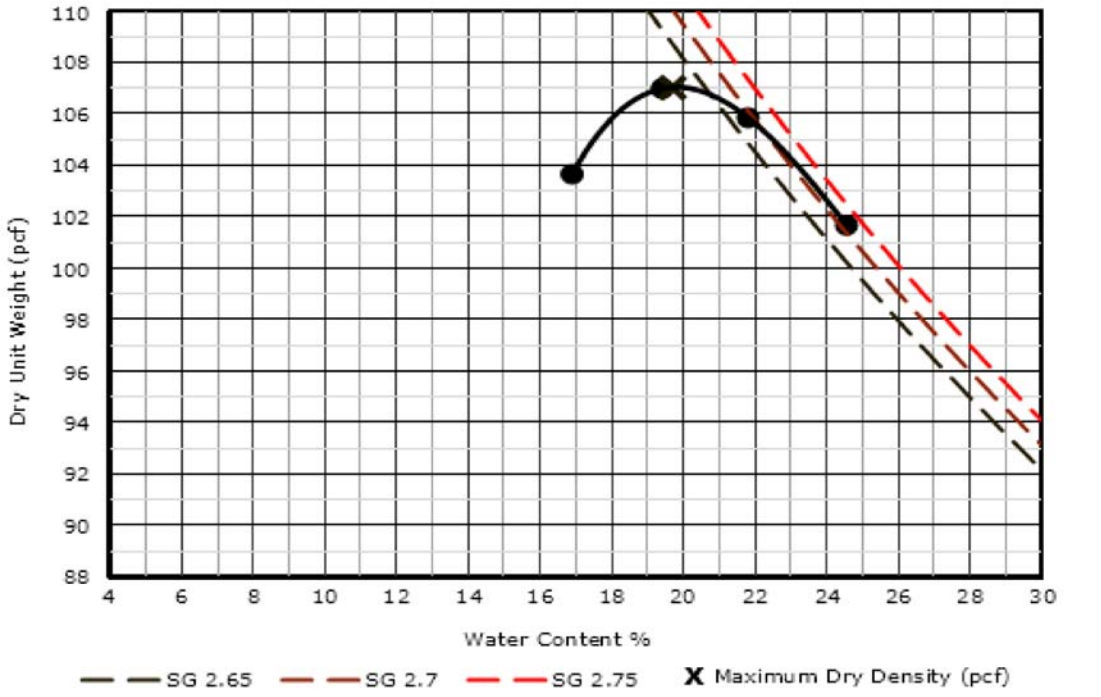
Project No. 35247264

Sample Information

Source of Material		**Test Designation / Method**	D698 / Method A
Sample Date		**Sample Preparation**	Wet
Sampled By		**Rammer Type**	Manual
As Received Water Content (%)	21.9	**Assumed Specific Gravity**	2.7
Sample Location			
Sample Description	Red Fat Clay with Sand		

Laboratory Test Results

Maximum Dry Unit Weight (pcf)	107.0	**Liquid Limit**	54
Optimum Water Content (%)	19.7	**Plastic Limit**	26
Fines (%)	80.2	**Plasticity Index**	28
USCS	CH	**Separating Sieve Size**	#4



Remarks
CL-C2

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution

(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Boring No.: N/A Depth/Sample No.: CL-C2

Max Dry Density(pcf) = 107.0 OMC = 19.7

% of max = 90.2% +/- OMC = -0.1

Material: Red Fat Clay with Sand

	Before Test	After Test
Can No.	397	155
Wet Wt.&Tare(g)	93.45	459.54
Dry Wt. & Tare(g)	84.11	363.78
Tare Wt.(g)	36.4	49.56
Wt. of Dry Soil(g)	47.7	314.22
Water Content(%)	19.6	30.5

Avg. Dia. 2.815 in UWW: 115.4 pcf

Sample Ht. 2.000 in UDW: 96.5 pcf

Sample Wt. 377.10 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58	PSI	B	53	PSI	Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
10/11/25	9:17	10/11/25	9:20	8.0	9.5	60.0	12.0	10.5	2.85E-06	1.00
10/11/25	9:20	10/11/25	9:23	9.5	11.2	60.0	10.5	8.9	3.14E-06	1.06
10/11/25	9:23	10/11/25	9:26	11.2	13.2	60.0	8.9	6.5	4.19E-06	0.83
10/11/25	9:26	10/11/25	9:29	13.2	14.3	60.0	6.5	5.5	2.00E-06	1.10
10/11/25	9:29	10/11/25	9:32	14.3	15.9	60.0	5.5	4.0	2.95E-06	1.07
10/11/25	9:32	10/11/25	9:35	15.9	17.3	60.0	4.0	2.5	2.76E-06	0.93

ASTM D4318 Atterberg Limits

Liquid Limit: 54

Plastic Limit: 26

Plasticity Index: 28

ASTM D1140 Wash 200

Percent Fines (%): 80.2

Avg. K_{20} = 2.98E-06 cm/sec

Remolded at 90% compaction of Standard Proctor and 0% - 2% above optimum moisture content

ASTM D2216 WATER CONTENT OF SOIL AND ROCK

Report Number: 35247264.0011
Service Date: 09/24/25
Report Date: 10/07/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264

Sample Location	CL-C3
Method Used	B
Water Content (%)	29.5
Visual Description	Red Sandy Lean Clay
Date Tested	10/07/25
Sample Tested By	Desharnais, Diego

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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ASTM D4318 LIQUID AND PLASTIC LIMIT, PI OF SOIL

Report Number: 35247264.0011
Service Date: 09/24/25
Report Date: 10/07/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

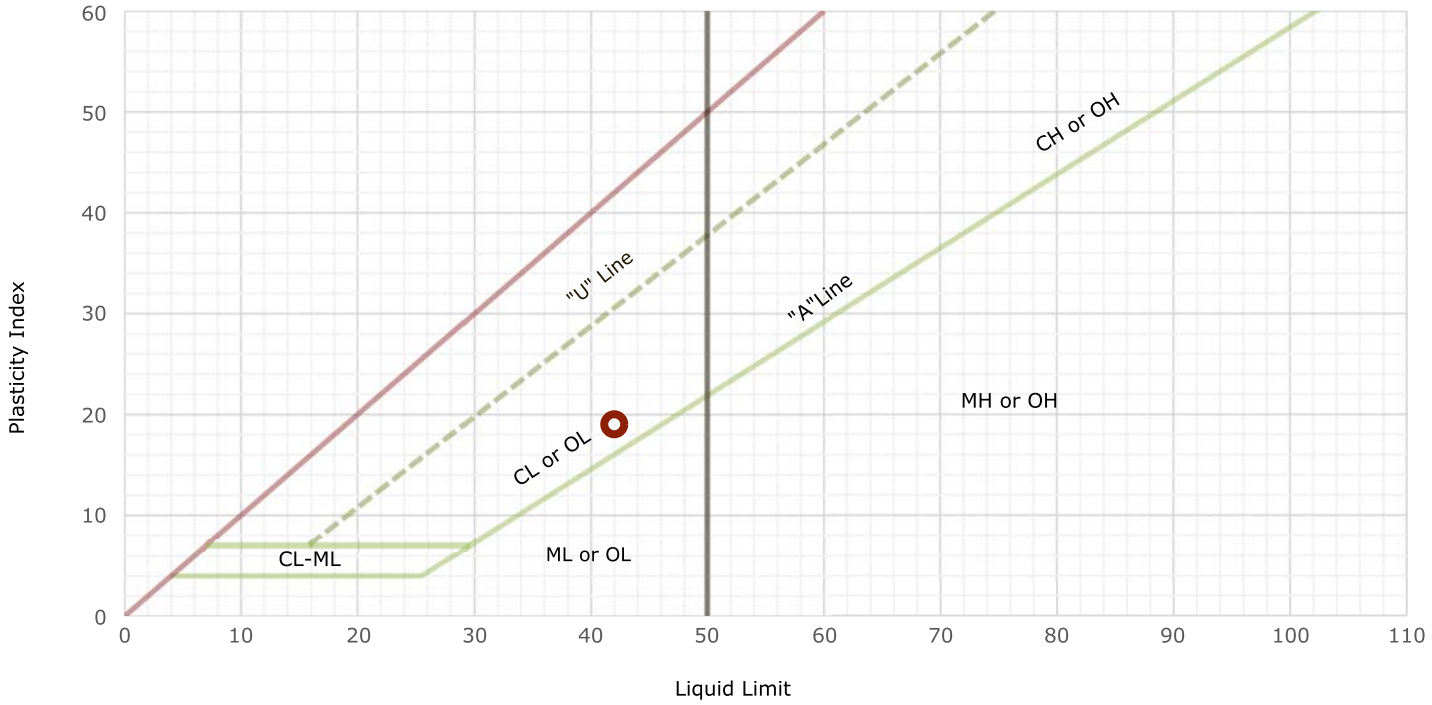
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Location	LL	PL	PI	Fines (%)	Description	USCS
CL-C3	42	23	19	55.4	Red Sandy Lean Clay	CL

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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ASTM D6913, SINGLE SIEVE SET, METHOD B

Report Number: 35247264.0011
Service Date: 09/24/25
Report Date: 10/04/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

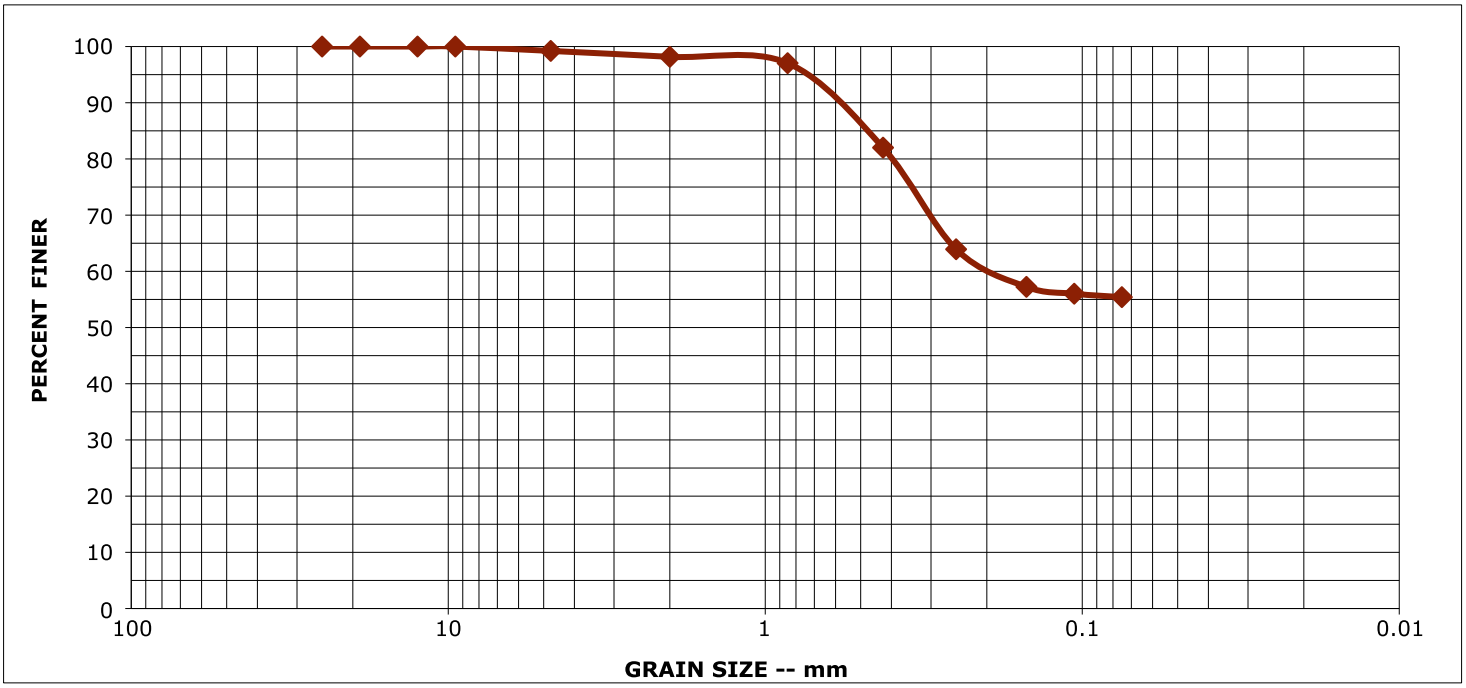
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Sample Location	Description	USCS	% Cobbles	% Gravel	% Sand	% Fines
CL-C3	Red Sandy Silt	ML	0.0	0.8	43.8	55.4

Sieve	% Finer	Sieve	% Finer	Coefficients	
1"	100.0	#100	57.2	C_C	
3/4"	100.0	#140	56.0	C_U	
1/2"	100.0	#200	55.4		
3/8"	100.0	Grain Size		Remarks	
#4	99.2				
#10	98.2	D_{100}	9.500	N/A	
#20	97.0	D_{60}	0.191		
#40	82.0	D_{30}			
#60	63.9	D_{10}			

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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LABORATORY COMPACTION CHARACTERISTICS OF SOIL

Report Number: 35247264.0011
Service Date: 09/24/25
Report Date: 10/07/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

