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ADDENDUM #7

DATED: SEPTEMBER 8, 2025

STATE of ALABAMA
P. T. ADDISON 4564
H. G. GANDY 3928
R. O. JONES III 4303
REGISTERED ARCHITECTS

PROJECT: **Huxford Elementary School Gymnasium And Classroom Addition For Escambia County Board Of Education Huxford, Alabama**
PH&J No: **2312SC**
DCM No: **2023650**
PSCA No. **9551**

7A-1 GENERAL

This Addendum is hereby made part of the Bid/Contract Documents and as such shall be acknowledged with the Bid. Failure to do so may subject the Bidder to disqualification. The following conditions take precedence over conflicting conditions in the Specifications, on the Drawings, and in any other Supplementary Documents. When a change is called for on a Drawing, this change shall carry through all applicable drawings, including all related architectural, civil, structural, mechanical, plumbing, electrical drawings or other discipline employed by the architect of record. The Bid/Contract Documents are hereby addended in the following:

7A-2 BIDDING REQUIREMENTS

1. **Unit Cost (Attachment to Proposal)**: Replace the published Attachment to Proposal with the one contained herein as Addendum No.: 7; Attachment #1.

2. **Soils Report (Section 0090)**: Replace the published report with the one contained herein as Addendum No.: 7; Attachment #2.

7A-3 SPECIFICATIONS

1. **Rigid Roof Insulation (Section 0730.B.7)**: Change the first three sentences to read:

   "To be equal to Carlisle polyisocyanurate with R value of 6 per inch and 20 PSI Compressive strength to create continuous insulation above the metal deck of R-25 or greater. This will require a total thickness of at least 4.4" or thicker depending on the manufacturer's available thickness, however the maximum thickness of a single board shall be 2".

2. **Windows (Section 0852)**: Replace the window specification added by previous addendum with the one contained herein as Addendum No.: 7; Attachment #3.

3. **Marker Boards (Section 1011.A.3)**: Add the following to this paragraph:

   "Provide one (1) 16'0" marker board in each lab and provide two (2) 16'0" marker boards in each classroom. Final location shall be determined by the Owner."

4. **Tack Boards (Section 1011.A.4)**: Add the following to this paragraph:

   "Provide one (1) 4'-0" tack board in each lab and classroom. Final location shall be determined by the Owner."

5. **Curtain Height (Section 1148.B)**: The height of the curtain shall be 9'-6" with width as stated on Sheet A2.5.

6. **Incline Wheelchair Lift (Section 1441.2.2.A)**: Change the model from the GSL Artira Lift to the X3 model. Revise electrical requirements from the published to 120 VAC single phase/ 50hz. General Contractor shall coordinate the electrical requirements.

7. **Liquid Adhesive (Section 15700.9.6)**: Modify this paragraph from the Mechanical Engineer as shown in the paragraph contained herein as Addendum No.: 7; Attachment #4.

7A-4 DRAWINGS

1. **Existing Cantilever Gate (Sheet C1.0)**: Relocated the existing cantilever gate at the SE entrance of the property to 5' north of the new fire hydrant. Reconnect motor/operator for fully operational system with traffic loop on the secure side to activate egress. Work shall be done under the base bid.

2. **New Cantilever Gates (Sheet C1.0)**: Install two (2) new cantilever gates under the base bid. One at the SE entrance of the existing parking lot with the gate sliding north/south. At the SW entrance the parking island shall be modified, increasing its size by four (4) parking spaces. Gate shall slide east/west. Provide traffic loop on the secure side to activate egress. Operators for the new gates shall be 1hp/208V/3-phase. Run the circuit for each gate to the nearest pane. This work shall be done under the base bid.

3. **Site Revisions (Sheet C1.0)**: Revise the SW portion of the Site Plan as shown in the sketch contained herein as Addendum No.: 7; Attachment #5.

4. **Site Revisions (Sheet C1.1)**: Revise the SW portion of the Site Plan as shown in the sketch contained herein as Addendum No.: 7; Attachment #5.

5. **Septic Plot Plan (Sheet C4.0)**: Add the following note:

   "ALL ONSITE SEWAGE DISPOSAL PRODUCTS SHALL BE INSTALLED BY A CONTRACTOR WITH A VALID PERMIT TO INSTALL ISSUED BY THE ALABAMA DEPARTMENT OF PUBLIC HEALTH AND HOLDING AN ADVANCED LEVEL 2 CURRENT LICENSE TO INSTALL BY THE ALABAMA ONSITE WASTEWATER BOARD OR A GENERAL CONTRACTOR'S LICENSE WITH A MUNICIPAL AND UTILITY (MU) CLASSIFICATION ISSUED BY THE ALABAMA LICENSING BOARD FOR GENERAL CONTRACTORS."

   THIS NEGATES THE NOTE ADDED IN ADDENDUM 5 REGARDING A LEVEL 2 LICENSE.

6. **<u>Site Details (Sheet C6.0)</u>**: Add the Site Details to this sheet as shown in the sketches contained herein as Addendum No.: 7; Attachment #5.

7A-5 ATTACHMENTS

ATTACHMENT #1	**ATTACHMENT TO PROPOSAL**
ATTACHMENT #2	**SECTION 0090 SOILS REPORT**
ATTACHMENT #3	**SECTION 0852 WINDOWS**
ATTACHMENT #4	**SECTION 15700 PARAGRAPH**
ATTACHMENT #5	**SITE REVISIONS & DETAILS**

End of Addendum

* * * TO PROPOSAL * * *

If UNIT PRICES are required to adjust units of work, the following will apply. The price shall apply for more or less:

UNIT PRICES: (include with all proposals)

Soil Replacement

For removable of unsatisfactory soil and replace with satisfactory structural fill material, per cubic yard (in place compacted). Price shall apply for more or less. Quantity will be calculated by the Geotechnical Engineers by cross-sectioning the excavated area. $_____PCY

Note: (Include in Base Bid price, under- cutting to the level indicated, plus add 5000 CY)

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SECTION 0090

APPROVED SOILS REPORT

The approved soils report is included here for the information of the Contractor and the guidance of Special Inspectors operating under Chapter 17 of the International Building Code. Neither the Owner nor the Architect assume any responsibility for the accuracy or completeness of the investigatory portion of the report, and both caution bidders that conditions may be encountered which are not reflected. Bidders may draw their own conclusions from the data indicated, or obtain, at their own expense, supplementary information.

The recommendations portion of the report is incorporated as a contract requirement pursuant to Chapter 17 of the IBC. See Section Earthwork.

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Report of Geotechnical Subsurface Investigation

Huxford Elementary School Building & Pavement Additions
Huxford Road
Huxford, Alabama
Our Job No. A25114.00630.000

Report of Geotechnical Subsurface Investigation

Huxford Elementary School Building & Pavement Additions

Huxford Road
Huxford, Alabama
Our Job No. A25114.00630.000

Prepared For:

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September 5, 2025

Table of Contents

1.0 Introduction 1

2.0 Summary 2

3.0 Evaluation 4
- 3.1 Site Location 4
- 3.2 Site Conditions 4
- 3.3 Site Geology and Subsurface Stratigraphy 6
- 3.4 General Construction Information 6

4.0 Recommendations - Site Preparation 8
- 4.1 "Controlled Areas" 8
- 4.2 Stripping 8
- 4.3 Drainage 8
- 4.4 Site Examination 8
- 4.5 Subgrade Improvements 8
- 4.6 Alternate Building “Controlled Area” Subgrade Improvements for Use with Aggregate Piers 9
- 4.7 Proof Rolling 9
- 4.8 Fill Earth 9
- 4.9 "Select Fill" 10
- 4.10 "Engineered Fill" 10
- 4.11 Weather Considerations 10
- 4.12 Unit Prices 10

5.0 Recommendations - Shallow Spread Foundations and Ground Supported Floor Slabs 11
- 5.1 Maximum Net Allowable Soil Bearing Pressures 11
- 5.2 Minimum Foundation Dimensions 11
- 5.3 Settlement 11
- 5.4 Foundation Construction 11
- 5.5 Acceptance of Foundation Bearing Levels 12
- 5.6 Floor Slab Bearing Conditions 12
- 5.7 Acceptance of Floor Slab Bearing Levels 12
- 5.8 Seismic Design Parameters 12
- 5.9 Control/Expansion Joints 12

6.0 Recommendations - Alternate Shallow Foundations with Aggregate Piers 13
6.1 Shallow Foundation with Aggregate pier Ground Improvement 13
6.2 Maximum Allowable Soil Bearing Pressures 13
6.3 Minimum Foundation Dimensions 13
6.4 Settlement.. 14
6.5 Seismic Design Parameters 14
6.6 Foundation Construction 14
6.7 Acceptance of Foundation Bearing Levels 14

7.0 Recommendations - Pavements 15
7.1 Reference 15
7.2 Subgrade Support Values 15
7.3 Traffic Data 15
7.4 Subgrade Improvements 15
7.5 Light to Medium Duty Pavement Sections 15
7.6 Trash Dumpster Loading Areas 16
7.7 Concrete Pavement Construction Joints 16
7.8 Material Thicknesses 16

8.0 Recommendations - General 17
8.1 Utility Trenches 17
8.2 Grading and Drainage Improvements 17
8.3 Vertical Cuts 17
8.4 Cut and Fill Slopes 17
8.5 Quality Control 17

9.0 General Comments 18

10.0 Signature 19

Attachments :

- Vicinity Map
- Boring Plans
- Test Boring Logs
- Laboratory Test Data
- Notes and References
- Investigative Procedures
- Unified Soil Classification Chart
- General Terms and Conditions

1.0 Introduction

UES Professional Solutions 18, LLC (UES) is pleased to provide this report of our subsurface investigation for the proposed Huxford Elementary School Building and Pavement Additions in Huxford, Alabama. The scope of this investigation included 16 soil test bores in the proposed building structure and pavement addition areas. The quantity and location of the test bores were taken in accordance with the authorized scope of work. The intent of this investigation was to evaluate the subsurface conditions with respect to the development of the site for support of the proposed new structure and pavement.

This report has been prepared in accordance with generally accepted current standards of geotechnical engineering practices and no other warranties are expressed or implied. The recommendations of this report are based on our professional judgment considering the proposed construction as described by this report and the data available to us. The construction should include follow up geotechnical monitoring and construction materials testing by our firm. It is important that we confirm the expected subsurface conditions based on the soil boring data during the construction phase. This report is presented on the basis that all of our recommendations will be followed.

2.0 Summary

Generally, the subsurface investigation indicated conditions which should be compatible with the planned structure and pavements provided the site preparation and construction are completed in accordance with the recommendations which follow in this report. Please note that our recommendations are site specific and may not be suitable for other types of structures or other locations.

A total of 16 test bores were completed to evaluate the subsurface stratigraphy. Beneath 10 to 13” of organic topsoil or 2 to 4” of asphalt, the test bores penetrated in-situ earth described as cohesive clayey sand (sections with trace gravel), silty clayey sand, sandy clay, silty clay, and non-cohesive silty sand. The predominate sand earth is of a marginal to good drainage classification. The predominate clay earth is of a poor drainage classification. Below localized weak surface soil conditions, the test bores encountered low to moderate soil strengths and consolidation characteristics which are expected to be compatible with the planned type of construction.

Test bores B-1 through B-9 indicated groundwater during drilling at depths ranging from 17 to 19’ below ground surface (bgs). Twenty-four hours following drilling the test bores had caved at depths ranging from 6.9 to 18.5’ bgs. The groundwater condition at this site is subject to seasonal variation and is expected to fluctuate. We do not anticipate that the groundwater condition will affect the construction or long-term performance of this project. Shallow groundwater encountered during construction (if any) can be controlled using shallow drainage ditches, sump pits and pumps, and/or permanent underdrains.

One of the primary concerns for the planned development is the presence of weak compressible soil zones identified at bores B-1, B-2, B-4, and B-8. Long term consolidation of this weak soil zone will create settlement issues for the planned building structure. The weak soil zone appears to be isolated and was not evident in the remainder of the test bores. We recommend that this area be undercut beginning at bores B-1, B-2, B-4, and B-8 extending in all directions beneath and 5’ beyond the edge of the building until the weak soil is removed. After stripping and removal of localized weak materials; the exposed subgrade should be processed and thoroughly compacted to at least 98% of the materials ASTM-D698 standard density. Any areas which fail to compact or fail to meet a proof roll should be undercut and backfilled with properly compacted “engineered fill”. The rubble-free, non-organic non-saturated sections of the native sand earth may be used to develop “engineered fill” for foundation and/or slab support.

Following proper site preparation, the project can use conventional design and construction techniques to develop a shallow spread foundation system for support of the planned structure. The spread foundations can be designed to bear transitional between the in-situ earth (compacted as required) and new “engineered fill” earth using net allowable soil bearing pressures of up to 1,500 pounds per square foot for continuous foundations and 2,000 pounds per square foot for isolated square foundations.

Recommendations for aggregate piers under all building foundations have been provided as an alternative to undercutting and recompacting. Piers will likely only need to be 8 to 10' deep to develop 4,000 psf or more net allowable soil bearing pressures, could be installed quickly, and possibly at a cost less than undercutting. The native soil could be compacted in-place for slab support. This option would be beneficial to the schedule if the site work has to be done during winter and spring seasons.

The pavement sections may be developed using locally available materials and conventional construction techniques. The pavement sections may be constructed using a crushed aggregate base and high stability bituminous pavement section, a granular soil base and high stability bituminous pavement, or a concrete pavement section placed directly over an improved layer of the subgrade earth.

3.0 Evaluation

3.1 Site Location

The site subject to this report is located at 637 Huxford Road in the unincorporated community of Huxford, Escambia County, Alabama. Our field personnel utilized the provided instructions, site plan and a survey grade GPS to locate the site and test bores. The ground elevation at each bore location was determined with the GPS. These elevations are shown on the test bore records. The horizontal and vertical accuracy of the GPS can be variable due to atmospheric influences, tree canopies, and other obstructions. The locations should be considered approximate. The GPS data is provided for information only and has not been field verified.

3.2 Site Conditions

The investigation site consisted of portions within the approximately 9-acre Huxford Elementary School Complex containing assorted buildings, paved drives and parking areas, grassed parking areas, and other associated improvements some of which are proposed for demolition. Generally, the site is open and clear where buildings are not present (see photos below).

The local terrain is described as gently sloping. There was approximately 8’ of relief between the test bore locations. Surface drainage was described as good. Surface water is expected to flow over the site and discharge beyond the area planned for development. There were no significant areas of ponded surface water on the site at the time of drilling.

Site access was described as good. There was no difficulty mobilizing our truck and ATV-mounted drilling equipment to the test bore locations.

3.3 Site Geology and Subsurface Stratigraphy

Geologically, the site is located in the Coastal Plain Provence and is underlain by the Citronelle Formation placed in the Pleistocene Epoch of the Quaternary Period. Typically, this formation yields moderate-reddish-brown deeply weathered fine to very coarse quartz sand and varicolored typically mottled lenticular beds of clay and clayey gravel. Limonite pebbles and lenses of limonite cemented sand occur locally in weathered exposures. Gravel is composed of chert and quartz pebbles.

Beneath 10 to 13” of organic topsoil or 2 to 4” of asphalt, the test bores penetrated in-situ earth described as cohesive clayey sand (sections with trace gravel), silty clayey sand, sandy clay, silty clay, and non-cohesive silty sand. Laboratory analyses confirmed “CL”, “SC-SM” and “CL-ML” Unified Soil Classifications of the predominate sandy clay, silty clayey sand and sandy silty clay earth with plasticity indices of 4, 7, 8, 9, and 10. The penetration resistance values, “N”, ranged from 3 to 28 blows per foot indicating relative densities of very loose to very firm in the predominate sand earth and consistencies of soft to very stiff in the predominate clay earth. Moisture tests indicated soil water contents ranging from 10.8 to 24.4%. Test bores were terminated at depths of 10 to 25’ bgs.

Test bores B-1 through B-9 indicated groundwater during drilling at depths ranging from 17 to 19’ below ground surface (bgs). Twenty-four hours following drilling the test bores had caved at depths ranging from 6.9 to 18.5’ bgs. The groundwater condition at this site is subject to seasonal variation and is expected to fluctuate.

The enclosed test boring records further describe the subsurface stratigraphy, Unified Soil Classifications, penetration resistance values, moisture contents, water depths, caved depths, and boring termination depths.

3.4 General Construction Information

Specific construction details were not provided. The following data was extrapolated from the provided construction information. The construction data described in this section was considered in the formulation of our recommendations; therefore, any significant changes, additions, or modifications to the planned development may have a significant impact on our recommendations. We ask that we be advised of any significant errors, omissions, or revisions in the construction data to permit further comment as needed.

We understand the proposed development will include school classroom and office type building construction along with related grading, drainage, and pavement improvements. The building will include single to two-story height, shallow foundations, concrete floor slab on grade and PEMB, CMU, steel frame or wood frame type construction with brick or metal veneer siding. Specific structural loading information was not provided. We anticipate that maximum concentrated loads will be less than 100 kips and that wall loads will be less than 6 kips per linear foot.

Specific pavement design criteria were not available. The pavements are expected to be subjected to a light to medium duty traffic classification including a moderate volume of automobiles and occasional medium to heavy weight service trucks and school buses.

Based on the provided finish grading information, a finish floor elevation of 340.7’, and the existing grades, we expect less than 4’ of earth cutting/filling will be required to establish finish grades in the building and pavement areas. Fill earth required to establish subgrade elevation is expected to originate from on-site cuts and/or local off-site borrow sources.

One of the enclosed boring plans further describes the planned development.

4.0 Recommendations - Site Preparation

4.1 "Controlled Areas"

Define those areas throughout and 5’ beyond the proposed building and pavement areas and throughout significant slopes as "controlled areas".

4.2 Stripping

Remove all topsoil, stumps, vegetation, concrete, asphalt, and otherwise unsuitable materials from the "controlled areas". All unsuitable materials should be wasted off-site or in non-structural areas.

4.3 Drainage

Maintain the "controlled areas" in a drained condition that will ensure the continual removal of surface water that may flow over the construction areas. Temporary site drainage can be enhanced by the installation of the final site drainage structures during the early phases of the site development.

4.4 Site Examination

Prior to the placement of fill earth and following removal of cut earth, the "controlled areas" should be examined by UES representatives. The examination should include proof rolling with construction equipment, test pits, supplemental test bores, visual examinations, etc., as needed to determine the presence, location, and extent of any localized organic, weak, and/or otherwise unsuitable soil conditions which may exist at the site. Areas which exhibit weak soil or otherwise unsuitable conditions should be corrected in accordance with our recommendations. Typically, areas which yield excessively under proof rolling should be undercut to expose a firm level of soil followed by backfilling with "engineered fill".

