

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.

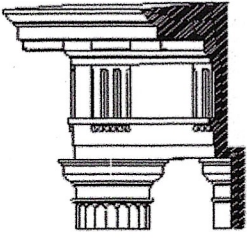
DATE: August 28, 2023
TO: **ALL BIDDERS**
RE: **Jackson County Animal Shelter**

ADDENDUM #1

The following information provided in this Addendum shall supersede all information provided in the Construction Documents regarding the affected items. This Addendum shall become part of the Construction Documents for the above project and shall be acknowledged by each bidder on the bid form.

1. Please find attached sign-in sheet from the mandatory Pre-Bid on August 24, 2023.
2. Please find the attached Geotechnical Report. Bidders are to consider the findings for site preparation and foundations at the additions.
3. See the attached revised E-3 sheet.
4. See the attached revised S-001 & S-002 drawings.
5. See supplemental sheet AA-01 with notes for Alternate Add #1 Walk-in Freezer/Cooler.
-New cooler/freezer manufacturer to be Southeast Cooler or as equal.
6. See the attached revised Project Manual Table of Contents.
7. See the attached revised section 06 17 53 Shop-Fabricated Wood Trusses.
8. See the attached section 10 26 00 Wall Rails that are to be installed in all building hallways. Floor plan indicates hallways that are to receive Wall Rails.
9. Note the existing Food Service and Kitchen equipment will be removed and stored on site by Jackson County. All Food Service and Kitchen equipment is to be reinstalled by the GC after renovations are complete. The Veggie Sink and Commercial Dishwasher are new equipment supplied by owner and install by the GC with other kitchen equipment.
10. All exterior wood/ Hardie board surfaces are to be prepped, primed, and painted.
Owner to select colors.
11. Jackson County will waive permit fees.
12. Existing Gypsum board ceilings and walls are to be repaired throughout, primed and painted.
13. AWI certified providers are required for millwork. All millwork to be WilsonArt Premium Plastic-Laminate on Plywood. Submit full range of samples to Owner. Submit Shop Drawings.
14. Disregard reference to ceiling tiles in the specifications. Ceiling tiles are not required in this project.
15. Note: Existing Decorative Timber Gable Bracket is to be removed, repaired, and stained to match existing. Reuse Decorative Timber Gable Bracket at the front building addition.

END OF ADDENDUM



**CARTER WATKINS
ASSOCIATES**

ARCHITECTS,
INC.

**JACKSON COUNTY, GEORGIA
SENIOR CENTER
ADDITIONS AND RENOVATION
PRE-BID SIGN-IN SHEET**

August 24, 2023, 11:00 A.M.

| | A | B | C | D |
|----|---------------------------------------|------------------|--------------------------------------|--------------|
| 1 | COMPANY | ATTENDEE NAME | EMAIL | PHONE |
| 2 | SUNBELT BUILDERS | Doug MURDAUGH | ESTIMATING@SUNBELTBUILDERS.COM | 770-786-3031 |
| 3 | HARMON SOLUTIONS | Ings Harmon | info@harmonsolutions.net | 470-938-6591 |
| 4 | CHRIST CENTERED CONSTRUCTION | Dan Terry | DanWTerry@gmail.com | 706-338-7226 |
| 5 | CROWN SERVICE CONTRACTORS | Chris Bennett | CBennett@CrownSC.net | 470-252-9107 |
| 6 | MATTHEW MCDANIEL PENCOR | MATTHEW MCDANIEL | MATTHEWM@PENCORCONSTRUCTION.COM | 7-617-2966 |
| 7 | PENCOR | AMAR | arajashkora@PENCORCONSTRUCTION.COM | 470-461-6903 |
| 8 | 1 PRIORITY ENVIRONMENTAL | OSCAR CONTRERAS | OCONTRERAS@EIO1PRIORITY.COM | 770-546-6437 |
| 9 | DIVERSIFIED COAST OF GA | RICHARD MURPHY | rick@dcofgeorgia.com | 770.271.9485 |
| 10 | KODAC CONSTRUCTION | Chip Williams | chip@kodacconstruction.com | 404-933-7068 |
| 11 | KODAC CONSTRUCTION | Mark Cruz | mark@kodacconstruction.com | 678 682 0898 |
| 12 | MULTI PLEX LLC | JACK FLANIGAN | ADMIN@MULTIPLXLLC.COM | 770-891-8869 |
| 13 | HOLLANDSWORTH | DANIEL DAVIS | daniel@hollandsworthconstruction.com | 678-800-8225 |
| 14 | ESSAYON PM | Sherrae Barlow | sbarlow@essayonpm.com | 404-290-7094 |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |



UNITED
CONSULTING

REPORT

For
Mr. Kevin C. Poe
Jackson County
Government

Geotechnical Exploration
Jackson County Senior Center
Additions
Stan Evans Drive
Jefferson, Jackson County, Georgia

Project No.: JACCO-23-GA-07440-01



May 11, 2023

Mr. Kevin C. Poe
County Manager
Jackson County Government
67 Athens Street
Jefferson, GA 30549

Via Email: kpoe@jacksoncountygov.com

Cc: Barry Vickery bvickery@jacksoncountygov.com

RE: Report of Geotechnical Exploration
Jackson County Senior Center Additions
Stan Evans Drive
Jefferson, Jackson County, Georgia 30549
Project No.: JACCO-23-GA-07440-01

Dear Mr. Poe:

United Consulting is pleased to submit this report of our Geotechnical Exploration for the above-referenced project. We appreciate the opportunity to assist you with this project and look forward to our continued participation. Please contact us if you have any questions or if we can be of further assistance.

Sincerely,

UNITED CONSULTING



Nhan "Yung" Dang, P.E.
Senior Geotechnical Engineer



Scott D. Smelter
Principal

YD/SDS/nj

unc-sps: Geotechnical Documents/JACCO-23-GA-07440-01- Geo.doc

TABLE OF CONTENTS

| | |
|--|----|
| 1.0 EXECUTIVE SUMMARY | 4 |
| 2.0 PROJECT INFORMATION | 5 |
| 3.0 PURPOSE | 6 |
| 4.0 SCOPE | 7 |
| 5.0 SOIL SURVEY DATA | 8 |
| 6.0 SUBSURFACE CONDITIONS | 9 |
| 7.0 DISCUSSION AND RECOMMENDATIONS | 10 |
| 7.1 Existing Fill Consideration | 10 |
| 7.2 Site Preparation | 10 |
| 7.3 Caving Considerations | 11 |
| 7.4 Difficult Excavation | 11 |
| 7.5 Groundwater Considerations | 11 |
| 7.6 Foundation Design and Construction | 11 |
| 7.7 Ground Floor Slabs | 12 |
| 7.8 Earthwork and Fill Placement | 12 |
| 8.0 LIMITATIONS | 14 |

APPENDIX

General Notes/Narrative of Drilling Operations
Figure 1– Boring Location Plan
Exploration Procedures
SPT Boring Logs (6)
Typical Benching Detail

1.0 EXECUTIVE SUMMARY

United Consulting has completed a Geotechnical Exploration at 151 General Jackson Parkway (Stan Evans Drive) in Jefferson, Jackson County, Georgia. Please refer to the text of the report for a more detailed discussion of the items summarized below.

1. Surficial fill soils were encountered in five of the six borings to depths ranging from approximately 1 to 3 feet. The fill soils were generally in a loose or firm condition. Low consistency (N=5 bpf) fill soils were encountered in boring B-2 which will require removal and recompaction or replacement where they are encountered near planned subgrade or foundation bearing elevations. With any undocumented fill, it is possible that areas of low consistency or poor-quality fill, debris or other deleterious materials could be present intermediate of the boring locations. Hence, we recommend the surficial fill be further evaluated by proofrolling with a full-loaded tandem-axle dump truck at the time of construction.
2. Based on the boring results, it appears that most of the onsite soils, including the existing fill, provided it is free of deleterious and organic materials, are generally suitable for reuse as engineered fill. As mentioned above, because of the presence of undocumented fill materials, it would not be unusual to encounter localized areas of buried trash, debris or other deleterious materials intermediate of the boring locations that would not be suitable for reuse.
3. Partially weathered rock (PWR) was not encountered and auger refusal did not occur in all borings at the termination depths ranging from approximately 15 to 20 feet. Difficult excavation conditions (ripping and/or blasting) associated with PWR and rock are not anticipated for the proposed construction.
4. Groundwater was not encountered during and after drilling in any of the borings to termination depths ranging from approximately 15 to 20 feet. Groundwater-related difficulties are generally not anticipated to be encountered during construction; however, some of the site soils are susceptible to the formation of shallower perched water levels during periods of wet weather, especially within the fill layer. The contractor should be prepared to manage groundwater and perched water as needed.
5. If the site is prepared as recommended in this report, the proposed building additions can be supported by shallow foundations underlain by suitable bearing soils designed for a maximum net allowable bearing pressure of 2,500 psf. Because of the presence of undocumented existing fill and the low consistency soil in boring B-2, it is possible that other areas of low consistency soils or poor quality soils could be encountered in foundation excavations and contingency funds should be included for remediation of such.
6. Site development was at a very preliminary stage at the time of this exploration, and no site grading or structural information was available. Once site development plans have more fully progressed, United Consulting should review such documents. The recommendations herein will need to be reevaluated based on that review, and additional subsurface exploration could be needed to finalize our recommendations.

2.0 PROJECT INFORMATION

The Site is the existing Jackson County Senior Citizen building located at 151 General Jackson Parkway (Stan Evans Drive) in Jefferson, Jackson County, Georgia. The Site is bound to the north by residential properties and Nora Court beyond, to the east by a commercial property, to the south by Stan Evans Drive and a grass area beyond, and to the west by wooded area and residential properties beyond. Boot Lake is located to the northeast of the Site, beyond the neighboring commercial property. The general location of the Site is shown on the attached Boring Location Plan (Figure 1).

Based on a site map, untitled, provided by your office, and our site observations, the existing property consists of a 1 and 2 story split masonry building, associated landscape areas and asphalt pavement driveway and parking lot. Based on historical aerial images, the Site was developed sometime between 1963 and 1981. The construction of Boot Lake also occurred during this time period.

The proposed development will consist of one-story additions to the north and southeast of the existing building, in the existing landscape and canopy areas. We have assumed minimal cuts and fills, no more than 1 foot. Based on past experience, we have assumed maximum column and wall loads will be on the order of 40 to 50 kips and 3 kips per linear foot, respectively.

Once site development plans have progressed more fully, United Consulting must be contacted to determine if our recommendations should be re-evaluated and/or revised, or if additional subsurface exploration should be performed.

3.0 PURPOSE

The purpose of this Geotechnical Exploration was to assess the general type and condition of the subsurface materials at the Project Site and to provide recommendations regarding potential foundation types, site grading, earthwork, quality control and other geotechnical related issues deemed pertinent to this project.

4.0 SCOPE

The scope of our Geotechnical Exploration included the following items:

1. A visual reconnaissance of the site from a geotechnical standpoint;
2. Drilling six (6) Standard Penetration Test (SPT) borings;
3. Visual evaluation of the soil samples obtained during our field testing program for further identification and classification;
4. Analyzing the existing soil conditions with respect to the proposed construction; and
5. Preparing this report to document the results of our field-testing program, engineering analysis, and to provide our findings and recommendations.

5.0 SOIL SURVEY DATA

According to the Natural Resources Conservation Services (NRCS) Soil Survey of Jackson County, Georgia, the soils in the area of the Site are mapped as Pacolet soils, 10 to 15 percent slopes, eroded (PuD2) and Cecil sandy clay loam, 6 to 10 percent slopes, eroded (CfC2).

Typical soils of the Pacolet soils (PuD2) consist of clay loam, clay, sandy clay loam, and loam to the study depth of approximately 70 inches. The soils have moderately high to high hydraulic permeability ranging from 0.57 to 1.98 inches per hour. Depth to water table is more than 80 inches. Depth to restrictive feature is more than 80 inches. Linear extensibility rating is 1.5 percent, which is low.

Typical soils of the Cecil sandy clay loam (CfC2) consist of sandy clay loam, clay loam, clay, and loam to the study depth of approximately 75 inches. The soils have a moderately high to high hydraulic permeability ranging from 0.57 to 1.98 inches per hour. Depth to water table is more than 80 inches. Depth to restrictive feature is more than 80 inches. Linear extensibility rating is 1.5, which is low.

Linear extensibility is used to determine the shrink-swell potential of the soils. The shrink-swell potential is low if the soil has a linear extensibility of less than 3 percent; moderate if 3 to 6 percent; high if 6 to 9 percent; and very high if more than 9 percent.

6.0 SUBSURFACE CONDITIONS

Initially, a layer of topsoil or asphalt and subbase was encountered in the borings. Below the surficial materials, fill soils were encountered in borings B-1 through B-4 and B-6 to depths ranging from approximately 1 to 3 feet. The fill soils encountered consisted of loose sand or firm clay with varying amounts of minor constituents including roots and rock fragments. A brick fragment was observed in the fill in boring B-1. Standard penetration test resistance (N-values) within the fill soils ranged from 5 to 10 blows per foot (bpf). Surficial low consistency (N=5 bpf) fill soil was encountered in boring B-2.

Below the surficial material or fill, typical residual soils of the Piedmont Physiographic Province of Georgia were encountered. The residuum was generally loose to very dense sand or firm to very stiff clay or silt with varying amounts of minor constituents including mica and rock fragments. N-values within the residuum ranged from 7 to over 60 bpf. Very dense residuum was encountered in boring B-5 at depths ranging from approximately 3 to 20 feet.

Partially weathered rock (PWR) was not encountered and auger refusal did not occur in any of the borings at the termination depths ranging from approximately 15 to 20 feet. PWR denotes residual material having an N-value of 100 bpf or greater. Auger refusal is a depth that the boring cannot be advanced with a soil drilling auger any further. Auger refusal below residuum generally represents a seam of rock, a boulder, or top of massive bedrock.

Groundwater was not encountered during and after drilling in any of the borings to termination depths ranging from approximately 15 to 20 feet. Groundwater levels will fluctuate based on yearly and seasonal rainfall variations and may rise in the future. This site is also susceptible to the formation of shallower perched water levels during periods of wet weather, especially within the fill layer.

Table 1: Summary of Subsurface Conditions

| Boring No. | Bottom of Fill Depth (ft.) | Top of Partially Weathered Rock (ft.) | Refusal Depth (ft.) | Termination Depth (ft.) | Groundwater Depth (ft.) |
|------------|----------------------------|---------------------------------------|---------------------|-------------------------|-------------------------|
| B-1 | 3 | NE | NE | 20 | NE |
| B-2 | 3 | NE | NE | 15 | NE |
| B-3 | 3 | NE | NE | 20 | NE |
| B-4 | 3 | NE | NE | 15 | NE |
| B-5 | NE | NE | NE | 20 | NE |
| B-6 | 1 | NE | NE | 20 | NE |

NE=Not Encountered.

7.0 DISCUSSION AND RECOMMENDATIONS

The following recommendations are based on our understanding of the proposed construction, the data obtained from the soil test borings, a site reconnaissance, and our experience with subsurface conditions similar to those encountered at the project site.

This exploration included six (6) SPT borings. No grading or structural information was available at this time of this study. Once grading and structural plans are available, United Consulting should review such documents to determine the extent of any additional exploration, or modifications to the recommendations in this report, that may be required.