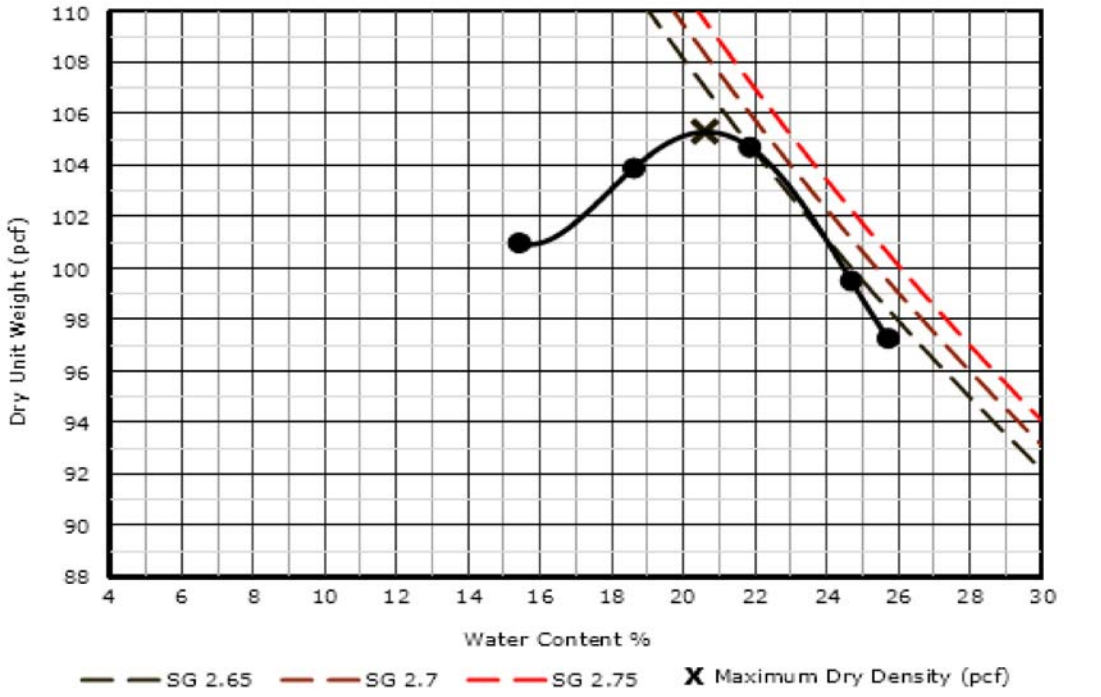
Project No. 35247264

Sample Information

Source of Material	On-site	**Test Designation / Method**	D698 / Method A
Sample Date	09/24/25	**Sample Preparation**	Wet
Sampled By	Fernando Ocampo Rodriguez	**Rammer Type**	Manual
As Received Water Content (%)	29.5	**Assumed Specific Gravity**	2.7
Sample Location	CL-C3		
Sample Description	Red Sandy Lean Clay		

Laboratory Test Results

Maximum Dry Unit Weight (pcf)	105.3	**Liquid Limit**	42
Optimum Water Content (%)	20.6	**Plastic Limit**	23
Fines (%)	55.4	**Plasticity Index**	19
USCS	CL	**Separating Sieve Size**	#4



Remarks

N/A

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution

(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = 105.3 OMC = 20.6

Boring No.: N/A Depth/Sample No.: CL-C3

% of max = 90.0% +/- OMC = 0.1

Material: Red Sandy Lean Clay

	Before Test	After Test
Can No.	328	139
Wet Wt.&Tare(g)	85.23	439.43
Dry Wt. & Tare(g)	77.08	350.91
Tare Wt.(g)	37.8	49.72
Wt. of Dry Soil(g)	39.3	301.19
Water Content(%)	20.7	29.4

Avg. Dia. 2.815 in UWW: 114.4 pcf

Sample Ht. 2.000 in UDW: 94.8 pcf

Sample Wt. 373.90 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		J-B	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
10/11/25	9:23	10/11/25	9:26	10.0	11.7	60.0	19.6	17.7	3.42E-06	0.89
10/11/25	9:26	10/11/25	9:29	11.7	13.6	60.0	17.7	16.0	3.42E-06	1.12
10/11/25	9:29	10/11/25	9:32	13.6	15.9	60.0	16.0	13.9	4.19E-06	1.10
10/11/25	9:32	10/11/25	9:35	15.9	17.3	60.0	13.9	12.6	2.57E-06	1.08
10/11/25	9:35	10/11/25	9:39	17.3	18.7	60.0	12.6	10.8	2.28E-06	0.78

ASTM D4318 Atterberg Limits

Liquid Limit: 42

Plastic Limit: 23

Plasticity Index: 19

ASTM D1140 Wash 200

Percent Fines (%): 55.4

Avg. K_{20} = 3.18E-06 cm/sec

Remolded at 90% compaction of Standard Proctor and 0% - 2% above optimum moisture content

ASTM D2216 WATER CONTENT OF SOIL AND ROCK

Report Number: 35247264.0014
Service Date: 09/25/25
Report Date: 10/07/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264

Sample Location	CL-C4
Method Used	B
Water Content (%)	27.9
Visual Description	Red Sandy Lean Clay
Date Tested	10/02/25
Sample Tested By	Connor, Kyler

Services:
Terracon Rep:
Reported To:
Contractor: McHenry Excavating

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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ASTM D4318 LIQUID AND PLASTIC LIMIT, PI OF SOIL

Report Number: 35247264.0014
Service Date: 09/25/25
Report Date: 10/07/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

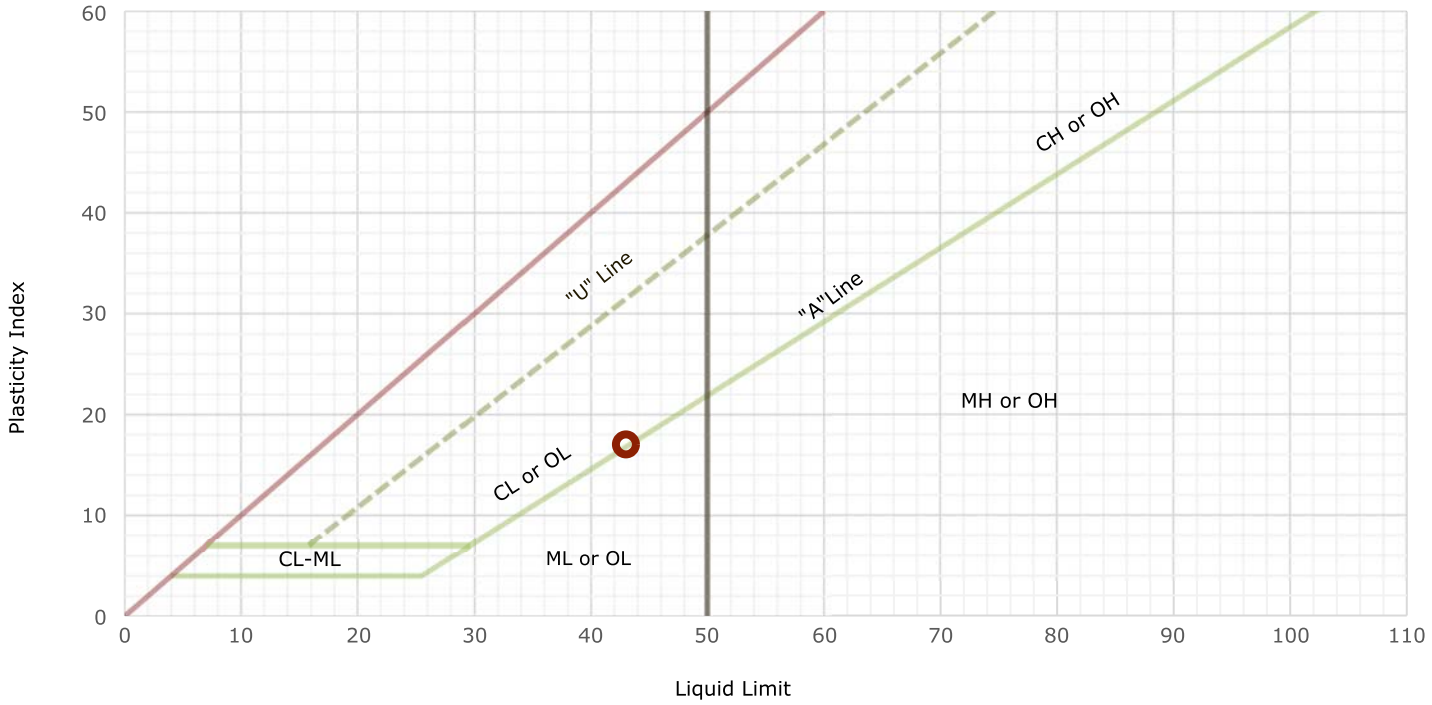
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Location	LL	PL	PI	Fines (%)	Description	USCS
CL-C4	43	26	17	65.6	Red Sandy Lean Clay	CL

Services:
Terracon Rep:
Reported To:
Contractor: McHenry Excavating

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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ASTM D6913, SINGLE SIEVE SET, METHOD B

Report Number: 35247264.0014
Service Date: 09/25/25
Report Date: 10/07/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

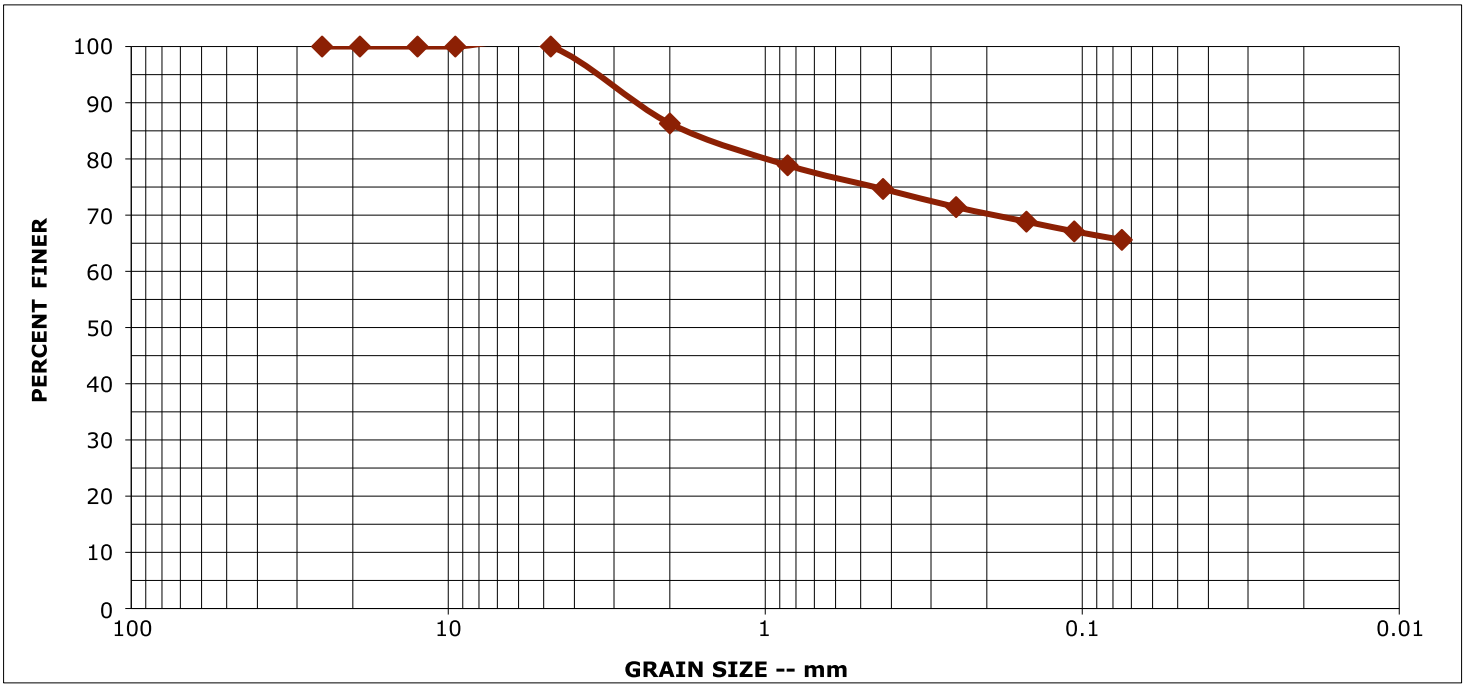
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Sample Location	Description	USCS	% Cobbles	% Gravel	% Sand	% Fines
CL-C4	Red Sandy Lean Clay	CL	0.0	0.0	34.4	65.6

Sieve	% Finer	Sieve	% Finer	Coefficients	
1"	100.0	#100	68.8	C_C	
3/4"	100.0	#140	67.1	C_U	
1/2"	100.0	#200	65.6		
3/8"	100.0	Grain Size		Remarks	
#4	100.0				
#10	86.3	D_{100}	4.750	N/A	
#20	78.9	D_{60}			
#40	74.7	D_{30}			
#60	71.4	D_{10}			

Services:
Terracon Rep:
Reported To:
Contractor: McHenry Excavating

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

LABORATORY COMPACTION CHARACTERISTICS OF SOIL

Report Number: 35247264.0014
Service Date: 09/25/25
Report Date: 10/07/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