4.5 Subgrade Improvements

Note that bore B-1, B-2, B-4, and B-7 in the building area indicated weak soil to a depth of 5’ below ground surface. The weak soil at these locations are expected to be localized conditions, however the lateral extent of the weak soil zone is unknown. The weak soil should be undercut to a depth of 5’ beginning at bore B-1, B-2, B-4, and B-7 locations extending in all directions throughout the building “controlled area”. The anticipated undercut area is illustrated on one of the attached boring plans. Once the weak soil zone has been removed, compact the exposed subgrade to at least 98% of the materials ASTM D-698 standard density. The undercut section should then be proof rolled. Areas which fail to compact or fail the proof roll should be undercut to expose firm earth followed by backfilling with “engineered fill”.

Subgrade improvements in the pavement areas should include compacting the exposed subgrade to 98% standard density. Then proof roll the pavement “controlled areas” Areas which fail to compact or fail the proof roll should be undercut to expose firm earth or to a maximum depth of 4’ below finish subgrade. Any required undercut areas should be backfilled with “engineered fill”.

4.6 Alternate Building “Controlled Area” Subgrade Improvements for Use with Aggregate Piers

When aggregate piers are used as ground improvement for building foundation support, undercutting and replacement with “engineered fill” can be omitted. Following topsoil stripping, the exposed subgrade in the building “controlled area” should be thoroughly compacted to at least 98% of the materials ASTM D-698 standard density for floor slab support. Place and compact any additional fill necessary to grade the site for floor slab support as “engineered fill”. The building “controlled area” should be proof rolled following completion of the density improvements. Areas which yield excessively under the proof roll should be reprocessed and compacted.

4.7 Proof Rolling

Proof rolling should be completed using rubber-tired construction equipment or a partially loaded dump truck weighing 40 tons. Proof-rolling should include a minimum of 2 passes in perpendicular directions over the "controlled areas". Areas which yield excessively should be corrected in accordance with our recommendations. Do not proof roll when the subgrade soil is saturated.

4.8 Fill Earth

Fill earth required to establish subgrade elevation in the "controlled areas" can consist of the rubble-free, non-saturated, and non-organic sections of the native material. Processing and moisture conditioning will be required to properly compact the on-site soils.

4.9 "Select Fill"

All fill earth originating from an off-site borrow source should be designated as "select fill". The "select fill" should consist of a rubble-free, non-saturated, and non-organic clayey sand or silty clayey sand that meets the following criteria.

"Select Fill" Composition

Sieve Requirements	% Passing
3"	100
No. 4	75 - 100
No. 200	20 - 45
Liquid Limit	40 max
Plasticity Index	6 to 12
Maximum Dry Unit Weight Based on ASTM-698 Standard Density Test	≥ 105 pcf

4.10 "Engineered Fill"

Unless otherwise specified, all fill earth, to include "select fill" earth, placed in the "controlled areas" should be designated as "engineered fill". Place fill earth in thin lifts not to exceed 8" loose measure and thoroughly compact each lift of fill to at least 98% of the materials ASTM D-698 standard density. At the time of densification, the moisture content of the "engineered fill" should be within 3% of optimum water content. Following acceptance for moisture and density, any "engineered fill" areas which are disturbed should be retested prior to the placement of additional fill earth or structures.

4.11 Weather Considerations

The native soils contain appreciable amounts of clay and silt fines. These soils are subject to a significant loss of shear strength when wet or saturated and can pump and yield under heavy construction traffic, especially during periods of frequent or extended periods of rain. The site can be best prepared during the normally drier summer and fall seasons when drying conditions are more favorable.

4.12 Unit Prices

If aggregate piers are not utilized, a line item for the removal of 7000 cubic yards (cy) of weak material and replacement with “engineered fill” should be included in the contract documents. Also, a add/deduct unit price should be established for weak material excavation and backfilling with “engineered fill” that is more or less than 7000 cubic yards. Cubic yard unit prices for weak material excavation and replacement should be based on in-place volumes established by a survey of the excavation prior to backfill.

5.0 Recommendations - Shallow Spread Foundations and Ground Supported Floor Slabs

5.1 Maximum Net Allowable Soil Bearing Pressures

2,000 pounds per square foot for isolated square foundations.
1,500 pounds per square foot for continuous foundations.

Note: Foundations should bear transitional in the in-situ earth (compacted as required) and/or new “engineered fill” exhibiting "N" values of 7 or greater.

5.2 Minimum Foundation Dimensions

Depth - The bottom of perimeter building wall and column foundations below outside finish grades should be at least 18". Increase depth as required to extend foundations through weak soil conditions. Any weak soil may be replaced with non-reinforced lean concrete (mud sill).

- The bottom of interior building foundations below the top of ground supported floor slabs should be at least 18". Increase depth as required to extend foundations through weak soil conditions. Any weak soil may be replaced with non-reinforced lean concrete (mud sill).

Width - Isolated square foundations - 30".
- Continuous wall foundations - 18".
- Turned down slab edges - 12"

Note: All foundations should be sized for total load but should not be less than the minimums described preceding in this report. The use of the recommended minimum foundation depths considers that adequate surface drainage is provided at finish subgrade elevation.

5.3 Settlement

The planned building structure will be subjected to total long term settlements of less than 1" with differential settlements of less than 1/2". The building foundations should be designed to tolerate these estimated settlements.

5.4 Foundation Construction

Do not permit foundation bearing soil to become saturated or dry excessively. Caution should be used not to disturb the foundation bearing level of soil. The bearing level of soil exposed in foundation trenches should be compacted to 98% standard density. Soils that fail to compact to the specified requirements will need to be undercut to a firm level and backfilled with “mud sills”. For budget purposes to correct the weak soil conditions, the construction documents should establish a base volume of 50 cubic yards of “mud sills” with an add/deduct unit price per cubic yard for more or less undercut and backfill with non-reinforced concrete (“mud sill”).

5.5 Acceptance of Foundation Bearing Levels

All foundation excavations should be examined by the project geotechnical consultant prior to the installation of the foundation reinforcement and concrete. All unacceptable conditions should be corrected in accordance with the geotechnical consultant's recommendations.

5.6 Floor Slab Bearing Conditions

The floor slab should bear on the properly compacted in-situ earth or new “engineered fill”. Provide a minimum 4" layer of compacted ALDOT 825 crushed stone base, no. 8910 crushed stone, ALDOT 821 granular soil, “select fill” or other suitable compactable granular fill between the subgrade layer and the slab. Provide a minimum 10 mil vapor barrier beneath the floor slab. Care should be taken not to damage the vapor barrier during placement of the floor slab concrete.

5.7 Acceptance of Floor Slab Bearing Levels

All floor slab bearing levels should be examined by the projects geotechnical consultant prior to the placement of the vapor barrier. All unacceptable conditions should be corrected in accordance with the geotechnical consultant's recommendations.

5.8 Seismic Design Parameters

The design parameters for the ASCE/SEI 7-22 are as follows for the site in Huxford, Alabama.

$S_s = 0.15$ $S_{MS} = 0.19$ $S_{DS} = 0.13$
$S_1 = 0.074$ $S_{M1} = 0.16$ $S_{D1} = 0.1$
Site Class D
Seismic Design Category B for Use Group I, II, or III and Seismic Design Category C for Use Group IV

5.9 Control/Expansion Joints

A liberal amount of control/expansion joints should be used in the concrete floor slabs, masonry walls and brick veneer walls to reduce the effects of the normal amounts of differential settlement and concrete shrinkage expected. The design and location of the control and construction joints should be in accordance with the recommendations of the Portland Cement Association.

6.0 Recommendations –Alternate Shallow Foundations with Aggregate Piers

6.1 Shallow Foundations with Aggregate Pier Ground Improvement

Aggregate piers are a proprietary intermediate foundation system which would be compatible with the soil conditions at this site for support of continuous and isolated foundation loads. The aggregate pier system is a ground improvement system which can improve bearing capacity and limit settlements for shallow foundations. There are multiple designers and installers of pier foundation systems. The design (grid pattern and depth) of the aggregate pier system is dependent on the load requirements of each specific project. The aggregate piers should be designed by a specialty contractor with at least 5years previous experience supporting similar buildings in similar soil conditions.

6.2 Maximum Allowable Soil Bearing Pressures

The aggregate piers should be designed to support the planned shallow foundations and to provide an allowable soil bearing pressure of up to 4,000 psf or more. The aggregate pier design should limit total settlements to 1" or less and differential settlements of approximately 1/2" or less. A minimum of one load test should be completed to verify the design parameters.

Note: The aggregate piers are typically installed from the existing ground surface with a sacrificial length that is removed during excavation for the foundation. Caution should be exercised to minimize disturbance of the soil bearing level and the surface of the aggregate piers. Do backfill over-excavated foundation trenches. All soil disturbed in the excavation process should be removed to expose undisturbed soil prior to the placement of the foundation concrete. During periods of poor weather, we recommend over excavating the foundation excavation by 4” and placing a 4” thick non-reinforced concrete mud mat to protect the soil bearing level, the tops of the aggregate piers, and to provide a working pad for the foundation construction.

6.3 Minimum Foundation Dimensions

Depth - The bottom of perimeter wall and column foundations below outside finish grades should be at least 18".

- The bottom of interior foundations below the top of ground supported floor slabs should be at least 18".

Width - Isolated square foundations - 30".
- Continuous wall foundations - 18".
- Turned down slab edges - 12"

Note: All foundations should be sized for total load but should not be less than the minimums described preceding in this report. The use of the recommended minimum foundation depths consider that adequate surface drainage is provided at finish subgrade elevation.

6.4 Settlement

The planned structures will be subjected to estimated total long-term settlements of 1" or less with differential settlements of 1/2” or less. The foundations and structures should be designed to tolerate these estimated settlements.

6.5 Seismic Design

The design parameters for the ASCE/SEI 7-22 are as follows for the site in Huxford, Alabama.

$S_s = 0.15$ $S_{MS} = 0.19$ $S_{DS} = 0.13$
$S_1 = 0.074$ $S_{M1} = 0.16$ $S_{D1} = 0.1$
Site Class D
Seismic Design Category B for Use Group I, II, or III and Seismic Design Category C for Use Group IV

6.6 Foundation Construction

Do not disturb the foundation bearing soil. Sections which become disturbed should be undercut and replaced with non-reinforced concrete. All foundations should be constructed as expediently as possible following excavation of the foundation trench. Caution should be exercised to prevent disturbance of the bearing soil and the tops of the aggregate piers during the excavation process. A minimum 4” thick mud sill (non-reinforced concrete) should be used during periods of poor weather to protect the bearing level of soil and the aggregate piers until the foundation reinforcement and concrete can be placed. The reinforced concrete foundation can bear directly on top of the mud mat.

6.7 Acceptance of Foundation Bearing Levels

All foundation excavations should be examined by UES representatives prior to the installation of the foundation reinforcement and concrete. All unacceptable conditions should be corrected in accordance with our recommendations.

7.0 Recommendations - Pavements

7.1 Reference

Alabama Department of Transportation (ALDOT), Standard Specifications For Highway Construction - 2022 Edition.

7.2 Subgrade Support Values

Based on estimated California Bearing Ratios (CBR) for the native and/or “select fill” earth at subgrade elevation, a design CBR value of 6 is recommended.

7.3 Traffic Data

Specific design pavement traffic data was not available. The pavements are expected to be subjected to a light to medium duty traffic classification including a moderate volume of automobiles and occasional medium to heavy weight service trucks and school buses. Please contact our office if specific pavement design data is available so that we may modify our pavement recommendations (if required).

7.4 Subgrade Improvements

Thoroughly mix and compact the top 6" of subgrade to 100% standard density.

Slope subgrade to provide positive drainage to side drainage ditches, underdrains, and/or storm drains to prevent the entrapment of water in the subgrade layer.

7.5 Light to Medium Duty Pavement Sections

Based on an estimated CBR value of 6 and a 20-year design life, the light to medium duty pavement sections may be developed using a crushed aggregate base and high stability bituminous pavement section, a granular soil base and high stability bituminous pavement section, or a concrete pavement section placed over the improved subgrade layer as described below.

7.5.1 Crushed Aggregate Base and High Stability Bituminous Pavement Section

1.5" - ALDOT Section 424-A 340 bituminous wearing surface.
1 - ALDOT Section 405 bituminous tack coat.
1.5" - ALDOT Section 424-B 634 bituminous binder.
1 - ALDOT Section 401-A bituminous prime coat.
6" - ALDOT Section 825 crushed aggregate soil base (100% modified density).
6" - ALDOT Section 230 modified roadbed (100% standard density).

7.5.2 Granular Soil Base and High Stability Bituminous Pavement Section

1.5" - ALDOT Section 424-A 340 bituminous wearing surface.
1 - ALDOT Section 405 bituminous tack coat.
2.5" - ALDOT Section 424-B 636 bituminous binder.
1 - ALDOT Section 401-A bituminous prime coat.
6" - ALDOT Section 821 granular soil base (98% modified density).
6" - ALDOT Section 230 modified roadbed (100% standard density).

Note: All bituminous pavements should be designed on the fine side of the restricted zone to reduce the permeability of the asphalt pavement.

7.5.3 Concrete Pavement Section

5" - 3500 psi compressive strength (550 psi flexural strength) concrete, maximum 4" slump.
6" - ALDOT Section 230 modified roadbed (100% standard density).

7.6 Trash Dumpster Loading Areas

A minimum 6" thick concrete pad should be developed in front and beneath trash dumpster areas to provide support for the sanitation vehicles during handling of the dumpsters.

7.7 Concrete Pavement Construction Joints

The design and location of construction joints should be in accordance with the recommendations of the Portland Cement Association. We recommend a maximum control joint spacing of 12'. All joints should be filled with a suitable flexible joint compound to prevent water intrusion at the joints.

7.8 Material Thicknesses

All material thicknesses referred to in this section are completed thicknesses.

8.0 Recommendations – General

8.1 Utility Trenches
All utility trenches (new and existing) extending through the "controlled areas" should be back-filled with "engineered fill".

8.2 Grading and Drainage Improvements
Incorporate finish grades, side drainage ditches, underdrains, etc., to reduce the possibility of ponding surface water within 5' of foundations and significant slopes.

8.3 Vertical Cuts
Vertical cuts greater than 4' or cuts required to remain open for extended periods of time should be sloped or braced as required for the protection of workmen entering deep excavations. Heavy construction traffic and stockpiling of excavated earth or other materials should not be permitted near the top of open unsupported excavations. Current OSHA regulations should be adhered to with respect to excavations for this project.

8.4 Cut and Fill Slopes
Cut and fill slopes should perform satisfactorily as steep as 2.5(H):1(V) in the earth typical of that penetrated in the upper strata at the site. All slopes should be protected from erosion using suitable vegetation or pavements.

8.5 Quality Control
UES should provide the following services during construction:

8.5.1 Verify the results of stripping, proof-rolling, and correction of weak soil conditions, quality and density of "engineered fill", installation of aggregate piers, and conditions of the foundation, floor slab, and pavement subgrade bearing levels.

8.5.2 Complete soil particle size, atterberg limits, and laboratory compaction tests on each different type of fill earth used in the "controlled areas".

8.5.3 Complete a minimum of 1 field density test per each 3,000 square feet per each 1' of vertical thickness of fill placed in the building and pavement "controlled areas". Also, a minimum of 1 field density test should be taken for each 50 linear feet per each 2' of vertical thickness of fill placed at utility trenches extending through "controlled areas".

8.5.4 Test all structural concrete in accordance with the guidelines established by the American Concrete Institute.

8.5.5 Quality assurance testing on the improved subgrade and base materials should be in accordance with the State of Alabama Department of Transportation.

9.0 General Comments

The scope of this study did not include sampling or testing for an environmental analysis or assessment for this site. If an environmental assessment of this site is desired, we should be contacted for further comment.

The comments of this report do not consider local flood conditions. The local flood condition/elevation (if any) should be determined and considered in the design of this project.

The frost penetration depth in the area of this project is generally taken to be less than 10". Provided our recommendations for the development of foundations and floor slabs are followed, we do not expect that the frost penetration will have any detrimental effects on the performance of the structure.

The comments of this report are based upon our interpretation of the construction information supplied by others, the data collected at the 16 soil test bores and our visual examination of the site. The evaluation of subsurface conditions based on the 16 soil test bores taken with this study requires a certain amount of interpolation. Improper site preparation, extremes in climatic conditions, significant changes in locations, grades, time, etc., can each affect groundwater, surface, and subsurface conditions. If conditions are encountered as the construction advances which vary significantly from those described by this report, we should be contacted for supplemental comment.

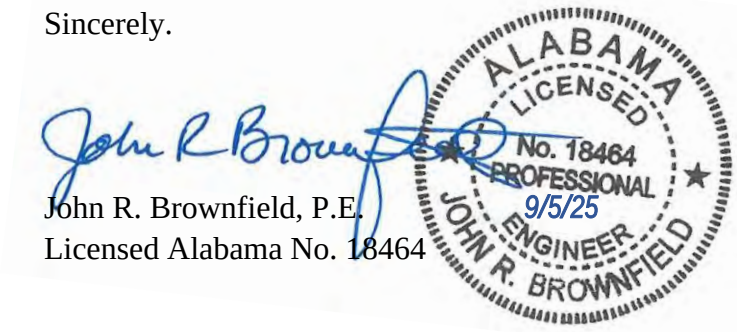
The scope of this investigation is not intended to establish volumetric estimates of the various subsurface materials at the site. Volumetric estimates may require a larger number of test bores placed on a close grid to establish reliable cross sections. If volume estimates are required of us for the design/development of this project to advance, please contact us for further comment.

We are available to provide a review of the final plans and project specifications with respect to their compatibility with the contents of this report. Furthermore, our firm would appreciate the opportunity to continue to serve as the geotechnical consultant and to provide the construction materials testing and monitoring for this project.

10.0 Signature

Thank you for selecting UES to provide the geotechnical services for this project. We are available to answer any questions concerning our findings and recommendations. If we can be of any further assistance, please contact our office.

Sincerely.



John R. Brownfield, P.E.
Licensed Alabama No. 18464

Report Distribution:
1 – Mr. Shaun Goolsby, Deputy of Operations (email)
1 – Mr. Steven Hall, Architect (email)

JRB/as


SITE
Huxford Community of Christ
Huxford Rd
Huxford Rd
Renovation Ministries Church
Huxford
McCullough Rd
Huxford Baptist Church
Butler St
Butler St
Tri County
A/C Man Heating & Air
21
21
21
Google Earth
Image © 2025 Airbus
N
1 mi

- Anticipated Undercut Area

B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
B-9
B-10
B-11
B-12
B-13
B-14
B-15
B-16

HUXFORD ROAD
HIGHWAY 30
(60' R.O.W.)