7.1 Existing Fill Consideration

Surficial fill soils were encountered in five of the six borings to depths ranging from approximately 1 to 3 feet. A brick fragment was encountered in the fill in boring B-1. The fill soils were generally in a loose or firm condition. Low consistency (N=5 bpf) fill soils were encountered in boring B-2 which will require removal and recompaction or replacement where they are encountered near planned subgrade or foundation bearing elevations. With any undocumented fill, it is possible that areas of poor-quality fill, debris or other deleterious materials could be present intermediate of the boring locations. Hence, we recommend the fill be further evaluated by proofrolling with a full-loaded tandem-axle dump truck at the time of construction.

The existing fill, provided it is free of deleterious and organic materials, generally appears to be suitable for reuse as engineered fill. As mentioned above, because the fill is undocumented, it would not be unusual to encounter localized areas of buried trash, debris or other deleterious materials intermediate of the boring locations that would not be suitable for reuse. In addition, some of the fill soils will be sensitive to changes in moisture content. If grading takes place during a period of wet weather, it may not be feasible to dry them using conventional aeration. If that is the case, they will need to be removed and replaced with drier soils or dried using chemical additives such as lime or cement.

7.2 Site Preparation

The proposed additions will generally be in the existing landscape and canopy areas. As such, topsoil, vegetation, and trees should be removed from the area of the proposed construction. Removal of trees should include removal of their root ball, which may extend to several feet below grade. Existing underground utilities should be relocated to at least 10 feet outside the perimeter of the proposed building footprint. The abandoned lines should then be excavated and removed from the area of the proposed construction. All excavations should be subsequently backfilled with properly compacted engineered fill. We do not recommend active or non-active utility lines located below the area of the proposed structures be left in place. Any abandoned utility pipes, if left in place and outside of the proposed building footprint, should be filled-in under pressure with cement grout having a minimum 28-day compressive strength of 500 pounds per square inch (psi). This would prevent localized cave-in upon eventual deterioration and loss of structural integrity of the pipe. Also, septic tanks, septic fields, and associated underground structures, if present, should be properly removed. The excavated trenches and pits associated with the removal of the buried structures should be backfilled with engineered fill.

After lowering the site grade where planned and prior to placement of engineered fill or commencement of construction, areas to receive fill, foundations, slabs, including the areas of the proposed structures, should be proofrolled with a fully loaded tandem-axle dump truck. Proofrolling should be performed under the observation of the Geotechnical Engineer or his representatives so that, areas, which exhibit “pumping” (wave type displacement) during proofrolling, may be treated by a method recommended by the Geotechnical Engineer. This method may consist of undercutting, and backfilling with suitable engineered fill, replacing with surge stone, and a layer of crusher run, or some other method that is deemed suitable.

As discussed above in report section 7.1, because of the presence of undocumented existing fill and low consistency fill soils, greater than normal remediation of these materials should be expected during site preparation, and contingency funds should be included for such.

7.3 Caving Considerations

All excavations should be conducted in accordance with the Occupational Safety and Health Administration (OSHA) guidelines. Flattening of the excavation sidewalls and/or the use of bracing may be needed to maintain stability during construction.

7.4 Difficult Excavation

Partially weathered rock (PWR) was not encountered and auger refusal did not occur in all borings at the termination depths ranging from approximately 15 to 20 feet. Difficult excavation conditions (ripping and/or blasting) associated with PWR and rock are not anticipated for the proposed construction. It is also important to note that depths to PWR and rock can vary over short horizontal distances in the Piedmont Physiographic Province, and PWR and rock could be encountered during construction at shallower depths intermediate of the boring locations for this study.

7.5 Groundwater Considerations

Groundwater was not encountered during or after drilling in any of the borings to termination depths ranging from 15 to 20 feet. Groundwater-related difficulties are generally not anticipated to be encountered during construction; however, some of the site soils are susceptible to the formation of shallower perched water levels during periods of wet weather, especially within the fill layer. The contractor should be prepared to manage groundwater and perched water as needed.

7.6 Foundation Design and Construction

Following site preparation as recommended in report sections 7.1 and 7.2, the proposed building additions could be supported on a shallow foundation system. The shallow foundations may consist of shallow strip and/or isolated column footings supported within and underlain by suitable bearing soils. A maximum net allowable soil bearing pressure of 2,500 pounds per square foot (psf) is recommended for foundation design.

When excavating foundations which adjoin the existing building, care should be exercised to not undermine the existing building foundations. Any excavation greater than 2 feet deep may require temporary support of the existing building foundations.

We recommend minimum footing dimensions of 20 inches for strip footings and 24 inches for square footings. Footings should bear at least 12 inches below outside finished grades for frost protection. The Geotechnical Engineer must evaluate each footing excavation prior to steel reinforcement or concrete placement. Conditions that are observed should be compared to the test boring data and design requirements. If unsuitable bearing material is encountered, it should be excavated and replaced or otherwise treated as recommended by the Geotechnical Engineer.

Surface water control should be maintained to prevent accumulation of water in footing excavations. Standing water in footing excavations should be removed promptly. Soil softened by the water should be removed, and the Geotechnical Engineer or his representative should reexamine the area.

7.7 Ground Floor Slabs

A slab-on-grade may be utilized for proposed building additions. We recommend a subgrade modulus of 120 pounds per cubic inch (pci) be used for slab design. It has been our experience that the floor slab subgrade is often disturbed by weather, foundation and utility line installation, and other construction activities between completion of grading and slab construction. For this reason, our Geotechnical Engineer should evaluate the subgrade immediately prior to placing the concrete. Areas judged by the Geotechnical Engineer to be unstable should be re-compacted or undercut and replaced with engineered fill compacted to at least 98 percent of its standard Proctor maximum dry density.

7.8 Earthwork and Fill Placement

The soils encountered at the Site, if free of organics and other deleterious materials, are generally expected to be suitable for re-use as engineered fill. However, some of the soils at the site will be particularly susceptible to changes in moisture content. If these soils become wet during construction, it may not be practical to adequately dry these soils without the use of chemical additives such as lime or cement, and they may need to be removed and replaced with drier soils.

The Geotechnical Engineer must evaluate excavated soils to assess their suitability for reuse as engineered fill. Typical restrictions on suitable fill are no organics, plasticity index less than 30, and maximum particle size of four inches, with not more than 30 percent greater than 3/4-inch. These restrictions should also be applied to the imported borrow soils if needed.

Positive drainage should be maintained at all times to prevent saturation of exposed soils in case of sudden rains. Sealing the surface of disturbed soils with a smooth-drum roller will also improve runoff and reduce the potential for construction delays due to undercutting and/or stabilization of saturated soils. The degree of soil stability problems will also be dependent upon the precautions taken by the contractor to help protect these moisture sensitive soils.

Standard Proctor compaction tests (ASTM D 698) should be performed for each soil type used, to provide data necessary for quality assurance testing. The soil moisture content at the time of compaction should be within optimal moisture content limits, that will allow the required compaction to be obtained.

The fill should be placed in thin lifts that will allow for adequate compaction to be achieved and compacted. Maximum loose lift thicknesses should not exceed 8 inches. We recommend that fill be compacted to at least 98% of Standard Proctor (ASTM D 698) maximum dry density within two feet below pavement subgrade or floor slabs and at least 95% of the Standard Proctor maximum dry density elsewhere.

A Geotechnical Engineer on a full-time basis should observe grading operations. In-place density tests taken by that individual will assess the degree of compaction being obtained. The frequency of the testing should be determined by the Geotechnical Engineer.

8.0 LIMITATIONS

This report is for the exclusive use of **Jackson County Government** and the designers of the project described herein and may only be applied to this specific project. Our conclusions and recommendations have been prepared using generally accepted standards of Geotechnical Engineering practice in the State of Georgia. No other warranty is expressed or implied. Our firm is not responsible for conclusions, opinions or recommendations of others.

The right to rely upon this report and the data within may not be assigned without UNITED CONSULTING'S written permission.

The scope of this evaluation was limited to an evaluation of the load-carrying capabilities and stability of the subsoils. Oil, hazardous waste, radioactivity, irritants, pollutants, molds, or other dangerous substance and conditions were not the subject of this study. Their presence and/or absence are not implied or suggested by this report, and should not be inferred.

Our conclusions and recommendations are based upon design information furnished to us, data obtained from the previously described exploration and testing program and our past experience. They do not reflect variations in subsurface conditions that may exist intermediate of our borings, and in unexplored areas of the site. Should such variations become apparent during construction, it will be necessary to re-evaluate our conclusions and recommendations based upon "on-site" observations of the conditions.

If the design or location of the project is changed, the recommendations contained herein must be considered invalid, unless our firm reviews the changes, and our recommendations are either verified or modified in writing. When design is complete, we should be given the opportunity to review the foundation plan, grading plan, and applicable portions of the specifications to confirm that they are consistent with the intent of our recommendations.

UNITED CONSULTING

APPENDIX

General Notes/Narrative of Drilling Operations

Figure 1 – Boring Location Plan

Exploration Procedures

SPT Boring Logs (6)

Typical Benching Detail

GENERAL NOTES

The soil classifications noted on the Boring Logs are visual classifications unless otherwise noted. Minor constituents of a soil sample are termed as follows:

| | |
|--------------------|----------|
| Trace | 0 - 10% |
| Some | 11 - 35% |
| Suffix "y" or "ey" | 36 - 49% |

LEGEND



Split Spoon Sample obtained during Standard Penetration Testing



Relatively Undisturbed Shelby Tube Sample



Groundwater Level at Time of Boring Completion



Groundwater Level at 24 hours (or as noted) after Termination of Boring

w Natural Moisture Content

LL Liquid Limit

PL Plastic Limit **Atterberg Limits**

PI Plasticity Index

PF Percent Fines (Percent Passing #200 Sieve)

γ_d Dry Unit Weight (Pounds per Cubic Foot or PCF)

γ_m Moist or In-Situ Unit Weight (PCF)

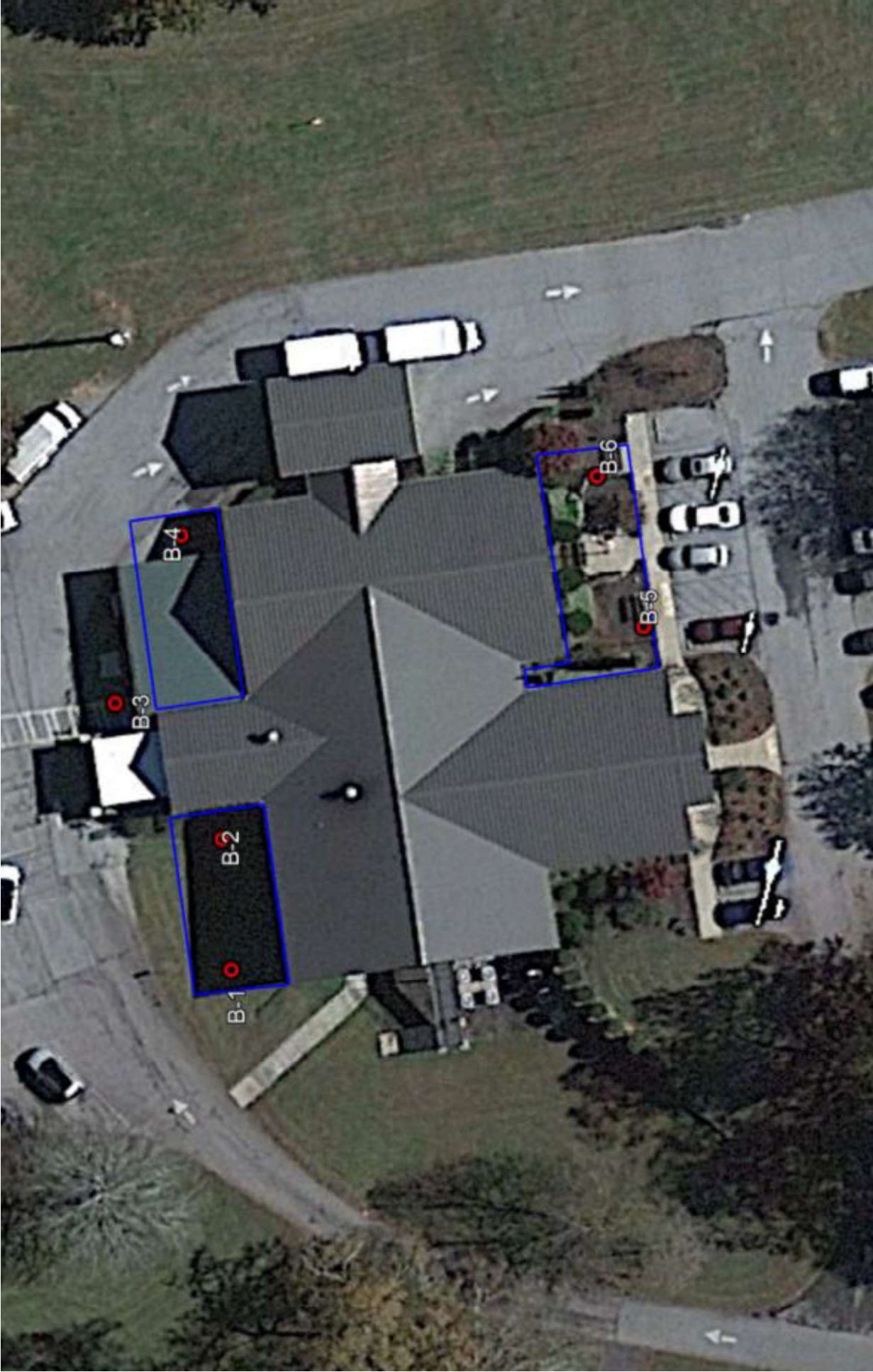
γ_{sat} Saturated Unit Weight (PCF)

BORING LOG DATA NARRATIVE OF DRILLING OPERATION

The test borings were made by mechanically advancing helical hollow stem augers into the ground. Samples were collected at regular intervals in each of the borings following established procedures for performing the Standard Penetration Test in accordance with ASTM Specification D 1586. Soil samples were obtained with a standard 1.4" I.D. x 2.0" O.D. split barrel sampler. The sampler is first seated 6" to penetrate any loose cuttings and then driven an additional foot with the blows required of a 140-pound hammer freely falling a distance of 30 inches. The number of blows required to drive the sampler the final foot is designated the "standard penetration resistance." The driving resistance, known as the "N" value, can be correlated with the relative density of granular soils and the consistency of cohesive deposits.

The following table describes soil consistency and relative densities based on standard penetration resistance values (N) determined by the Standard Penetration Test (SPT).

| | | |
|---------------|------------|-------------------------|
| | <u>"N"</u> | <u>Consistency</u> |
| Clay and Silt | 0-2 | Very Soft |
| | 3-4 | Soft |
| | 5-8 | Firm |
| | 9-15 | Stiff |
| | 16-30 | Very Stiff |
| | Over 31 | Hard |
| | <u>"N"</u> | <u>Relative Density</u> |
| Sand | 0-4 | Very Loose |
| | 5-10 | Loose |
| | 11-19 | Firm |
| | 20-29 | Medium Dense |
| | 30-49 | Dense |
| | 50+ | Very Dense |



UNITED
CONSULTING



Prepared: EDC

Checked: YD

Date: 05/03/2023

Scale: NTS

Title:

Project: Jackson County Senior Center Additions

Project No.: JACCO-23-GA-07440-01

Client: Jackson County Government

FIG 1

EXPLORATION PROCEDURES

Six (6) SPT borings (designated B-1 through B-6) were performed at the approximate locations indicated on the attached Boring Location Plan (Figure 1). The SPT borings were performed in general accordance with ASTM D 1586. Soil samples obtained during testing were visually evaluated by the Project Engineer and classified according to the visual-manual procedure described in ASTM D 2488. A narrative of field operations is included in The Appendix.