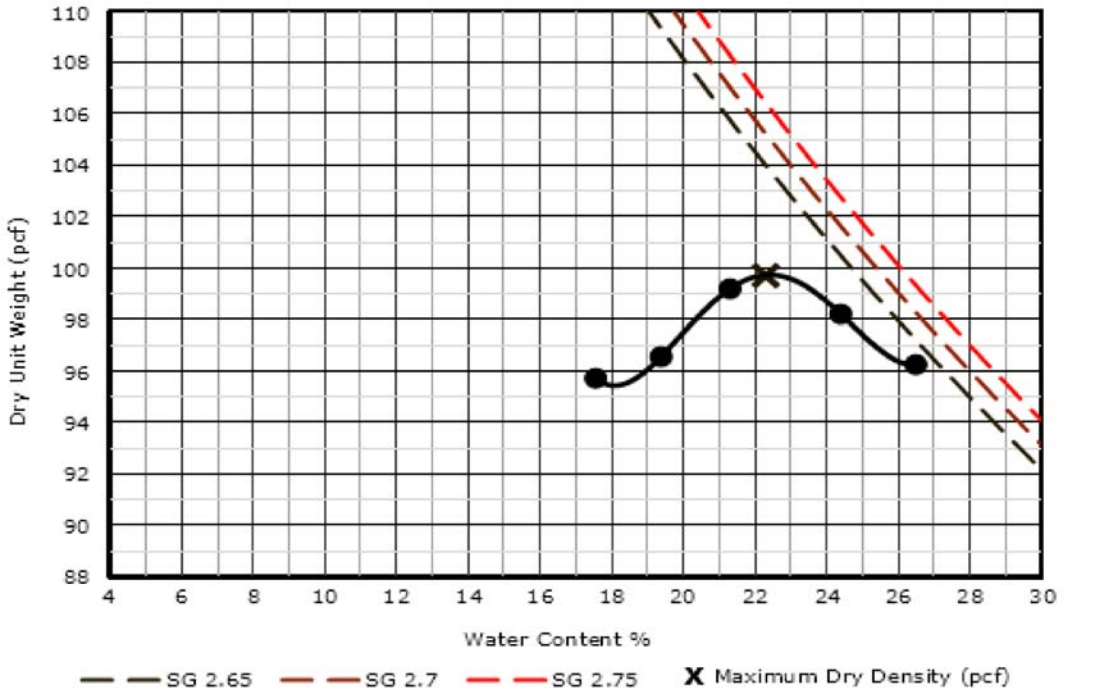
Project No. 35247264

Sample Information

Source of Material		**Test Designation / Method**	D698 / Method A
Sample Date		**Sample Preparation**	Wet
Sampled By		**Rammer Type**	Manual
As Received Water Content (%)	27.9	**Assumed Specific Gravity**	2.7
Sample Location			
Sample Description	Red Sandy Lean Clay		

Laboratory Test Results

Maximum Dry Unit Weight (pcf)	99.7	**Liquid Limit**	43
Optimum Water Content (%)	22.3	**Plastic Limit**	17
Fines (%)	65.6	**Plasticity Index**	26
USCS	CL	**Separating Sieve Size**	#4



Remarks

CL-C4

Services:
Terracon Rep:
Reported To:
Contractor: McHenry Excavating

Report Distribution

(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Boring No.: N/A Depth/Sample No.: CL-C4

Max Dry Density(pcf) = 99.7 OMC = 22.3

% of max = 90.4% +/- OMC = -0.5

Material: Red Sandy Lean Clay

	Before Test	After Test
Can No.	391	221
Wet Wt.&Tare(g)	112.72	412.54
Dry Wt. & Tare(g)	99.00	324.39
Tare Wt.(g)	36.0	49.72
Wt. of Dry Soil(g)	63.0	274.67
Water Content(%)	21.8	32.1

Avg. Dia. 2.815 in UWW: 109.7 pcf

Sample Ht. 2.000 in UDW: 90.1 pcf

Sample Wt. 358.60 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58	PSI	J-K	53	PSI	Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
10/15/25	9:20	10/15/25	9:30	1.7	2.0	60.0	23.0	22.3	2.85E-07	0.43
10/15/25	9:30	10/15/25	9:40	2.0	2.4	60.0	22.3	21.6	3.14E-07	0.57
10/15/25	9:40	10/15/25	9:50	2.4	2.8	60.0	21.6	21.0	2.85E-07	0.67
10/15/25	9:50	10/15/25	10:00	2.8	3.2	60.0	21.0	20.5	2.57E-07	0.80
10/15/25	10:00	10/15/25	10:10	3.2	3.6	60.0	20.5	20.0	2.57E-07	0.80
10/15/25	10:10	10/15/25	10:20	3.6	4.0	60.0	20.0	19.5	2.57E-07	0.80
10/15/25	10:20	10/15/25	10:30	4.0	4.4	60.0	19.5	19.0	2.57E-07	0.80

ASTM D4318 Atterberg Limits

Liquid Limit: 43

Plastic Limit: 17

Plasticity Index: 26

ASTM D1140 Wash 200

Percent Fines (%): 65.6

Avg. K_{20} = 2.57E-07 cm/sec

Remolded at 90% compaction of Standard Proctor and 0% - 2% above optimum moisture content

ASTM D2216 WATER CONTENT OF SOIL AND ROCK

Report Number: 35247264.0016
Service Date: 11/18/25
Report Date: 11/21/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264

Sample Location	CL-C5
Method Used	B
Water Content (%)	20.5
Visual Description	Brown and Red Lean Clay with Sand
Date Tested	11/19/25
Sample Tested By	Baumann, Garrett

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

ASTM D4318 LIQUID AND PLASTIC LIMIT, PI OF SOIL

Report Number: 35247264.0016
Service Date: 11/18/25
Report Date: 11/21/25
Task: Bid Phase and CQA

2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

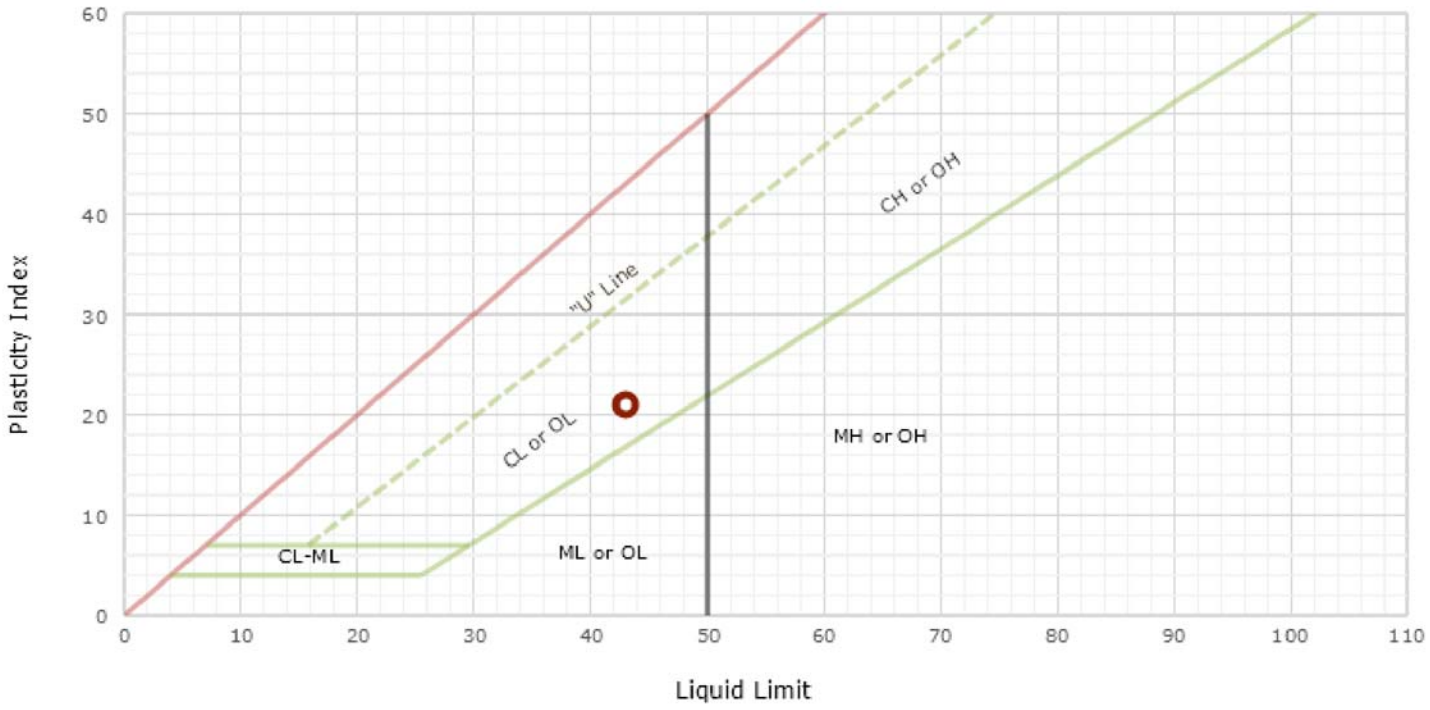
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Location	LL	PL	PI	Fines (%)	Description	USCS
CL-C5	43	22	21	81.4299	Brown and Red Lean Clay with Sand	

Remarks	N/A

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

ASTM D6913 GRADATION OF SOILS USING SIEVE ANALYSIS

Report Number: 35247264.0016
Service Date: 11/18/25
Report Date: 11/21/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

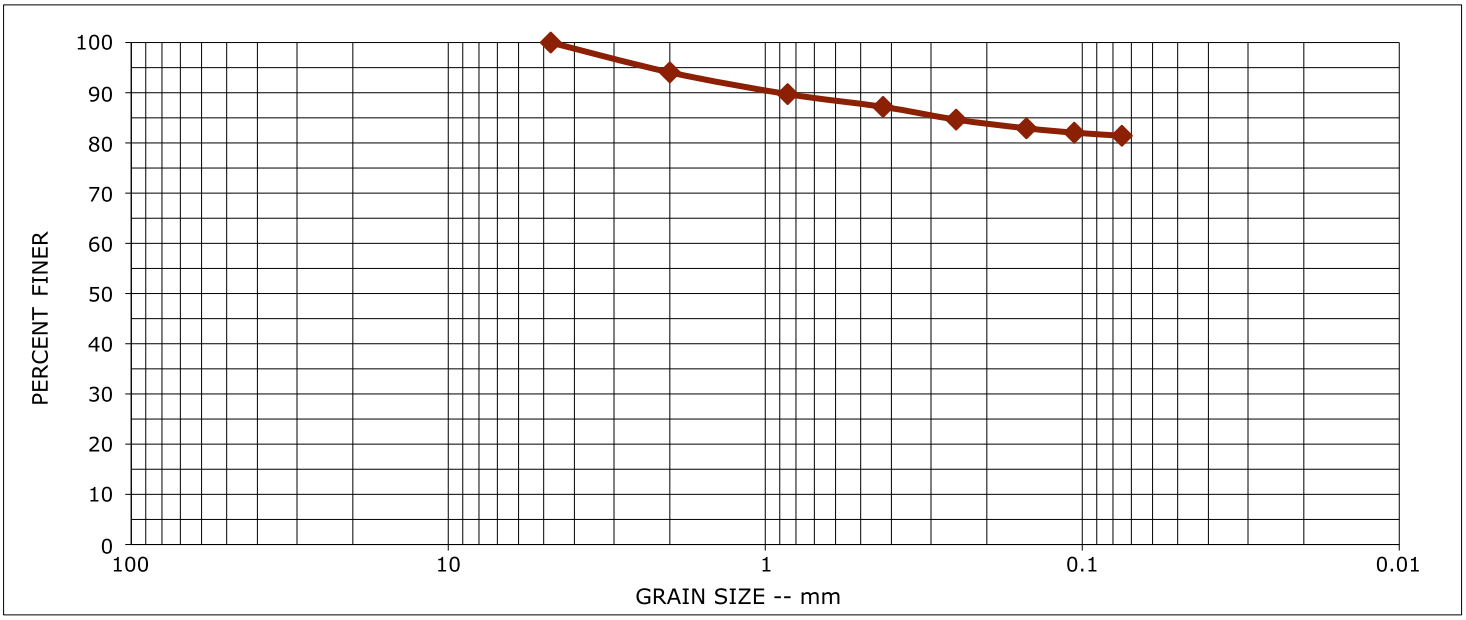
Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project No. 35247264



Sample Location	Description	USCS	% Cobbles	% Gravel	% Sand	% Fines
CL-C5	Brown and Red Lean Clay with Sand	CL	0.0	0.0	18.6	81.4

Sieve	% Finer	Sieve	% Finer	Remarks
5"		#20	89.7	N/A
4"		#40	87.2	
3"		#60	84.6	
2"		#100	82.9	
1 1/2"		#140	82.0	
1"		#200	81.4	
3/4"		Grain Size		Coefficients
1/2"		D_{100}	4.750	C_C
3/8"		D_{60}		
#4	100.0	D_{30}		C_U
#10	94.1	D_{10}		

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution
(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.

LABORATORY COMPACTION CHARACTERISTICS OF SOIL

Report Number: 35247264.0016
Service Date: 11/18/25
Report Date: 11/25/25
Task: Bid Phase and CQA

Terracon
2822 O'Neal Ln, Bldg B
Baton Rouge, LA 70816-3127
225-344-6052

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

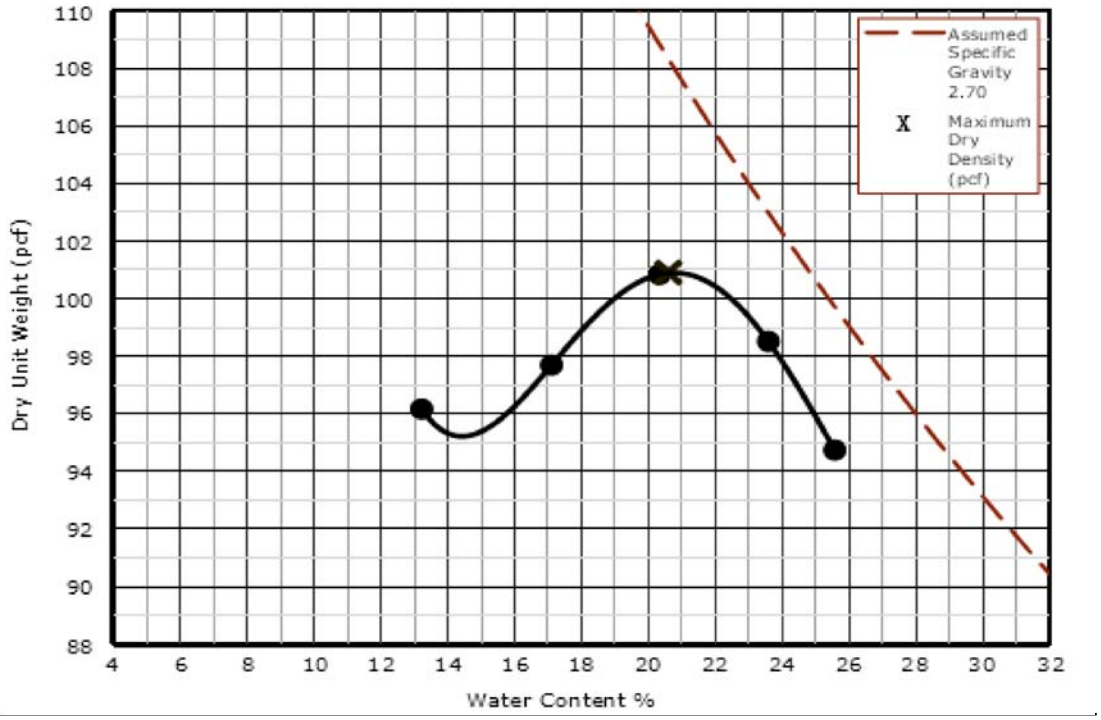
Project No. 35247264

Sample Information

Source of Material		**Test Designation / Method**	D698 / Method A
Sample Date		**Sample Preparation**	Wet
Sampled By		**Rammer Type**	Manual - Circular Face
As Received Water Content (%)	N/A	**Assumed Specific Gravity**	2.7
Sample Location			
Sample Description	Tan Lean Clay		