NORTH WILSON AVENUE

NORTH HALF OF SECTION 15, T-3-N, R-6-E, ESCAMBIA COUNTY
SOUTH HALF OF SECTION 15, T-3-N, R-6-E, ESCAMBIA COUNTY

2085.70± TO YELLOW PAINTED TREE LINE

2636.04± TO YELLOW PAINTED TREE LINE

FUTURE CAFETERIA BUILDING
F.F.E - 340.50

EXISTING BUILDING

PROPOSED SCHOOL BUILDING
F.F.E. - 340.70

PROPOSED SCHOOL BUILDING ALTERNATE
F.F.E. - 340.70

REQ'D INFILTRATION POND

FUTURE CAFETERIA PARKING

COVERED WALKWAY

REQ'D GRAVEL DRIVE

REQ'D CONCRETE MECHANICAL PAD

REQ'D FULL DEPTH ASPHALT PAVEMENT

REQ'D 6" GATE VALVE

REQ'D FIRE HYDRANT WITH (4) BOLLARDS

REQ'D DUMPSTER PAD

REQ'D 3:1 SLOPE

REQ'D RIP RAP WITH FILTER FABRIC

REQ'D EROSION CONTROL BLANKET (TYP.)

REQ'D SILT FENCE (TYP.)

REQ'D INLET PROTECTION (TYP.)

REQ'D CHECK DAM (TYP.)

REQ'D 3" CONCRETE FLUME

REQ'D CURB STOP (TYP.)

REQ'D 6" C900 PVC FIRE PROTECTION MAIN

REQ'D 4" SDR26 PVC SEWER LATERAL (WITH ACID DILUTION BASIN SEE PLUMBING PLAN)

REQ'D 6" VINYL COATED CHAIN LINK FENCE WITH GATE

REQ'D 5' CONCRETE SIDEWALK

REQ'D 3" GAS SERVICE (COORDINATE WITH GAS COMPANY)

REQ'D 3" WATER SERVICE

REQ'D 3" SCH. 40 PVC

REQ'D 3" METER & DOUBLE CHECK BACKFLOW DEVICE

REQ'D 3" GATE VALVE

REQ'D 6" x 3" TEE

REQ'D 6" x 6" TEE

REQ'D 6" GATE VALVE

REQ'D (2) 6" GATE VALVES

REQ'D 6" x 6" TAPPING SLEEVE AND VALVE

REQ'D 50' x 20' CONSTRUCTION EXIT

REQ'D 1" MILL & OVERLAY & RESTRIPE EXISTING PARKING

REQ'D HC PARKING SIGN (R7-8)/(R7-8P)

REQ'D HC PARKING SIGN (R7-8)

REQ'D 12" ROOF DRAIN

REQ'D 6" ROOF DRAIN

REQ'D 4" SDR26 PVC SEWER LATERAL

REQ'D 4" SDR26 PVC SEWER LATERAL (WITH ACID DILUTION BASIN SEE PLUMBING PLAN)

REQ'D TEMPORARY CONSTRUCTION ENTRANCE TO PROTECT DISPOSAL AREA THROUGH THE COURSE OF CONSTRUCTION

MALBIS
0-2%

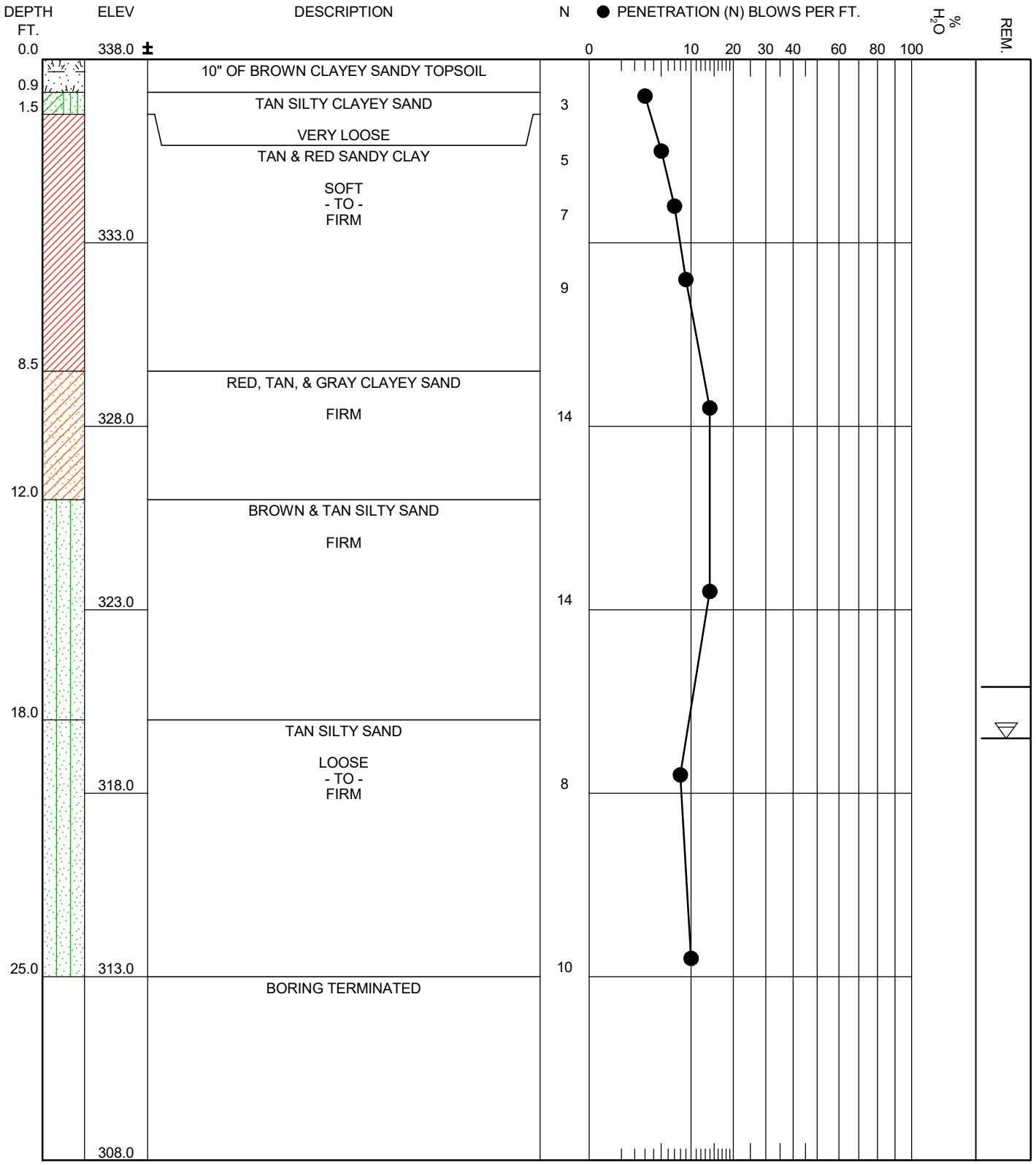
BAMA
0-2%

REDF

T.B.M. (2-15-24)
SET R.R. SPIKE IN POWER POLE
ELEV-339.54

FIP 1/2" REBAR

FIP 1/2" REBAR CAP
REEVES PLS 36027



UES

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

Undisturbed Sample

LA Lab Analysis

Water Level

Water Level 18.5' DURING DRILLING

Boring Caved 17.1' AFTER 24 HOURS

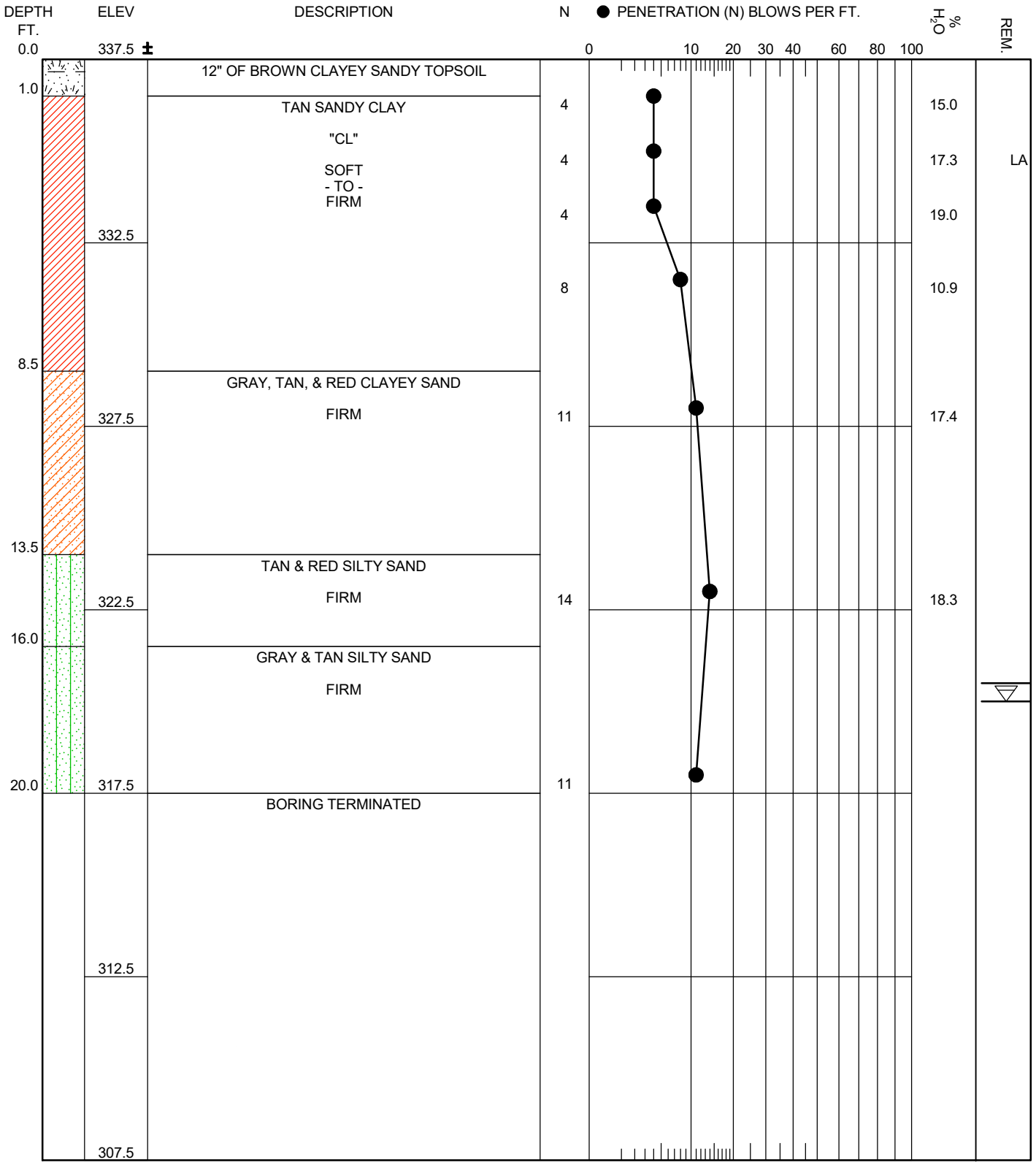
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B- 1

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level 17.5' DURING DRILLING

Boring Caved 17.0' AFTER 24 HOURS

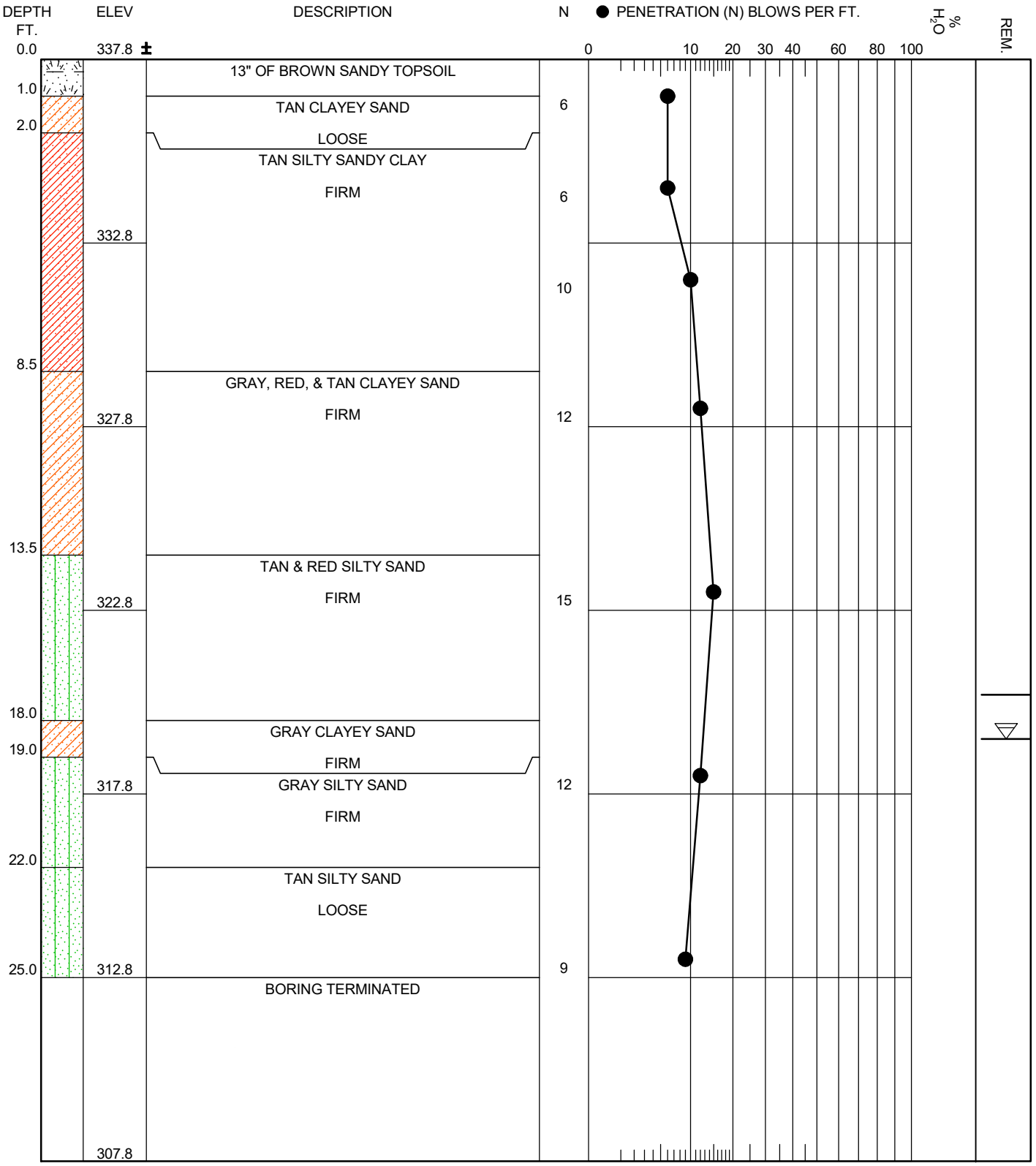
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B- 2

DATE DRILLED 8/19/25

TYPE BORING SB



Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

Undisturbed Sample

LA Lab Analysis

Water Level

Water Level 18.5' DURING DRILLING

Boring Caved 17.3' AFTER 24 HOURS

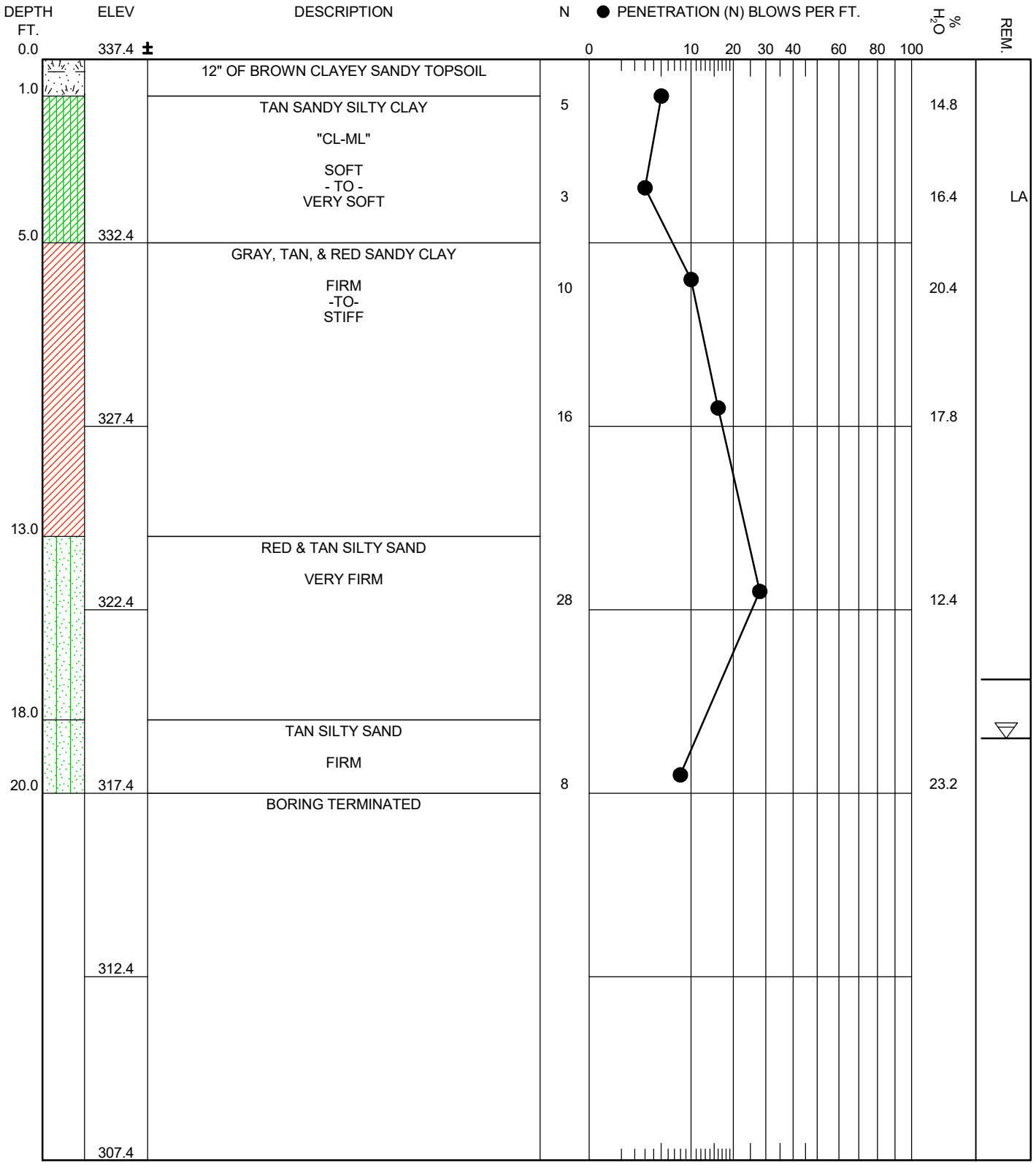
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B- 3