The test locations were located on site using a portable GPS unit. The test locations shown on the Boring Location Plan should be considered approximate.



United Consulting
625 Holcomb Bridge Rd.
Norcross, GA, 30071

BORING NUMBER B-1

PAGE 1 OF 1

CLIENT Jackson County Government

PROJECT NAME Jackson County Senior Center Additions

PROJECT NUMBER JACCO-23-GA-07440-01

PROJECT LOCATION 151 Jackson Pkwy, Jefferson, Georgia

DATE STARTED 05/02/2023 COMPLETED 05/02/2023

GROUND ELEVATION _____ HOLE SIZE 6.25"

DRILLING CONTRACTOR ARC One

GROUND WATER LEVELS:

DRILLING METHOD 2.25 Hollow Stem Auger

AT TIME OF DRILLING --- not encountered

LOGGED BY Emily Casey CHECKED BY Yung Dang

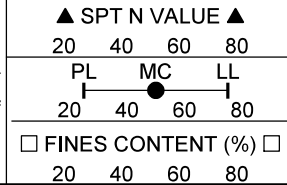
AT END OF DRILLING ---

NOTES Auto Hammer 90% Efficiency

AFTER DRILLING ---

GEO TECH BH PLOTS INCHES REC - DF STD US LAB.GDT - 5/10/23 15:34 - H:\GINT DATABASE\PROJECTS\2023\JACCO-23-GA-07440-01 JACKSON COUNTY SENIOR CENTER ADDITIONS.GPJ

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY - inch (RQD - inch.) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | DRY UNIT WT. (pcf) | ▲ SPT N VALUE ▲ | | | | |
|------------|-------------|--|--------------------|-------------------------------|-----------------------|-------------------|--------------------|-----------------|----|----|----|--|
| | | | | | | | | 20 | 40 | 60 | 80 | |
| 0 | | Topsoil | | | | | | | | | | |
| | | Clay-sandy; trace roots, firm; red brown; with brick fragment (fill) | SS 1 | 14 | 2-3-4 (7) | | | | | | | |
| | | Sand-silty; trace mica, firm; red brown with orange (residuum) | SS 2 | 8 | 5-6-7 (13) | | | | | | | |
| 5 | | Some mica, loose; red brown | SS 3 | 14 | 3-4-6 (10) | | | | | | | |
| | | Silt-sandy; some mica, stiff; red brown with pink | SS 4 | 12 | 3-6-6 (12) | | | | | | | |
| 10 | | Clay-silty; trace sand, stiff; dark red brown with orange | SS 5 | 12 | 3-5-6 (11) | | | | | | | |
| 15 | | Silt-sandy; trace rock fragments, very stiff; pink brown | SS 6 | 12 | 4-7-10 (17) | | | | | | | |
| 20 | | Boring terminated at 20.0 feet. | | | | | | | | | | |





United Consulting
625 Holcomb Bridge Rd.
Norcross, GA, 30071

BORING NUMBER B-2

PAGE 1 OF 1

CLIENT Jackson County Government

PROJECT NAME Jackson County Senior Center Additions

PROJECT NUMBER JACCO-23-GA-07440-01

PROJECT LOCATION 151 Jackson Pkwy, Jefferson, Georgia

DATE STARTED 05/02/2023 COMPLETED 05/02/2023

GROUND ELEVATION _____ HOLE SIZE 6.25"

DRILLING CONTRACTOR ARC One

GROUND WATER LEVELS:

DRILLING METHOD 2.25 Hollow Stem Auger

AT TIME OF DRILLING --- not encountered

LOGGED BY Emily Casey CHECKED BY Yung Dang

AT END OF DRILLING ---

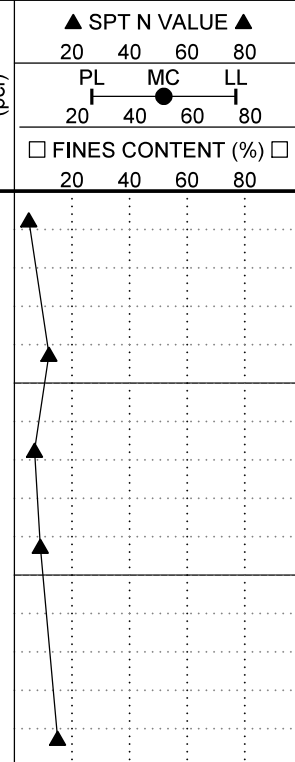
NOTES Auto Hammer 90% Efficiency

AFTER DRILLING ---

GEO TECH BH PLOTS INCHES REC - DF STD US LAB.GDT - 5/10/23 15:34 - H:\GINT DATABASE\PROJECTS\2023\JACCO-23-GA-07440-01 JACKSON COUNTY SENIOR CENTER ADDITIONS.GPJ

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY - inch (RQD - inch.) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | DRY UNIT WT. (pcf) | ▲ SPT N VALUE ▲ | | | | |
|------------|-------------|---|--------------------|-------------------------------|-----------------------|-------------------|--------------------|-----------------|----|----|----|--|
| | | | | | | | | 20 | 40 | 60 | 80 | |
| 0 | | Topsoil | SS 1 | 10 | 3-2-3 (5) | | | | | | | |
| | | Clay-sandy; trace rock fragments, firm; orange brown (fill) | | | | | | | | | | |
| 5 | | Sand; some clay, trace rock fragments, firm; orange tan (residuum) | SS 2 | 8 | 3-5-7 (12) | | | | | | | |
| | | Silt; some clay, some rock fragments, trace sand, firm; white with tan | SS 3 | 10 | 4-3-4 (7) | | | | | | | |
| 10 | | Some clay, some rock fragments, stiff; white with tan | SS 4 | 14 | 2-3-6 (9) | | | | | | | |
| 15 | | Silt-sandy; trace mica, trace rock fragments, stiff; orange tan with pink | SS 5 | 16 | 4-6-9 (15) | | | | | | | |

Boring terminated at 15.0 feet.





United Consulting
625 Holcomb Bridge Rd.
Norcross, GA, 30071

BORING NUMBER B-3

PAGE 1 OF 1

CLIENT Jackson County Government

PROJECT NAME Jackson County Senior Center Additions

PROJECT NUMBER JACCO-23-GA-07440-01

PROJECT LOCATION 151 Jackson Pkwy, Jefferson, Georgia

DATE STARTED 05/02/2023 COMPLETED 05/02/2023

GROUND ELEVATION _____ HOLE SIZE 6.25"

DRILLING CONTRACTOR ARC One

GROUND WATER LEVELS:

DRILLING METHOD 2.25 Hollow Stem Auger

AT TIME OF DRILLING --- not encountered

LOGGED BY Emily Casey CHECKED BY Yung Dang

AT END OF DRILLING ---

NOTES Auto Hammer 90% Efficiency

AFTER DRILLING ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY - inch (RQD - inch.) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | DRY UNIT WT. (pcf) | ▲ SPT N VALUE ▲ | | | |
|------------|-------------|---|--------------------|-------------------------------|-----------------------|-------------------|--------------------|-----------------------|----|----|----|
| | | | | | | | | 20 | 40 | 60 | 80 |
| | | | | | | | | PL | MC | LL | |
| | | | | | | | | 20 | 40 | 60 | 80 |
| | | | | | | | | ☐ FINES CONTENT (%) ☐ | | | |
| | | | | | | | | 20 | 40 | 60 | 80 |
| 0 | | 2" Asphalt, 5" GAB | SS 1 | 12 | 2-3-5 (8) | | | | | | |
| | | Clay; some sand, trace rock fragments, firm; red brown (fill) | | | | | | | | | |
| 5 | | Clay-sandy; trace mica, stiff; red brown with tan (residuum) | SS 2 | 6 | 3-4-6 (10) | | | | | | |
| | | Silt-sandy; some mica, stiff; red brown | SS 3 | 14 | 5-4-7 (11) | | | | | | |
| | | Sand-silty; some rock fragments, firm; red brown and tan | SS 4 | 14 | 4-5-7 (12) | | | | | | |
| 15 | | Trace rock fragments, firm; orange tan with pink | SS 5 | 14 | 5-5-7 (12) | | | | | | |
| | | Silt-sandy; some mica, stiff; tan brown with pink | SS 6 | 14 | 5-6-9 (15) | | | | | | |
| 20 | | Boring terminated at 20.0 feet. | | | | | | | | | |

G:\GINT\DATABASE\PROJECTS\2023\JACCO-23-GA-07440-01 JACKSON COUNTY SENIOR CENTER ADDITIONS.GPJ



United Consulting
625 Holcomb Bridge Rd.
Norcross, GA, 30071

BORING NUMBER B-4

PAGE 1 OF 1

CLIENT Jackson County Government

PROJECT NAME Jackson County Senior Center Additions

PROJECT NUMBER JACCO-23-GA-07440-01

PROJECT LOCATION 151 Jackson Pkwy, Jefferson, Georgia

DATE STARTED 05/02/2023 COMPLETED 05/02/2023

GROUND ELEVATION _____ HOLE SIZE 6.25"

DRILLING CONTRACTOR ARC One

GROUND WATER LEVELS:

DRILLING METHOD 2.25 Hollow Stem Auger

AT TIME OF DRILLING --- not encountered

LOGGED BY Emily Casey CHECKED BY Yung Dang

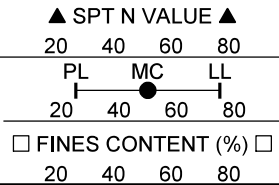
AT END OF DRILLING ---

NOTES Auto Hammer 90% Efficiency

AFTER DRILLING ---

GEO TECH BH PLOTS INCHES REC - DF STD US LAB.GDT - 5/10/23 15:34 - H:\GINT DATABASE\PROJECTS\2023\JACCO-23-GA-07440-01 JACKSON COUNTY SENIOR CENTER ADDITIONS.GPJ

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY - inch (RQD - inch.) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | DRY UNIT WT. (pcf) | ▲ SPT N VALUE ▲ | | | | |
|------------|-------------|---|--------------------|-------------------------------|-----------------------|-------------------|--------------------|-----------------|----|----|----|--|
| | | | | | | | | 20 | 40 | 60 | 80 | |
| 0 | | 2" Asphalt, 4" GAB | | | | | | | | | | |
| | | Sand-clayey; trace rock fragments, loose; red brown (fill) | SS 1 | 10 | 3-5-5 (10) | | | | | | | |
| 5 | | Sand-clayey; trace rock fragments, firm; red brown with orange (residuum) | SS 2 | 10 | 5-6-8 (14) | | | | | | | |
| | | Sand-silty; trace rock fragments, firm; orange brown with red | SS 3 | 12 | 6-6-7 (13) | | | | | | | |
| 10 | | Silt-sandy; trace rock fragments, stiff; red tan with white | SS 4 | 10 | 5-5-8 (13) | | | | | | | |
| | | Sand; some silt, some rock fragments, firm; orange tan | SS 5 | 10 | 4-6-8 (14) | | | | | | | |
| 15 | | Boring terminated at 15.0 feet. | | | | | | | | | | |





United Consulting
625 Holcomb Bridge Rd.
Norcross, GA, 30071

BORING NUMBER B-5

PAGE 1 OF 1

CLIENT Jackson County Government
 PROJECT NUMBER JACCO-23-GA-07440-01
 DATE STARTED 05/02/2023 COMPLETED 05/02/2023
 DRILLING CONTRACTOR ARC One
 DRILLING METHOD 2.25 Hollow Stem Auger
 LOGGED BY Emily Casey CHECKED BY Yung Dang
 NOTES Auto Hammer 90% Efficiency

PROJECT NAME Jackson County Senior Center Additions
 PROJECT LOCATION 151 Jackson Pkwy, Jefferson, Georgia
 GROUND ELEVATION _____ HOLE SIZE 6.25"
 GROUND WATER LEVELS:
 AT TIME OF DRILLING --- not encountered
 AT END OF DRILLING ---
 AFTER DRILLING ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY - inch (RQD - inch.) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | DRY UNIT WT. (pcf) | ▲ SPT N VALUE ▲ | |
|------------|-------------|--|--------------------|-------------------------------|-----------------------|-------------------|--------------------|-----------------|----|
| | | | | | | | | 20 | 40 |
| 0 | | Topsoil Clay; stiff; orange and tan (residuum) | SS 1 | 12 | 3-5-6 (11) | | | | |
| 5 | | Sand; some rock fragments, very dense; tan | SS 2 | 8 | 7-29-50/5" | | | | >> |
| | | Some silt, some rock fragments, firm; light orange tan | SS 3 | 12 | 5-8-12 (20) | | | | |
| 10 | | Some silt, some rock fragments, dense; light orange tan with black | SS 4 | 12 | 7-17-21 (38) | | | | |
| 15 | | Some rock fragments, trace silt, very dense; light orange tan with black | SS 5 | 12 | 12-24-36 (60) | | | | |
| 20 | | Some silt, trace rock fragments, dense; light orange tan with black | SS 6 | 16 | 10-15-18 (33) | | | | |

Boring terminated at 20.0 feet.

