Addendum No. 5

Lake Charles Public Works New Facility Phase 2
4200 Broad Street
Lake Charles, LA

Project No.: DR002

City of Lake Charles
326 Pujo Street
Lake Charles, LA

TO ALL CONTRACTORS:

This Addendum is hereby made a part of the Contract Documents dated December 20, 2025 and prepared by Brossett Architect, LLC.

The following items shall be considered part of the Contract Documents and shall be included in the same upon executions of the Contract. Changes made by Addenda take precedence over information published at an earlier date. Any changes, which may affect construction or proper installation of materials, equipment or structures, not specifically mentioned in this addendum, shall be brought to the attention of the Architect before submitting bid. Otherwise, such conditions, if found later to exist, must be worked out in an acceptable manner at no additional cost to the Owner.

It is understood and agreed that the following alterations, changes and/or omissions shall be made in the Plans and the Specifications, as now drawn and written, and that such alterations, changes and/or omissions shall be incorporated in the project during construction. Unless such an alteration, change and/or omission is specifically mentioned in this addendum, the plans and specifications as now drawn and written, shall govern in all respects.

Acknowledge receipt of this Addendum on the Bid Form.

Bidders are advised to call attention of all sub-bidders and suppliers to all information and changes which may affect their work.

This addendum consists of a total of 68 pages.

PART 1 – Drawing Modifications

1. A1.1-1: Existing power poles (PP) noted to remove will not be installed in Phase 1 and will not be removed in this project.
2. A1.3-1: Water tank to be dark green and ANSI/FDA approved resin material.
3. A1.12-1: Diesel fuel tank to be 12,000-gallon size in lieu of 20,000 gallon as noted.
4. A1.12-1: All fuel tanks (diesel, gasoline, and dyed diesel) to be installed a minimum 25 ft away from property line.
5. A1.12-1: All fuel tanks to be UL 2085 rated.
6. A1.12-1: Provide safety emergency shut-off valve to stop the transfer of fuel to dispensers in accordance with IFC 2303.2.

7. A1.12-1: Fuel dispensers to be Diesel & Off-Road Diesel Hi-Flow Commercial Dispensers, Gasboy Commercial DEF Dispenser (warm weather), and Unleaded Gasoline Standard-Flow Commercial Dispensers.
8. A1.12-1: Provide (2) water hose reels as noted on A1.12-5. 2nd component is not shown clearly in elevations. Hose reels to be connected to water supply noted on plumbing dwgs.
9. A1.12-1: Contractor shall furnish and install a complete Above Ground Storage Tank (AST) fuel storage, monitoring, and dispensing system for this project. Equipment listed herein constitutes one of the approved products. Any other Substitutions require approval per Article 3 of instructions to bidders. Complete system shall comply with NFPA 30/NFPA 30A, International Fire Code (IFC), NEC Article 514, EPA SPCC (40 CFR 112) and all applicable state and local regulations
10. Above Ground Storage Tanks to be (Fireguard UL-2085) as follows: Diesel Tank: Fireguard UL-2085, double-wall steel, interstitial monitoring, overfill prevention, audible/visual high-level alarm; Unleaded Tank: Fireguard UL-2085, double-wall steel, interstitial monitoring, overfill prevention; Off-Road Diesel Tank: Fireguard UL-2085, double-wall steel, interstitial monitoring; DEF Tank Blue1 Southern Easy Tank with accessories, DEF-compatible materials, integrated containment. Provide tank monitoring system (Automatic Tank Gauge: Franklin Fueling Systems EVO 600 (inventory-only configuration) with Franklin inventory-only probes, Franklin ULS (Universal Leak Sensors) for tank and containment monitoring. Provide Franklin Fueling System Submersible Turbine Pumps (STPs) at 2 HP & ¾ HP, Mechanical line leak detectors installed per NFPA 30A and Franklin STP control boxes integrated with OPW PV200 system. Provide Fuel Control System. FCS to be OPW Petro Vend PV200 (Two (2) units), with capabilities of Driver PIN, Vehicle ID, transaction reporting, and pump authorization control. Piping System to be Franklin Fueling Systems UPP Double-Wall Piping between tanks and dispensers with continuous secondary containment with Franklin UPP single-wall dispenser sumps at each fuel dispenser and one at the fuel tank area. Electrical to be Classified wiring per NEC Article 514 with emergency stop within 100 feet. Provide Testing & Commissioning of complete system including Interstitial verification, pump testing, EVO setup, PV200 programming, and Owner training required. Provide two (2) OPW Petro Vend PV200 units shall be provided and installed as follows PV200 Unit #1 controls all fuel dispensers (diesel, unleaded, off-road diesel, and DEF) including pump authorization for associated Franklin STPs. Contractor Responsibilities shall include all Electrical, Communication, and Mounting and shall supply and install all electrical wiring, conduit, communication cabling, control wiring, and associated infrastructure required for full operation of the fuel systems. This includes, but is not limited to, power circuits, control circuits, data/communication cabling, interconnections between the EVO 600, OPW PV200 units, , STP control panels, dispensers, sensors, and all related components. Contractor shall also furnish and install all mounting hardware, brackets, supports, anchors, and structural attachments required for proper installation of fuel equipment, control panels, and monitoring devices. Provide and install minimum (2) 1” conduits per fuel dispensers to home run back to Room 215 with exact location to be by Architect. All electrical work shall comply with NEC requirements and applicable local codes. Coordination with other trades shall be the responsibility of the Contractor to ensure a complete and fully operational system. Provide all electrical wiring, conduit, communication cabling, control wiring, mounting hardware, and system integration required for fuel systems. Provide system startup, programming, testing, and Owner training. Provide stainless steel fueling islands manufactured by OPW as shown on the project plans. Furnish and install OPW stainless steel fueling islands at islands indicated on the dwgs. Manufacturer noted herein to be considered as approved equals.