Laboratory Test Results

Maximum Dry Density (pcf)	100.9	**Liquid Limit**	43
Optimum Water Content (%)	20.6	**Plastic Limit**	22
Fines (%)	81.4	**Plasticity Index**	21
USCS	CL	**Separating Sieve Size**	#4



Remarks

CL-C5

Services:
Terracon Rep:
Reported To:
Contractor:

Report Distribution

(1) Terracon Consultants, Inc., Owen Carpenter

Franklin, Carpenter

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Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = 100.9 OMC = 20.6

Boring No.: N/A Depth/Sample No.: CL-C5

% of max = 90.2% +/- OMC = -0.3

Material: Tan and Red Lean Clay with Sand

	Before Test	After Test
Can No.	387	184
Wet Wt.&Tare(g)	92.73	434.21
Dry Wt. & Tare(g)	83.19	346.77
Tare Wt.(g)	36.3	49.67
Wt. of Dry Soil(g)	46.9	297.10
Water Content(%)	20.3	29.4

Avg. Dia. 2.815 in UWW: 109.6 pcf

Sample Ht. 2.000 in UDW: 91.0 pcf

Sample Wt. 358.00 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58 PSI		B	53 PSI		Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
12/11/25	10:18	12/11/25	10:21	2.0	3.9	60.0	20.0	18.2	3.52E-06	1.06
12/11/25	10:21	12/11/25	10:24	3.9	5.5	60.0	18.2	16.5	3.14E-06	0.94
12/11/25	10:24	12/11/25	10:27	5.5	7.2	60.0	16.5	14.9	3.14E-06	1.06
12/11/25	10:27	12/11/25	10:30	7.2	9.3	60.0	14.9	12.9	3.90E-06	1.05
12/11/25	10:30	12/11/25	10:33	9.3	11.0	60.0	12.9	11.0	3.42E-06	0.89
12/11/25	10:33	12/11/25	10:36	11.0	13.0	60.0	11.0	9.2	3.62E-06	1.11
12/11/25	10:36	12/11/25	10:39	13.0	14.9	60.0	9.2	7.4	3.52E-06	1.06
12/11/25	10:39	12/11/25	10:42	14.9	16.6	60.0	7.4	5.5	3.42E-06	0.89

ASTM D4318 Atterberg Limits

Liquid Limit: 43

Plastic Limit: 22

Plasticity Index: 21

ASTM D1140 Wash 200

Percent Fines (%): 81.4

Avg. K_{20} = 3.46E-06 cm/sec

Remolded at 90% compaction of Standard Proctor and 0% - 2% above optimum moisture content

Appendix C-3
Field Moisture/Density Testing

FIELD DENSITY TEST REPORT

Report Number: 35247264.0002
Service Date: 08/20/25
Report Date: 08/28/25
Task: Bid Phase and CQA

Terracon
25809 I 30
Bryant, AR 72022-9313
501-847-9292 Reg No: 918015

Client

B & F Engineering, Inc.
Attn: John Rogers
928 Airport Rd
Hot Springs, AR 71913-4618

Project

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services
1040 Cedar Glades Road
Hot Springs, AR 71902

Project Number: 35247264

Material Information

Mat. No.	Proctor Ref. No.	Classification and Description	Laboratory Test Method	Lab Test Data: Opt. Water Content (%)	Lab Test Data: Max. Lab Density (pcf)	Project Requirements: Water Content (%)	Project Requirements: Compaction (%)
1	35247264.0006	Tan Lean Clay	ASTM D698	16.6	109.1		Min 90

Field Test Data

Test No.	Test Location	Lift / Elev.	Mat. No.	Probe Depth (in)	Wet Density (pcf)	Water Content (pcf)	Water Content (%)	Dry Density (pcf)	Percent Compaction (%)
	Cell 1 - Phase 3								
1	See Attached	1st lift	1	10	126.8	9.9	8.5	116.9	100+
2		1st lift	1	10	122.6	13.8	12.7	108.8	100
3		1st lift	1	10	123.2	10.8	9.6	112.4	100+
4		1st lift	1	10	135.1	16.8	14.2	118.3	100+
5		1st lift	1	10	125.7	15.2	13.8	110.5	100+
6		1st lift	1	10	122.6	16.2	15.2	106.4	98
7		1st lift	1	10	123.1	12.5	11.3	110.6	100+
8		1st lift	1	10	128.6	16.1	14.3	112.5	100+

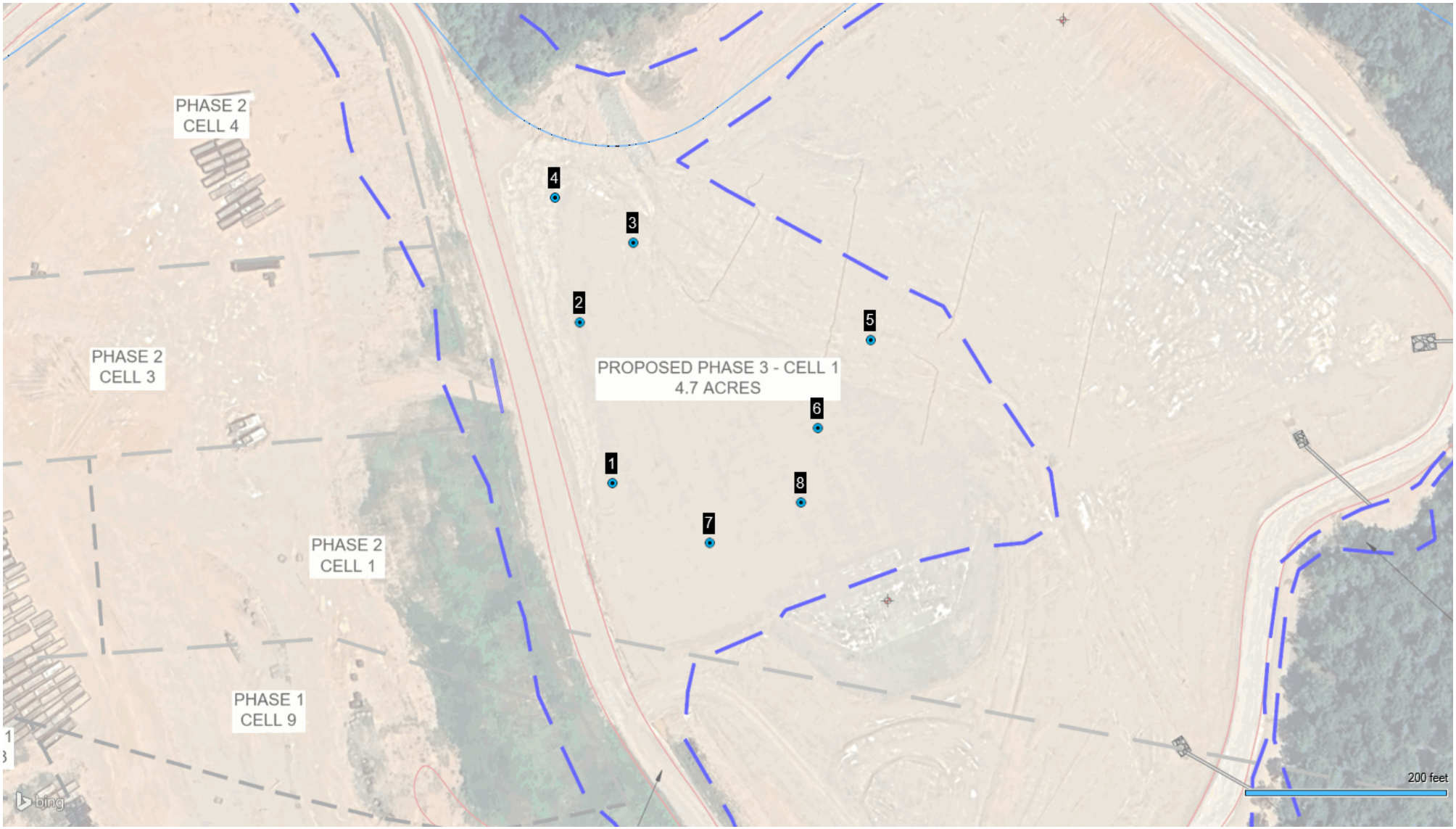
Datum: Top of existing grade **Std. Cnt. M:** 592 **Std. Cnt. D:** 1701
S/N: 27140 **Make:** Troxler "B" **Model:** 3440 **Last Cal. Date:** 07/30/2025
Comments: **Test and/or retest results on this report meet project requirements as noted above.**

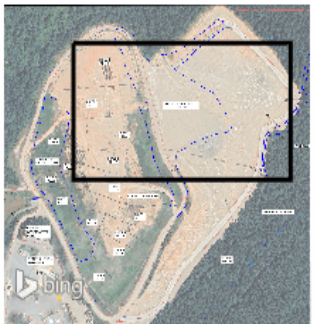
Services: Perform in-place density and moisture content tests to determine degree of compaction and material moisture condition.
Terracon Rep.: Tyler Farnsworth, CTTP 3103
Reported To: Martin Graf - McHenry
Contractor: McHenry Excavating
Report Distribution:
(1) B & F Engineering, Inc., John Rogers

Reviewed By: Tyler Farnsworth, CTTP 3103
Assistant Project Manager

Test Methods: ASTM D6938

The tests were performed in general accordance with applicable ASTM, AASHTO, or DOT test methods. This report is exclusively for the use of the client indicated above and shall not be reproduced except in full without the written consent of our company. Test results transmitted herein are only applicable to the actual samples tested at the location(s) referenced and are not necessarily indicative of the properties of other apparently similar or identical materials.





- Test
- Retested / Accepted
- Deviation

Terracon
25809 I 30 Bryant, AR 72022-9313
501-847-9292 terracon.com

B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Field Density Testing

Exhibit

A-1

Report Number:	Service Date:	Employee:	Scale:
35247264.0002	08/20/2025	Farnsworth, Tyler	Refer to Drawing

Summary of Field Density Test Results
ASTM D 2922

Terracon
25810 Interstate 30 South
Bryant, AR 72023
(501) 847-9293

Client Name: Garland County Class 4 Landfill
Project Name: B&F GCCG Ph 3, Cell 1 CQA
Site Location: Hot Springs, Arkansas
Contractor: James A. Rogers Excavating

Technician: Fernando Ocampo, Allie Storment
Reviewed by: Allie Storment
Approved by: Owen Carpenter
Test Location: Phase 3 - Cell 1 Test Pad

Test Date	Test No.	Lift or Elev.	Test Location	Shelby Tube Sample	Mat'l. No.	Wet Density, pcf	Dry Density, pcf	Lab Max. Dry Density, pcf	Percent Compaction %	Percent Compaction Required	Moisture Content	Optimum Moisture %	PASS or FAIL
20-Sep	1	1	Test Pad		CL-PC1	109.8	91.2	105.7	86.3	90.0	20.4	20.1	FAIL
20-Sep	2	1	Test Pad	P-1-1	CL-PC1	109.4	88.7	105.7	83.9	90.0	23.3	20.1	FAIL
20-Sep	3	1	Test Pad	P-1-2	CL-PC1	124.4	101.9	105.7	96.4	90.0	22.1	20.1	PASS
20-Sep	4	1	Test Pad		CL-PC1	120.3	97.2	105.7	91.9	90.0	23.8	20.1	PASS
20-Sep	5	1	Test Pad		CL-PC1	118.6	96.0	105.7	90.8	90.0	23.6	20.1	PASS
23-Sep	6	2	Test Pad	P-2-1	CL-PC1	104.9	86.0	105.7	81.3	90.0	22.0	20.1	FAIL
23-Sep	7	2	Test Pad		CL-PC1	120.8	97.6	105.7	92.3	90.0	23.8	20.1	PASS
23-Sep	8	2	Test Pad		CL-PC1	119.5	96.3	105.7	91.1	90.0	24.1	20.1	PASS
23-Sep	9	2	Test Pad		CL-PC1	123.7	100.3	105.7	94.9	90.0	23.3	20.1	PASS
23-Sep	10	2	Test Pad	P-2-2	CL-PC1	117.7	94.4	105.7	89.3	90.0	24.7	20.1	FAIL
24-Sep	11	3	Test Pad		CL-PC1	118.6	97.4	105.7	92.1	90.0	21.8	20.1	PASS
24-Sep	12	3	Test Pad	P-3-1	CL-PC1	121.6	100.4	105.7	95.0	90.0	21.1	20.1	PASS
24-Sep	13	3	Test Pad		CL-PC1	117.8	96.7	105.7	91.5	90.0	21.8	20.1	PASS
24-Sep	14	3	Test Pad	P-3-2	CL-PC1	121.8	98.9	105.7	93.6	90.0	23.1	20.1	PASS
24-Sep	15	3	Test Pad		CL-PC1	123.4	101.7	105.7	96.2	90.0	21.3	20.1	PASS