G:\GINT\DATABASE\PROJECTS\2023\JACCO-23-GA-07440-01 JACKSON COUNTY SENIOR CENTER ADDITIONS.GPJ



United Consulting
625 Holcomb Bridge Rd.
Norcross, GA, 30071

BORING NUMBER B-6

PAGE 1 OF 1

CLIENT Jackson County Government
 PROJECT NUMBER JACCO-23-GA-07440-01
 DATE STARTED 05/02/2023 COMPLETED 05/02/2023
 DRILLING CONTRACTOR ARC One
 DRILLING METHOD 2.25 Hollow Stem Auger
 LOGGED BY Emily Casey CHECKED BY Yung Dang
 NOTES Auto Hammer 90% Efficiency

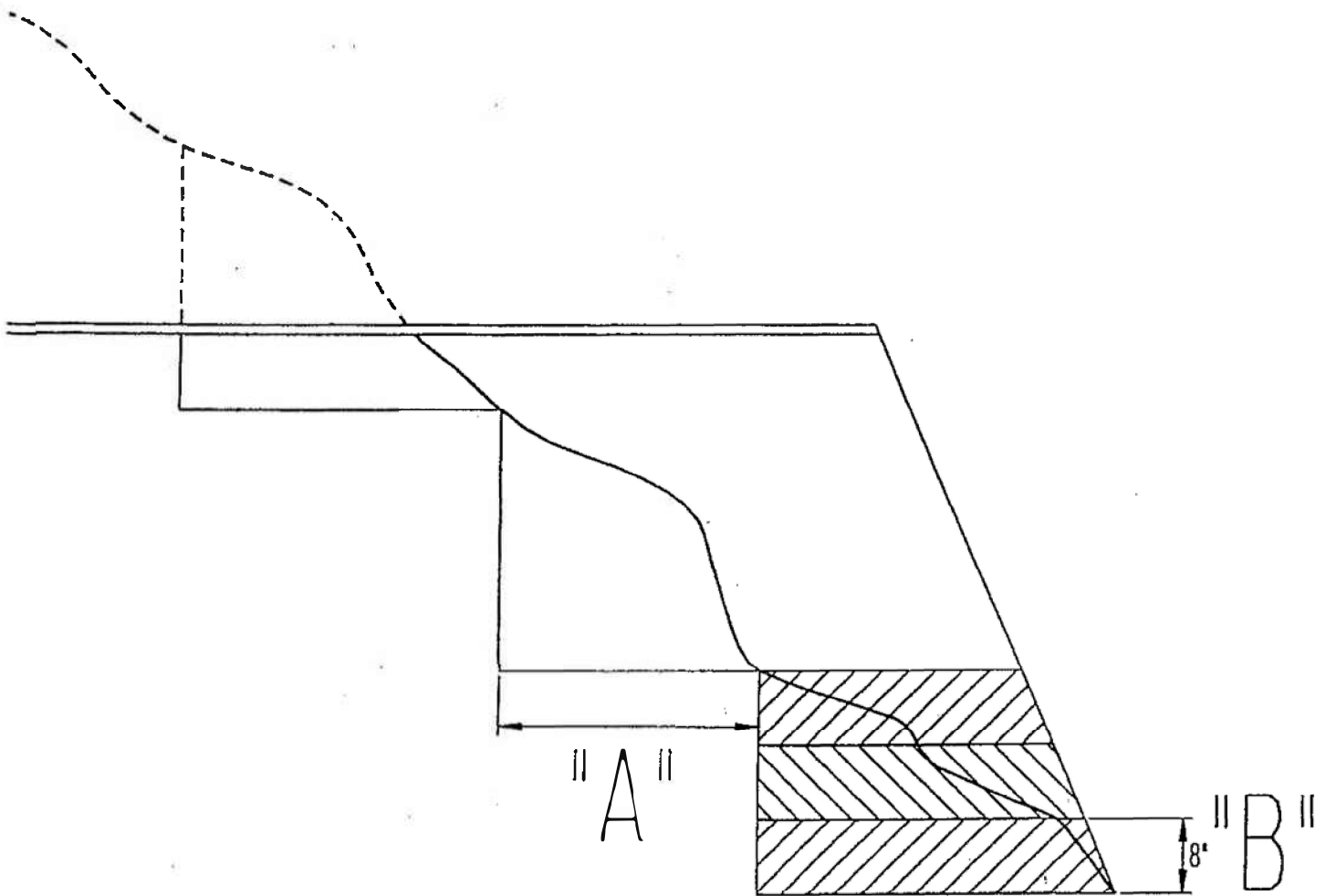
PROJECT NAME Jackson County Senior Center Additions
 PROJECT LOCATION 151 Jackson Pkwy, Jefferson, Georgia
 GROUND ELEVATION _____ HOLE SIZE 6.25"
 GROUND WATER LEVELS:
 AT TIME OF DRILLING --- not encountered
 AT END OF DRILLING ---
 AFTER DRILLING ---

| DEPTH (ft) | GRAPHIC LOG | MATERIAL DESCRIPTION | SAMPLE TYPE NUMBER | RECOVERY - inch (RQD - inch.) | BLOW COUNTS (N VALUE) | POCKET PEN. (tsf) | DRY UNIT WT. (pcf) | ▲ SPT N VALUE ▲ | | | | | | |
|------------|-------------|---|--------------------|-------------------------------|-----------------------|-------------------|--------------------|-----------------|----|----|----|--|--|--|
| | | | | | | | | 20 | 40 | 60 | 80 | | | |
| 0 | | Topsoil | SS 1 | 8 | 3-4-5 (9) | | | | | | | | | |
| | | Sand-clayey; trace roots, trace rock fragments, loose; red brown (fill) | | | | | | | | | | | | |
| | | Sand-silty; trace rock fragments, loose; red brown (residuum) | | | | | | | | | | | | |
| 5 | | | SS 2 | 10 | 5-3-5 (8) | | | | | | | | | |
| | | Silt-sandy; trace rock fragments, firm; orange tan with red | SS 3 | 14 | 5-4-4 (8) | | | | | | | | | |
| | | Trace rock fragments, firm; orange tan with pink | SS 4 | 12 | 4-4-4 (8) | | | | | | | | | |
| 10 | | | | | | | | | | | | | | |
| | | Trace rock fragments, firm; orange tan with pink | SS 5 | 14 | 3-4-4 (8) | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| | | Trace rock fragments, stiff; orange tan with pink | SS 6 | 16 | 4-5-7 (12) | | | | | | | | | |
| 20 | | | | | | | | | | | | | | |

Boring terminated at 20.0 feet.

G:\GINT\DATABASE\PROJECTS\2023\JACCO-23-GA-07440-01 JACKSON COUNTY SENIOR CENTER ADDITIONS.GPJ

5/10/23 15:34 - H:\GINT\DATABASE\PROJECTS\2023\JACCO-23-GA-07440-01 JACKSON COUNTY SENIOR CENTER ADDITIONS.GPJ



1. THE ABOVE DIAGRAM ILLUSTRATES A TYPICAL BENCHING FOR PLACEMENT OF FILL ON A SLOPING SURFACE.
2. THE DIAGRAM SHOWS THAT BEFORE FILL IS PLACED, THE FIRST STEP IS CUT INTO THE SLOPE A MAXIMUM DISTANCE OF ABOUT 8 FEET 'A' (ABOUT $\frac{3}{4}$ THE WIDTH OF USUAL D-8 BULLDOZER BLADE). SUCCESSIVE LAYERS OF FILL ARE THEN PLACED. BEFORE FINAL LAYER IS PLACED, THE SECOND STEP IS CUT 8 FEET INTO THE SLOPE AND SUCCESSIVE LAYERS ARE AGAIN PLACED.
3. SELECT FILL MATERIAL SHOULD BE PLACED IN 8 INCH LIFTS AND COMPACTED TO THE SPECIFIED DENSITY ('B').

TYPICAL BENCHING DETAIL NOT TO SCALE

2015/DETAILS/TYPBENCH.DGN



We're here for you

UNITED CONSULTING

625 Holcomb Bridge Road
Norcross, Georgia 30071
770-209-0029 Fax 582-2900
www.unitedconsulting.com
Copyright © United Consulting Group, Ltd.

Important Information about This

Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical-engineering study conducted for a civil engineer may not fulfill the needs of a constructor — a construction contractor — or even another civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client. No one except you should rely on this geotechnical-engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply this report for any purpose or project except the one originally contemplated.*

Read the Full Report

Serious problems have occurred because those relying on a geotechnical-engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

Geotechnical engineers consider many unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk-management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical-engineering report that was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical-engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light-industrial plant to a refrigerated warehouse;
- the elevation, configuration, location, orientation, or weight of the proposed structure;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an

assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical-engineering report is based on conditions that existed at the time the geotechnical engineer performed the study. *Do not rely on a geotechnical-engineering report whose adequacy may have been affected by:* the passage of time; man-made events, such as construction on or adjacent to the site; or natural events, such as floods, droughts, earthquakes, or groundwater fluctuations. *Contact the geotechnical engineer before applying this report to determine if it is still reliable.* A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ — sometimes significantly — from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide geotechnical-construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final*, because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical-engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make constructors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give constructors the complete geotechnical-engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise constructors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure constructors have sufficient time to perform additional study.* Only then might you be in a position to give constructors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help

others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform an *environmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical-engineering report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk-management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold-prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, many mold-prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical-engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; *none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.*

Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your GBC-Member geotechnical engineer for more information.



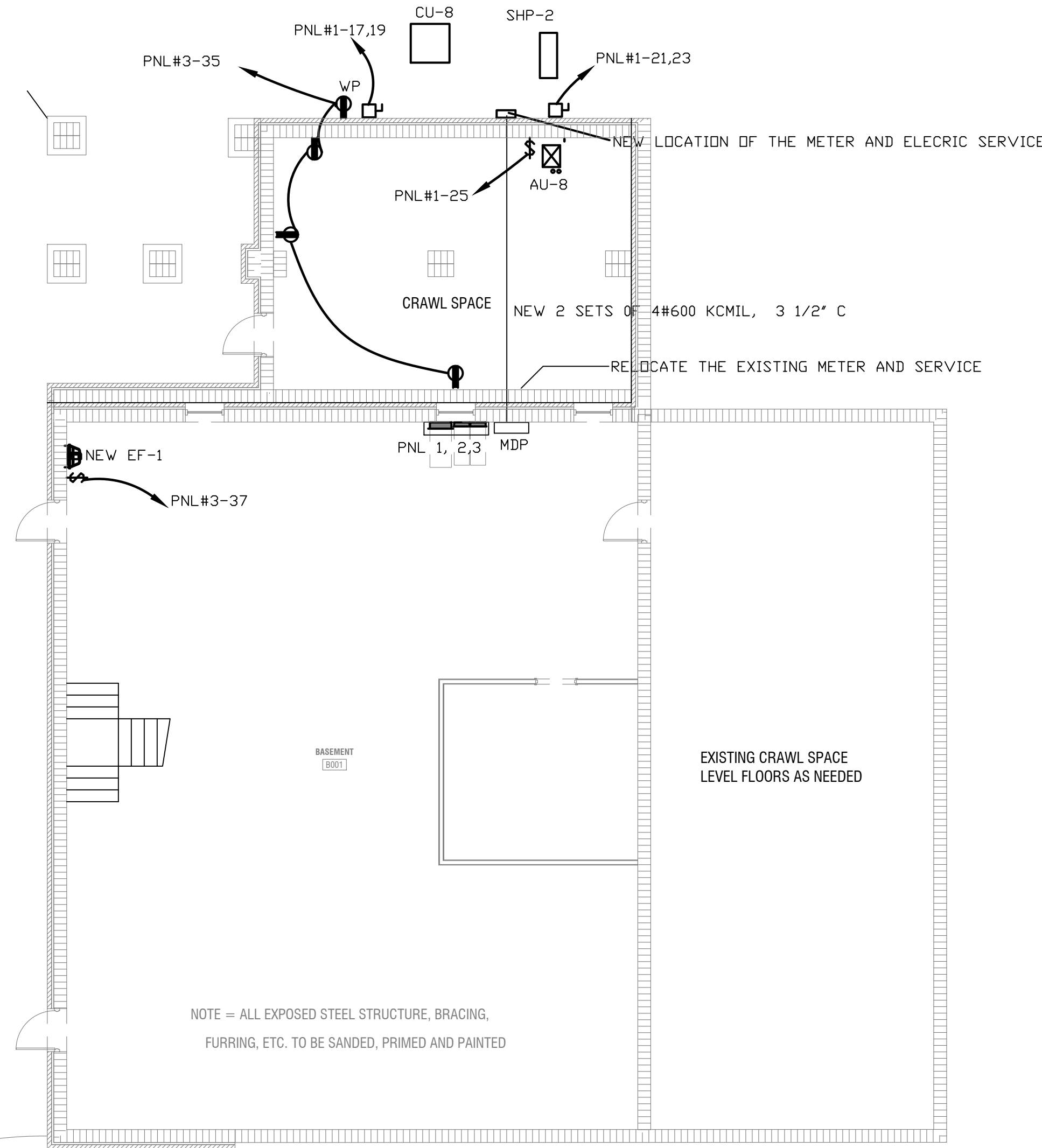
8811 Colesville Road/Suite G106, Silver Spring, MD 20910

Telephone: 301/565-2733 Facsimile: 301/589-2017

e-mail: info@geoprofessional.org www.geoprofessional.org

Copyright 2015 by Geoprofessional Business Association (GBA). Duplication, reproduction, or copying of this document, or its contents, in whole or in part, by any means whatsoever, is strictly prohibited, except with GBA's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of GBA, and only for purposes of scholarly research or book review. Only members of GBA may use this document as a complement to or as an element of a geotechnical-engineering report. Any other firm, individual, or other entity that so uses this document without being a GBA member could be committing negligent or intentional (fraudulent) misrepresentation.

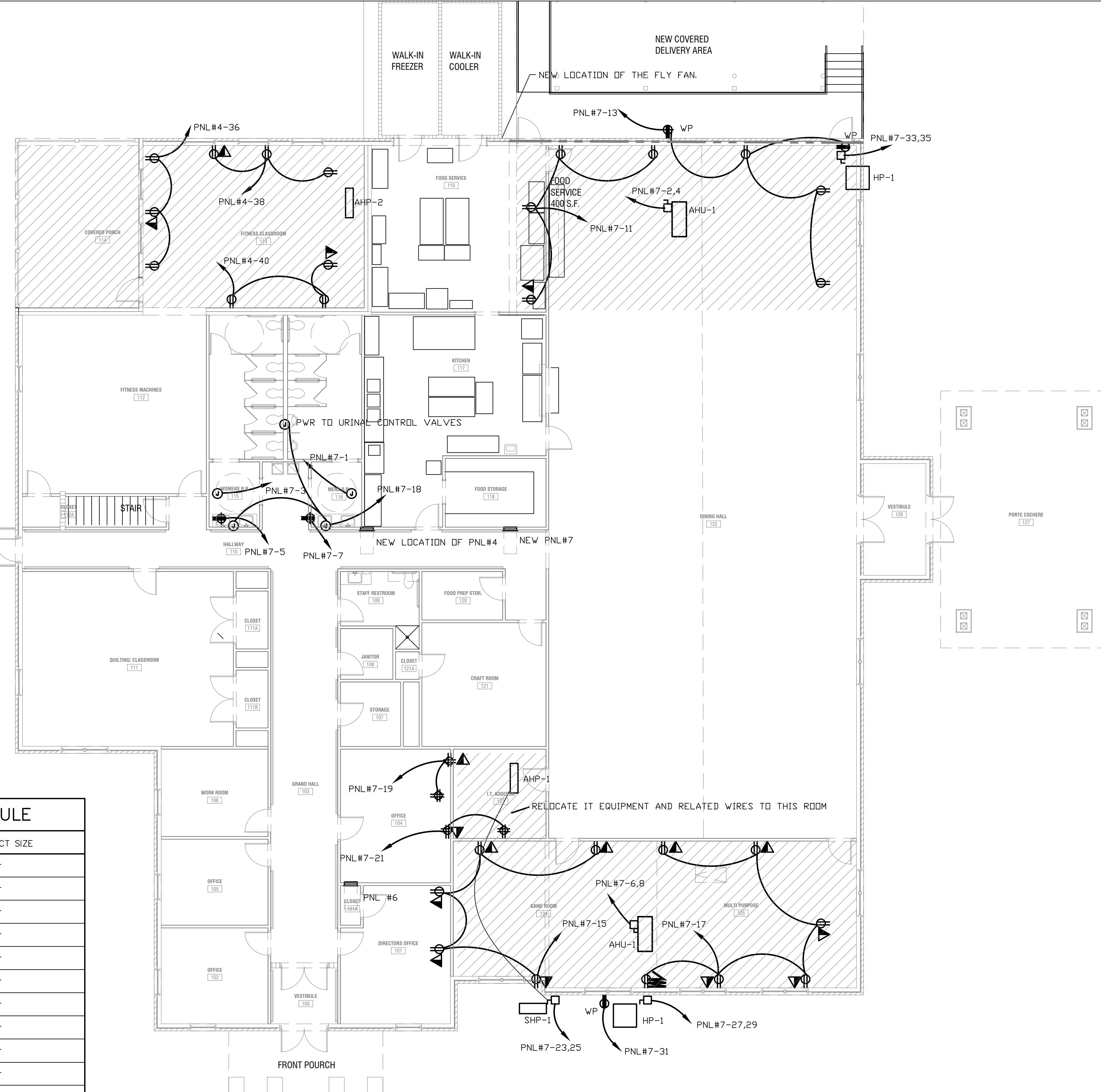
| LEGEND | |
|---|--|
| ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT MOUNTING HEIGHT FROM THE CENTER OF ITEM | |
| FIRE ALARM SYSTEM | |
| | MANUAL PULL STATION, 4'-0" AFF |
| | COMBINATION ALARM HORN-STROBE, 6'-8" AFF |
| | CEILING MOUNTED SYSTEM SMOKE DETECTOR |
| | STROBE ALARM, 6'-8" AFF |
| | FIRE ALARM CONTROL PANEL, TOP AT 6'-6" AFF |
| | FIRE ALARM ANNIUNCIATOR, FLUSH, 5'-0" AFF |
| POWER/MOTORS | |
| | MOTOR |
| | DISCONNECT SWITCH, AMPS/POLES/FUSE |
| | PANELBOARD |
| | MOTOR STARTER |
| SIGNAL COMMUNICATIONS | |
| | TELEPHONE/DATA OUTLET 18" AFF, RUN 3/4" CONDUIT WITH PULL STRING 0'-6" ABOVE CEILING AND/OR INSULATION. |
| | TELEVISION OUTLET, STUB 1" CONDUIT, WITH PULL STRING FROM RECESSED JUNCTION BOX 0'-6" ABOVE CEILING AND/OR INSULATION |
| WIRING | |
| | SINGLE POLE SWITCH, 3"6" AFF |
| | SENSORWORK-823-XX DIMMING WALL SWITCH SUBSCRIPT INDICATES NUMBER OF POLES FOR SWITCH 3 FOR 3 WAY, 4 FOR 4 WAY, M FOR MOTOR CONTROLLER |
| | CONDUIT IN WALL OR ABOVE CEILING |
| | CONDUIT IN FLOOR SLAB OR UNDER GROUND |
| | EXPOSED CONDUIT |
| | HOME RUN, 2#12 AND 1#12 GROUND COPPER THHN 1/2" C OR AS NOTED. |
| | JUNCTION BOX, CEILING WALL |
| RECEPTACLES/WIRING DEVICES | |
| | DUPLEX OUTLET, 20A, 125V, HUBBELL #CBR20* OR EQUAL (MOUNT 18" A.F.F.) |
| | DUPLEX OUTLET MOUNTED ABOVE COUNTER (COORDINATE W/CABINET WORK) |
| | DUPLEX OUTLET W/G.F.I., HUBBELL #GF5352* A OR EQUAL (MOUNT 18" AFF) |
| | DUPLEX OUTLET W/G.F.I. MOUNTED ABOVE COUNTER |