11. Lube System: PV200 Unit #2 Controls for lube dispensing equipment from storage tanks in Room 218. Lube storage tanks existing to be relocated by Contractor as noted elsewhere. Provide lube pumps, associated piping, and lube monitoring systems as required. Contractor shall coordinate electrical and control interface as required for proper integration with the PV200 lube control unit. Provide Lube Dispensing Piping. All lube dispensing lines shall utilize 3/4" stainless steel piping. All fittings for lube piping shall be VEGA compression fittings. Lube piping materials shall be suitable for petroleum lubricants and installed in accordance with manufacturer recommendations and applicable codes. Contractor shall coordinate routing and terminations with the lube equipment provided by others. Lube Hose Reel Requirements to be Hannay (or prior approved equal) hose reels for all lube dispensing products as indicated on the project plans. Hose reels shall be heavy-duty, suitable for petroleum lubricants and shop environments. Reels shall be sized appropriately for hose length, diameter, and pressure requirements of each lube product. Mounting configuration shall match the layout shown on the approved construction drawings. Contractor shall coordinate hose reel installation with lube equipment provided by others and ensure proper integration with the OPW PV200 lube control unit. Provide a Graco Bulk Fluid Management System for all lube oil products. System shall be capable of monitoring, controlling, and reporting bulk lubricant usage. System shall integrate with lube dispensing equipment and coordinate with the OPW PV200 lube control unit where applicable. are provided by others; the contractor shall coordinate all necessary control wiring, communication connections, and commissioning for lube storage tanks, primary pumps, and associated monitoring hardware. Contractor shall supply and install all electrical wiring, conduit, communication cabling, control wiring, and associated infrastructure required for full operation of the lube systems. This includes, but is not limited to, power circuits, control circuits, data/communication cabling, interconnections between the PV200 units, Graco Bulk Fluid Management System, STP control panels, dispensers, sensors, and all related components. Contractor shall also furnish and install all mounting hardware, brackets, supports, anchors, and structural attachments required for proper installation of lube equipment, hose reels, control panels, and monitoring devices. All electrical work shall comply with NEC requirements and applicable local codes. Coordination with other trades shall be the responsibility of the Contractor to ensure a complete and fully operational system. Provide compressed air/pneumatic system including air compressors, air distribution piping, air drops, regulators, or other pneumatic infrastructure for each lube tank. Contractor shall coordinate as required to ensure proper interface with lube dispensing equipment or control systems that require pneumatic supply.
12. A1.12-1: Fuel system installer to provide permit drawings as required per State and local requirements.
13. A2.12-1,Type C: Window type C to be “451T” in lie of as noted.
14. A6.3-2: Hat channels indicated shall be 1 ½” X 16 ga painted in lieu of as noted.
15. Ref. drawing M2.3: All exhaust hose reels with keynote 17 shall refer to keynote 11.
16. Ref. drawing M2.3: Water heater with keynote 16 shall refer to keynote 10.
17. Contractor shall provide manual fire alarm pull stations on the interior side at each storage unit egress door in Building C.
18. Disconnect switch for 10-ton crane shall be 600V, 3p60A, HD, NEMA 1, FDS. Fuse disconnect per manufacturer recommendation.
19. Fixture type ‘P’ does not require DMX control. Standard 0-10V (DIM 1%) dimming is acceptable.
20. Ref Drawing E1.0R1(attached): Replace previously issued sheet E1.0 in its entirety with the attached E1.0R1.