Summary of Field Density Test Results
ASTM D 2922

Terracon
25810 Interstate 30 South
Bryant, AR 72023
(501) 847-9293

Client Name: Garland County Class 4 Landfill
Project Name: B&F GCCG Ph 3, Cell 1 CQA
Site Location: Hot Springs, AR
Contractor: James A. Rogers Excavating

Technician: Fernando Ocampo, Allie Storment
Reviewed by: Allie Storment
Approved by: Owen Carpenter
Test Location: Phase 3 - Cell 1

Test Date	Test No.	Lift or Elev.	Test Location	Shelby Tube Sample	Mat'l. No.	Wet Density, pcf	Dry Density, pcf	Lab Max. Dry Density, pcf	Percent Compaction %	Percent Compaction Required	Moisture Content	Optimum Moisture %	PASS or FAIL
20-Sep	1	1	Test Pad Location		CL-PC1	159.4	129.3	105.7	122.3	90.0	23.3	20.1	PASS
23-Sep	2	2	Test Pad Location		CL-PC1	118.2	96.9	105.7	91.7	90.0	22.0	20.1	PASS
24-Sep	3	3	Test Pad Location	P3-1	CL-PC1	121.8	98.9	105.7	93.6	90.0	23.1	20.1	PASS
20-Sep	4	1	Northwest corner		CL-PC1	123.2	102.1	105.7	96.6	90.0	20.7	20.1	PASS
20-Sep	5	1	Northwest corner		CL-PC1	123.1	100.8	105.7	95.4	90.0	22.1	20.1	PASS
20-Sep	6	1	Northwest corner	P1	CL-PC1	123.2	101.7	105.7	96.2	90.0	21.1	20.1	PASS
20-Sep	7	1	Northwest corner		CL-PC1	119.8	98.9	105.7	93.6	90.0	21.1	20.1	PASS
20-Sep	8	2	Northwest corner		CL-PC1	129.1	106.7	105.7	100.9	90.0	21.0	20.1	PASS
30-Sep	9	2	Northwest corner		CL-PC1	123.0	100.1	105.7	94.7	90.0	22.9	20.1	PASS
30-Sep	10	2	Northwest corner		CL-PC1	120.5	99.6	105.7	94.2	90.0	21.0	20.1	PASS
2-Oct	11	2	Northwest corner	P2	CL-PC1	120.4	99.5	105.7	94.1	90.0	21.0	20.1	PASS
30-Sep	12	1	Southeast area	P7	CL-C1	118.7	91.8	91.8	100.0	90.0	29.3	28.5	PASS
30-Sep	13	1	Southeast area		CL-C1	106.7	82.8	91.8	90.2	90.0	28.9	28.5	PASS
30-Sep	14	1	Southeast area		CL-C1	107.2	83.1	91.8	90.5	90.0	29.0	28.5	PASS
30-Sep	15	1	Southeast area	P9	CL-C1	111.5	86.2	91.8	93.9	90.0	29.4	28.5	PASS
1-Oct	16	2	Southeast area	P3	CL-C1	107.9	84.0	91.8	91.5	90.0	28.5	28.5	PASS

Summary of Field Density Test Results
ASTM D 2922

Terracon
25810 Interstate 30 South
Bryant, AR 72023
(501) 847-9293

Client Name: Garland County Class 4 Landfill
Project Name: B&F GCCG Ph 3, Cell 1 CQA
Site Location: Hot Springs, AR
Contractor: James A. Rogers Excavating

Technician: Fernando Ocampo, Allie Storment
Reviewed by: Allie Storment
Approved by: Owen Carpenter
Test Location: Phase 3 - Cell 1

Test Date	Test No.	Lift or Elev.	Test Location	Shelby Tube Sample	Mat'l. No.	Wet Density, pcf	Dry Density, pcf	Lab Max. Dry Density, pcf	Percent Compaction %	Percent Compaction Required	Moisture Content	Optimum Moisture %	PASS or FAIL
1-Oct	17	2	Southeast area		CL-C1	110.8	86.0	91.8	93.6	90.0	28.9	28.5	PASS
1-Oct	18	2	Southeast area		CL-C1	108.6	83.3	91.8	90.8	90.0	30.3	28.5	PASS
1-Oct	19	2	Southeast area	P10	CL-C1	111.7	86.1	91.8	93.7	90.0	29.8	28.5	PASS
3-Oct	20	3	Southeast area		CL-C1	106.9	82.8	91.8	90.2	90.0	29.1	28.5	PASS
3-Oct	21	3	Southeast area		CL-C1	107.5	82.6	91.8	90.0	90.0	30.1	28.5	PASS
3-Oct	22	3	Southeast area		CL-C1	109.1	84.9	91.8	92.5	90.0	28.5	28.5	PASS
3-Oct	23	3	Southeast area		CL-C1	107.5	83.3	91.8	90.8	90.0	29.0	28.5	PASS
19-Oct	24	1	West area		CL-C4	118.2	95.2	99.7	95.5	90.0	24.2	22.3	PASS
19-Oct	25	1	West area		CL-C4	116.1	93.9	99.7	94.2	90.0	23.6	22.3	PASS
19-Oct	26	1	West area	P11	CL-C4	118.3	95.0	99.7	95.3	90.0	24.5	22.3	PASS
19-Oct	27	1	West area		CL-C4	116.3	93.9	99.7	94.2	90.0	23.8	22.3	PASS
19-Oct	28	1	West area		CL-C4	116.8	92.6	99.7	92.8	90.0	26.2	22.3	PASS
19-Oct	29	1	West area		CL-C4	116.6	93.6	99.7	93.9	90.0	24.6	22.3	PASS
19-Oct	30	1	West area	P12	CL-C4	115.9	93.2	99.7	93.4	90.0	24.4	22.3	PASS
19-Oct	31	1	West area		CL-C4	113.1	91.7	99.7	91.9	90.0	23.4	22.3	PASS
19-Oct	32	1	West area		CL-C4	118.7	96.7	99.7	97.0	90.0	22.7	22.3	PASS

Summary of Field Density Test Results
ASTM D 2922

Terracon
25810 Interstate 30 South
Bryant, AR 72023
(501) 847-9293

Client Name: Garland County Class 4 Landfill
Project Name: B&F GCCG Ph 3, Cell 1 CQA
Site Location: Hot Springs, AR
Contractor: James A. Rogers Excavating

Technician: Fernando Ocampo, Allie Storment
Reviewed by: Allie Storment
Approved by: Owen Carpenter
Test Location: Phase 3 - Cell 1

Test Date	Test No.	Lift or Elev.	Test Location	Shelby Tube Sample	Mat'l. No.	Wet Density, pcf	Dry Density, pcf	Lab Max. Dry Density, pcf	Percent Compaction %	Percent Compaction Required	Moisture Content	Optimum Moisture %	PASS or FAIL
19-Oct	33	1	South corner		CL-C4	119.5	95.5	99.7	95.8	90.0	25.1	22.3	PASS
22-Oct	34	2	West area		CL-C4	120.4	97.3	99.7	97.5	90.0	23.8	22.3	PASS
22-Oct	35	2	West area		CL-C4	118.2	97.0	99.7	97.3	90.0	21.9	22.3	FAIL
23-Oct	35R	2	West area		CL-C4	112.2	90.4	99.7	90.7	90.0	24.1	22.3	PASS
22-Oct	36	2	West area		CL-C4	117.9	96.7	99.7	97.0	90.0	21.9	22.3	FAIL
23-Oct	36R	2	West area		CL-C4	118.2	96.2	99.7	96.5	90.0	22.9	22.3	PASS
22-Oct	37	2	West area		CL-C4	115.3	93.1	99.7	93.4	90.0	23.8	22.3	PASS
22-Oct	38	2	West area		CL-C4	115.7	94.8	99.7	95.1	90.0	22.0	22.3	FAIL
23-Oct	38R	2	West area	P15	CL-C4	117.6	94.9	99.7	95.2	90.0	23.9	22.3	PASS
22-Oct	39	2	West area		CL-C4	117.6	94.9	99.7	95.2	90.0	23.9	22.3	PASS
22-Oct	40	2	West area		CL-C4	121.0	98.7	99.7	99.0	90.0	22.6	22.3	PASS
22-Oct	41	2	West area		CL-C4	117.8	93.2	99.7	93.5	90.0	26.4	22.3	PASS
22-Oct	42	2	West area	P13	CL-C4	114.3	92.1	99.7	92.4	90.0	24.1	22.3	PASS
23-Oct	43	3	Northwest corner	P14	CL-C4	118.5	96.0	99.7	96.2	90.0	23.5	22.3	PASS
23-Oct	44	3	Northwest corner		CL-C4	119.2	96.0	99.7	96.3	90.0	24.2	22.3	PASS
23-Oct	45	3	Northwest corner		CL-C4	119.1	96.8	99.7	97.0	90.0	23.1	22.3	PASS

Summary of Field Density Test Results
ASTM D 2922

Terracon
25810 Interstate 30 South
Bryant, AR 72023
(501) 847-9293

Client Name: Garland County Class 4 Landfill
Project Name: B&F GCCG Ph 3, Cell 1 CQA
Site Location: Hot Springs, AR
Contractor: James A. Rogers Excavating

Technician: Fernando Ocampo, Allie Storment
Reviewed by: Allie Storment
Approved by: Owen Carpenter
Test Location: Phase 3 - Cell 1

Test Date	Test No.	Lift or Elev.	Test Location	Shelby Tube Sample	Mat'l. No.	Wet Density, pcf	Dry Density, pcf	Lab Max. Dry Density, pcf	Percent Compaction %	Percent Compaction Required	Moisture Content	Optimum Moisture %	PASS or FAIL
23-Oct	46	3	Northwest corner		CL-C4	119.2	96.8	99.7	97.1	90.0	23.1	22.3	PASS
28-Oct	47	1	Northeast side		CL-C4	122.2	99.4	99.7	99.7	90.0	22.9	22.3	PASS
28-Oct	48	1	Northeast side		CL-C4	125.8	102.5	99.7	102.8	90.0	22.7	22.3	PASS
28-Oct	49	1	Northeast side		CL-C4	128.9	105.1	99.7	105.5	90.0	22.6	22.3	PASS
28-Oct	50	1	Northeast side		CL-C4	119.7	97.5	99.7	97.8	90.0	22.8	22.3	PASS
28-Oct	51	1	Northeast side	P16	CL-C4	122.7	99.0	99.7	99.3	90.0	23.9	22.3	PASS
28-Oct	52	1	Northeast side		CL-C4	125.5	102.3	99.7	102.6	90.0	22.7	22.3	PASS
28-Oct	53	1	Northeast side		CL-C4	120.5	98.4	99.7	98.7	90.0	22.4	22.3	PASS
28-Oct	54	1	Northeast side	P17	CL-C4	120.3	98.1	99.7	98.4	90.0	22.6	22.3	PASS
1-Nov	55	3	West area		CL-C4	123.0	97.0	99.7	97.3	90.0	26.8	22.3	PASS
1-Nov	56	3	West area		CL-C4	115.6	93.7	99.7	94.0	90.0	23.4	22.3	PASS
1-Nov	57	3	West area		CL-C4	118.4	94.7	99.7	95.0	90.0	25.0	22.3	PASS
1-Nov	58	3	West area		CL-C4	119.0	96.1	99.7	96.4	90.0	23.8	22.3	PASS
1-Nov	59	3	West area	P19	CL-C4	119.0	96.0	99.7	96.3	90.0	23.9	22.3	PASS
1-Nov	60	3	West area		CL-C4	113.1	91.2	99.7	91.5	90.0	24.0	22.3	PASS
1-Nov	61	3	West area	P18	CL-C4	123.2	100.2	99.7	100.5	90.0	23.0	22.3	PASS

Summary of Field Density Test Results
ASTM D 2922

Terracon
25810 Interstate 30 South
Bryant, AR 72023
(501) 847-9293

Client Name: Garland County Class 4 Landfill
Project Name: B&F GCCG Ph 3, Cell 1 CQA
Site Location: Hot Springs, AR
Contractor: James A. Rogers Excavating

Technician: Fernando Ocampo, Allie Storment
Reviewed by: Allie Storment
Approved by: Owen Carpenter
Test Location: Phase 3 - Cell 1

Test Date	Test No.	Lift or Elev.	Test Location	Shelby Tube Sample	Mat'l. No.	Wet Density, pcf	Dry Density, pcf	Lab Max. Dry Density, pcf	Percent Compaction %	Percent Compaction Required	Moisture Content	Optimum Moisture %	PASS or FAIL
1-Nov	62	3	West area		CL-C4	121.3	98.5	99.7	98.8	90.0	23.1	22.3	PASS
1-Nov	63	3	West area		CL-C4	122.2	98.5	99.7	98.8	90.0	24.1	22.3	PASS
1-Nov	64	2	Southeast area		CL-C4	121.1	98.0	99.7	98.3	90.0	23.6	22.3	PASS
1-Nov	65	2	Southeast area		CL-C4	126.0	109.9	99.7	110.3	90.0	14.6	22.3	FAIL
1-Nov	65R	2	Southeast area		CL-C4	119.8	97.6	99.7	97.9	90.0	22.8	22.3	PASS
1-Nov	66	2	Southeast area		CL-C4	125.4	105.7	99.7	106.1	90.0	18.6	22.3	FAIL
1-Nov	66R	2	Southeast area		CL-C4	123.3	97.2	99.7	97.5	90.0	26.8	22.3	PASS
1-Nov	67	2	Southeast area	P20	CL-C4	122.3	98.5	99.7	98.8	90.0	24.2	22.3	PASS
1-Nov	68	2	Southeast area		CL-C4	118.8	94.1	99.7	94.3	90.0	26.3	22.3	PASS
1-Nov	69	2	Southeast area	P61	CL-C4	124.1	99.5	99.7	99.8	90.0	24.7	22.3	PASS
1-Nov	70	2	Southeast area		CL-C4	117.2	94.3	99.7	94.6	90.0	24.3	22.3	PASS
1-Nov	71	2	Southeast area		CL-C4	117.4	95.7	99.7	96.0	90.0	22.7	22.3	PASS
1-Nov	72	2	Southeast area		CL-C4	116.7	95.4	99.7	95.7	90.0	22.3	22.3	PASS
3-Nov	73	3	Southeast area		CL-C4	119.1	96.4	99.7	96.6	90.0	23.6	22.3	PASS
3-Nov	74	3	Southeast area		CL-C4	117.2	94.4	99.7	94.7	90.0	24.1	22.3	PASS
3-Nov	75	3	Southeast area		CL-C4	125.9	101.7	99.7	102.0	90.0	23.8	22.3	PASS