BASEMENT FLOOR PLAN-POWER
1/8"=1'-0"

| COPPER WIRING SCHEDULE | | |
|------------------------|-------------------|-----------------|
| BREAKER SIZE | WIRING SIZE | DISCONNECT SIZE |
| 20/1 | 2#12,1#12G, 1/2"C | 30/2/NF |
| 20/2 | 3#12,1#12G, 1/2"C | 30/3/NF |
| 20/3 | 4#12,1#12G, 1/2"C | 30/4/NF |
| 30/1 | 2#10,1#10G, 1/2"C | 30/2/NF |
| 30/2 | 3#10,1#10G, 1/2"C | 30/3/NF |
| 30/3 | 4#10,1#10G, 1/2"C | 30/4/NF |
| 40/1 | 2#8,1#10G, 3/4"C | 60/2/NF |
| 40/2 | 3#8,1#10G, 3/4"C | 60/3/NF |
| 40/3 | 4#8,1#10G, 3/4"C | 60/4/NF |
| 50/1 | 2#6,1#10G, 3/4"C | 60/2/NF |
| 50/2 | 3#6,1#10G, 3/4"C | 60/3/NF |
| 50/3 | 4#6,1#10G, 3/4"C | 60/4/NF |
| 60/1 | 2#4,1#8G, 1"C | 100/2/NF |
| 60/2 | 3#4,1#8G, 1"C | 100/3/NF |
| 60/3 | 4#4,1#8G, 1"C | 100/4/NF |
| 70/1 | 2#4,1#8G, 1"C | 100/2/NF |
| 70/2 | 3#4,1#8G, 1"C | 100/3/NF |
| 70/3 | 4#4,1#8G, 1"C | 100/4/NF |
| 80/1 | 2#4,1#8G, 1"C | 100/2/NF |
| 80/2 | 3#4,1#8G, 1 1/4"C | 100/3/NF |
| 80/3 | 4#4,1#8G, 1 1/4"C | 100/4/NF |
| 90/1 | 2#3,1#8G, 1 1/4"C | 100/2/NF |
| 90/2 | 3#3,1#8G, 1 1/4"C | 100/3/NF |
| 90/3 | 4#3,1#8G, 1 1/4"C | 100/4/NF |
| 100/1 | 2#3,1#8G, 1 1/4"C | 100/2/NF |
| 100/2 | 3#3,1#8G, 1 1/4"C | 100/3/NF |
| 100/3 | 4#3,1#8G, 1 1/2"C | 100/4/NF |

* MAXIMUM LENGTH=100 FT.
** OUTDOOR DISCONNECT SHALL BE WEATHERPROOF PROVIDE NEUTRAL WIRE FOR DRYER, RANGE, AND OVEN.

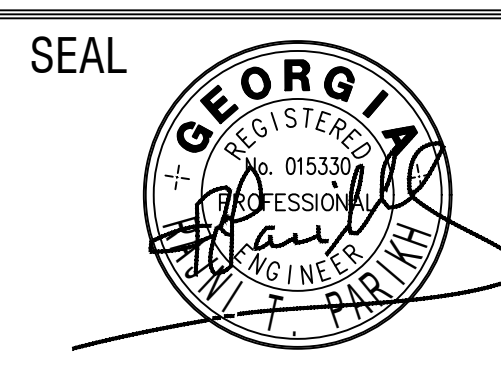


FIRST FLOOR PLAN-POWER
1/8"=1'-0"

| REVISIONS | | | | | |
|-----------|----------|---------|--------|------|---------|
| Number | Date | Remarks | Number | Date | Remarks |
| X | 00-00-00 | N/A | | | |

CONSULTANTS

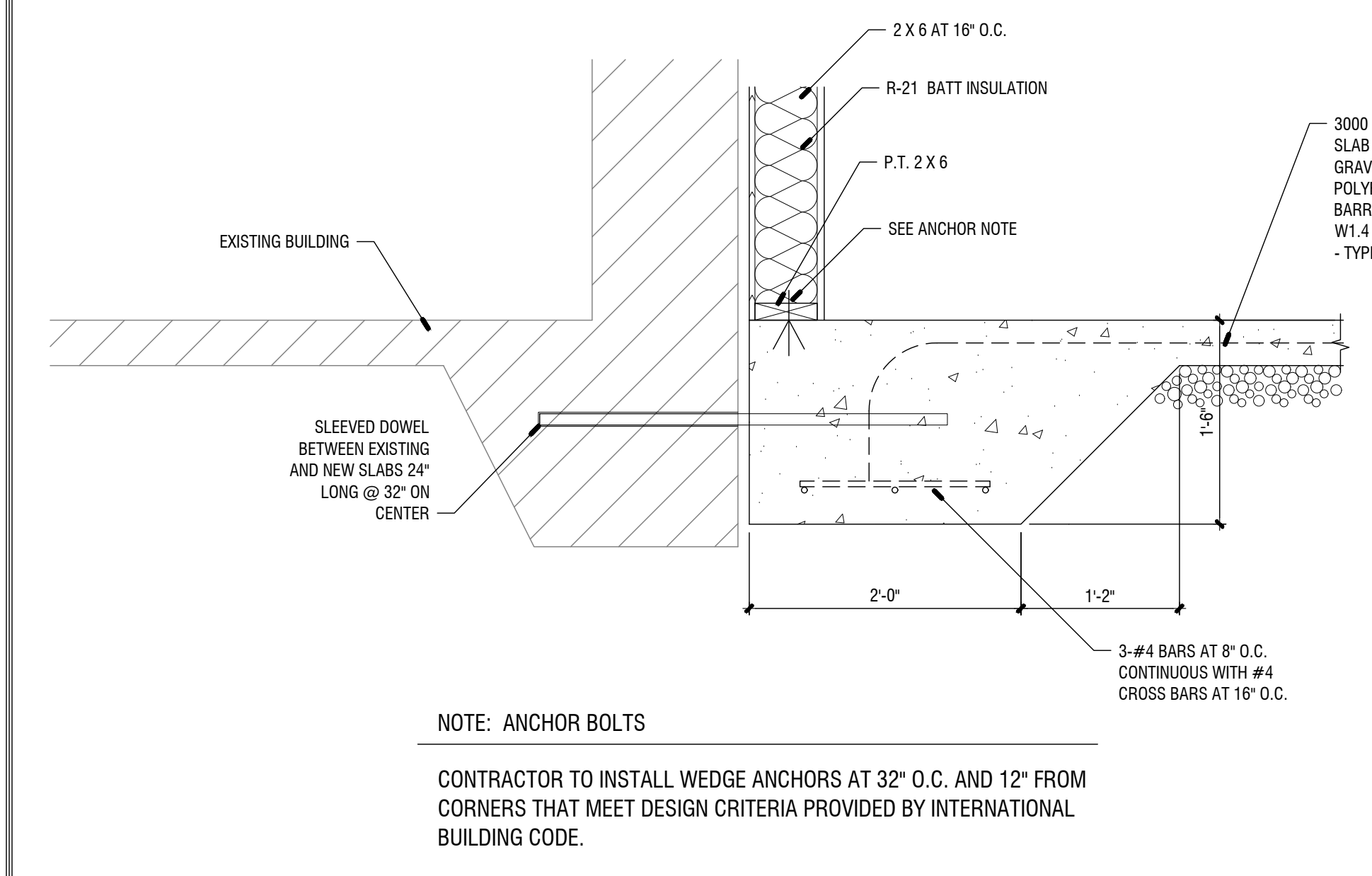
CARTER WATKINS ASSOCIATES ARCHITECTS, INC.
 POST OFFICE BOX 1084
 137 EAST WASHINGTON STREET
 MONROE, GEORGIA 30655
 FAX: 770-267-1064
 email@carterwatkins.com www.carterwatkins.com



JACKSON COUNTY SENIOR CENTER
 151 GENERAL JACKSON DR. JEFFERSON GA 30549

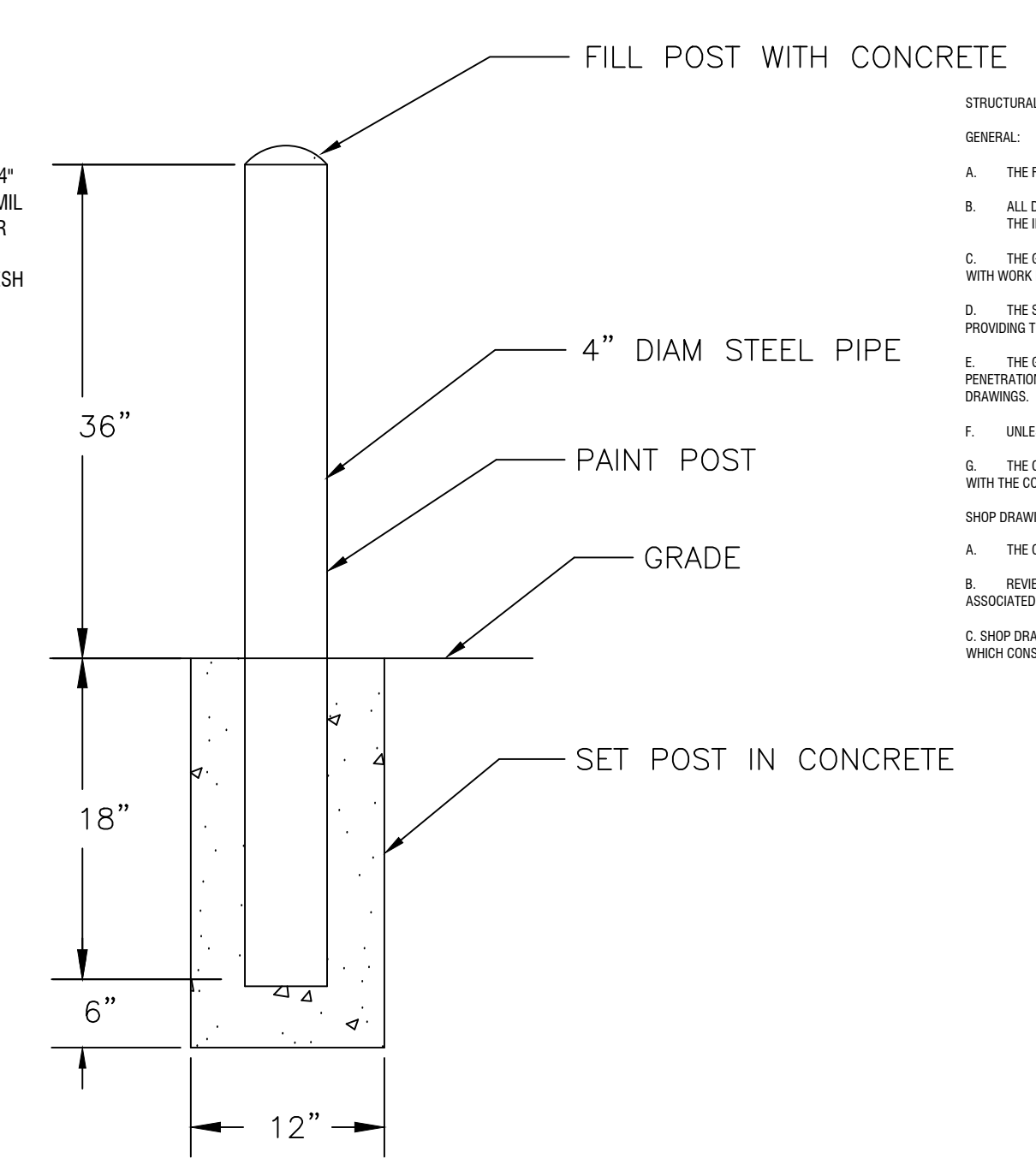
| | | |
|---|--|-----------------------|
| SHEET TITLE: BASEMENT & FIRST FLOOR PLAN-POWER LEGEND & WIRING SCHEDULE | | NUMBER: E-1 |
| PRINTED: Jul 25, 2023 | | |

Aug 28 2023 1: T:\SHARED CAD Projects\2022 Jackson County Senior Center\Sheet\Notes\402 FOUNDATION NOTES AND DETAILS.rvt