21. Ref Drawing E1.1R2(attached): Replace previously issued sheet E1.1R1 in its entirety with the attached E1.1R2.
22. Ref Drawing E3.3R1(attached): Replace previously issued sheet E3.3 in its entirety with the attached E3.3R1.
23. Ref Drawing E3.6R1(attached): Replace previously issued sheet E3.6 in its entirety with the attached E3.6R1.
24. Ref Drawing E5.0R1(attached): Replace previously issued sheet E5.0 in its entirety with the attached E5.0R1.
25. Ref Drawing E5.2R2(attached): Replace previously issued sheet E5.2R1 in its entirety with the attached E5.2R2.
26. Ref Drawing E5.3R2(attached): Replace previously issued sheet E5.3R1 in its entirety with the attached E5.3R2.

PART 2- Project Manual Modifications

1. Addendum 3-Note 23: LCPW existing current fluids provider is LARD Oil Company.
2. Addendum 4, Part 1, Note 8: Lift to have 30" wide tracks in lieu of as noted.
3. 005800 Agreement Between Owner and Contractor-3.2: Construction time shall be 541 calendar days in lieu of as noted.
4. Geotechnical Engineering Report: Attached Geotechnical Engineering Report dated January 19, 2026 is included as reference only and not as an indicator of changes to the scope of work as noted in the project bidding documents.
5. 323132-3.3L: Pickets shall be inserted and tightly interlocked. Pull pickets tight and secure at one end only to provide no movement/slack between pickets.

PART 3-Prior Approvals (*Subject to compliance with the provisions of the Contract Documents, Specifications, the following manufacturers may be substituted. Contractor shall note that prior approval is by manufacturer's name only. Contractor shall ensure that the products used in preparation of his proposal and proposed to be used on this project, is equivalent to that specified in appearance, performance, size, installation type, and shape. Any material found to not be equivalent to that specified will be rejected. Prior approval of one manufacturer does not automatically prior approve any subsidiary company, parent company and/or sister company and their associated products.)*

1. Fuel Dispensing pumps	AtlasX 9800G series
2. 7 ½" Curtainwall Systems	YKK AP
3. 4 ½" Storefront Systems	YKK AP
4. (099100) Concrete non-traffic coating	Niser 015
5. Revetment mat system	Shoretec

MECHANICAL, PLUMBING, FIRE PROTECTION AND ELECTRICAL ITEMS

MANUFACTURER	PRODUCT
Berner, Powered-Aire	Air curtains
Greenheck, MacroAir	HVLS fans
Pottorff	Manual, Motorized Dampers
Pottorff	Fire Dampers
Pottorff	Access Panels
S&P	Roof Caps