Summary of Field Density Test Results
ASTM D 2922

Terracon
25810 Interstate 30 South
Bryant, AR 72023
(501) 847-9293

Client Name: Garland County Class 4 Landfill
Project Name: B&F GCCG Ph 3, Cell 1 CQA
Site Location: Hot Springs, AR
Contractor: James A. Rogers Excavating

Technician: Fernando Ocampo, Allie Storment
Reviewed by: Allie Storment
Approved by: Owen Carpenter
Test Location: Phase 3 - Cell 1

Test Date	Test No.	Lift or Elev.	Test Location	Shelby Tube Sample	Mat'l. No.	Wet Density, pcf	Dry Density, pcf	Lab Max. Dry Density, pcf	Percent Compaction %	Percent Compaction Required	Moisture Content	Optimum Moisture %	PASS or FAIL
3-Nov	76	3	Southeast area	P23	CL-C4	126.2	101.9	99.7	102.2	90.0	23.8	22.3	PASS
3-Nov	77	3	Southeast area	P22	CL-C4	124.5	101.5	99.7	101.9	90.0	22.6	22.3	PASS
3-Nov	78	3	Southeast area		CL-C4	121.1	99.0	99.7	99.3	90.0	22.3	22.3	PASS
3-Nov	79	3	Southeast area		CL-C4	120.6	98.6	99.7	98.9	90.0	22.3	22.3	PASS
3-Nov	80	3	Southeast area		CL-C4	114.3	93.5	99.7	93.7	90.0	22.3	22.3	PASS
3-Nov	81	3	Southeast area		CL-C4	116.4	94.6	99.7	94.8	90.0	23.1	22.3	PASS

Appendix C-4
Permeability Test Results

Terracon

Garland County Class 4 Landfill Phase 3 - Cell 1

SUMMARY OF PERMEABILITY TESTING DATA

TABLE 3

Test No.	Lift No./ Layer	Test Results		Replacment Test No.
		K (cm/sec)	Pass/ Fail	
P-1-1	TP Lift 1	2.44E-06	Pass	
P-1-2	TP Lift 1	1.79E-08	Pass	
P-2-1	TP Lift 2	2.75E-07	Pass	
P-2-2	TP Lift 2	7.33E-08	Pass	
P-3-1	TP Lift 3	1.51E-06	Pass	
P-3-2	TP Lift 3	1.14E-07	Pass	
P-1	Lift 1	8.14E-07	Pass	
P-2	Lift 2	1.20E-06	Pass	
P-8	Lift 1	7.35E-08	Pass	
P-9	Lift 1	1.43E-07	Pass	
P-10	Lift 2	1.63E-07	Pass	
P-11	Lift 1	5.35E-07	Pass	
P-12	Lift 1	3.30E-07	Pass	
P-13	Lift 2	2.74E-07	Pass	
P-14	Lift 3	3.10E-07	Pass	
P-15	Lift 2	5.36E-07	Pass	
P-16	Lift 1	1.47E-07	Pass	
P-17	Lift 1	8.80E-07	Pass	
P-18	Lift 3	3.84E-07	Pass	
P-19	Lift 3	3.79E-07	Pass	
P-20	Lift 2	1.65E-06	Pass	
P-21	Lift 2	4.49E-07	Pass	
P-22	Lift 3	2.32E-07	Pass	
P-23	Lift 3	8.46E-07	Pass	

Notes: Permeability Numbers 3 through 7 were skipped, there are no tests for them.

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-1-1

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	127	182
Wet Wt.&Tare(g)	157.29	338.05
Dry Wt. & Tare(g)	142.02	279.33
Tare Wt.(g)	49.6	49.78
Wt. of Dry Soil(g)	92.4	229.55
Water Content(%)	16.5	25.6

Avg. Dia. 2.847 in UWW: 121.1 pcf

Sample Ht. 1.359 in UDW: 103.9 pcf

Sample Wt. 275.00 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910098	53 PSI		cm/sec	
Date	Time	Date	Time	H1	H2	PSI	H1	H2		PV Ratio
09/19/25	3:28:00	09/19/25	3:28:30	1.0	1.5	60.0	20.0	19.5	3.79E-06	1.00
09/19/25	3:28:30	09/19/25	3:29:00	1.5	1.9	60.0	19.5	19.0	1.14E-06	0.80
09/19/25	3:29:00	09/19/25	3:29:30	1.9	2.4	60.0	19.0	18.4	4.17E-06	0.83
09/19/25	3:29:30	09/19/25	3:30:00	2.4	2.8	60.0	18.4	18.0	1.01E-06	1.00
09/19/25	3:30:00	09/19/25	3:30:30	2.8	3.2	60.0	18.0	17.5	3.41E-06	0.80
09/19/25	3:30:30	09/19/25	3:31:00	3.2	3.6	60.0	17.5	17.0	1.14E-06	0.80

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 2.44E-06 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-1-2

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	164	113
Wet Wt.&Tare(g)	165.95	285.95
Dry Wt. & Tare(g)	149.23	242.25
Tare Wt.(g)	49.5	49.52
Wt. of Dry Soil(g)	99.7	192.73
Water Content(%)	16.8	22.7

Avg. Dia. 2.839 in UWW: 120.7 pcf

Sample Ht. 1.151 in UDW: 103.3 pcf

Sample Wt. 230.80 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		B	53 PSI		cm/sec	
Date	Time	Date	Time	H1	H2	PSI	H1	H2		PV Ratio
10/06/25	13:35	10/06/25	13:44	3.0	3.1	60.0	19.0	18.9	3.59E-08	1.00
10/06/25	13:44	10/06/25	14:16	3.1	3.2	60.0	18.9	18.8	1.01E-08	1.00
10/06/25	14:16	10/06/25	14:37	3.2	3.3	60.0	18.8	18.7	1.54E-08	1.00
10/06/25	14:37	10/06/25	15:08	3.3	3.4	60.0	18.7	18.6	1.04E-08	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 1.79E-08 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-2-1

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	150	150
Wet Wt.&Tare(g)	149.28	312.54
Dry Wt. & Tare(g)	132.15	257.46
Tare Wt.(g)	49.6	49.64
Wt. of Dry Soil(g)	82.5	207.82
Water Content(%)	20.8	26.5

Avg. Dia. 2.835 in UWW: 120.1 pcf

Sample Ht. 1.288 in UDW: 99.4 pcf

Sample Wt. 256.29 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58	PSI	A	53	PSI	Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
10/06/25	13:35	10/06/25	13:44	1.7	2.9	60.0	21.0	19.8	4.83E-07	1.00
10/06/25	13:44	10/06/25	13:55	2.9	3.6	60.0	19.8	19.0	2.47E-07	0.87
10/06/25	13:55	10/06/25	14:05	3.6	4.3	60.0	19.0	18.4	2.36E-07	1.17
10/06/25	14:05	10/06/25	14:16	4.3	5.0	60.0	18.4	17.7	2.31E-07	1.00
10/06/25	14:16	10/06/25	14:27	5.0	5.5	60.0	17.7	17.2	1.65E-07	1.00
10/06/25	14:27	10/06/25	14:37	5.5	6.3	60.0	17.2	16.4	2.90E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 2.75E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-2-2

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	145	125
Wet Wt.&Tare(g)	174.47	403.62
Dry Wt. & Tare(g)	150.04	329.73
Tare Wt.(g)	49.6	49.69
Wt. of Dry Soil(g)	100.4	280.04
Water Content(%)	24.3	26.4

Avg. Dia. 2.865 in UWW: 121.2 pcf

Sample Ht. 1.701 in UDW: 97.5 pcf

Sample Wt. 348.84 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910099	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
09/26/25	12:12	09/26/25	12:32	2.3	2.4	60.0	22.0	21.6	5.86E-08	0.25
09/26/25	12:32	09/26/25	12:43	2.4	2.6	60.0	21.6	21.4	8.52E-08	1.00
09/26/25	12:43	09/26/25	12:53	2.6	2.7	60.0	21.4	21.3	4.69E-08	1.00
09/26/25	12:53	09/26/25	13:03	2.7	2.9	60.0	21.3	21.1	9.37E-08	1.00
09/26/25	13:03	09/26/25	13:13	2.9	3.0	60.0	21.1	21.0	4.69E-08	1.00
09/26/25	13:13	09/26/25	13:23	3.0	3.2	60.0	21.0	20.8	9.37E-08	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 7.33E-08 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-3-1

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	108	144
Wet Wt.&Tare(g)	199.55	353.26
Dry Wt. & Tare(g)	173.42	287.58
Tare Wt.(g)	49.6	49.66
Wt. of Dry Soil(g)	123.8	237.92
Water Content(%)	21.1	27.6

Avg. Dia. 2.846 in UWW: 111.0 pcf

Sample Ht. 1.556 in UDW: 91.6 pcf

Sample Wt. 288.35 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910098	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
09/26/25	12:21	09/26/25	12:30	1.1	5.5	60.0	23.6	18.6	2.27E-06	0.88
09/26/25	12:30	09/26/25	12:43	5.5	9.3	60.0	18.6	15.4	1.17E-06	1.19
09/26/25	12:43	09/26/25	12:53	9.3	12.4	60.0	15.4	11.8	1.46E-06	0.86
09/26/25	12:53	09/26/25	13:03	12.4	15.6	60.0	11.8	8.5	1.41E-06	0.97
09/26/25	13:03	09/26/25	13:13	15.6	18.7	60.0	8.5	5.4	1.35E-06	1.00
09/26/25	13:13	09/26/25	13:23	18.7	22.0	60.0	5.4	2.3	1.39E-06	1.06

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 1.51E-06 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-3-2

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	135	104
Wet Wt.&Tare(g)	170.44	340.86
Dry Wt. & Tare(g)	149.63	282.52
Tare Wt.(g)	49.6	49.65
Wt. of Dry Soil(g)	100.0	232.87
Water Content(%)	20.8	25.1

Avg. Dia. 2.819 in UWW: 120.9 pcf

Sample Ht. 1.455 in UDW: 100.1 pcf

Sample Wt. 288.12 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58 PSI		B	53 PSI		Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
09/26/25	12:21	09/26/25	12:32	1.4	1.5	60.0	22.0	21.6	9.41E-08	0.25
09/26/25	12:32	09/26/25	12:43	1.5	1.6	60.0	21.6	21.3	7.53E-08	0.33
09/26/25	12:43	09/26/25	12:53	1.6	1.8	60.0	21.3	21.1	8.28E-08	1.00
09/26/25	12:53	09/26/25	13:03	1.8	2.1	60.0	21.1	20.8	1.24E-07	1.00
09/26/25	13:03	09/26/25	13:13	2.1	2.4	60.0	20.8	20.5	1.24E-07	1.00
09/26/25	13:13	09/26/25	13:23	2.4	2.7	60.0	20.5	20.2	1.24E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 1.14E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-1

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	118	173
Wet Wt.&Tare(g)	149.95	324.91
Dry Wt. & Tare(g)	134.00	266.20
Tare Wt.(g)	49.7	49.64
Wt. of Dry Soil(g)	84.4	216.56
Water Content(%)	18.9	27.1

Avg. Dia. 2.829 in UWW: 116.4 pcf

Sample Ht. 1.371 in UDW: 97.9 pcf

Sample Wt. 263.27 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		J-B	53 PSI		cm/sec	
Date	Time	Date	Time	H1	H2	PSI	H1	H2		PV Ratio
10/03/25	10:52	10/03/25	11:02	1.2	3.7	60.0	22.2	19.7	9.69E-07	1.00
10/03/25	11:02	10/03/25	11:12	3.7	5.9	60.0	19.7	17.4	8.72E-07	0.96
10/03/25	11:12	10/03/25	11:23	5.9	8.0	60.0	17.4	15.3	7.40E-07	1.00
10/03/25	11:23	10/03/25	11:33	8.0	10.0	60.0	15.3	13.3	7.75E-07	1.00
10/03/25	11:33	10/03/25	11:43	10.0	12.0	60.0	13.3	11.2	7.94E-07	0.95
10/03/25	11:43	10/03/25	11:53	12.0	13.9	60.0	11.2	9.3	7.36E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 8.14E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-2

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	123	105
Wet Wt.&Tare(g)	147.50	328.37
Dry Wt. & Tare(g)	131.39	271.86
Tare Wt.(g)	49.8	49.67
Wt. of Dry Soil(g)	81.6	222.19
Water Content(%)	19.7	25.4

Avg. Dia. 2.849 in UWW: 121.9 pcf

Sample Ht. 1.323 in UDW: 101.8 pcf

Sample Wt. 269.79 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910098	53 PSI		cm/sec	
Date	Time	Date	Time	H1	H2	PSI	H1	H2		PV Ratio
10/03/25	10:52	10/03/25	11:02	1.0	5.1	60.0	22.9	18.4	1.59E-06	0.91
10/03/25	11:02	10/03/25	11:12	5.1	8.5	60.0	18.4	14.9	1.27E-06	0.97
10/03/25	11:12	10/03/25	11:23	8.5	11.5	60.0	14.9	11.8	1.02E-06	0.97
10/03/25	11:23	10/03/25	11:33	11.5	14.5	60.0	11.8	8.7	1.12E-06	0.97
10/03/25	11:33	10/03/25	11:43	14.5	17.6	60.0	8.7	5.5	1.16E-06	0.97
10/03/25	11:43	10/03/25	11:53	17.6	20.3	60.0	5.5	2.7	1.01E-06	0.96