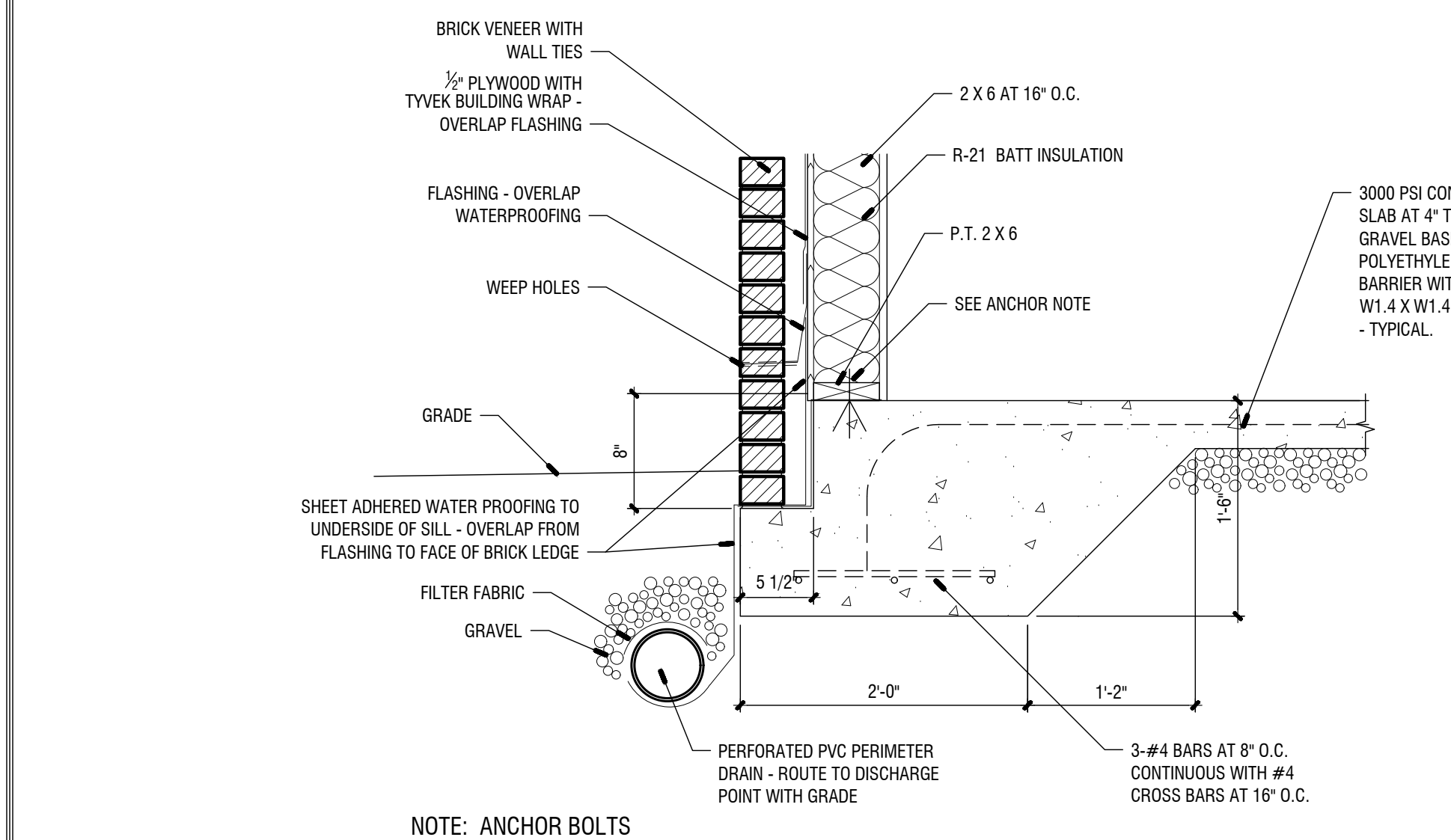


NOTE: ANCHOR BOLTS
CONTRACTOR TO INSTALL WEDGE ANCHORS AT 32\"/>

10 TURNDOWN SLAB AT EXISTING BUILDING

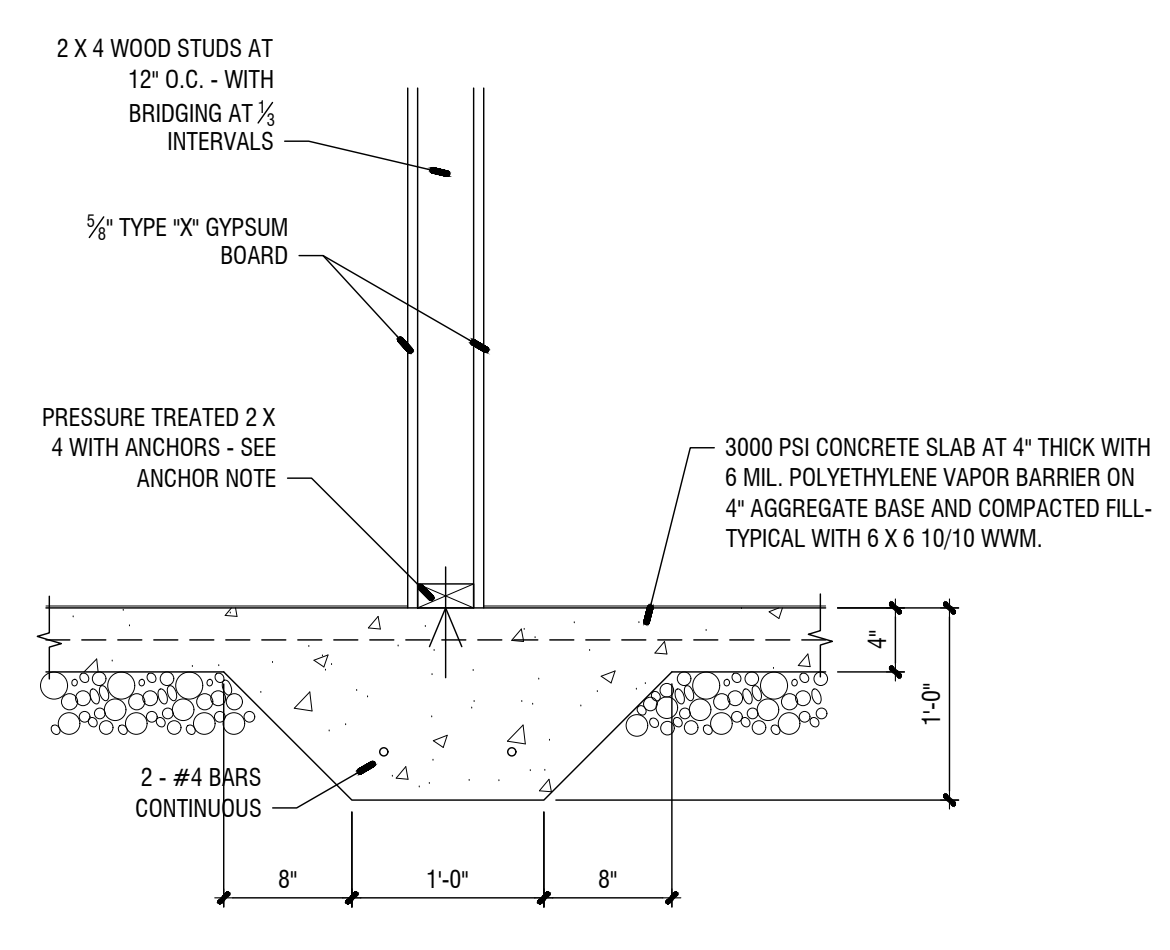


TYPICAL BOLLARD DETAIL
N.T.S.



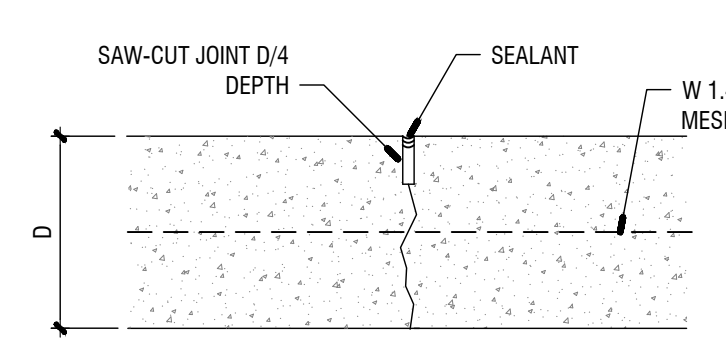
NOTE: ANCHOR BOLTS
CONTRACTOR TO INSTALL WEDGE ANCHORS AT 32\"/>

6 TURNDOWN SLAB



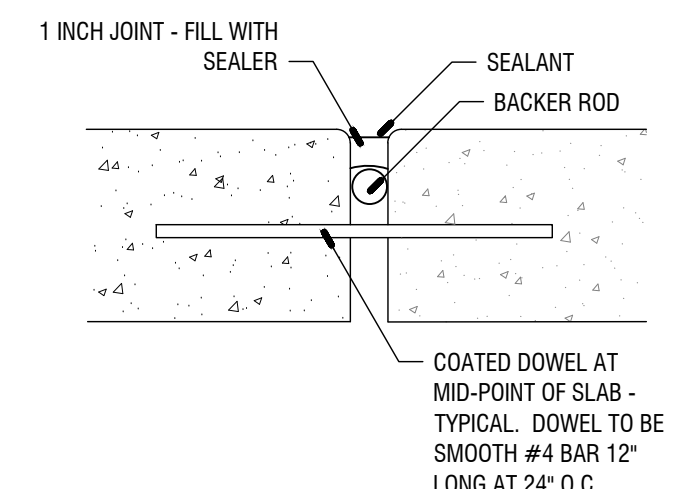
7 INTERIOR LOAD BEARING WALL

NOTE:
EXPANSION JOINTS ARE TO BE CUT THE FOLLOWING DAY.



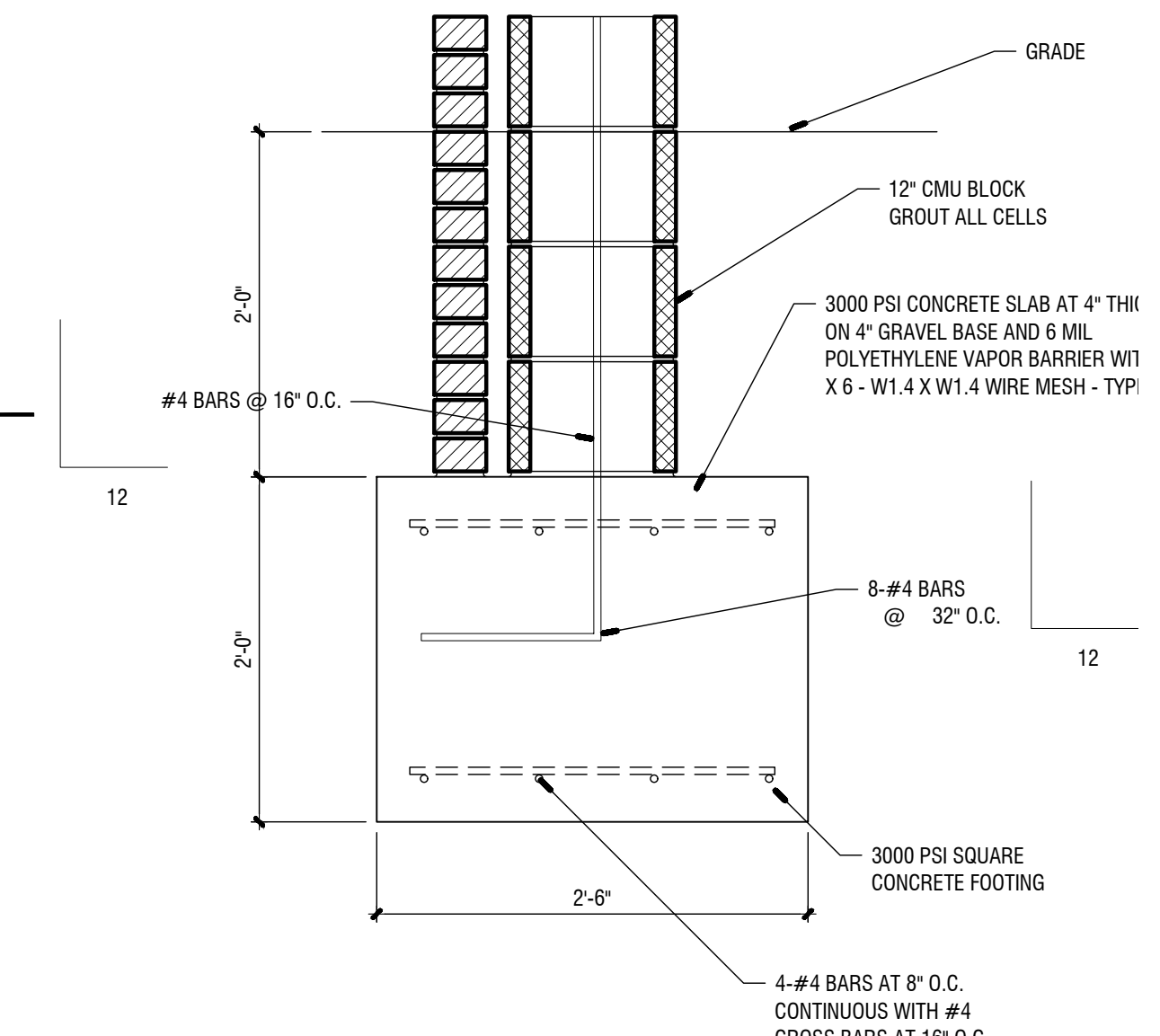
8 CONTROL JOINT

NOTE:
EXPANSION JOINT TO BE FORMED FROM THE POURING OF TWO DIFFERENT CONCRETE POURS.