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level 18.5' DURING DRILLING

Boring Caved 16.9' AFTER 24 HOURS

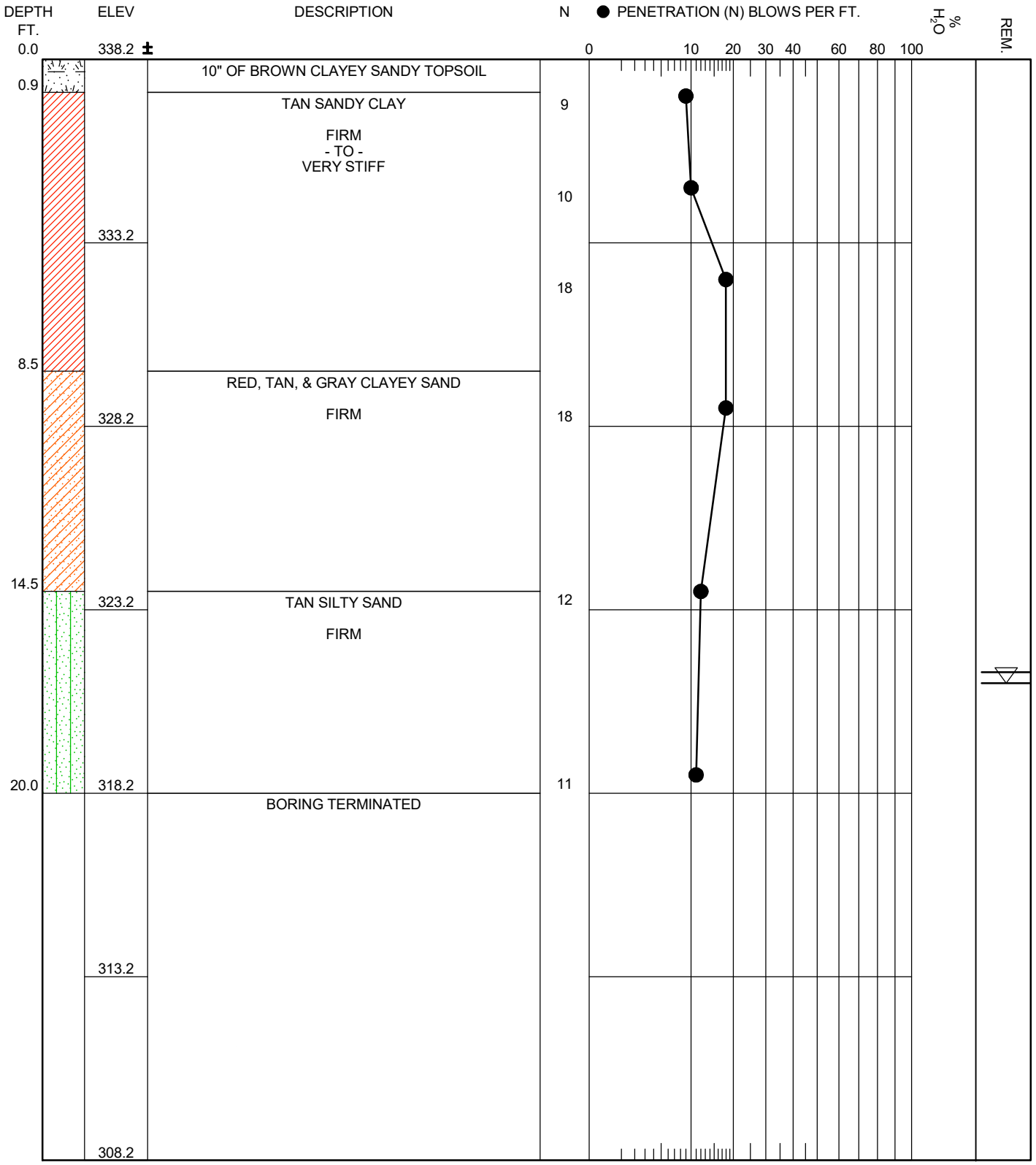
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B- 4

DATE DRILLED 8/19/25

TYPE BORING SB



UES

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

Undisturbed Sample

LA Lab Analysis

Water Level

Water Level 17.0' DURING DRILLING

Boring Caved 16.7' AFTER 24 HOURS

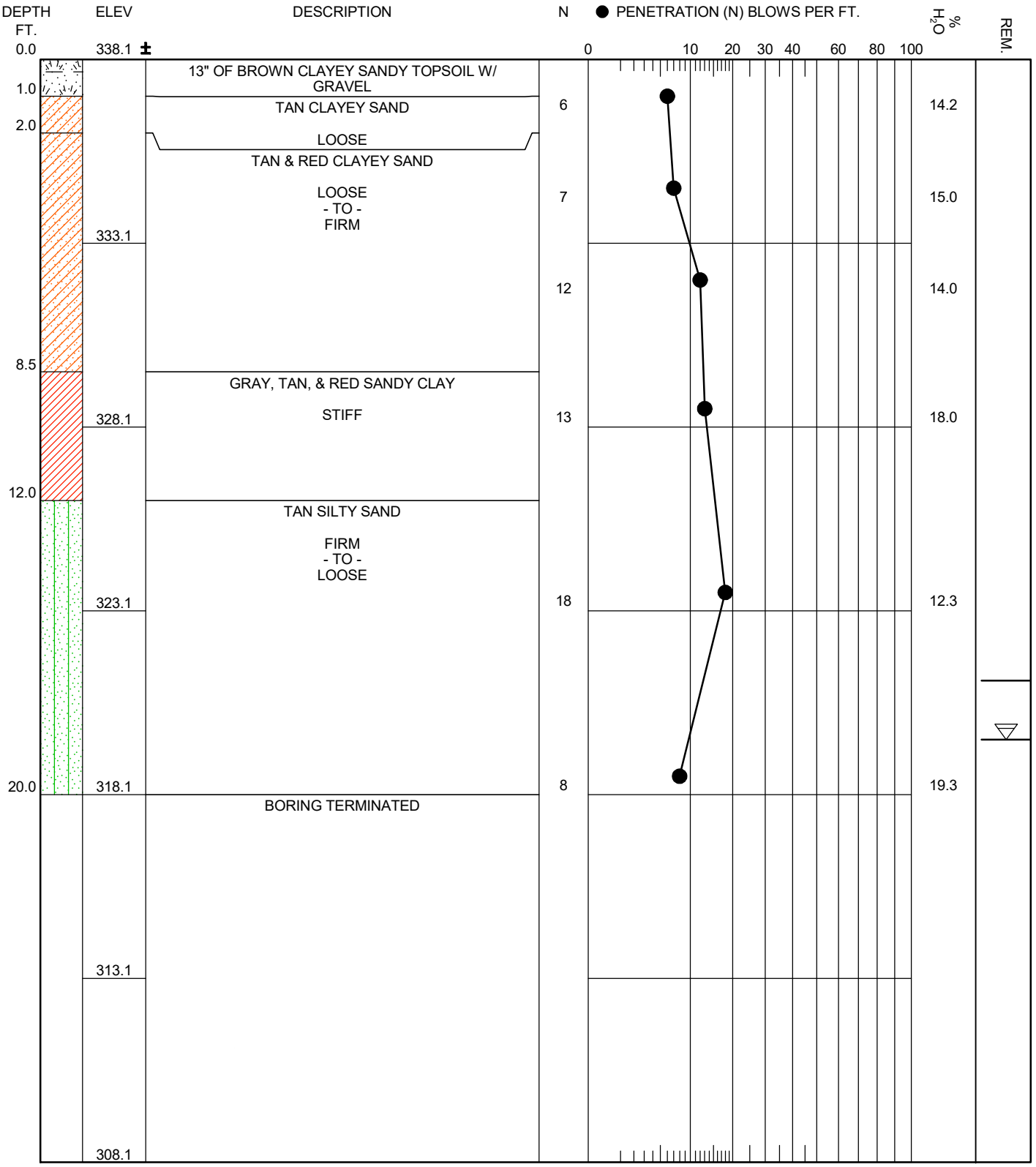
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B- 5

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level 18.5' DURING DRILLING

Boring Caved 16.9' AFTER 24 HOURS

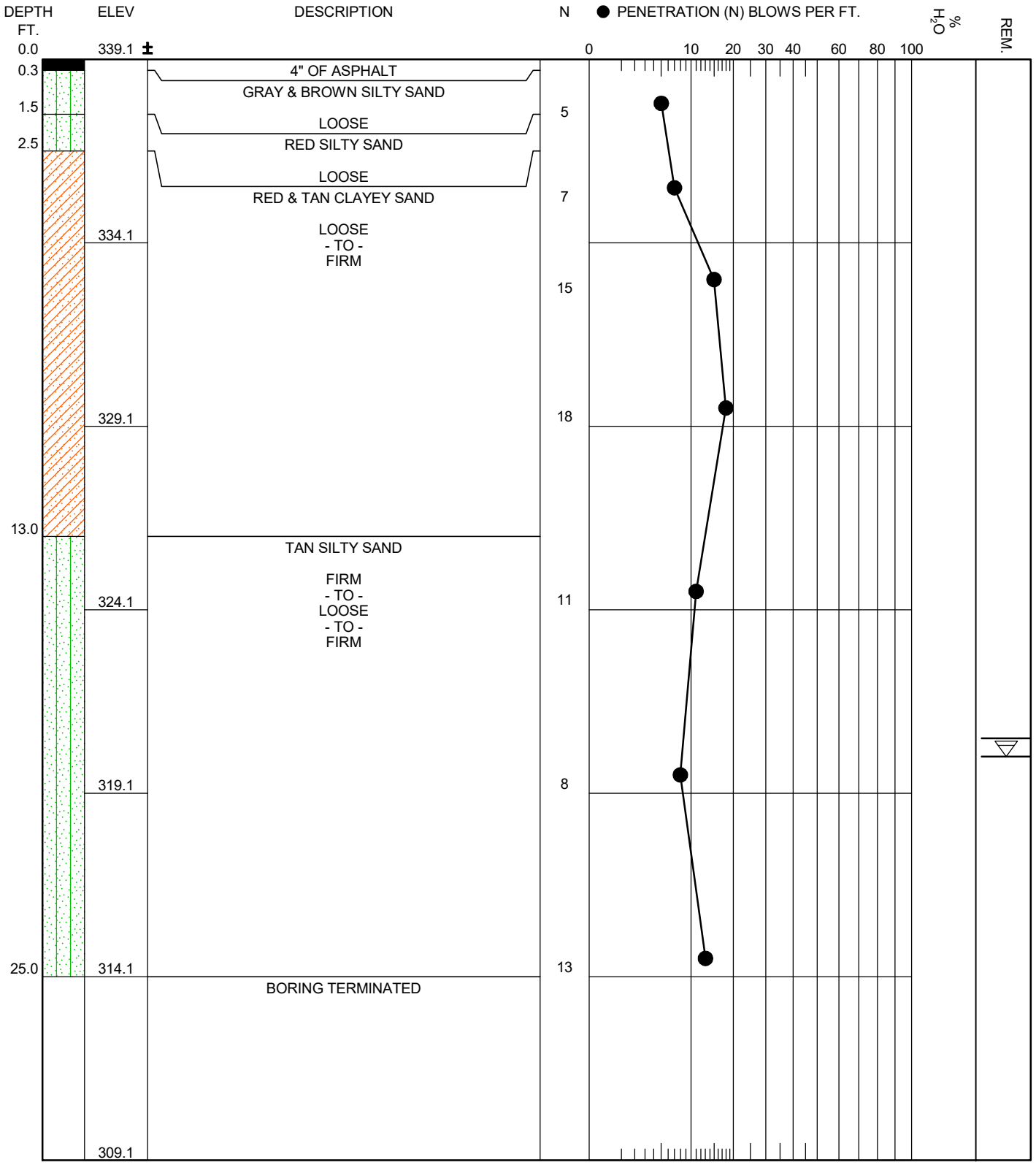
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B- 6

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level 19.0' DURING DRILLING

Boring Caved 18.5' AFTER 24 HOURS

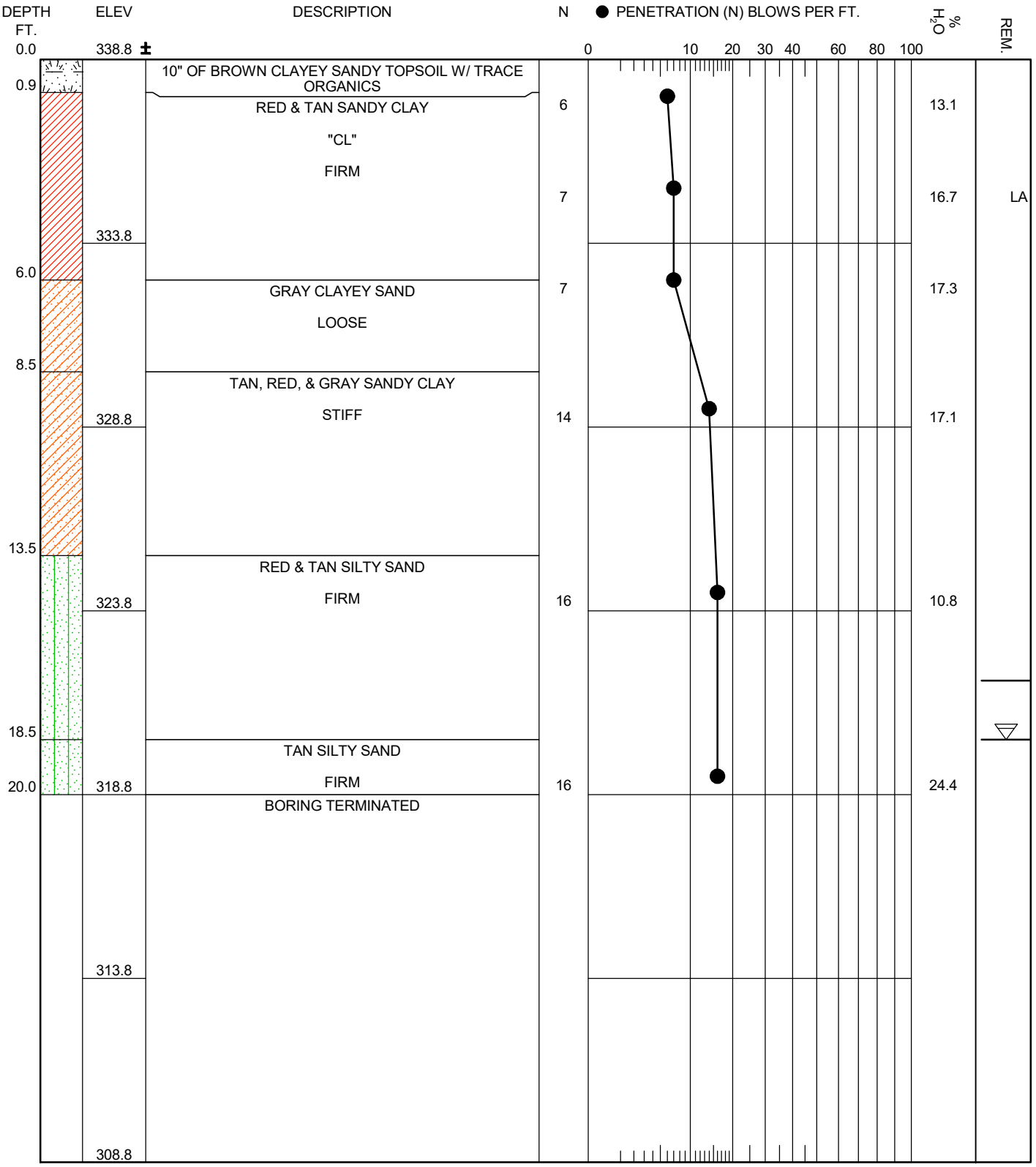
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B- 7

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level 18.5' DURING DRILLING

Boring Caved 16.9' AFTER 24 HOURS

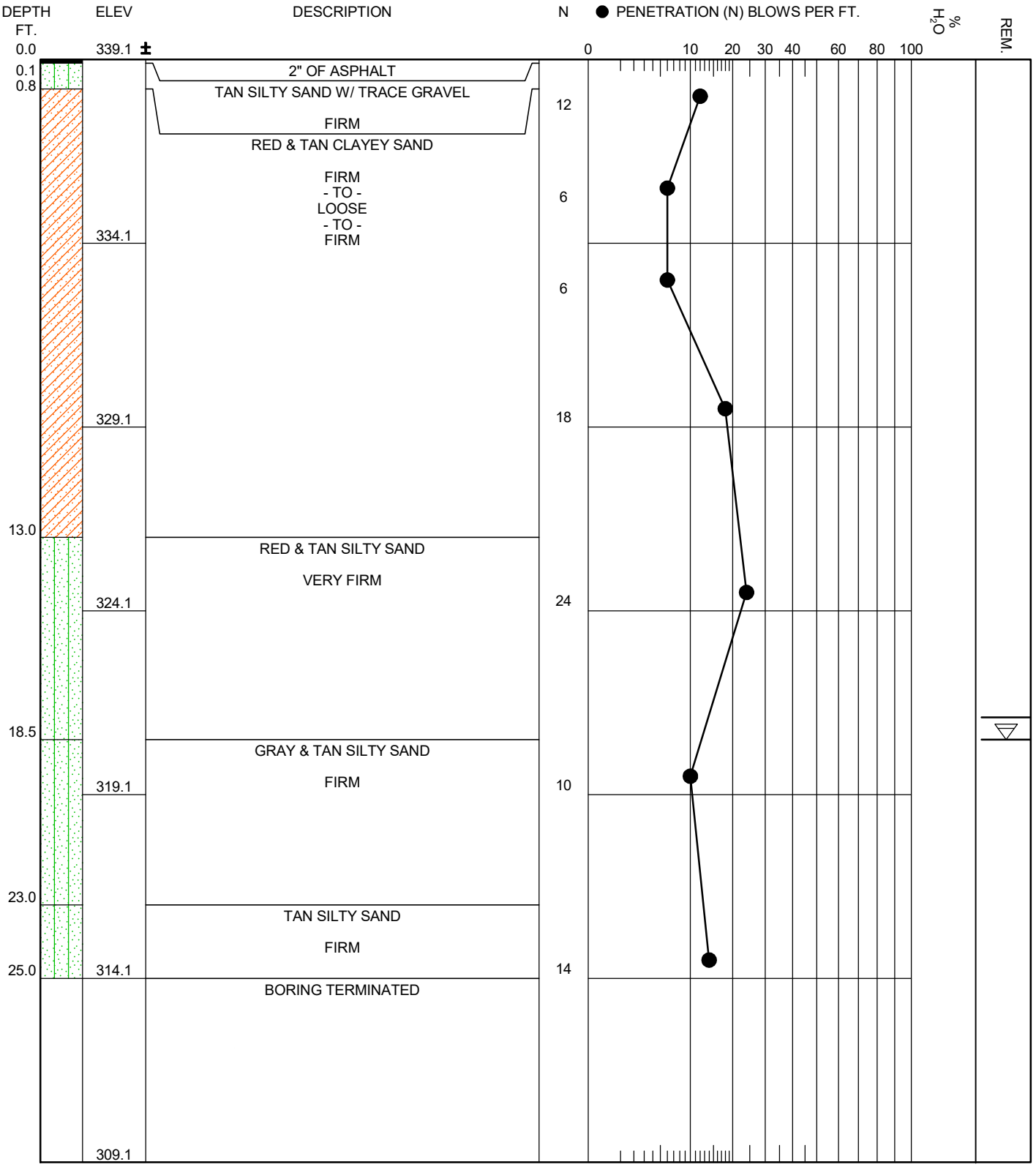
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B- 8