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 1.20E-06 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-8

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	173	164
Wet Wt.&Tare(g)	104.82	337.45
Dry Wt. & Tare(g)	94.15	270.39
Tare Wt.(g)	49.6	49.55
Wt. of Dry Soil(g)	44.5	220.84
Water Content(%)	24.0	30.4

Avg. Dia. 2.844 in UWW: 119.2 pcf

Sample Ht. 1.391 in UDW: 96.1 pcf

Sample Wt. 276.40 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58	PSI	910096	53	PSI	Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
10/07/25	13:13	10/07/25	13:23	4.2	4.3	60.0	20.4	20.2	5.83E-08	0.50
10/07/25	13:23	10/07/25	13:33	4.3	4.4	60.0	20.2	20.0	5.83E-08	0.50
10/07/25	13:33	10/07/25	13:44	4.4	4.6	60.0	20.0	19.7	8.84E-08	0.67
10/07/25	13:44	10/07/25	13:55	4.6	4.8	60.0	19.7	19.5	7.07E-08	1.00
10/07/25	13:55	10/07/25	14:05	4.8	5.0	60.0	19.5	19.3	7.78E-08	1.00
10/07/25	14:05	10/07/25	14:16	5.0	5.2	60.0	19.3	19.1	7.07E-08	1.00
10/07/25	14:16	10/07/25	14:27	5.2	5.4	60.0	19.1	18.9	7.07E-08	1.00
10/07/25	14:27	10/07/25	14:37	5.4	5.6	60.0	18.9	18.7	7.78E-08	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 7.35E-08 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-9

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	181	138
Wet Wt.&Tare(g)	118.51	351.85
Dry Wt. & Tare(g)	103.51	277.45
Tare Wt.(g)	49.7	49.63
Wt. of Dry Soil(g)	53.8	227.82
Water Content(%)	27.9	32.7

Avg. Dia. 2.794 in UWW: 119.4 pcf

Sample Ht. 1.533 in UDW: 93.4 pcf

Sample Wt. 294.69 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910097	53 PSI		cm/sec	
Date	Time	Date	Time	H1	H2	PSI	H1	H2		PV Ratio
10/07/25	13:12	10/07/25	13:22	6.0	6.4	60.0	19.1	18.7	1.78E-07	1.00
10/07/25	13:22	10/07/25	13:33	6.4	6.7	60.0	18.7	18.4	1.21E-07	1.00
10/07/25	13:33	10/07/25	13:44	6.7	7.0	60.0	18.4	18.0	1.41E-07	0.75
10/07/25	13:44	10/07/25	13:55	7.0	7.4	60.0	18.0	17.6	1.62E-07	1.00
10/07/25	13:55	10/07/25	14:05	7.4	7.7	60.0	17.6	17.3	1.33E-07	1.00
10/07/25	14:05	10/07/25	14:16	7.7	8.0	60.0	17.3	17.0	1.21E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 1.43E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-10

% of max = N/A +/- OMC = N/A

Material: Red Clay

	Before Test	After Test
Can No.	176	177
Wet Wt.&Tare(g)	148.92	380.64
Dry Wt. & Tare(g)	128.89	309.28
Tare Wt.(g)	49.7	49.68
Wt. of Dry Soil(g)	79.2	259.60
Water Content(%)	25.3	27.5

Avg. Dia. 2.833 in UWW: 120.3 pcf

Sample Ht. 1.625 in UDW: 96.0 pcf

Sample Wt. 323.34 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette 58 PSI		Cell # J-K	B - Burette 53 PSI		Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
10/07/25	13:55	10/07/25	14:05	4.1	4.3	60.0	22.6	22.2	1.37E-07	0.50
10/07/25	14:05	10/07/25	14:16	4.3	4.5	60.0	22.2	21.9	1.04E-07	0.67
10/07/25	14:16	10/07/25	14:27	4.5	5.0	60.0	21.9	21.5	1.87E-07	1.25
10/07/25	14:27	10/07/25	14:37	5.0	5.3	60.0	21.5	21.1	1.60E-07	0.75
10/07/25	14:37	10/07/25	14:48	5.3	5.6	60.0	21.1	20.8	1.25E-07	1.00
10/07/25	14:48	10/07/25	14:58	5.6	6.0	60.0	20.8	20.4	1.83E-07	1.00
10/07/25	14:58	10/07/25	15:08	6.0	6.4	60.0	20.4	20.0	1.83E-07	1.00
10/07/25	15:08	10/07/25	15:18	6.4	6.7	60.0	20.0	19.7	1.37E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 1.63E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-11

% of max = N/A +/- OMC = N/A

Material: Tan Fat Clay

	Before Test	After Test
Can No.	124	149
Wet Wt.&Tare(g)	197.24	407.63
Dry Wt. & Tare(g)	169.90	319.70
Tare Wt.(g)	49.6	49.72
Wt. of Dry Soil(g)	120.3	269.98
Water Content(%)	22.7	32.6

Avg. Dia. 2.825 in UWW: 114.3 pcf

Sample Ht. 1.785 in UDW: 93.1 pcf

Sample Wt. 335.61 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58 PSI		J-S	53 PSI		Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/04/25	8:50	11/04/25	8:55	2.0	2.6	60.0	20.9	20.0	7.59E-07	0.67
11/04/25	8:55	11/04/25	9:00	2.6	3.0	60.0	20.0	19.6	4.05E-07	1.00
11/04/25	9:00	11/04/25	9:05	3.0	3.5	60.0	19.6	19.1	5.06E-07	1.00
11/04/25	9:05	11/04/25	9:10	3.5	4.1	60.0	19.1	18.6	5.56E-07	1.20
11/04/25	9:10	11/04/25	9:15	4.1	4.5	60.0	18.6	18.2	4.05E-07	1.00
11/04/25	9:15	11/04/25	9:20	4.5	5.0	60.0	18.2	17.6	5.56E-07	0.83
11/04/25	9:20	11/04/25	9:25	5.0	5.7	60.0	17.6	17.0	6.58E-07	1.17
11/04/25	9:25	11/04/25	9:30	5.7	6.4	60.0	17.0	16.4	6.58E-07	1.17

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 5.35E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-12

% of max = N/A +/- OMC = N/A

Material: Tan Fat Clay

	Before Test	After Test
Can No.	114	133
Wet Wt.&Tare(g)	131.61	495.60
Dry Wt. & Tare(g)	113.55	387.99
Tare Wt.(g)	49.6	49.61
Wt. of Dry Soil(g)	63.9	338.38
Water Content(%)	28.3	31.8

Avg. Dia. 2.788 in UWW: 114.8 pcf

Sample Ht. 2.350 in UDW: 89.5 pcf

Sample Wt. 432.17 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		F	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/04/25	8:55	11/04/25	9:00	2.0	2.2	60.0	20.0	19.4	5.47E-07	0.33
11/04/25	9:00	11/04/25	9:05	2.2	2.4	60.0	19.4	19.0	4.10E-07	0.50
11/04/25	9:05	11/04/25	9:10	2.4	2.5	60.0	19.0	18.8	2.05E-07	0.50
11/04/25	9:10	11/04/25	9:15	2.5	2.7	60.0	18.8	18.6	2.74E-07	1.00
11/04/25	9:15	11/04/25	9:20	2.7	2.9	60.0	18.6	18.4	2.74E-07	1.00
11/04/25	9:20	11/04/25	9:25	2.9	3.1	60.0	18.4	18.2	2.74E-07	1.00
11/04/25	9:25	11/04/25	9:30	3.1	3.3	60.0	18.2	18.0	2.74E-07	1.00
11/04/25	9:30	11/04/25	9:35	3.3	3.6	60.0	18.0	17.6	4.79E-07	0.75
11/04/25	9:35	11/04/25	9:40	3.6	3.9	60.0	17.6	17.3	4.10E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 3.30E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-13

% of max = N/A +/- OMC = N/A

Material: Tan & Red Fat Clay

	Before Test	After Test
Can No.	367	178
Wet Wt.&Tare(g)	135.72	319.01
Dry Wt. & Tare(g)	112.73	248.63
Tare Wt.(g)	37.2	49.64
Wt. of Dry Soil(g)	75.6	198.99
Water Content(%)	30.4	35.4

Avg. Dia. 2.822 in UWW: 118.4 pcf

Sample Ht. 1.352 in UDW: 90.8 pcf

Sample Wt. 262.86 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		J-K	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/14/25	7:52	11/14/25	7:58	2.3	2.7	60.0	23.3	22.7	3.20E-07	0.67
11/14/25	7:58	11/14/25	8:04	2.7	3.0	60.0	22.7	22.4	1.92E-07	1.00
11/14/25	8:04	11/14/25	8:09	3.0	3.4	60.0	22.4	22.0	3.07E-07	1.00
11/14/25	8:09	11/14/25	8:14	3.4	3.7	60.0	22.0	21.7	2.30E-07	1.00
11/14/25	8:14	11/14/25	8:19	3.7	4.2	60.0	21.7	21.3	3.46E-07	1.25
11/14/25	8:19	11/14/25	8:24	4.2	4.5	60.0	21.3	21.0	2.30E-07	1.00
11/14/25	8:24	11/14/25	8:29	4.5	4.9	60.0	21.0	20.6	3.07E-07	1.00
11/14/25	8:29	11/14/25	8:34	4.9	5.4	60.0	20.7	20.3	3.46E-07	1.25
11/14/25	8:34	11/14/25	8:39	5.4	5.7	60.0	20.3	20.0	2.30E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 2.74E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-14

% of max = N/A +/- OMC = N/A

Material: Tan & Red Fat Clay

	Before Test	After Test
Can No.	149	346
Wet Wt.&Tare(g)	124.80	454.60
Dry Wt. & Tare(g)	109.07	356.05
Tare Wt.(g)	49.7	37.23
Wt. of Dry Soil(g)	59.4	318.82
Water Content(%)	26.5	30.9

Avg. Dia. 2.855 in UWW: 120.8 pcf

Sample Ht. 1.992 in UDW: 95.5 pcf

Sample Wt. 404.45 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910099	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/06/25	11:40	11/06/25	12:02	5.8	7.0	60.0	21.4	19.6	3.77E-07	0.67
11/06/25	12:02	11/06/25	12:23	7.0	8.1	60.0	19.6	18.4	3.03E-07	0.92
11/06/25	12:23	11/06/25	12:44	8.1	9.3	60.0	18.4	17.1	3.29E-07	0.92
11/06/25	12:44	11/06/25	13:04	9.3	10.4	60.0	17.1	16.0	3.04E-07	1.00
11/06/25	13:04	11/06/25	13:21	10.4	11.6	60.0	16.0	15.0	3.58E-07	1.20
11/06/25	13:21	11/06/25	13:44	11.6	12.6	60.0	15.0	13.8	2.64E-07	0.83
11/06/25	13:44	11/06/25	14:04	12.6	13.8	60.0	13.8	12.8	3.04E-07	1.20

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 3.10E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-15

% of max = N/A +/- OMC = N/A

Material: Orange & Gray Fat Clay

	Before Test	After Test
Can No.	147	146
Wet Wt.&Tare(g)	179.44	422.54
Dry Wt. & Tare(g)	151.61	328.60
Tare Wt.(g)	49.7	49.70
Wt. of Dry Soil(g)	101.9	278.90
Water Content(%)	27.3	33.7

Avg. Dia. 2.837 in UWW: 114.4 pcf

Sample Ht. 1.886 in UDW: 89.9 pcf

Sample Wt. 358.15 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		A	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/05/25	5:10	11/05/25	5:26	2.2	3.6	60.0	21.3	19.3	5.63E-07	0.70
11/05/25	5:26	11/05/25	5:40	3.6	5.3	60.0	19.3	17.6	6.44E-07	1.00
11/05/25	5:40	11/05/25	5:56	5.3	6.9	60.0	17.6	16.1	5.13E-07	1.07
11/05/25	5:56	11/05/25	6:10	6.9	8.3	60.0	16.1	14.7	5.30E-07	1.00
11/05/25	6:10	11/05/25	6:20	8.3	9.4	60.0	14.7	13.6	5.83E-07	1.00
11/05/25	6:20	11/05/25	6:33	9.4	10.7	60.0	13.6	12.4	5.10E-07	1.08
11/05/25	6:33	11/05/25	6:46	10.7	11.9	60.0	12.4	11.1	5.10E-07	0.92
11/05/25	6:46	11/05/25	6:59	11.9	13.2	60.0	11.1	9.9	5.10E-07	1.08
11/05/25	6:59	11/05/25	7:12	13.2	14.4	60.0	9.9	8.7	4.89E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 5.36E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-16

% of max = N/A +/- OMC = N/A

Material: Tan & Red Fat Clay

	Before Test	After Test
Can No.	104	125
Wet Wt.&Tare(g)	198.09	336.94
Dry Wt. & Tare(g)	168.41	270.01
Tare Wt.(g)	49.7	49.69
Wt. of Dry Soil(g)	118.7	220.32
Water Content(%)	25.0	30.4

Avg. Dia. 2.867 in UWW: 118.3 pcf

Sample Ht. 1.390 in UDW: 94.7 pcf

Sample Wt. 278.73 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		A	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/17/25	9:36	11/17/25	9:53	3.1	3.6	60.0	21.0	19.6	2.14E-07	0.36
11/17/25	9:53	11/17/25	10:15	3.6	4.2	60.0	19.6	18.7	1.30E-07	0.67
11/17/25	10:15	11/17/25	10:30	4.2	4.8	60.0	18.7	17.9	1.78E-07	0.75
11/17/25	10:30	11/17/25	10:46	4.8	5.4	60.0	17.9	17.3	1.43E-07	1.00
11/17/25	10:46	11/17/25	11:02	5.4	5.9	60.0	17.3	16.7	1.31E-07	0.83
11/17/25	11:02	11/17/25	11:16	5.9	6.4	60.0	16.7	16.1	1.50E-07	0.83
11/17/25	11:16	11/17/25	11:31	6.4	6.9	60.0	16.1	15.5	1.40E-07	0.83
11/17/25	11:31	11/17/25	11:45	6.9	7.4	60.0	15.5	15.0	1.37E-07	1.00
11/17/25	11:45	11/17/25	12:00	7.4	7.9	60.0	15.0	14.3	1.53E-07	0.71