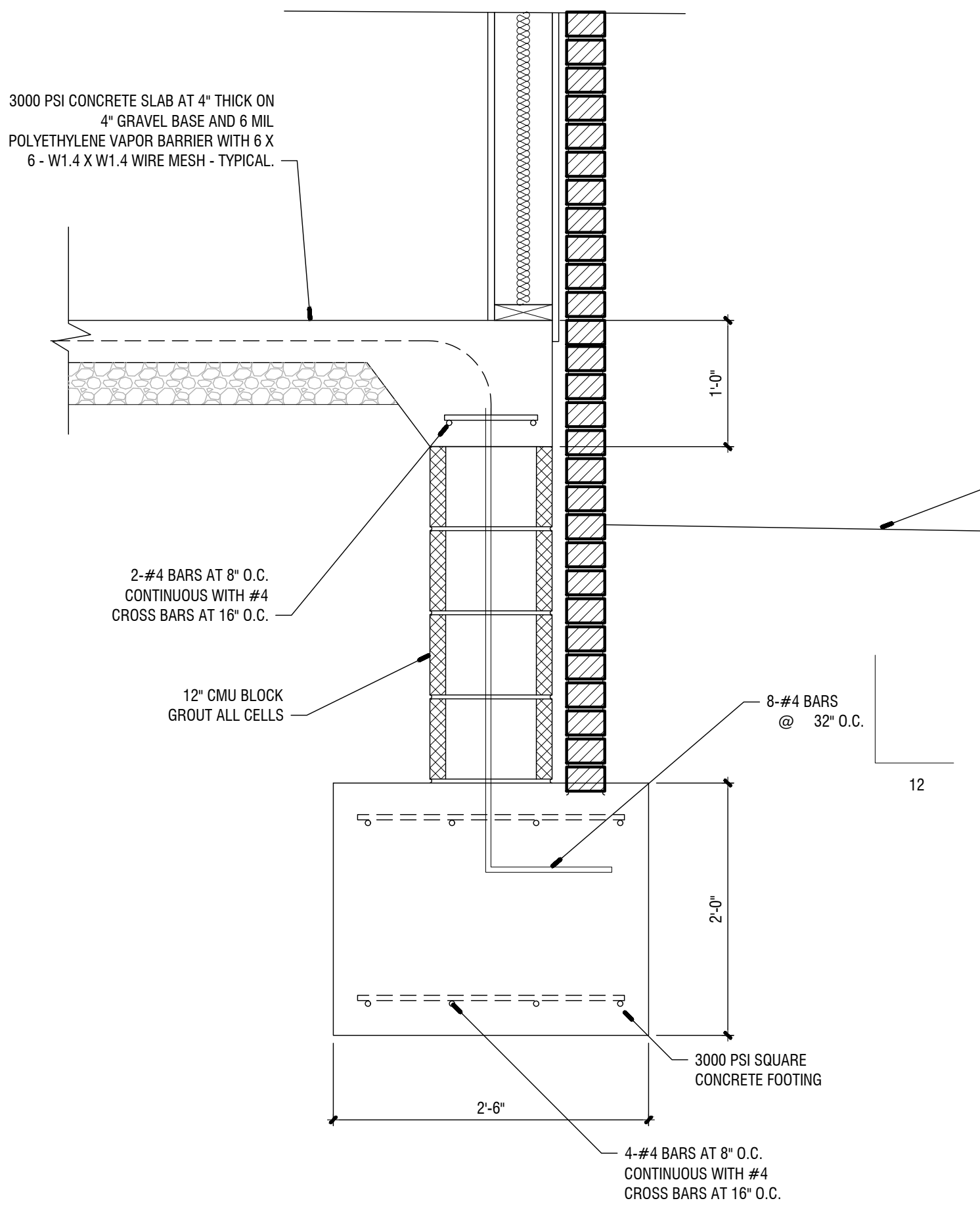


9 EXPANSION JOINT

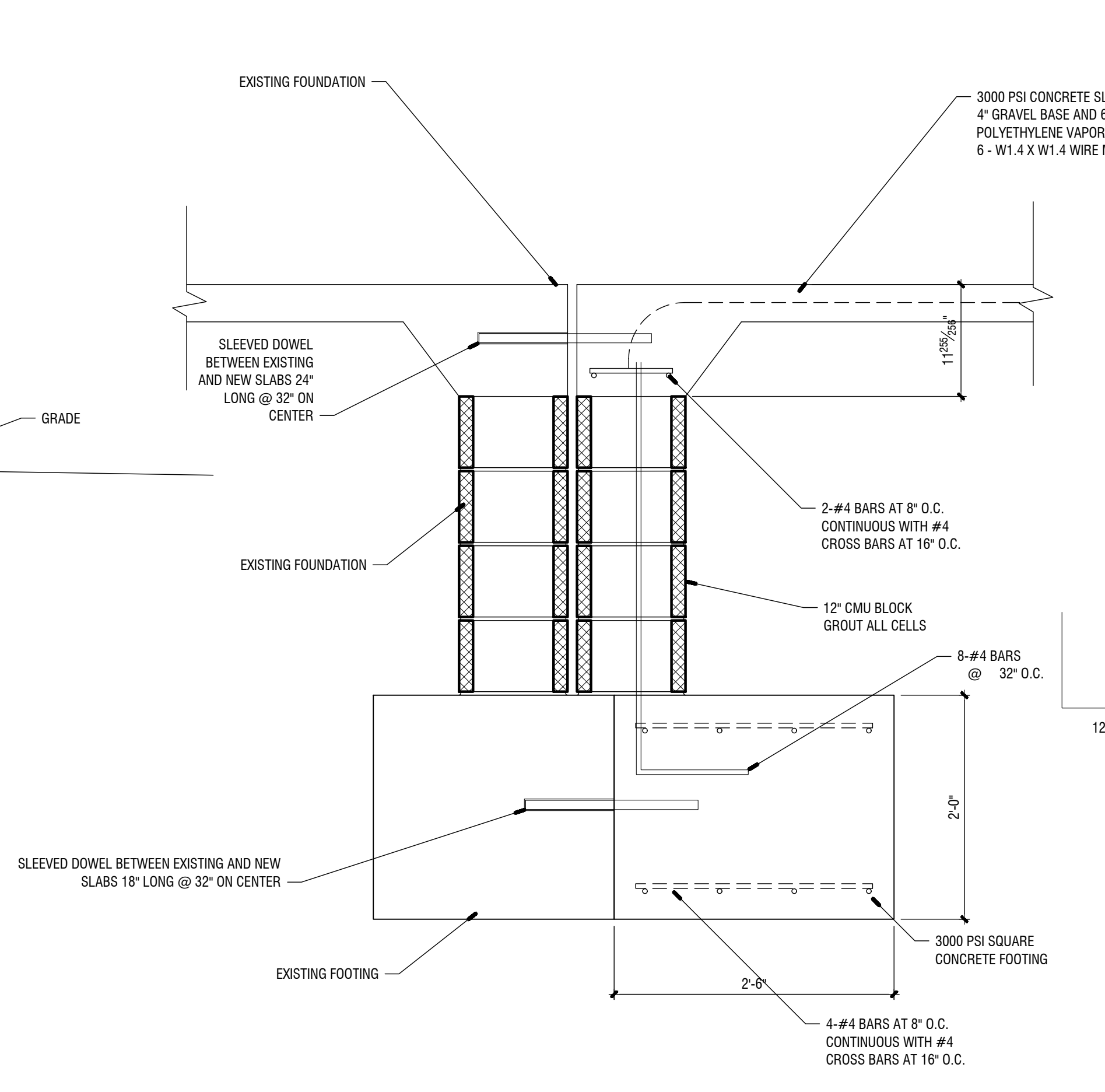
NOTE:
1. EXPANSION JOINT TO BE FORMED FROM THE POURING OF TWO DIFFERENT CONCRETE POURS.
2. APPLY BLOCK FILLER AND PRIME AND PAINT TO ALL INTERIOR CONCRETE BLOCK. COLORS TO BE SELECTED.
3. CONTROL JOINTS ARE TO BE CUT THE FOLLOWING DAY.
4. ALL INTERIOR BLOCK EXPOSED OUTSIDE CORNERS TO BE 1\"/>



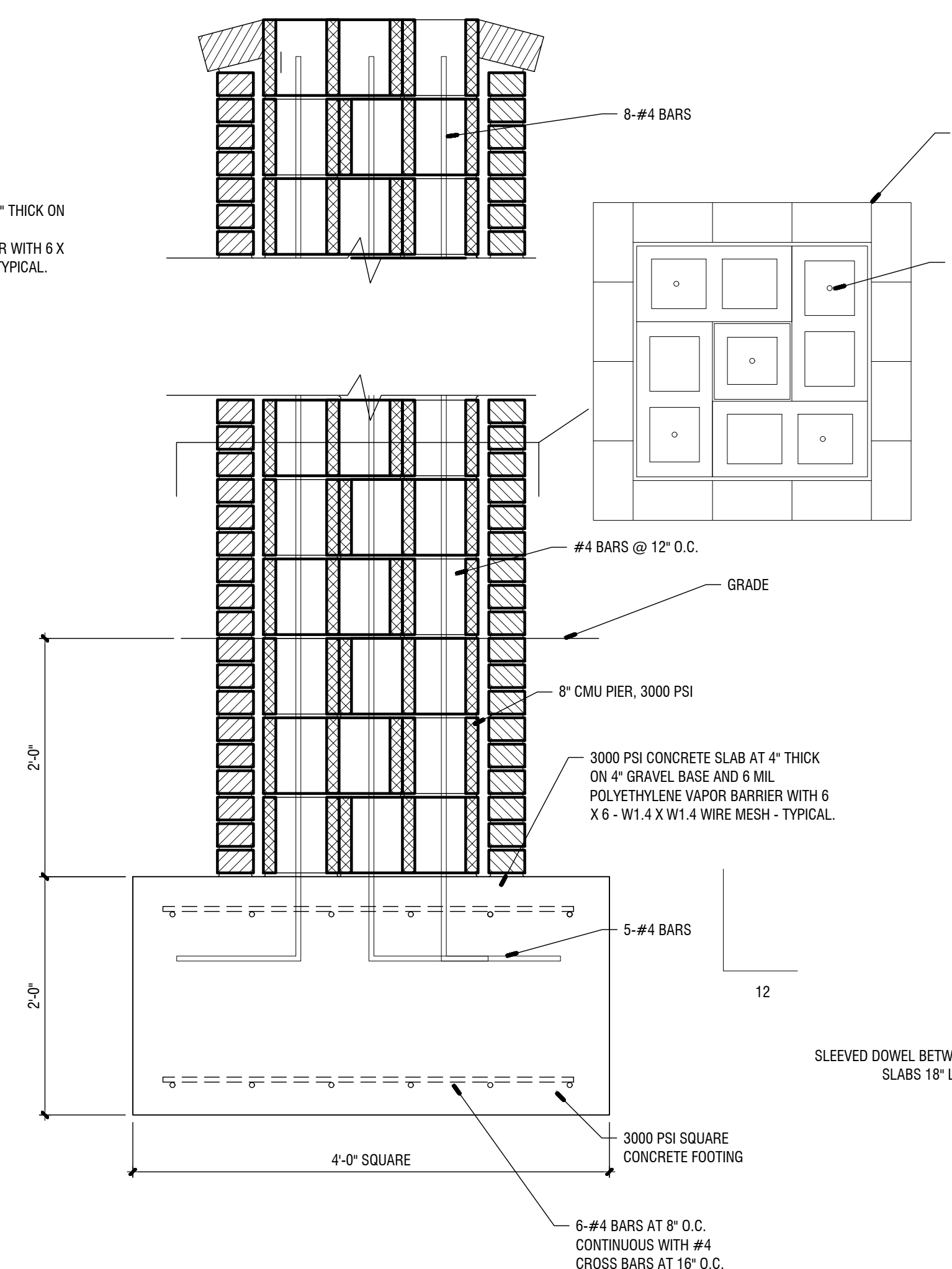
5 CMU WALL WITH FOOTING



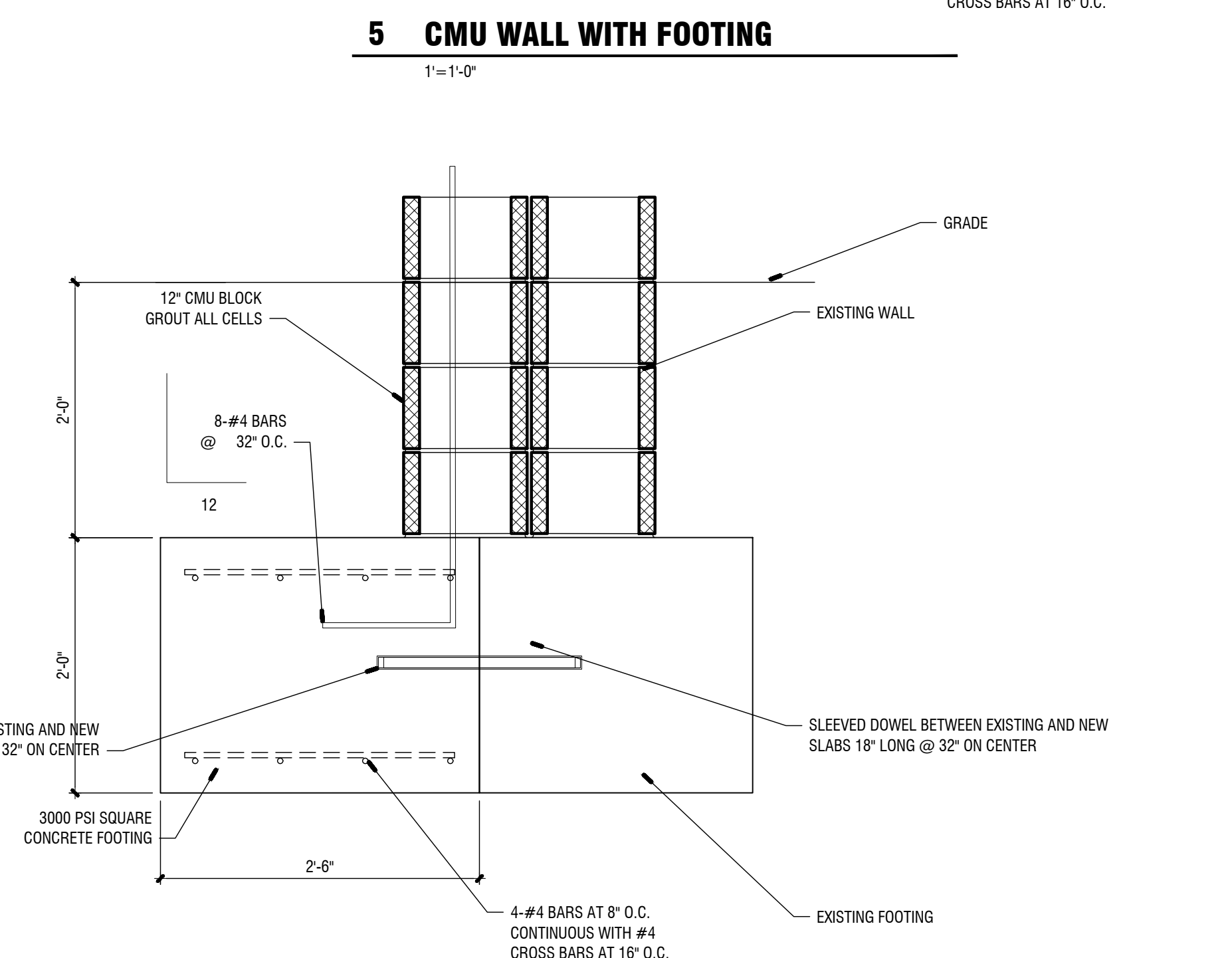
1 THICKENED SLAB WITH STEM WALL



2 EXISTING SLAB @ THICKENED SLAB WITH STEM WALL



3 CONCRETE PIER

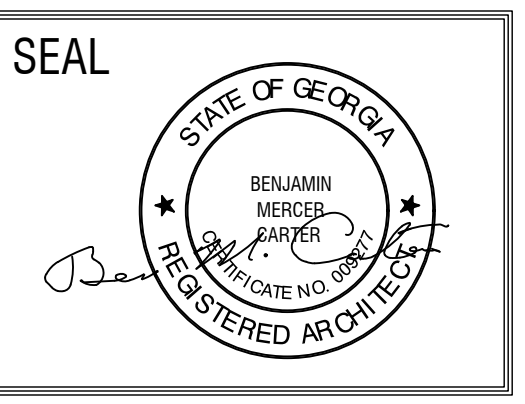


4 CMU WALL WITH FOOTING AT EXISTING BUILDING

| REVISIONS | | | CONSULTANTS | | |
|-----------|---------|-------------------------|-------------|------|---------|
| Number | Date | Remarks | Number | Date | Remarks |
| 1 | 8.28.23 | REVISED FOUNDATION DWGS | | | |
| | | | | | |
| | | | | | |

CONSULTANTS

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.
POST OFFICE BOX 1064
137 EAST WASHINGTON STREET
MONROE, GEORGIA 30655
Fax: 770.267-1064
email: c@carterwatkins.com www.carterwatkins.com



JACKSON COUNTY SENIOR CENTER
151 GENERAL JACKSON DR. JEFFERSON GA 30549

SHEET TITLE: FOUNDATION NOTES AND DETAILS
NUMBER: S-002
PRINTED:

FAYETTE CO. ANIMAL SHELTER PRINTED DATE: 08/28/23 This document is the property of Carter Watkins Associates. Reproduction of any kind is prohibited under Federal Copyright Laws.