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level 18.5' DURING DRILLING

Boring Caved 17.9' AFTER 24 HOURS

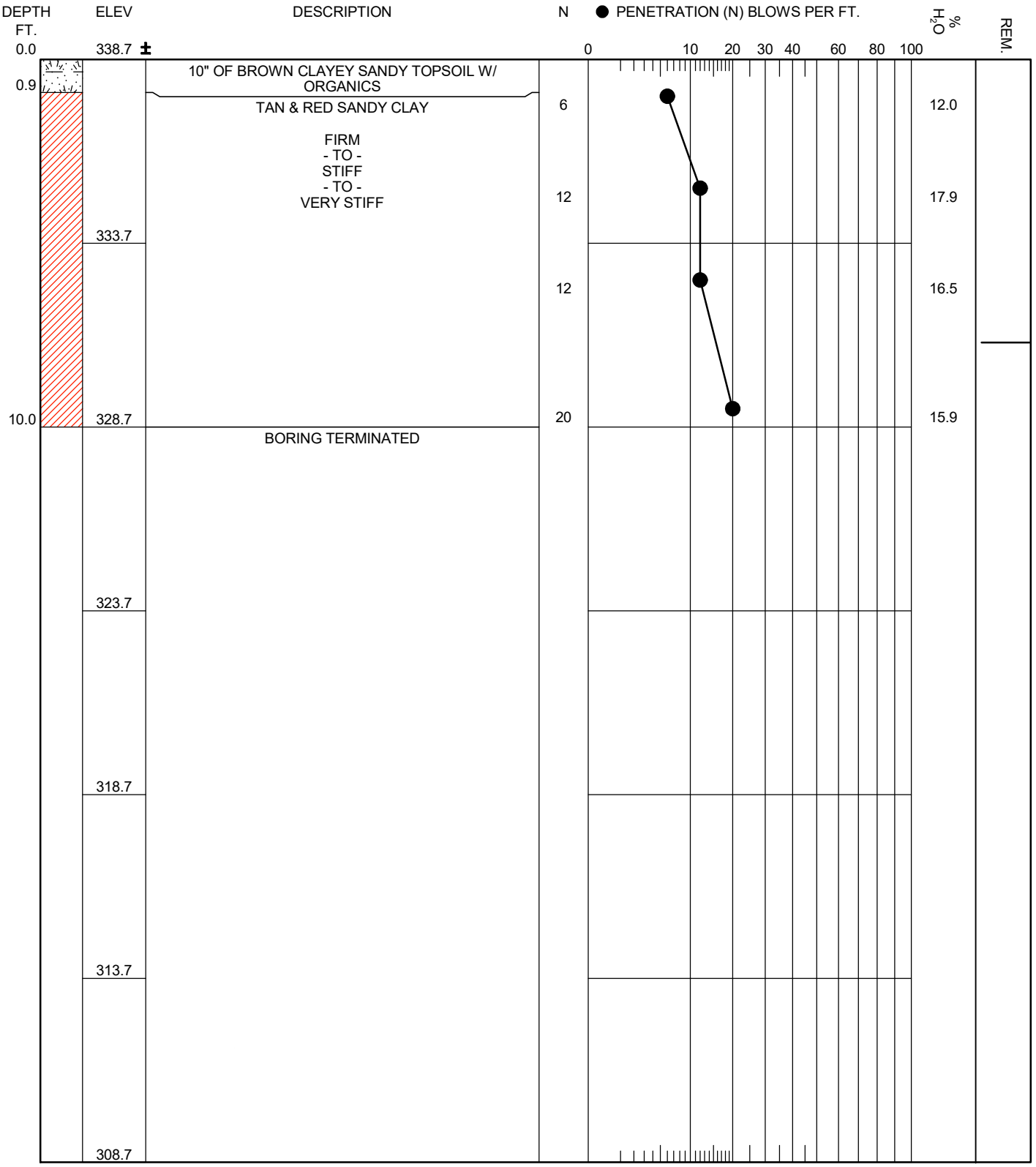
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B- 9

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level

Boring Caved 7.7' AFTER 24 HOURS

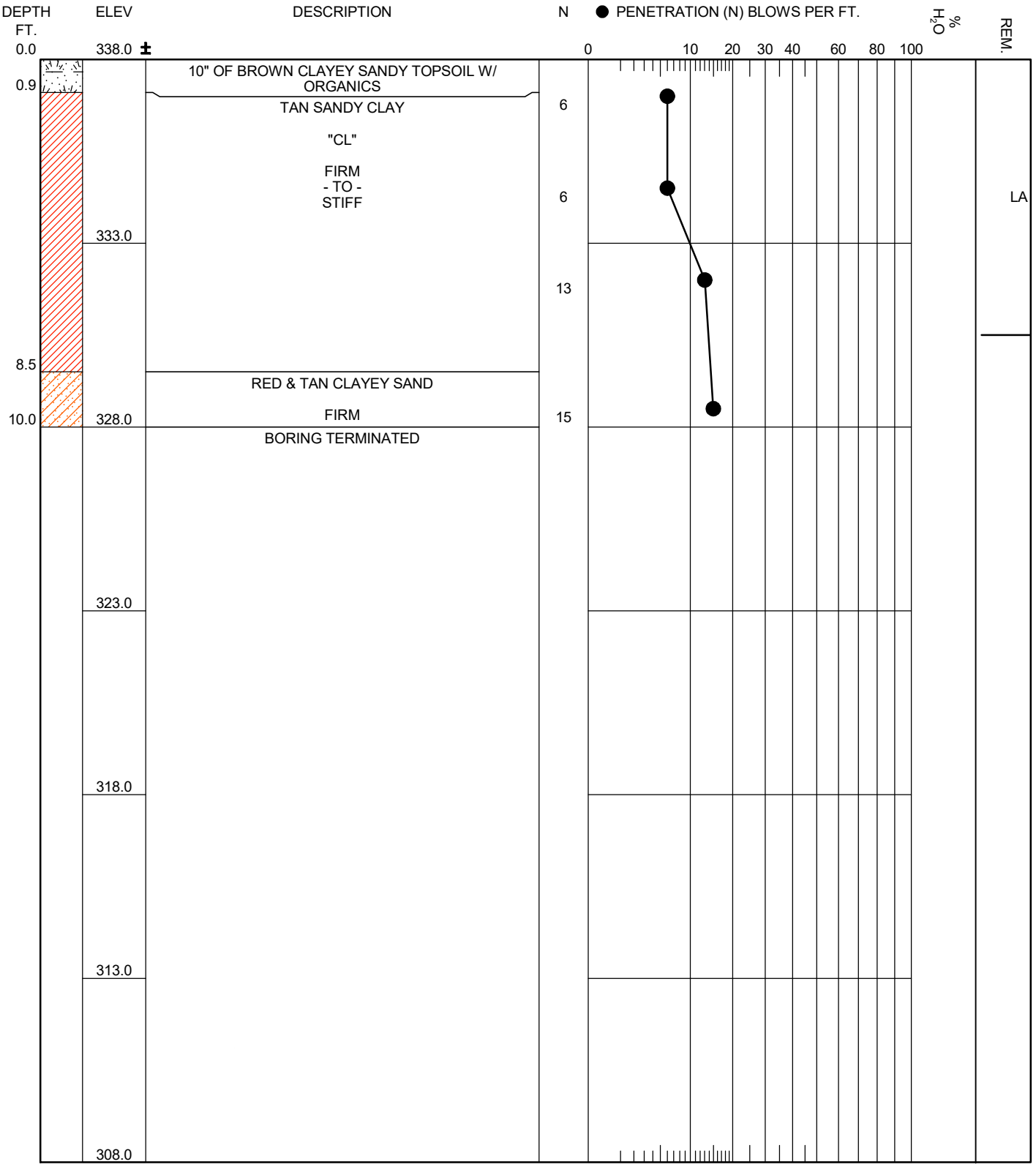
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B-10

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level

Boring Caved 7.5' AFTER 24 HOURS

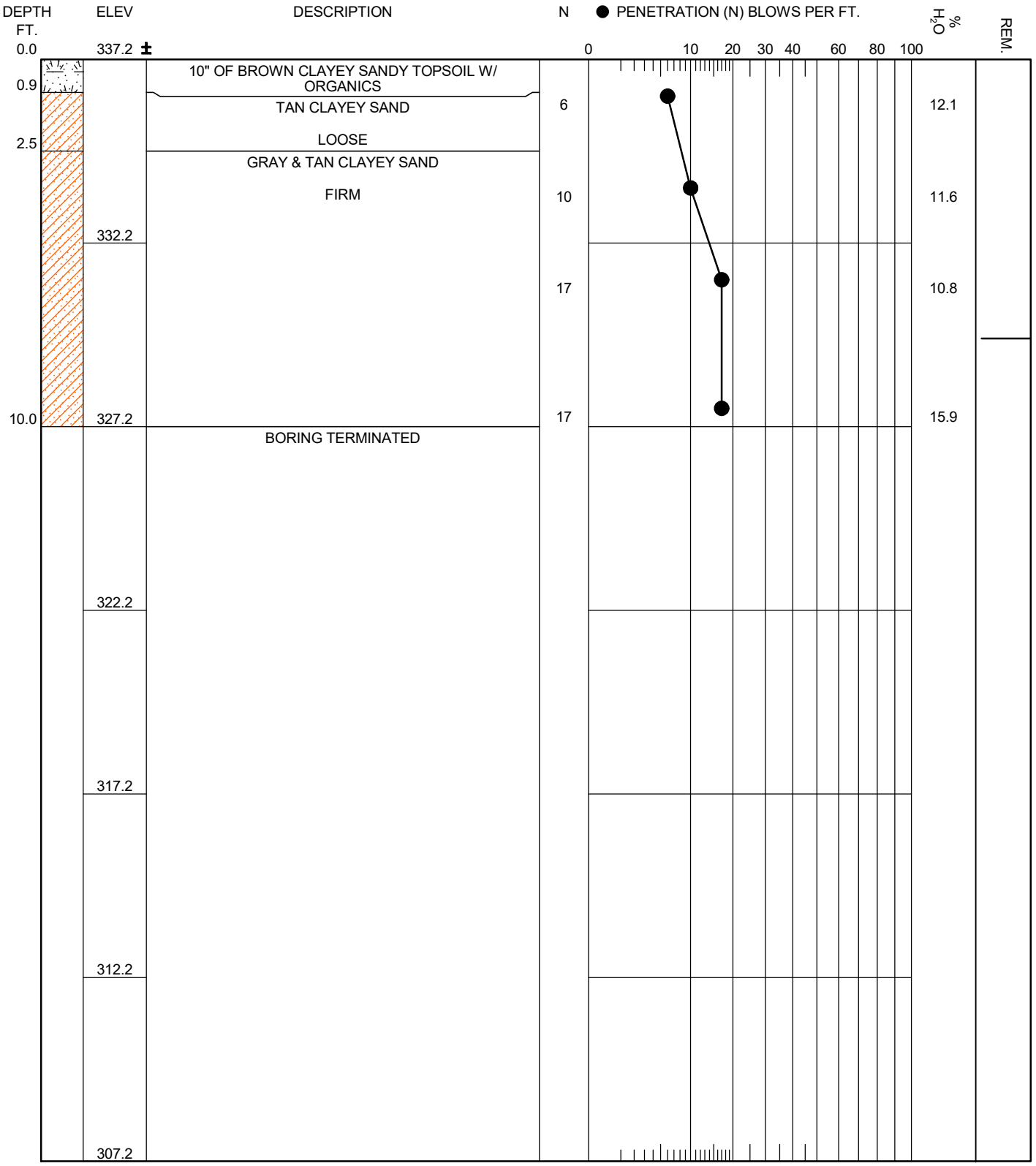
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B-11

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level

Boring Caved 7.6' AFTER 24 HOURS

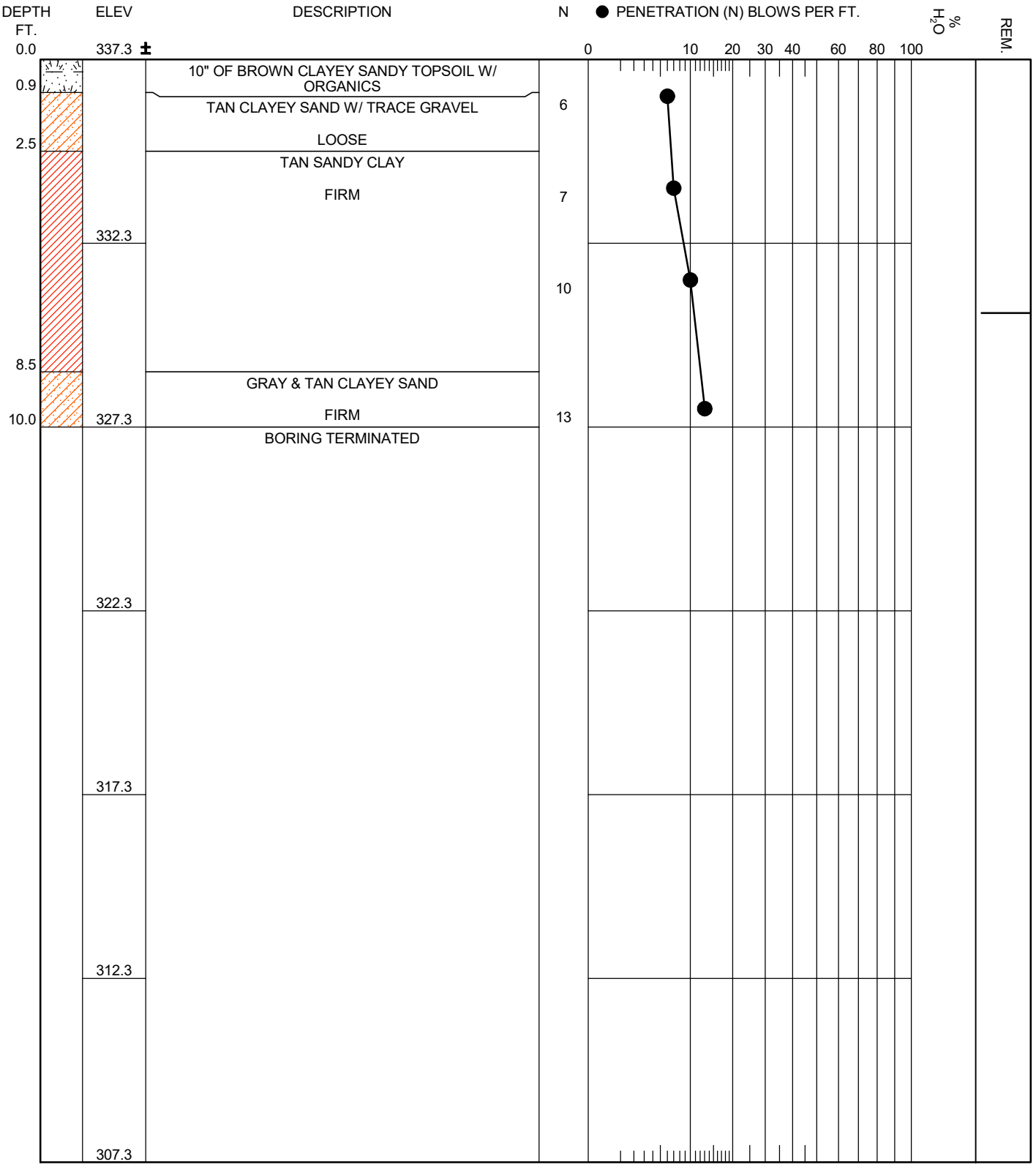
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B-12

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level

Boring Caved 6.9' AFTER 24 HOURS

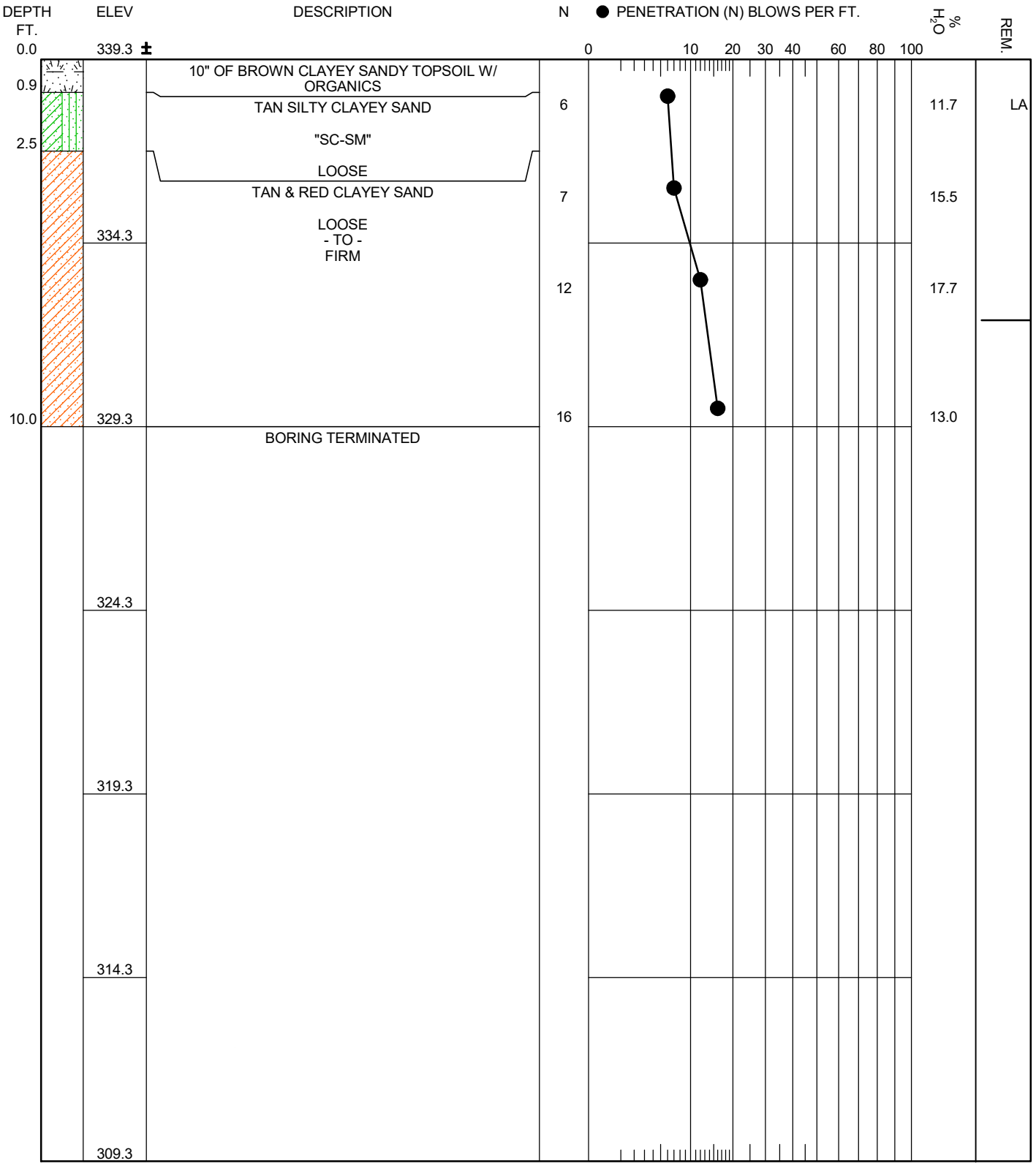
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B-13