ACME Manufacturing / S&P	Roof Hoods
Builders Best	Wall Caps
Duravent	Type "B" Flue Pipe
Duct Direct / Spiral Systems	Spiral Pipe
Mitchell Metals	Snaplock-Pipe
Dace	Taps
Thermaflex	Flexible Duct
ACME	Ceiling / Cabinet Exhaust Fans
ACME	Roof / Wall Mounted Exhaust Fans
Nederman / MagneGrip	Vehicle Exhaust System
CaptiveAire / Accurex	Kitchen Equipment (Commercial)
Brasch	Gas Detection Monitoring System
Edwards	Fire Alarm System
Metalux	Lighting
Portfolio	Lighting
Startek	Lighting
Trace-lite	Lighting
McGraw-Edison	Lighting
Utility Metals	Lighting Pole
Lumenpulse	Lighting
Sure-Lites	Lighting
Steinel	Lighting Controls
Intelligent LC	Lighting Controls

END OF ADDENDUM NO. 5

Geotechnical Engineering Report

Lake Charles Public Works New Facility Phase 2
Broad Street, west of Senator J. Bennett Johnston Ave.
Lake Charles, Louisiana

for

Brossett Architect, LLC
414 Pujo Street
Lake Charles, LA 70601

prepared by

Daniel J. Holder, P.E., Inc.
Consulting Geotechnical Engineer
2767 Scarborough Drive
Lake Charles, LA 70615

DJH File 25-041
19 January 2026

Daniel J. Holder, P.E., Inc.
Consulting Geotechnical Engineer

2767 Scarborough Drive
Lake Charles, LA 70615
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337-274-4125

19 January 2026

Brossett Architect, LLC
414 Pujo Street
Lake Charles, LA 70601

Attn: Mr. David Brossett, A.I.A.

RE: Geotechnical Engineering Report
Lake Charles Public Works New Facility Phase 2
Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
DJH File 25-041

Dear Mr. Brossett:

We have completed the Geotechnical Engineering Report for the referenced project, and are submitting the same herewith. This work was performed in general accordance with our written scope of work dated 22 October 2025, and authorized in an e-mail from your office dated 14 November 2025. This report confirms the preliminary recommendations provided in our e-mail dated 09 December 2025.

Please advise if you have any questions regarding this information, or if I may be of any additional assistance. It has been a pleasure working with you on this project.

Sincerely,

Daniel J. Holder, P.E.
Louisiana P.E. Reg. No. 26532

STATE OF LOUISIANA
DANIEL J. HOLDER
NO. 26532
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

TABLE OF CONTENTS

PROJECT INFORMATION

RESULTS OF INVESTIGATION

GEOTECHNICAL RECOMMENDATIONS

OTHER GEOTECHNICAL CONSIDERATIONS

APPENDIX

Geotechnical Engineering Report

Lake Charles Public Works New Facility Phase 2
Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana

DJH File 25-041; 19 January 2026

PROJECT INFORMATION

1. Description of Project. According to the information provided for our use, we understand that this project will consist of several new pre-engineered metal buildings (e.g., an 18,000 s.f. Crew Building, a 3,600 s.f. Storage Building, a 38,000 s.f. Vehicle Maintenance Building, Covered Parking, and other Miscellaneous Structures, etc.) for the Lake Charles Public Works Department, along with associated site pavements. Building loads were not specified, but are expected to be in the range of 2 to 4 kips per foot for walls and 25 to 50 kips for columns. Site pavements are expected to consist of asphalt or Portland cement concrete, with vehicle loadings limited to light passenger car and truck traffic, and heavy trucks. Site grades in the building area are expected to be about 3 feet or so to bring the site to the desired subgrade elevation. About 850 feet of existing drainage lateral (up to 9 feet deep) will be relocated as part of the project.

The new facility will be located on a 40+ acre parcel bounded by Broad Street, Senator J. Bennett Johnston Avenue, and Avenue J to the north, east, and south, respectively, in Lake Charles, Louisiana. Refer to the Site Vicinity Map (Figure 1), the Aerial Photograph / Boring Location Plan (Figure 2), and the Site Plan / Boring Location Plan (Figure 3) in the Appendix.