VERIFY REQUIRED CONC. PAD SIZE WITH
MANUFACTURE & UNIT SIZES.
(WALL HUNG UNITS ARE ACCEPTABLE IF
POSSIBLE)

NOTE:

1. USE EXISTING WIRING TO SUPPLY TO NEW UNITS. ANY ADDITIONAL CIRCUITS NECESSARY TO BE DESIGN BUILD PER MANUFACTURES STANDARD.
2. SUBMIT ENGINEER SHOP DRAWINGS.

CONCRETE PAD

19'-6"

NEW LED LIGHTING-
USE EXISTING WIRING FROM PANEL
TO SUPPLY NEW COOLER.

EXISTING COOLER/FREEZER PAD TO
REMAIN AND BE REUSED.
-MAXIMIZE COOLER/FREEZER AREA
TO EXISTING PAD
-FIELD VERIFY ALL DIMENSIONS.

FLASH TO BUILDING

WALK-IN
FREEZER

WALK-IN
COOLER

LINE OF EXISTING BUILDING

LIGHT SWITCHES TO BE INSIDE FOOD
SERVICES ON COOLER WALL AS IT
CURRENTLY EXISTS.

TPO MEMBRANE-
FLASH TO WALL

INSULATED PANELS

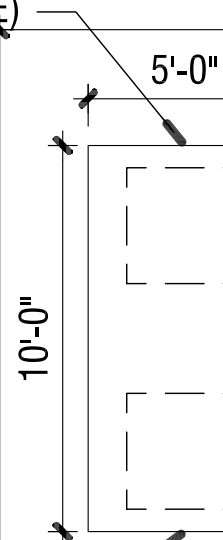
SWINGING COOLER DOORS

INSULATED FLOOR PANEL

EXISTING CONCRETE
EQUIPMENT PAD

NEW REFRIGERATION
EQUIPMENT PAD

8'-0"



22'-6"

5'-0"

10'-0"

\$

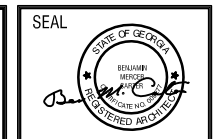
\$

Aug 28 2023 1:15 PM REVISED: 08/28/23 Jackson County Senior Center (New) (Proposed) Floor Plan.dwg

| REVISIONS | | | | | |
|-----------|---------|-------------------------|--------|------|---------|
| Number | Date | Remarks | Number | Date | Remarks |
| 1 | 8.28.23 | REVISED FOUNDATION DIMS | | | |
| | | | | | |
| | | | | | |
| | | | | | |

CONSULTANTS

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.
 POST OFFICE BOX 1004
 137 EAST WASHINGTON STREET
 MONROE, GEORGIA 30655
 FAX: 770.267.1064
 email@carterwatkins.com www.carterwatkins.com



JACKSON COUNTY SENIOR CENTER
 151 GENERAL JACKSON DR. JEFFERSON
 GA 30549

SHEET TITLE:
ALTERNATE ADD #1 NEW WALK IN
COOLER/ FREEZER
 PRINTED:

NUMBER:
AA-001

FAYETTE CO. ANIMAL SHELTER PRINTED DATE: 08/28/23

This Document is the property of Carter Watkins Associates. Reproduction of any kind is prohibited under Federal Copyright Laws.

TABLE OF CONTENTS

Jackson County Senior Citizens' Center Renovations and Additions

BID NOTICE

A305 CONTRACTOR QUALIFICATIONS

A310 PROPOSAL BOND

A312 PAYMENT BOND

A312 PERFORMANCE BOND

CDBG CONTRACT CLAUSES

| | | |
|------------|------------------|---------------------------------|
| DIVISION 1 | SECTION 01 11 13 | SUMMARY OF THE WORK |
| | SECTION 01 21 13 | ALLOWANCES |
| | SECTION 01 23 00 | ALTERNATES |
| | SECTION 01 25 13 | PRODUCT SUBSTITUTIONS |
| | SECTION 01 26 00 | MODIFICATION PROCEDURES |
| | SECTION 01 29 00 | APPLICATION FOR PAYMENT |
| | SECTION 01 31 13 | PROJECT COORDINATION |
| | SECTION 01 31 19 | PROJECT MEETINGS |
| | SECTION 01 32 33 | PHOTOGRAPHIC DOCUMENTATION |
| | SECTION 01 33 00 | SUBMITTALS |
| | SECTION 01 42 19 | REFERENCES AND STANDARDS |
| | SECTION 01 43 13 | MATERIALS AND EQUIPMENT |
| | SECTION 01 51 00 | TEMPORARY FACILITIES |
| | SECTION 01 58 13 | PROJECT SIGNS |
| | SECTION 01 70 00 | PROJECT CLOSEOUT |
| | SECTION 01 78 33 | WARRANTIES AND BONDS |
| | SECTION 01 78 39 | PROJECT RECORD DOCUMENTS |
| | SECTION 01 79 00 | DEMONSTRATION AND TRAINING |
| DIVISION 2 | SECTION 0 41 16 | SELECTIVE DEMOLITION |
| DIVISION 3 | SECTION 03 30 00 | CONCRETE WORK |
| DIVISION 4 | SECTION 04 21 00 | CLAY MASONRY UNITS |
| | SECTION 04 22 00 | CONCRETE MASONRY UNITS |
| DIVISION 5 | SECTION 05 52 23 | METAL RAILINGS |
| DIVISION 6 | SECTION 06 10 00 | ROUGH CARPENTRY |
| | SECTION 06 17 53 | SHOP FABRICATED WOOD TRUSSES |
| | SECTION 06 40 23 | INTERIOR ARCHITECTURAL WOODWORK |
| DIVISION 7 | SECTION 07 13 16 | SHEET MEMBRANE WATERPROOFING |

TABLE OF CONTENTS

Jackson County Senior Citizens' Center Renovations and Additions

| | | |
|-------------|---------------------|---|
| | SECTION 07 21 00 | BUILDING INSULATION |
| | SECTION 07 41 13 | METAL ROOF PANELS |
| | SECTION 07 72 00 | ROOF ACCESSORIES |
| | SECTION 07 72 01 | GUTTERS AND DOWNSPOUTS |
| DIVISION 8 | SECTION 08 11 13 | STANDARD STEEL DOORS AND FRAMES |
| | SECTION 08 14 00 | WOOD DOORS |
| | SECTION 08 41 23 | ALUMINUM STOREFRONTS AND ENTRANCES |
| | SECTION 08 71 10 | DOOR HARDWARE |
| | SECTION 08 80 00 | GLASS AND GLAZING |
| DIVISION 9 | SECTION 09 29 00 | GYPSUM BOARD |
| | SECTION 09 30 13 | CERAMIC TILE |
| | SECTION 09 51 23 | ACOUSTICAL CEILING TILE |
| | SECTION 09 65 19 | RESILIENT FLOORING |
| | SECTION 09 91 00 | PAINTING |
| DIVISION 10 | SECTION 10 14 00 | INTERIOR SIGNAGE LETTERS AND PLAQUES |
| | SECTION 10 21 13 | PHENOLIC TOILET PARTITIONS |
| | SECTION 10 26 00 | WALL RAILS |
| | SECTION 10 73 00 | METAL CANOPIES |
| DIVISION 12 | SECTION 12 20 00 | WINDOW SHADES |
| | SECTION 12 53 30 | PLASTIC LAMIMATE CASEWORK |
| | SECTION 12 36 61.19 | QUARTZ COUNTERTOPS |
| DIVISION 23 | SECTION 23 05 00 | GENERAL MECHANICAL PROVISIONS |
| | SECTION 23 06 00 | BASIC MATERIALS AND METHODS |
| | SECTION 23 06 30 | HEATING, VENTILATION, AND AIR CONDITIONING |
| DIVISION 26 | SECTION 26 00 00 | BASIC MATERIALS AND METHODS |
| | SECTION 26 05 33 | CONDUIT |
| DIVISION 27 | SECTION 27 30 00 | VOICE AND DATA COMMUNICATION CABLING |
| DIVISION 28 | SECTION 28 31 00 | FIRE ALARM SYSTEM |
| DIVISION 31 | SECTION 31 31 16 | TERMITE CONTROL |

SECTION 06 17 53
SHOP-FABRICATED WOOD TRUSSES

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.

06 17 53-1

JACKSON COUNTY SENIOR CENTER
AUGUST 22, 2023

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Wood roof trusses.
2. Wood girder trusses.

1.2 ALLOWANCES

- A. Provide wood truss bracing under the Metal-Plate-Connected Truss Bracing Allowance as specified in Section 012100 "Allowances."

1.3 ACTION SUBMITTALS

- A. Product Data: For metal-plate connectors, metal truss accessories, and fasteners.

- B. Shop Drawings: Show fabrication and installation details for trusses.

1. Show location, pitch, span, camber, configuration, and spacing for each type of truss required.
2. Indicate sizes, stress grades, and species of lumber.
3. Indicate locations of permanent bracing required to prevent buckling of individual truss members due to design loads.
4. Indicate locations, sizes, and materials for permanent bracing required to prevent buckling of individual truss members due to design loads.
5. Indicate type, size, material, finish, design values, orientation, and location of metal connector plates.
6. Show splice details and bearing details.

SECTION 06 17 53
SHOP-FABRICATED WOOD TRUSSES

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.

06 17 53-2

JACKSON COUNTY SENIOR CENTER
AUGUST 22, 2023

- C. Delegated-Design Submittal: For metal-plate-connected wood trusses indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.4 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For metal-plate-connected wood trusses, signed by officer of truss-fabricating firm.
- B. Evaluation Reports: For the following, from ICC-ES:
 - 1. Metal-plate connectors.
 - 2. Metal truss accessories.

1.5 QUALITY ASSURANCE

- A. Wood Truss Shop Drawing submittal to contain all layouts, details, connections, etc. Drawings shall bear the stamp of a Georgia Registered Structural Engineer.
- B. Metal Connector-Plate Manufacturer Qualifications: A manufacturer that is a member of TPI and that complies with quality-control procedures in TPI 1 for manufacture of connector plates.
 - 1. Manufacturer's responsibilities include providing professional engineering services needed to assume engineering responsibility.
 - 2. Engineering Responsibility: Preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.
- C. Fabricator Qualifications: Shop that [participates in a recognized quality-assurance program, complies with quality-control procedures in TPI 1, and involves third-party inspection by an independent testing and inspecting agency acceptable to Architect and authorities having jurisdiction]

SECTION 06 17 53
SHOP-FABRICATED WOOD TRUSSES

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.
JACKSON COUNTY SENIOR CENTER
AUGUST 22, 2023

06 17 53-3

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Handle and store trusses to comply with recommendations in SBCA BCSI, "Building Component Safety Information: Guide to Good Practice for Handling, Installing, Restraining, & Bracing Metal Plate Connected Wood Trusses."

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design metal-plate-connected wood trusses.
- B. Structural Performance: Metal-plate-connected wood trusses shall be capable of withstanding design loads within limits and under conditions indicated. Comply with requirements in TPI 1.
- C. Comply with applicable requirements and recommendations of TPI 1, TPI DSB, and SBCA BCSI.
- D. Wood Structural Design Standard: Comply with applicable requirements in AF&PA's "National Design Specifications for Wood Construction" and its "Supplement."

2.2 DIMENSION LUMBER

- A. Lumber: DOC PS 20 and applicable rules of any rules-writing agency certified by the American Lumber Standard Committee (ALSC) Board of Review. Provide lumber graded by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Provide dry lumber with [15] [19] percent maximum moisture content at time of dressing.
- B. Permanent Bracing: Provide wood bracing that complies with requirements for miscellaneous lumber in [Section 061000 "Rough Carpentry."]

SECTION 06 17 53
SHOP-FABRICATED WOOD TRUSSES

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.

06 17 53-4

JACKSON COUNTY SENIOR CENTER
AUGUST 22, 2023

2.3 METAL CONNECTOR PLATES

- A. General: Fabricate connector plates to comply with TPI 1.
- B. Hot-Dip Galvanized-Steel Sheet: ASTM A 653/A 653M; Structural Steel (SS), high-strength low-alloy steel Type A (HSLAS Type A), or high-strength low-alloy steel Type B (HSLAS Type B); **G60 (Z180)** coating designation; and not less than **0.036 inch (0.9 mm)** thick.

2.4 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
 - 1. Provide fasteners for use with metal framing anchors that comply with written recommendations of metal framing manufacturer.
 - 2. Where trusses are exposed to weather, in ground contact, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.

2.5 METAL FRAMING ANCHORS AND ACCESSORIES

- A. Allowable design loads, as published by manufacturer, shall comply with or exceed those [indicated or required by the current edition of the International Building Code] .Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency. Framing anchors shall be punched for fasteners adequate to withstand same loads as framing anchors.
- B. Galvanized-Steel Sheet: Hot-dip, zinc-coated steel sheet complying with ASTM A 653/A 653M, **G60 (Z180)** coating designation.

SECTION 06 17 53
SHOP-FABRICATED WOOD TRUSSES

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.

06 17 53-5

JACKSON COUNTY SENIOR CENTER
AUGUST 22, 2023

2.6 FABRICATION

- A. Assemble truss members in design configuration indicated; use jigs or other means to ensure uniformity and accuracy of assembly, with joints closely fitted to comply with tolerances in TPI 1. Position members to produce design camber indicated.
 - 1. Fabricate wood trusses within manufacturing tolerances in TPI 1.
- B. Connect truss members by metal connector plates located and securely embedded simultaneously in both sides of wood members by air or hydraulic press.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install wood trusses only after supporting construction is in place and is braced and secured.
- B. If trusses are delivered to Project site in more than one piece, assemble trusses before installing.
- C. Hoist trusses in place by lifting equipment suited to sizes and types of trusses required, exercising care not to damage truss members or joints by out-of-plane bending or other causes.
- D. Install and brace trusses according to TPI recommendations and as indicated.
- E. Anchor trusses securely at bearing points; use metal truss tie-downs or floor truss hangers as applicable. Install fasteners through each fastener hole in metal framing anchors according to manufacturer's fastening schedules and written instructions.
- F. Securely connect each truss ply required for forming built-up girder trusses.
- G. Install and fasten permanent bracing during truss erection and before construction loads are applied. Anchor ends of permanent bracing where terminating at walls or beams.

SECTION 06 17 53
SHOP-FABRICATED WOOD TRUSSES

CARTER WATKINS ASSOCIATES ARCHITECTS, INC.

06 17 53-6

JACKSON COUNTY SENIOR CENTER
AUGUST 22, 2023

1. Install bracing to comply with [Section 061000 "Rough Carpentry."] [Section 061053 "Miscellaneous Rough Carpentry."]
 2. Install and fasten strongback bracing vertically against vertical web of parallel-chord floor trusses at centers indicated.
- H. Install wood trusses within installation tolerances in TPI 1.
- I. Do not alter trusses in field. Do not cut, drill, notch, or remove truss members.
- J. Replace wood trusses that are damaged or do not comply with requirements.

END OF SECTION 061753