DATE DRILLED 8/19/25

TYPE BORING SB



UES

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level

Boring Caved 7.1' AFTER 24 HOURS

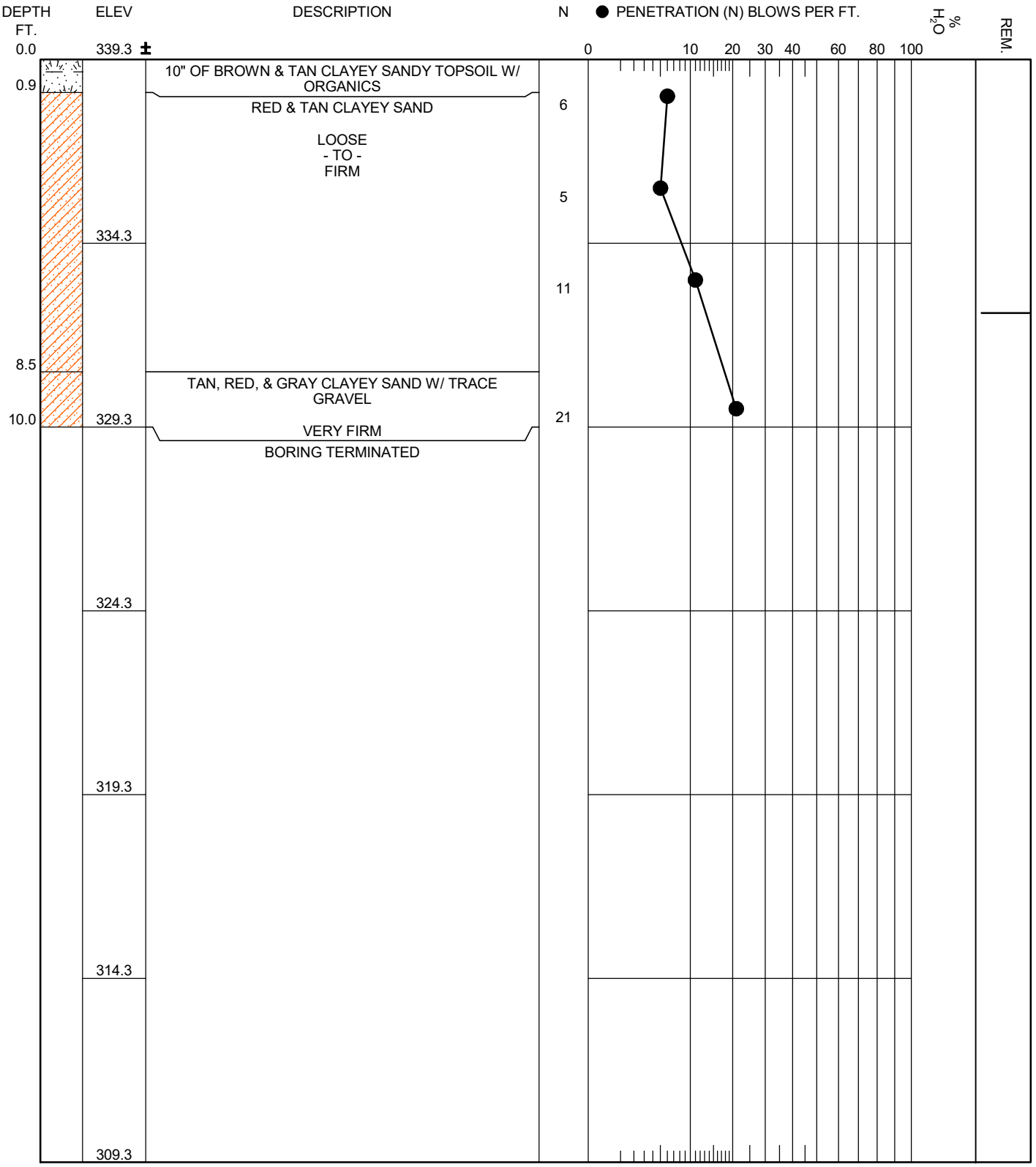
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B-14

DATE DRILLED 8/19/25

TYPE BORING SB



UES™

Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level

Boring Caved 6.9' AFTER 24 HOURS

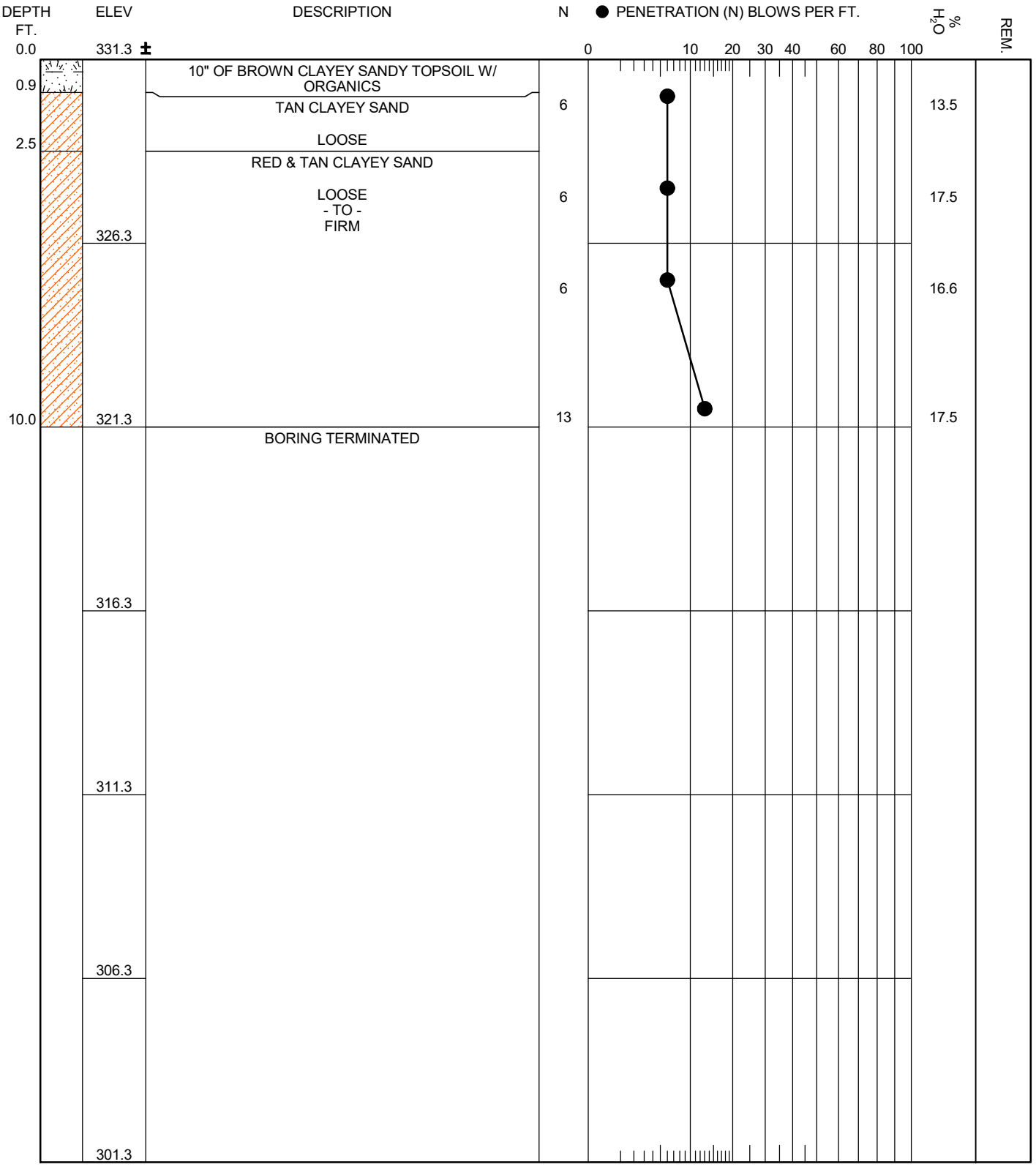
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B-15

DATE DRILLED 8/19/25

TYPE BORING SB



Boring and Sampling Meets ASTM D-1586

Penetration (N) is the Number of Blows of 140 lb. Hammer Falling 30 in. Required to Drive 1.4 in I.D. Sampler 1 Ft.

☒ Undisturbed Sample

LA Lab Analysis

Water Level

Water Level

Boring Caved

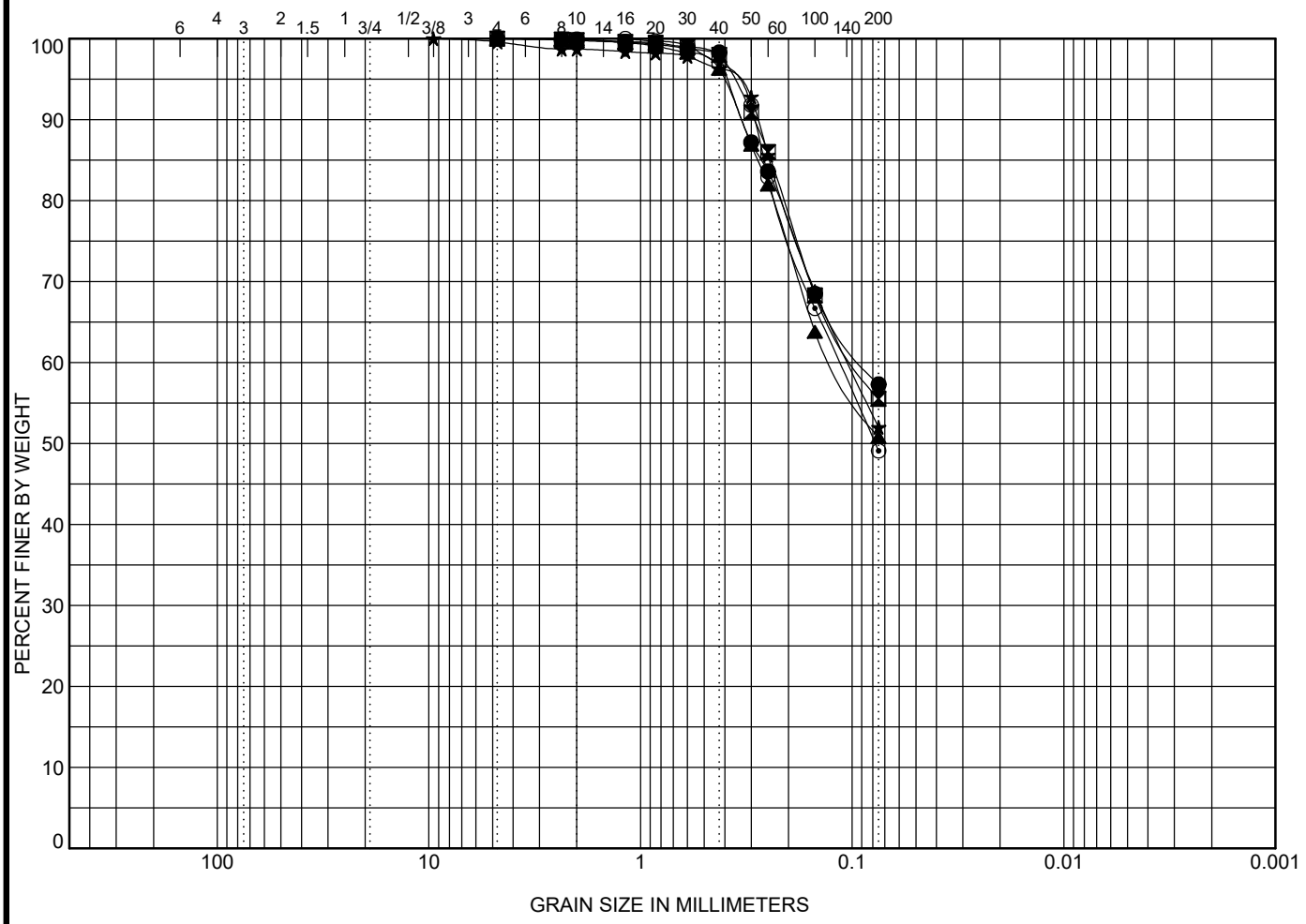
TEST BORING LOG

JOB NO. A25114.00630.000

BORING NO. B-16

DATE DRILLED 8/19/25

TYPE BORING SB



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification			Classification	LL	PL	PI	Cc	Cu
●	4767	B-2 1.5-3'	SANDY LEAN CLAY CL	22	12	10		
⊠	4768	B-4 2.5-4'	SANDY SILTY CLAY CL-ML	20	13	7		
▲	4769	B-8 2.5-4'	SANDY LEAN CLAY CL	24	15	9		
★	4770	B-11 2.5-4'	SANDY LEAN CLAY CL	22	14	8		
⊙	4771	B-14 0-1.5'	SILTY, CLAYEY SAND SC-SM	16	12	4		

Specimen Identification			D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
●	4767	B-2 1.5-3'	4.75	0.089			0.0	42.7	57.3	
⊠	4768	B-4 2.5-4'	4.75	0.096			0.0	44.5	55.5	
▲	4769	B-8 2.5-4'	4.75	0.122			0.0	49.2	50.8	
★	4770	B-11 2.5-4'	9.525	0.104			0.4	47.6	52.0	
⊙	4771	B-14 0-1.5'	1.18	0.115			0.0	50.9	49.1	

Client: Escambia County Board of Education
301 Belleville Ave
Brewton, AL 36426

Test Methods: ASTM D6913, ASTM D4318
Sample Received Date: 8/19/2025
Test Date(s): Grain Size - 8/25/2025, Atterberg Limits - 8/25/2025

UES™

GRAIN SIZE DISTRIBUTION

Project: Huxford Elementary School

Location: Atmore, AL

Job No.: A25114.00630.000 Report Date: 8/27/2025

Reviewed By: Steve Carmichael, P.E.

US GRAIN SIZE2 A25114.00630.000.GPJ CARMICHL.GDT 9/5/25

INVESTIGATIVE FIELD PROCEDURES

Penetration Testing & Split Barrel Sampling: A standard 2.0" O.D. (1.4" I.D.) split barrel sampler is first seated 6" to penetrate any loose cuttings and then driven an additional 12" with blows of a 140-pound hammer falling 30". The number of blows required to drive the sampler the final foot is recorded and designated the “penetration resistance” (N). (ASTM D- 1586)

Soil Boring (SB): The test bore is advanced by a drilling rig utilizing 5-5/8" O.D. (2-1/4" I.D.) hollow stem augers. Soil samples are obtained with a standard split-tube sampler by driving the sampler thru the hollow auger. Collected soil specimens are sealed in air tight containers and delivered to the laboratory to confirm the drillers classifications. (ASTM D- 1452 & 1586)

Auger Boring (AB): Steel flight augers are utilized to advance the test bore. The soils are visually classified and sampled from the cuttings which are bought to the surface. (ASTM D-1452)

Undisturbed Sampling (UD): Relatively undisturbed soil samples are obtained by forcing a section of 3" O.D. 16-gauge steel tubing into the soil at the desired sample location. The tube is then sealed from moisture loss and delivered to the laboratory for possible laboratory testing.

Rotary-Wash Boring (RB): The drilling operation is performed by first setting a length of casing and then advancing the test bore by “jetting” a bentonite solution thru drill rods and bit.

Core Drilling (CD): The test bore is advanced thru rock by coring which utilizes a diamond bit and a double tube, swivel type core barrel. (ASTM D-2113)

Monitoring Wells (MW): Temporary or permanent wells may be installed to provide the accurate water table determination and periodic monitoring. The well is constructed with 1.5" to 4" diameter PVC pipe meeting current standards for monitoring well construction.

NOTES AND REFERENCES

Soil descriptions are based on the predominate constituent of the material and are further described by appropriate modifiers in reverse order of their importance. For example, a predominate sand soil containing clay would be described as “clayey sand”. Additional modifiers may be used, beginning with the least important constituent such as “silty clayey sand”, etc.

Water levels shown on the test boring logs reflect those levels measured at the specified time and date indicated on the logs. These water levels are subject to seasonal fluctuation and can be effected by local surface drainage and/or rainfall during the monitoring period.

The following table describes soil relative densities and consistencies based on penetration resistance values (N) determined by the Standard Penetration Test. The “N” values are estimated for hand tool bores using a portable dynamic cone penetrometer.