RESULTS OF INVESTIGATION

2. General. This investigation included the following work activities.

- a review of available geologic information;
- a site reconnaissance by the project engineer;
- twenty-six (26) soil borings; including eleven (11) to the 10 to 25 foot depth in the building areas, four (4) to the 10 foot depth for the new drainage lateral, and eleven (11) to the 4 foot depth in the pavement areas;
- laboratory testing of selected soil samples;
- engineering analyses and evaluations; and,
- the preparation of this report by the Geotechnical Engineer.

The locations of the soil boring are shown on Figures 2 and 3, and the Soil Boring Logs are included in the Appendix. The results of the field and laboratory testing programs are shown on the Soil Boring Log, and on other figures, where applicable. Finally, a Description of the Field and Laboratory Testing Procedures is also included in the Appendix.

3. Site Conditions. The site conditions described in this section are based on our field observations, and a review of available topographic and geologic data and historical aerial photographs of the site, as discussed below.

3.1 Field Observations. At the time of our investigation, the site consisted of an open, vacant field of short (i.e., 1 to 2 foot high) grass. The Administration Building for Phase I of the project was under construction on the north side of the project site. Warehouses and multi-family apartment buildings on Canvasback Street border the site to the west, and a small, open drainage ditch and a small, fenced pond to the south. Beyond that, a detention pond and parking lot are located to the south and southeast/east, respectively. A drainage canal (which will be relocated as part of this project) cuts through the southeast corner of the site. Drainage appeared to be poor to very poor.

3.2 Topography. It is estimated that the overall Phase 2 project area is bounded by latitudes N 30° 13.583' and N 30° 13.475'; and longitudes of W 93° 09.527' and W 93° 09.379', respectively. The appropriate U.S.G.S. Topographic Map (i.e., Figure 1) indicates that the overall project area is at an elevation of about EL +10 or so. A topographic survey indicates that the site is generally at an elevation of about EL +8 to EL +7, sloping gently downwards to the drainage lateral and detention pond to the east and south, respectively.

3.3 Geology. According to the Geologic Map of Louisiana (Pope, et al, 1984), the site is underlain by the Prairie Formation of Pleistocene Age. The Pleistocene Age ended some 11,700 years ago, corresponding to the end of the last glacial period. The Prairie Formation soils are described as "*Light gray to light brown clay, sandy clay, silt, sand, and some gravel.*"

3.5 Historical Aerial Photographs. According to historic aerial photographs available on the Calcasieu Parish Police Jury GIS Mapping Application (e.g., Figure 2), the immediate project site appears to have remained relatively unchanged since about the 2016 to 2014 photographs, in which a small pond (or watering hole) is apparent between Boring Nos. B-3, B-4 and B-21. In the 2012 photograph, some scattered trees exist across the north half or so of the site, and the small pond is not evident. No further changes of any significance are evident until the 2004 photograph, in which a lot of earthwork activity appears to have taken place on the northwest, west and east sides of the drainage ditch. In the 2000 photograph, it is apparent that this earthwork activity corresponds with the clearing of a wooded area. In the 1983 photograph, the entire parcel (i.e., Phase 1 and 2, etc.) appear to be wooded. In the 1974-75 photograph, the entire parcel appears to be open field, with numerous small "pimple mounds" evident across the site (pimple mounds are low, rounded hills found in the coastal prairies of southwestern Louisiana and eastern Texas, and are a feature of the prairie grasslands ecosystem). No further changes of any significance are evident until the 1940 photograph, in which the drainage lateral does not exist. (The 1953 photograph is largely "whited out.")

Please note that this discussion of site conditions is necessarily general in nature, and that a comprehensive description of current or previously existing site conditions is beyond the scope of this investigation. Reference is made to Figures 1, 2, and 3 in the Appendix, and the other sources noted herein.

4. Soil and Ground Water Conditions. The soils encountered in the soil boring made for this project are summarized in the following table.