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 1.47E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-17

% of max = N/A +/- OMC = N/A

Material: Tan & Red Fat Clay

	Before Test	After Test
Can No.	104	147
Wet Wt.&Tare(g)	181.11	330.21
Dry Wt. & Tare(g)	160.73	271.95
Tare Wt.(g)	49.8	49.70
Wt. of Dry Soil(g)	110.9	222.25
Water Content(%)	18.4	26.2

Avg. Dia. 2.820 in UWW: 120.7 pcf

Sample Ht. 1.352 in UDW: 101.9 pcf

Sample Wt. 267.46 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		D	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/14/25	7:52	11/14/25	7:58	3.0	4.4	60.0	23.8	21.7	1.12E-06	0.67
11/14/25	7:58	11/14/25	8:04	4.4	5.5	60.0	21.7	20.5	7.37E-07	0.92
11/14/25	8:04	11/14/25	8:09	5.5	6.7	60.0	20.5	19.3	9.23E-07	1.00
11/14/25	8:09	11/14/25	8:14	6.7	8.0	60.0	19.3	18.1	9.61E-07	1.08
11/14/25	8:14	11/14/25	8:19	8.0	9.1	60.0	18.1	16.9	8.84E-07	0.92
11/14/25	8:19	11/14/25	8:24	9.1	10.2	60.0	16.9	15.7	8.84E-07	0.92
11/14/25	8:24	11/14/25	8:29	10.2	11.3	60.0	15.7	14.6	8.46E-07	1.00
11/14/25	8:29	11/14/25	8:34	11.3	12.5	60.0	14.6	13.4	9.23E-07	1.00
11/14/25	8:34	11/14/25	8:39	12.5	13.7	60.0	13.4	12.3	8.84E-07	1.09

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 8.80E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-18

% of max = N/A +/- OMC = N/A

Material: Tan & Red Fat Clay

	Before Test	After Test
Can No.	366	138
Wet Wt.&Tare(g)	232.06	332.81
Dry Wt. & Tare(g)	189.62	258.90
Tare Wt.(g)	37.1	49.63
Wt. of Dry Soil(g)	152.5	209.27
Water Content(%)	27.8	35.3

Avg. Dia. 2.832 in UWW: 120.4 pcf

Sample Ht. 1.378 in UDW: 94.2 pcf

Sample Wt. 274.28 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58 PSI		B	53 PSI		Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/17/25	9:57	11/17/25	10:15	1.1	2.6	60.0	22.2	19.7	#REF!	0.60
11/17/25	10:15	11/17/25	10:30	2.6	4.1	60.0	19.7	18.1	4.02E-07	0.94
11/17/25	10:30	11/17/25	10:46	4.1	5.7	60.0	18.1	16.5	3.89E-07	1.00
11/17/25	10:46	11/17/25	11:02	5.7	7.3	60.0	16.5	15.0	3.76E-07	1.07
11/17/25	11:02	11/17/25	11:16	7.3	8.8	60.0	15.0	13.5	4.16E-07	1.00
11/17/25	11:16	11/17/25	11:31	8.8	10.3	60.0	13.5	11.9	4.02E-07	0.94
11/17/25	11:31	11/17/25	11:45	10.3	11.6	60.0	11.9	10.5	3.75E-07	0.93
11/17/25	11:45	11/17/25	12:00	11.6	13.3	60.0	10.5	9.0	4.14E-07	1.13
11/17/25	12:00	11/17/25	12:17	13.3	14.5	60.0	9.0	7.6	2.97E-07	0.86

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 3.84E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-19

% of max = N/A +/- OMC = N/A

Material: Tan & Red Fat Clay

	Before Test	After Test
Can No.	160	143
Wet Wt.&Tare(g)	84.23	356.39
Dry Wt. & Tare(g)	77.50	282.81
Tare Wt.(g)	49.7	49.65
Wt. of Dry Soil(g)	27.8	233.16
Water Content(%)	24.2	31.6

Avg. Dia. 2.845 in UWW: 113.1 pcf

Sample Ht. 1.555 in UDW: 91.1 pcf

Sample Wt. 293.53 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910099	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/17/25	9:57	11/17/25	10:15	2.1	3.6	60.0	23.4	21.0	4.71E-07	0.63
11/17/25	10:15	11/17/25	10:30	3.6	4.9	60.0	21.0	19.8	3.62E-07	1.08
11/17/25	10:30	11/17/25	10:46	4.9	6.4	60.0	19.8	18.3	4.07E-07	1.00
11/17/25	10:46	11/17/25	11:02	6.4	7.8	60.0	18.3	17.0	3.67E-07	1.08
11/17/25	11:02	11/17/25	11:16	7.8	9.0	60.0	17.0	15.6	4.03E-07	0.86
11/17/25	11:16	11/17/25	11:31	9.0	10.2	60.0	15.6	14.4	3.48E-07	1.00
11/17/25	11:31	11/17/25	11:45	10.2	11.4	60.0	14.4	13.2	3.72E-07	1.00
11/17/25	11:45	11/17/25	12:00	11.4	12.8	60.0	13.2	11.9	3.91E-07	1.08

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 3.79E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-20

% of max = N/A +/- OMC = N/A

Material: Tan and Red Lean Clay

	Before Test	After Test
Can No.	155	178
Wet Wt.&Tare(g)	230.37	275.94
Dry Wt. & Tare(g)	198.26	222.04
Tare Wt.(g)	49.6	49.60
Wt. of Dry Soil(g)	148.7	172.44
Water Content(%)	21.6	31.3

Avg. Dia. 2.828 in UWW: 111.5 pcf

Sample Ht. 1.181 in UDW: 91.7 pcf

Sample Wt. 217.15 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		910096	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/20/25	12:54	11/20/25	13:00	3.5	6.7	60.0	19.0	15.6	1.84E-06	0.94
11/20/25	13:00	11/20/25	13:05	6.7	9.3	60.0	15.6	13.0	1.74E-06	1.00
11/20/25	13:05	11/20/25	13:10	9.3	12.0	60.0	13.0	10.5	1.74E-06	1.08
11/20/25	13:10	11/20/25	13:15	12.0	14.4	60.0	10.5	8.0	1.64E-06	0.96
11/20/25	13:15	11/20/25	13:20	14.4	17.1	60.0	8.0	5.3	1.80E-06	1.00
11/20/25	13:20	11/20/25	13:23	17.1	18.2	60.0	5.3	4.2	1.22E-06	1.00
11/20/25	13:23	11/20/25	13:26	18.2	19.7	60.0	4.2	2.5	1.78E-06	0.88
11/20/25	13:26	11/20/25	13:30	19.7	21.3	60.0	2.5	0.6	1.46E-06	0.84

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 1.65E-06 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-21

% of max = N/A +/- OMC = N/A

Material: Tan and Red Lean Clay

	Before Test	After Test
Can No.	109	158
Wet Wt.&Tare(g)	154.04	328.34
Dry Wt. & Tare(g)	133.92	263.34
Tare Wt.(g)	49.8	49.63
Wt. of Dry Soil(g)	84.2	213.71
Water Content(%)	23.9	30.4

Avg. Dia. 2.825 in UWW: 116.9 pcf

Sample Ht. 1.405 in UDW: 94.3 pcf

Sample Wt. 270.13 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette			
				58 PSI		Z	53 PSI		Permeability	
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/20/25	10:26	11/20/25	10:33	9.4	10.0	60.0	11.3	10.5	3.98E-07	0.75
11/20/25	10:33	11/20/25	10:40	10.0	10.6	60.0	10.5	9.8	3.70E-07	0.86
11/20/25	10:40	11/20/25	10:47	10.6	11.4	60.0	9.8	9.0	4.55E-07	1.00
11/20/25	10:47	11/20/25	10:54	11.4	12.2	60.0	9.0	8.0	5.12E-07	0.80
11/20/25	10:54	11/20/25	11:01	12.2	13.0	60.0	8.0	7.0	5.12E-07	0.80

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 4.49E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-22

% of max = N/A +/- OMC = N/A

Material: Tan and Red Lean Clay

	Before Test	After Test
Can No.	146	177
Wet Wt.&Tare(g)	187.07	275.64
Dry Wt. & Tare(g)	158.99	221.24
Tare Wt.(g)	49.7	49.65
Wt. of Dry Soil(g)	109.3	171.59
Water Content(%)	25.7	31.7

Avg. Dia. 2.863 in UWW: 114.7 pcf

Sample Ht. 1.153 in UDW: 91.2 pcf

Sample Wt. 223.42 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		J-K	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/20/25	10:26	11/20/25	10:33	6.1	6.6	60.0	17.2	16.6	2.50E-07	0.83
11/20/25	10:33	11/20/25	10:40	6.6	7.1	60.0	16.6	16.0	2.50E-07	0.83
11/20/25	10:40	11/20/25	10:47	7.1	7.6	60.0	16.0	15.6	2.05E-07	1.25
11/20/25	10:47	11/20/25	10:54	7.6	8.1	60.0	15.6	15.0	2.50E-07	0.83
11/20/25	10:54	11/20/25	11:01	8.1	8.6	60.0	15.0	14.6	2.05E-07	1.25

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 2.32E-07 cm/sec

Tested In-situ

Terracon

ASTM D5084 Method C

Flex Wall Permeability

Project No.: 35247264

Project: B&F GCCG Ph 3, Cell 1 Bid Docs & CQA Services

Max Dry Density(pcf) = N/A OMC = N/A

Boring No.: N/A Depth/Sample No.: P-23

% of max = N/A +/- OMC = N/A

Material: Tan and Red Lean Clay

	Before Test	After Test
Can No.	110	186
Wet Wt.&Tare(g)	110.19	406.55
Dry Wt. & Tare(g)	97.32	319.59
Tare Wt.(g)	49.7	49.60
Wt. of Dry Soil(g)	47.6	269.99
Water Content(%)	27.0	32.2

Avg. Dia. 2.832 in UWW: 116.3 pcf

Sample Ht. 1.800 in UDW: 91.5 pcf

Sample Wt. 346.03 g Pres. Diff. 5.0 psi

Temperature (C°): 22.0 Con. Pres*: 2.0 *Note: The value is Effective Confining Pressure

Temp. Corr. Factor 0.953

				A - Burette		Cell #	B - Burette		Permeability	
				58 PSI		A	53 PSI			
Date	Time	Date	Time	H1	H2	PSI	H1	H2	cm/sec	PV Ratio
11/21/25	8:31	11/21/25	8:34	2.0	2.4	60.0	23.0	22.4	8.46E-07	0.67
11/21/25	8:34	11/21/25	8:37	2.4	3.0	60.0	22.4	21.7	1.10E-06	0.86
11/21/25	8:37	11/21/25	8:40	3.0	3.4	60.0	21.7	21.1	8.46E-07	0.67
11/21/25	8:40	11/21/25	8:43	3.4	4.0	60.0	21.1	20.5	1.02E-06	1.00
11/21/25	8:43	11/21/25	8:46	4.0	4.5	60.0	20.5	20.0	8.46E-07	1.00
11/21/25	8:46	11/21/25	8:49	4.5	5.0	60.0	20.0	19.5	8.46E-07	1.00
11/21/25	8:49	11/21/25	8:52	5.0	5.5	60.0	19.5	19.0	8.46E-07	1.00
11/21/25	8:52	11/21/25	8:58	5.5	6.0	60.0	19.0	18.5	4.23E-07	1.00

ASTM D4318 Atterberg Limits

Liquid Limit: N/A

Plastic Limit: N/A

Plasticity Index: N/A

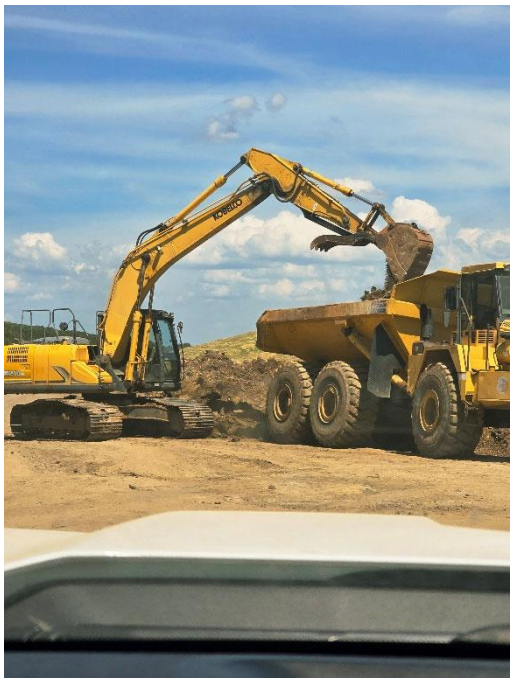
ASTM D1140 Wash 200

Percent Fines (%): N/A

Avg. K_{20} = 8.46E-07 cm/sec

Tested In-situ

Appendix D
Photographic Log



1. Contractor loading on-site materials for subgrade fill



2. Contractor working on subgrade cut and fill



3. Contractor compacting subgrade in cell and perimeter road areas



4. Contractor beginning test fill pad



5. Contractor compacting test pad materials with sheepsfoot compactor



6. Working on final lift of Phase 3, Cell 1



7. Completed Phase 3, Cell1 at Phase 2 and 3 tie-in



8. Completed Phase 3, Cell1 showing perimeter berms and perimeter access road in background