	N	Relative Density
	0 – 3	Very Loose
	4 – 9	Loose
Sand	10 – 19	Firm
	20 - 29	Very Firm
	30 - 49	Dense
	50+	Very Dense

	N	Consistency
	0 - 2	Very Soft
	3 - 5	Soft
	6 - 11	Firm
Clay and Silt	12 - 17	Stiff
	18 - 29	Very Stiff
	30 - 49	Hard
	50+	Very Hard

Laboratory Test References

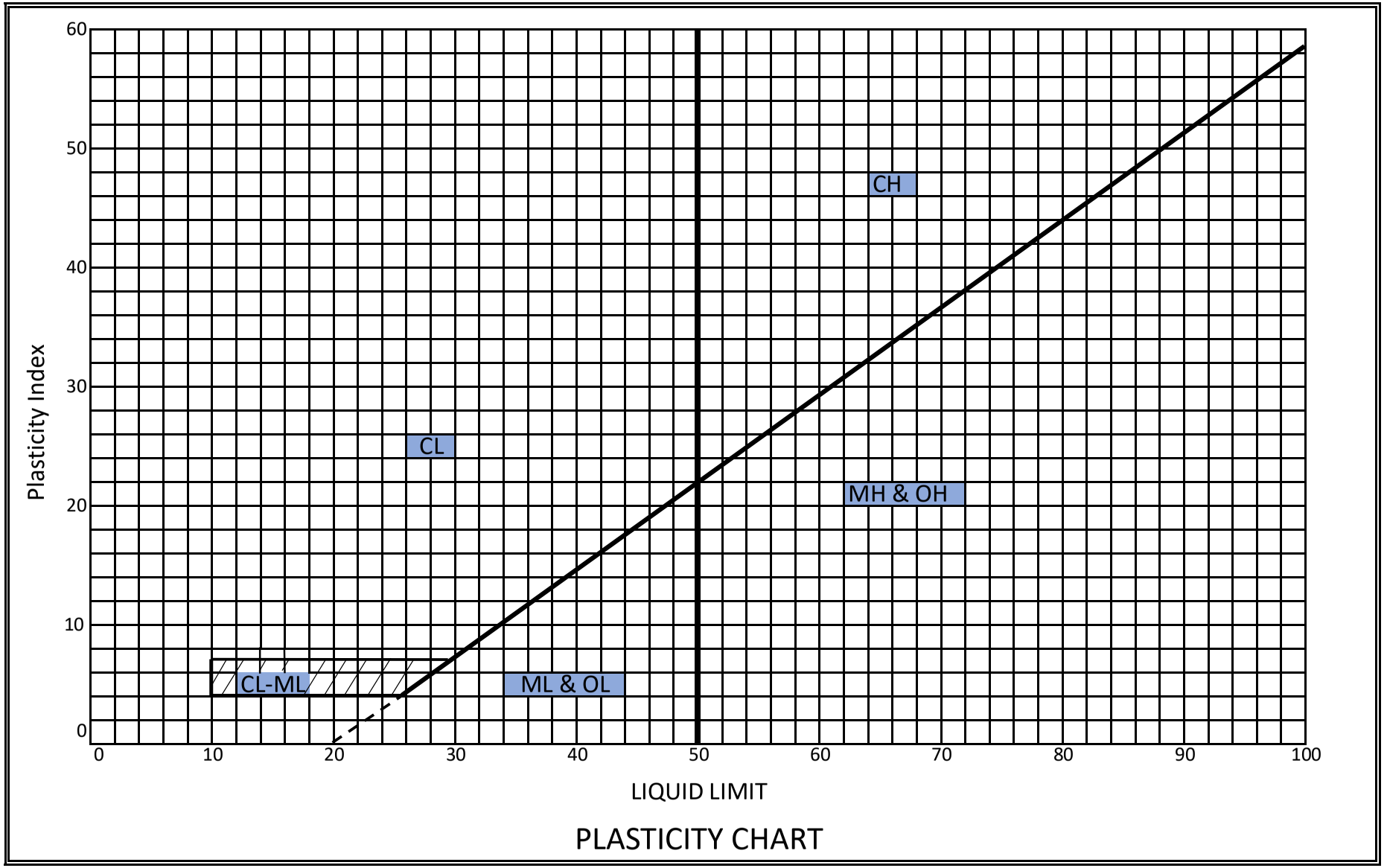
Test	**Reference**
Moisture Content	ASTM D-854
Particle Size Analysis	ASTM D-421,422,1140
Atterberg Limit	ASTM D-423, 424
Specific Gravity	ASTM D-2216
Compaction Test	ASTM D-698, 1557
California Bearing Ratio Test	AASHTO T-193
Triaxial Shear Test	ASTM D-2850
Unconfined Compression Test	ASTM D-2166
Consolidation Test	ASTM D-2435
Soil Permeability Test	ASTM D-2434

The Unified Soil Classification System

Major divisions			Group symbol		Typical names	Classification criteria for coarse-grained soils	
Coarse-grained soils (more than half of material is larger than No. 200)	Gravels (more than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (little or no fines)	GW		Well-graded gravels, gravel-sand mixtures, little or no fines	$C_U \geq 4$ $1 \leq C_C \leq 3$	
			GP		Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW ($C_U < 4$ or $1 > C_C > 3$)	
		Gravels with fines (appreciable amount of fines)	GM	d/u	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below A line or $I_P < 4$	Above A line with $4 < I_P < 7$ are borderline cases requiring use of dual symbols
			GC		Clayey gravels, gravel-sand-clay mixtures	Atterberg limits below A line with $I_P > 7$	
	Sands (more than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (little or no fines)	SW		Well-graded sands, gravelly sands, little or no fines	CU ≥ 6 $1 \leq C_C \leq 3$	
			SP		Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW ($C_U < 6$ or $1 > C_C > 3$)	
		Sands with fines (appreciable amount of fines)	SM	d/u	Silty sands, sand-silt mixtures	Atterberg limits below A line or $I_P < 4$	Limits plotting in hatched zone with $4 \leq I_P \leq 7$ are borderline cases requiring use of dual symbols
			SC		Clayey sands, sand-clay mixtures	Atterberg limits above A line with $I_P > 7$	
Fine-grained soils (more than half of material is smaller than No. 200)	Silts and clays (liquid limit < 50)		ML		Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	1. Determine percentages of sand and gravel from grain-size curve. 2. Depending on percentages of fines (fraction smalled than 200 sieve size), coarse-grained soils are classified as follows: Less than 5%-GW, GP, SW, SP More than 12%-GM, GC, SM, SC 5 to 12%-Borderline cases requiring dual symbols.	
			CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays		
			OL		Organic silts and organic silty clays of low plasticity		
	Silts and clays (liquid limit > 50)		MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts		
			CH		Inorganic clays or high plasticity, fat clays		
			OH		Organic clays of medium to high plasticity, organic silts		
	Highly organic soils		Pt		Peat and other highly organic soils		

$$C_U = D_{60}/D_{10}$$

$$C_C = D^2_{30}/D_{10}D_{60}$$



PLASTICITY CHART

General Terms and Conditions

Binding Agreement. By accepting the Proposal Client accepts and agrees to be bound by all terms and conditions set forth in the Proposal and these General Terms and Conditions. The Proposal and these General Terms and Conditions (collectively, the "**Agreement**") comprise the entire agreement between UES Professional Solutions 18, LLC ("**UES**") and the Client and supersede all prior or contemporaneous understandings, agreements, and representations.

Scope of Services. UES shall provide the services (the "**Services**") set forth in the Proposal. UES shall not provide and is not responsible for the supervision or direction of the actual work of the contractor, or for site safety. The Client agrees that UES will not be expected to make exhaustive or continuous site visits beyond those established in the Proposal, but that construction observation appropriate for the construction stage shall be performed. It is understood that the Services provided by UES will not relieve the contractor of its duties and responsibilities for performing its work in accordance with the plans and specifications. UES will observe, test, document and alert the Client and/or its contractor, in a timely manner, when UES deems work pertinent to its Services is not being performed in accordance with the plans and specifications. The Services do not include investigation, detection, prevention, or assessment of biological pollutants such as molds, fungi, spores, bacteria or any of their byproducts. Full-time construction observation by UES employees does not mean that UES is observing all work by the contractor or all placement of all materials. Full-time construction observation means that an employee of UES has been assigned to the project for the time required to fulfill UES's contractual responsibilities.

Additional Services. If, during the performance of the Services, UES, its sole discretion, deems it necessary to perform services in addition to the Services (the "**Additional Services**") to successfully complete any evaluation or analysis contained in the Services, UES shall request in writing a modification of its Scope of Services, along with a description of the additional fees for the performance of such Additional Services. The Client may authorize such Additional Services in writing, which shall modify the terms of this Agreement. If the Client declines to modify the terms of this Agreement with respect to the Additional Services UES shall have the right to modify the Agreement to eliminate any evaluation or analysis that would require the Additional Services and to modify the fees to be charged to reflect the elimination of any evaluation or analysis, which modification shall be binding on the Client.

Schedule. The Client acknowledges that any schedule for the performance of the Services contained in the Proposal is an estimate of the time required for performance of the Services, and that the performance of the Services may not be complete prior to the expiration of the period or periods listed in such schedule. Any failure of UES to perform the Services within the time set forth in any schedule for performance shall not be considered a material breach of this Agreement.

Insurance. The Client represents and warrants that Client or the owner of the Property shall, as applicable, maintain one or more general liability, automobile and workman's compensation insurance policies providing coverage for injuries or damage incurred on the property (the "**Property**") at which the Services are to be performed in the amount of at least $1,000,000 per policy, per occurrence. The Client agrees to add UES as an additional insured for General Liability coverage. UES shall procure and maintain insurance coverage as it deems to be adequate. Certificates for such policies shall be provided to the owner upon request.

Entry onto Property. If the Client is the owner of the Property, the Client hereby authorizes UES to enter the Property for the purpose of performing the Services and the Client represents and warrants that the Client has full power and authority to permit UES personnel to enter and perform the Services on the Property, as may be required under the terms of this Agreement. If the Client is not the owner of the Property, the Client shall assist UES in obtaining permission from the Property's owner to access the Property and perform the Services. If such permission cannot be obtained, UES may, in its sole discretion, modify or cancel the Agreement. If UES determines it is necessary to enter onto property adjacent to the Property (the "**Adjacent Property**") to complete the performance of the Services, UES will contact the Client prior to making any entry onto any Adjacent Property to request that the Client obtain permission from the owner of the Adjacent Property, and from any other third party from whom permission may be required to allow UES to enter thereon. Upon receiving such a request, the Client shall assist UES in obtaining permission from the owner of the Adjacent Property. If such permission or authorization cannot be obtained, UES may, in its sole discretion, modify the Agreement to eliminate any Services that would require entry onto such Adjacent Property and such adjustments shall be binding on the Client.

Fees and Payment of Invoices. As consideration for the Services, the Client shall pay to UES for the costs and fees stated in the Proposal (the "**Fees**"). If the Client designates a third party to pay the Fees the Client shall remain liable for the full payment of the Fees. UES will submit invoices to the Client periodically. Unless otherwise stated on the Invoice or in the Proposal, invoices are due and payable within thirty (30) days from the invoice date. If the Client fails to make any payments due UES for the Services within thirty (30) days from invoice date, interest as permitted by Georgia law may be charged until the full amounts due are paid. If the Client fails to pay the amount due UES within thirty (30) days from UES's invoice date, UES may, in its sole discretion, suspend services being performed under this Agreement until UES has been paid in full all amounts due for the Services provided, expenses incurred and other related charges. Failure by the Client to pay UES prior to the due date of an invoice shall constitute a material breach of the Agreement. Payments received from the Client will be applied and credited first to interest then to principal. The Client will reimburse UES for all time spent and expenses (including attorneys' fees) incurred in connection with collecting any delinquent amounts.

Client's Responsibilities. In addition to the Client's obligations to pay for the Services performed under this Agreement and the Client's other obligations set forth in this Agreement, the Client agrees to assist and cooperate with UES in any manner necessary and within its ability to facilitate performance of the Services, supply UES with all information and documents in the Client's possession or knowledge that are relevant to the Services. The Client shall designate the location of all subsurface structures on plans to be furnished to UES such as pipes, tanks, cables and utilities within the property lines and shall be responsible for any damage inadvertently caused by UES to any such structure or utility not so designated.

Standards of Performance. The standard of care for all professional engineering and related services performed or furnished by UES under the Proposal and this Agreement will be the care and skill ordinarily used by members of the profession practicing under similar circumstances at the same time and in the same locality. The Client shall be responsible for, and UES may rely on, the accuracy and completeness of specifications, requirements, programs, instructions, reports, data, drawings, and other information furnished by the Client to UES pursuant to this Agreement. UES may use such specifications, requirements, programs, instructions, reports, data, drawings and information in performing or furnishing services under this Agreement. In the event necessary requirements or specifications are not provided before the Services commence, UES may set basic requirements for soil density tests and concrete sample fabrication that will be used until such time as they are provided.

Dispute Resolution; Litigaiton. As a condition precedent to filing any action in state or federal court concerning the Proposal or this Agreement, UES and the Client agree to negotiate all disputes between them arising out of or relating to the Proposal or the Agreement in good faith for a period of 30 days from the date of written notice of such dispute, regardless of the nature of the relief sought. If such negotiations between UES and the Client do not fully resolve the dispute, as a further condition precedent to filing any action in state or federal court, UES and Client shall mediate the dispute with a mutually acceptable alternative dispute resolution service. If said dispute is not fully resolved by said mediation, the dispute may then proceed in a state or federal court in Fulton County, Georgia unless an alternative venue is agreed upon by both UES and the Client. The prevailing party in any lawsuit filed by the parties concerning the Proposal or this Agreement shall be entitled to recover its costs and expenses incurred in such proceedings from the other party, including reasonable attorneys' fees, costs of court and expert witness costs. THE CLIENT IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY WITH RESPECT TO ANY LEGAL PROCEEDING ARISING OUT OF OR RELATED TO THE PROPOSAL OR THIS AGREEMENT. The Client acknowledges that it understands and has considered the implication of this waiver and makes this waiver voluntarily.

Use of Documents and Intellectual Property. Unless otherwise agreed in writing, all documents and information prepared by UES or obtained from a third party in connection with the performance of the Services are instruments of service (the "**Instruments of service**"), and UES shall retain ownership therein (including the right to reuse at the discretion of UES). All Instruments of Service are solely for use by the Client and will not be provided by the Client to any other person or entity without the prior written consent of UES. The Client has the right to reuse the Instruments of Service for purposes reasonably connected with the project for which the Services are provided, including without limitation design and licensing requirements of the project. No party other than the Client may rely on the Instruments of Service, and the Client will not represent to any other party that it may rely on the Instruments of Service without the express prior written consent of UES. The Client acknowledges that UES may employ or develop proprietary software, trade secrets, or other intellectual property in the performance of the Services (the "**Intellectual Property**"). The Client hereby agrees that it will not retain or acquire any ownership interest in the Intellectual Property and that all Intellectual Property employed or developed by UES in the course of the performance of the Services shall remain the property of UES or a third party, as applicable.

Term of Agreement. This Agreement shall begin on the date of execution as set forth on the Proposal and shall continue until the completion of all obligations of the parties under this Agreement, mutual written agreement of the parties, termination for material breach of this Agreement, or termination by UES for convenience. UES shall have the right, in the event of a material breach by the Client to terminate this Agreement. Said termination shall be effective immediately upon delivery by UES to the Client of a written termination notice or on such other later date as may be specified in any such notice of termination. UES may also terminate this Agreement for convenience upon thirty (30) days' written notice to the Client. If UES commits a material breach of this Agreement, the Client may terminate this Agreement upon thirty (30) days written notice to UES, provided the breach remains uncured at the end of such thirty (30) day period.

Indemnification. The Client agrees to defend, indemnify and hold UES and its agents, employees, owners, insurers and fiduciaries (the "**UES Indemnified Parties**") harmless for any costs, liabilities, claims, expenses, or damages incurred by the UES Indemnified Parties arising, directly or indirectly, from the provision of the Services by UES to the Client, including, but not limited to, any costs, liabilities, claims, expenses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) arising from the following: (a) any injury incurred by any UES employee or other personnel in the course of performing the Services; (b) any out-of-pocket cost or expense incurred by UES payable to any third party arising exclusively from the performance of the Services, other than the costs and expenses payable to UES personnel as compensation; (c) entry onto the Property or any Adjacent Property by UES after the Client has represented to UES that UES is duly authorized to enter such Property or Adjacent Property; and (d) any misrepresentation or breach of any warranty set forth in this Agreement by the Client.

Limitation of Liability. Notwithstanding any other term or provision in the Proposal and the Agreement, in recognition of the relative risks, rewards and benefits of the work being performed by UES to both the Client and UES, the risks have been allocated such that the Client agrees and acknowledged that, to the fullest extent permitted by Georgia law, the total liability of UES to the Client for any and all injuries, claims, losses, expenses, damages or claim expenses arising out of the Proposal and the Agreement from any cause or causes of action whatsoever, whether arising out of contract, negligence, strict liability in tort, or warranty, shall not exceed any amounts paid by the Client for the Services relating to the event giving rise to the liability; provided, however, that, in the event such claims are attributable to gross negligence or intentional misconduct of UES, the limit of liability will be increased to the greater of $1,000,000.00 or the amount paid by the Client for the Services relating to the event giving rise to the liability, less any applicable insurance amount covering alleged damages or claims. No action, regardless of form, arising from or pertaining to this Agreement or the Services may be brought by the Client more than one (1) year after such action has accrued, and neither UES nor any officer, director, manager, employee, or agent of UES shall have any liability under this Agreement for consequential, exemplary, or incidental damages, including, without limitation, damages for loss of goodwill, losses due to delay or work stoppage, and any and all business or commercial damages or losses.

Disclaimer of Warranties. UES DOES NOT MAKE ANY WARRANTY, WHETHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE SERVICES PROVIDED HEREUNDER, AND ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE ARE HEREBY EXPRESSLY EXCLUDED.

No Third-Party Beneficiary. The provisions of this Agreement are and will be for the benefit of the parties to the Agreement only and are not for the benefit of any third party, and accordingly, no third party shall have the right to enforce the provisions of this Agreement.

Force Majeure. UES shall not be liable or responsible to the Client, nor be deemed to have defaulted or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement if such failure or delay is caused by or results from acts or circumstances beyond the reasonable control of UES including, without limitation, acts of God, flood, fire, earthquake, explosion, governmental actions, civil unrest, national emergency, or labor disputes; provided, however, that, if the event in question continues for a continuous period in excess of thirty (30) days, the Client shall be entitled to give notice in writing to UES to terminate this Agreement.

Disposal of Samples. UES may dispose of all stored soil, rock, and asphalt samples 60 or more days after submission of the final report covering those samples. UES may dispose of stormwater samples immediately upon testing.

Successors, Assigns, and Beneficiaries. The Client and UES each are hereby bound and the partners, successors, executors, administrators and legal representatives of the Client and UES are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of the Agreement.

Miscellaneous. The following other terms and conditions shall also govern this Agreement: (a) all representations, agreements to reimburse, defend, hold harmless or indemnify, dispute resolution provisions, and covenants or agreements that contemplate performance after completion of and/or payment for the Services in this Agreement shall survive any completion or termination of this Agreement; (b) the Agreement shall be construed and interpreted under and shall be governed by and enforced according to the substantive laws of Georgia, without regard to choice of law rules; (c) this Agreement may not be modified, changed or supplemented, nor may any obligations in this Agreement be waived, except by a written document signed by the party to be charged or by such party's agent duly authorized in writing; (d) no waiver of a breach of any of the terms, covenants or conditions of this Agreement will be construed or held to be a waiver of any succeeding or preceding breach of the same or any other term, covenant or condition herein contained; (e) the failure of either party to insist upon strict performance of any of the provisions of this Agreement shall in no way constitute a waiver of its rights, at law or in equity, or a waiver of any other provisions of this Agreement or subsequent default by the other party in the performance of or compliance with any of the terms and conditions set forth in this Agreement; (f) the parties to this Agreement agree that both have had the opportunity to review and negotiate the terms of this Agreement and to obtain the assistance of counsel in reviewing and negotiating such terms prior to execution, and that this Agreement shall be construed neither against nor in favor of either party but shall be construed in a neutral manner; (g) all notices and other communications shall be in writing and shall be deemed properly delivered, received, given and served: (i) on the same day as personally delivered; (ii) when delivered if deposited in the United States mail, certified or registered, postage prepaid, return receipt requested; (iii) when delivered by Federal Express or other comparable courier service, charges prepaid and any delivery failure caused by a party's failure to give notice of change of address or refusal to accept delivery shall be deemed receipt of notice; and (h) the parties acknowledge that each will have access to the others' proprietary information and pledge to one another to use the same solely for the purpose of furthering the performance of this Agreement, and upon the termination thereof, to maintain and protect the confidentiality of the same forevermore as though it was their own.

Section 0852

Fixed Glass Window

Part 1 General

A. Section Includes

Kolbe Forgent Direct Set Fixed (Basis of Design) window complete with glazing, weather strip, simulated divided lights, and standard or specified anchors, trim and attachments.