Generalized Soil Stratification[1]

Depth[2] of Strata (ft)		Description
Top	**Bottom**	
0	2 to 4	Firm to stiff dark brown or gray to dark brownish gray very SILTY CLAY (CL), w/ roots – poor
2 to 4	6 to 10	Firm to stiff light gray & tan SILTY to SANDY CLAY (CL), w/ tan oxides & gray silt streaks
6 to 10	10 to 12½	Stiff to firm reddish brown & light gray SILTY to SANDY CLAY (CL)
10 to 12½	17	Stiff reddish brown CLAY (CH), w/ black oxides & light gray & tan silt lenses / pockets / streaks
17	25	Stiff brown w/ light gray CLAY (CH), w/ black & brown oxides, & light gray silt lenses / pockets

[1] Soil Stratification Varied. Refer to Boring Logs in Appendix.
[2] Depths Measured From Existing Ground Surface.

The borings were initially advanced using dry auger methods to determine the presence of and the hydrostatic conditions of ground water in the boreholes. Ground water was first encountered at about the 8 to 15 foot depth, and was observed to rise to about the 10½ to 11½ foot depth after a brief (about 15 minute) observation period. The depth to ground water can fluctuate with seasonal variations in rainfall and evaporation, etc., but is typically first encountered in this area from about the 8 to 12 foot depth, and will generally rise to about the 4 to 6 foot depth after a period of time. Much shallower ground water levels (i.e., “perched water”) can often be observed after periods of precipitation. The actual ground water depth should be determined more accurately at the time of construction.

The information contained in this section has been generalized from the data obtained from the soil borings made for this investigation, and is meant to provide a general overview of the soil and ground water conditions. For more specific information, refer to the Boring Logs in the Appendix.

GEOTECHNICAL RECOMMENDATIONS

5. General Considerations. Geotechnical aspects of this project include site preparation and earthwork, and foundations for the support of the new building addition. These items are discussed in general in this section, and in more detail in the following sections of this report.

5.1 General. Surface drainage appeared to be relatively poor to very poor at this site. Establishing and maintaining good drainage is critical for earthwork and foundation construction; otherwise, significant construction difficulties and/or additional measures (e.g., additional undercutting, subgrade stabilization, etc.) can be expected to be required. Performing earthwork operations during wet weather conditions and/or after long, wet periods should be avoided. Dewatering is not expected to be necessary for shallow excavations (i.e., less than about 2 to 4 feet) at this site (under dry conditions). If minor dewatering is required (e.g., after periods of inclement weather, etc.), sump and pump methods may be suitable if large enough pumps are utilized and the contractor is diligent. Otherwise, or for deeper excavations, other measures may be required.

5.2 Site Preparation and Earthwork. In general, the borings in the building and pavement areas encountered about 2 to 4 feet of dark (very) silty clay, with plasticity indices (PI's) of about 11 or higher. This material was generally in a dry condition, but can become very weak when wet and/or physically disturbed. Underlying this material, firm to stiff silty to sandy clays and clays were encountered to the limit of the exploration at about the 25 foot depth; in some cases, these clays are somewhat desiccated (i.e., dry), and are likely to have minor to moderate expansive properties (i.e., they have the potential to shrink and swell, particularly the latter, with changes in moisture content).

As noted in Section 1, site grades are expected to be raised about 3 feet or so to bring the site to the desired subgrade elevation. Ordinarily, we recommend that all silty soils (i.e., the upper 4 feet or so at this site) be completely removed and replaced with select fill during the site preparation activities. In this case, however, it may be considered sufficient to remove only the top 1 to 2 feet or so of this material (or deeper, if significant roots or organic matter are present), so that a new building pad of compacted select fill at least 4 feet thick can be placed for the support of the new buildings. This course of action is risky – if the silty soils become wet they will lose all apparent strength and will likely have to be completely removed (i.e., the full 4 foot or so depth) to expose the underlying clayey subgrade. As long as the underlying, remaining silty soils remain dry and can support the construction activities (i.e., the placement and compaction of new, select fill), though, this is a viable option. Subgrade treatment of the top 8 to 12 inches or so of the remaining silty soils will probably assist with this course of action; subgrade treatment is discussed in Section 6.3.