B. Related Sections

1. Section 0130 – Submittal Procedures: Shop Drawings, Product Data, and Samples
2. Section 0160 – Product Substitution Procedures
3. Section 0620 – Millwork: Wood trim other than furnished by door and frame manufacturer
4. Section 0790 – Joint Sealants: Sill sealant and perimeter caulking
5. Section 0990 – Paints and Coatings: Paint and stain other than finish

C. References

1. ASTM, International:
   - E283: Standard Test Method for Determining Rate of Air Leakage through Exterior Windows, Skylights, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
   - E330: Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights, and Curtain Walls by Uniform Static Air Pressure Difference
   - E547: Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls, by Cyclic Air Pressure Difference
   - E2190: Standard Specification for Insulating Glass Unit Performance and Evaluation
   - C1036: Standard Specification for Flat Glass
   - E2112: Standard Practice for Installation of Exterior Windows, Doors, and Skylights
2. North American Fenestration Standard (NAFS) - American Architectural Manufacturer's Association/Window and Door Manufacturer's Association/Canadian Standards Association (AAMA/WDMA/CSA 101/I.S.2/A440):
3. AAMA/WDMA/CSA 101/I.S.2/A440-17: NAFS: North American Fenestration, Standard/Specification for windows, doors, and skylights
4. Window and Door Manufacturers Association (WDMA)
5. WDMA I.S.4: Industry Standard for Water Repellent Preservative Treatment for Millwork
6. WDMA I.S.2: Hallmark Certification Program
7. Insulating Glass Certification Council (IGCC) and Fenestration Glazing Industry Alliance (FGIA) Glass Products Council (GPC)
8. Fenestration Glazing Industry Alliance (FGIA) – note: AAMA combined with IGMA and formed FGIA as of 08/01/2019
9. AAMA 2605: Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels
10. National Fenestration Rating Council (NFRC):
    - NFRC 101: Procedure for Determining Fenestration Product Thermal Properties
    - NFRC 200: Procedure for Determining Solar Heat Gain Coefficients at Normal Incidence
11. Window Covering
    - WCMA A100.0: American National Standard for Safety of Window Covering Products

D. Submittals

A. Shop Drawings: Submit shop drawings under provision of Section 0130.
B. Product Data: Submit product data for certified options under provision of Section 0130. Product performance rating information may be provided via quote, performance rating summary (NFRC Data), or certified performance grade summary (WDMA Hallmark data).
C. Samples:
   a. Submit corner section under provision of Section 0130.
   b. Specified performance and design requirements under provisions of Section 0130.

E. Quality Assurance

1. Requirements: consult local code for IBC [International Building Code] and IRC [International Residential Code] adoption year and pertinent revisions for information on:
   - Egress, emergency escape and rescue requirements
   - Basement window requirements
2. Windows fall prevention and/or window opening control device requirements.

F. Delivery

A. Deliver in original packaging and protect from weather

G. Storage and Handling

A. Store window units in an upright position in a clean and dry storage area above ground to protect from weather.

H. **Warranty:** The following limited warranty is subject to conditions and exclusions. There are certain conditions or applications over which Kolbe has no control. Defects or problems as a result of such conditions or applications are not the responsibility of Kolbe.

Insulating glass with stainless steel spacers is warranted against seal failure caused by manufacturing defects and resulting in visible obstruction through the glass for twenty (20) years from the original date of purchase. Glass is warranted against stress cracks caused by manufacturing defects from ten (10) years from the original date of purchase

Part 2 Products

A. Manufactured Units

A. Basis of Design: Kolbe Windows and Doors; Forgent All Glastra Windows: www.kolbewindows.com. Represented by Dale Inc. Alan Rogers 205 470 0252 arogers@daleinc.net
B. Fiberglass Windows: Hollow, tubular, multi-layer fiber reinforced material; factory fabricated; with vision glass, related flashings, anchorage and attachment devices.
   1.Product Type: Forgent Fixed Direct Set
   2.Color: To be selected by Architect from manufacturer's standard range.
   3.Movement: Accommodate movement between window and perimeter framing and deflection of lintel, without damage to components or deterioration of seals.
C. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
D. Thermal Movement: Design to accommodate thermal movement caused by 100 degrees F temperature change without buckling stress on glass, joint seal failure, damaging loads on structural elements, damaging loads on fasteners, reduction in performance or other detrimental effects.

B. PERFORMANCE REQUIREMENTS

A. Performance Grade and Class : LC-PG50
B. Deflection: Limit member deflection to 1/200 of the longer dimension with full recovery of glazing materials.
C. Overall Thermal Transmittance (U-value): 0.35, maximum, including glazing, measured on window sizes required for this project.
D. Water Leakage: No uncontrolled leakage on interior face when tested in accordance with ASTM E331 at differential pressure of 12.11 pounds per square foot.
E. Air Leakage: 0.3 cfm/sq ft maximum leakage when tested at 1.57 psf pressure difference in accordance with ASTM E283/E283M.
F. Acoustic Performance: Minimum outdoor-indoor transmission class (OITC) rating of 34, when tested in accordance with ASTM E90 and ASTM E1332.

B. COMPONENTS

1. Frame: Constructed of multi-chambered fiberglass and UV stable polymer extrusions. The interior of the windows shall consists of uPVC interior stops and mull casings on mulled units] Frames have integrated heavy vinyl nailing fins at head, side jambs, and sill. Drip cap for installation is cut to fit and shipped loose.
2. Jamb thickness: 5/8 inch (16mm)
3. Basic jamb width: 2-1/2 inch (64mm).
4. Exterior: All frame parts are .087 inch (2.2mm) thick.
5. Corner Construction: Welded mitered corners
6. Interior: Reinforced fiberglass
7. Frame width: 3 3/32 inch (79mm)
8. Jamb depth: 2 inch (51mm)
9. Surface Finish:
   - Exterior Finish – uPVC polymer exterior.
   - Standard Integral Colors; As selected by Architect from manufacturer standard colors.
   - Interior Finish – Standard integral colors; As selected by Architect from manufacturer standard colors.

C. Glazing

Laminated Low-E 366 insulated glass necessary to meet Impact and Alabama Energy Code requirements ‘U.’ value 0.65 or better and SHGC 0.25 or better

1. Grilles: Surface mounted, simulated divided lite, and bonded to outer and inner glazing surface with integral spacer bar. 1” typical bars with a 2” horizontal bar to replicate a checkrail

D. Finish

1. Surface Finish:
   - Exterior Finish – uPVC polymer exterior.
   - Acrylic Film Colors: Bronze and Midnight. Exterior acrylic films on frame components. The film has a 100% polyvinylidene fluoride PVDF laminate top layer. The base layer consists of solar shield technology (SST) to further decrease heat build-up in the film and underlying components.
2. Interior Finish:
   - Standard integral colors; Cloud (white) or Sahara (tan)

E. Examination

1. Verification of Condition: Before installation, verify openings are plumb, square and of proper dimensions as required in Section 0170. Report frame defects or unsuitable conditions to the General Contractor before proceeding,
2. Acceptance of Condition: Beginning installation confirms acceptance of existing conditions.

F. Installation

1. Assemble and install window/door unit(s) according to manufacturer's instruction and reviewed shop drawing.
2. Install sealant and related backing materials at perimeter of unit or assembly in accordance with Section 0790 Joint Sealants. Do not use expansive foam sealant.
3. Install accessory items as required.
4. Use finish nails to apply wood trim and mouldings.

G. Field Quality Control

1. Remove visible labels and adhesive residue according to manufacturer's instruction.
2. Unless otherwise specified, air leakage resistance tests shall be conducted at a uniform static pressure of 75 Pa (~1.57 psf). The maximum allowable rate of air leakage shall not exceed 2.3 L/sm2 (~0.45 cfm/ft2).
3. Unless otherwise specified, water penetration resistance testing shall be conducted per AAMA 502 and ASTM E1105 at 2/3 of the fenestration products design pressure (DP) rating using "Procedure B" – cyclic static air pressure difference. Water penetration shall be defined in accordance with the test method(s) applied.

H. Cleaning

1. Remove visible labels and adhesive residue according to manufacturer's instruction.
2. Leave windows and glass in a clean condition. Final cleaning as required.

I. Protecting Installed Construction

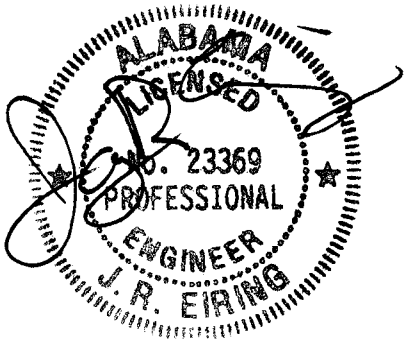
1. Protecting windows from damage by chemicals, solvents, paint or other construction operations may cause damage.

End of Section

ZGOUVAS, EIRING & ASSOCIATES
CONSULTING ENGINEERS, INC.

Huxford Elementary School
Gymnasium and Classroom Addition
HVAC Addendum

September 8, 2025



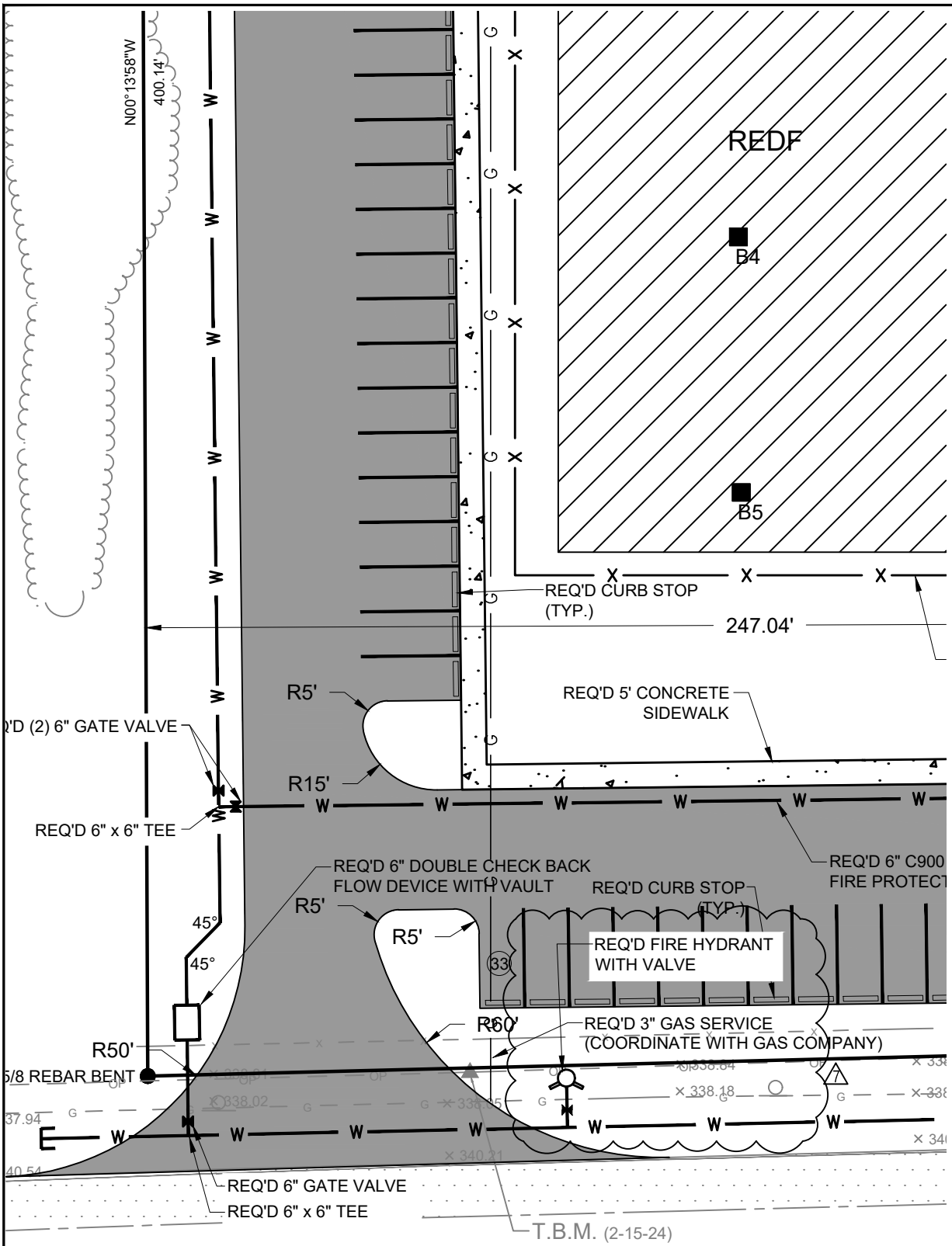
1) Refer to the specifications Section 15700-33, Para. 9.6, Application, and modify the previously specified insulation adhesive requirement as follows:

   The liquid adhesive must be UL-723, ASTM E-84, NFPA 90A and 90B, LEED and ASTM C916 compliant, low VOC, moisture and mildew-resistant with suitability for high-humidity environments. The liquid adhesive must be Design Polymerics DP 2502, Foster 85-60, Vimasco 581 or Childers Chil-Quik CP-127.

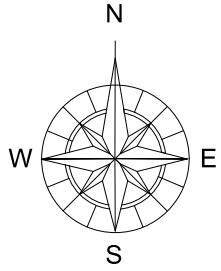
END OF ADDENDUM

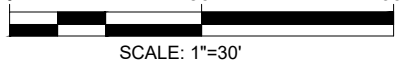
Addendum No.: 7;
Attachment #4

800 South McDonough Street– Montgomery, AL 36104-5053–(334) 263-4406 FAX (334)263-0349



STATE PLANE GRID NORTH





GYMNASIUM AND CLASSROOM ADDITION
HUXFORD ELEMENTARY
FOR
ESCAMBIA COUNTY BOARD OF EDUCATION
BREWTON, ALABAMA

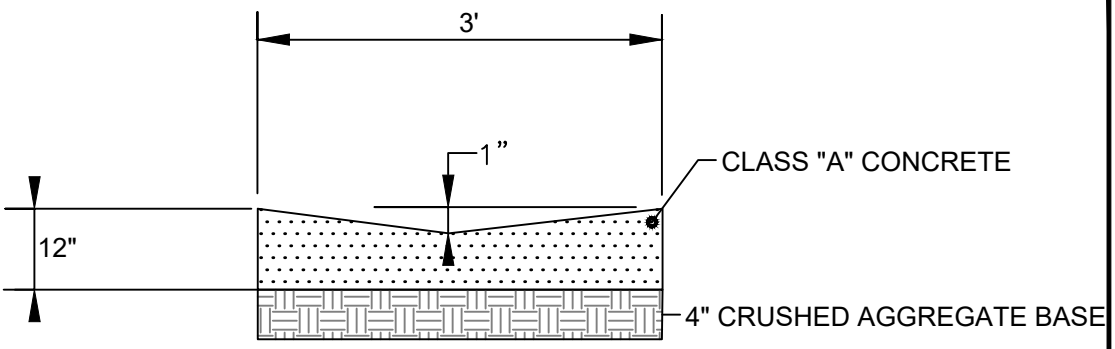
DRAWN: PM
CHECKED: PM
DATE: 09.08.25
REVISED:
SHEET TITLE:
SITE PLAN
(ADDENDUM No. 7)

JOB NO.: PSCA #: 9551
DCM #: 2023650
PHJ #: 2312SC

SEQ. NO. OF
SHEET NO.:
Addendum No.: 7;
Attachment #5

STATE of ALABAMA
REGISTERED ARCHITECTS

P. T. ADDISON 4564
H. G. GANDY 3928
R. O. JONES III 4503



VALLEY GUTTER

NOTE: THIS DETAIL ALSO APPLIES TO THE 3' CONCRETE SWALE.

GYMNASIUM AND CLASSROOM ADDITION
HUXFORD ELEMENTARY
FOR
ESCAMBIA COUNTY BOARD OF EDUCATION
BREWTON, ALABAMA

DRAWN: PM
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DATE: 09.08.25
REVISED:
SHEET TITLE:
VALLEY GUTTER DETAILS

PSCA #: 9551
DCM #: 2023650
JOB NO.: PHJ #: 2312SC

SEQ. NO. OF
SHEET NO.:

Addendum No.: 7;
Attachment #5

STATE of ALABAMA
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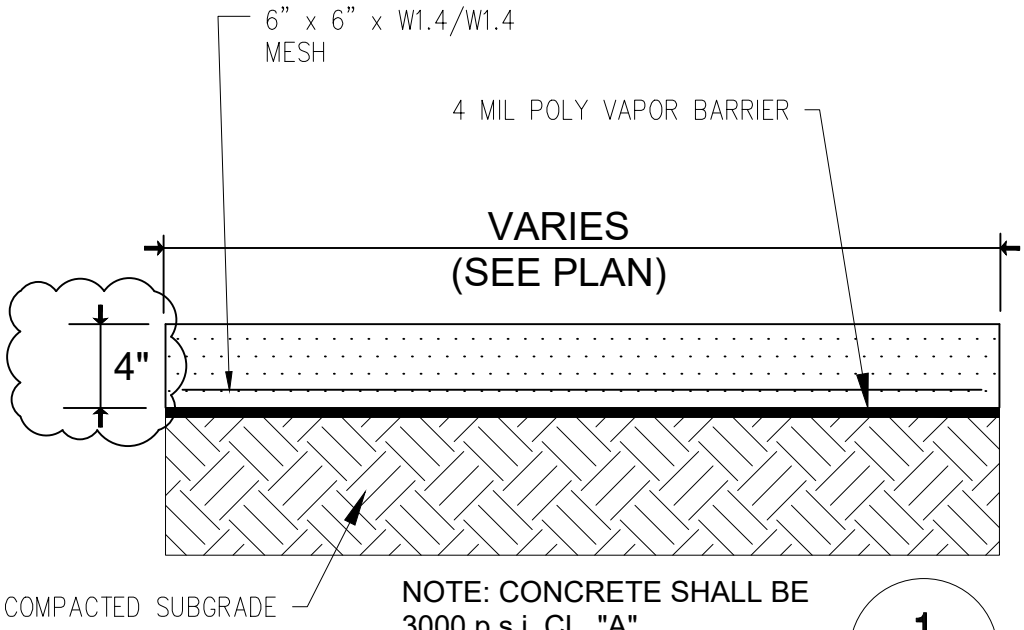

NOTE: CONCRETE SHALL BE
3000 p.s.i.,CL. "A"

1
C6.0

SIDEWALK DETAIL

GYMNASIUM AND CLASSROOM ADDITION
HUXFORD ELEMENTARY
FOR
ESCAMBIA COUNTY BOARD OF EDUCATION
BREWTON, ALABAMA

DRAWN: PM
CHECKED: PM
DATE: 09.08.25
REVISED:
SHEET TITLE:
SIDEWALK
DETAIL

PSCA #: 9551
DCM #: 2023650
JOB NO.: PHJ #: 2312SC

SEQ. NO. OF
SHEET NO.:

Addendum No.: 7;
Attachment #5

STATE of ALABAMA
REGISTERED ARCHITECTS

P. T. ADDISON 4564
H. G. GANDY 3928
R. O. JONES III 4503