The recommendations contained in the preceding paragraph are based on an additional 3 feet of new, select fill being placed, resulting in a uniform building pad of new, select fill that is at least 4 feet (or more) in total thickness (i.e., at least 2 feet below the bottom of any shallow footings or grade beams, and at least 4 feet below the bottom of the floor slabs. The remaining recommendations in this report are based on this 4 foot thick uniform pad of new, select fill being properly placed and compacted in accordance with the recommendations provided in Section 6. Reference is made to the Recommended Procedure for New Building Pad in Figure 4 of the Appendix.

Once the initial undercutting has been performed (as described above), additional undercutting and/or subgrade stabilization / treatment may be required if the underlying subgrade is too wet or weak to support further construction activities (e.g., a proofroll, and fill placement and compaction). The need for additional undercutting will be highly dependent upon the moisture condition of the subgrade at the time of the construction activities.

Once a stable subgrade surface is achieved, compacted select fill may be placed as required to establish the desired subgrade elevations.

Recommendations for site preparation and earthwork activities are provided in Section 6.

5.3 Shallow Foundations. Once the building pad has been properly constructed, shallow foundations may be considered for the support of the new buildings or any lightly loaded auxiliary structures, as long as some tolerance for minor soil movements is acceptable. The use of reinforced slab foundations (i.e., a “ribbed slab”) is recommended to provide rigidity in the foundations to help resist differential soil movements. The foundations may be conventionally reinforced (with “rebar” and welded wire mesh) or post-tensioned with high strength steel tendons. This approach has been used successfully on many projects in this area, but will not guarantee that some movements won’t occur, particularly if extreme conditions of moisture change (e.g., extended droughts or periods of excessive rainfall, etc.) and/or severe loading conditions occur. In any event, the higher the quality of the earthwork construction, and the stiffer the foundation is constructed, the less likely are the chances for the movements described above. Recommendations for shallow foundations are provided in Section 7.

5.4 Drilled Shaft Foundations. If the possibility of these minor movements is not acceptable and/or heavier building loads are anticipated, then drilled, cast-in-place concrete shafts may be utilized to support the new building, along with a floor slab-on-grade supported on the new uniform building pad described above.

Excavations for drilled shafts at this site may require the use of drilling slurry to remain stable (i.e., not cave and/or have the bottom become “quick), particularly in the sandy clay soils from about the 4 to 10 (or 12½) foot depth below existing grades. Temporary

steel casing may be used to assist with the excavations, if desired, and may be effective without drilling slurry if a "seal" in the underlying clays can be made that allows the concrete for the shafts to be placed "in the dry." In any event, the contractor should be thoroughly experienced with the use of these drilling techniques and prepared to use same or significant construction difficulties and/or inadequate shaft sections could result. Recommendations for drilled shafts are provided in Section 7.

5.5 Site Pavements. Once the recommended site preparation activities have been completed as described in Sections 5.2 and 6, the subgrade should be suitable for the support of the site pavements. Recommendations for Site Preparation and Earthwork Activities are provided in Section 6; recommendations for Site Pavements are provided in Section 9.

6. Site Preparation and Earthwork Activities. Site Preparation and Earthwork Activities for this project should be performed in general accordance with the following recommendations.

6.1 General. As noted in Section 5, establishing and maintaining good drainage will be critical for earthwork and foundation construction at this site. Poor drainage and/or wet conditions at the time of construction can be expected to cause delays and/or cost overruns due to additional undercutting or stabilization measures. The contractor should be prepared to make every reasonable effort to provide dry working conditions (i.e., cut drainage ditches prior to earthwork activities; thoroughly "process," or dry the subgrade soils, if necessary; and take advantage of dry weather conditions; etc.). Standing water on the subgrade or in any excavations should be promptly drained or pumped off. Another desirable practice is to avoid "opening up" larger areas for earthwork than can be successfully completed before inclement weather conditions occur. A good discussion of the normal earthwork construction methods that should be attempted by the contractor before resorting to undercutting or stabilization measures is provided in 203.07.2 Surface Layer Preparation, of the LA DOTD *Louisiana Standard Specifications for Roads and Bridges (LSSRB),* 2026 Edition).

All site preparation and earthwork activities should be inspected and tested by qualified Construction Material Testing (CMT) personnel experienced in earthwork construction. This should include full-time inspection of the site preparation and testing of fill placement and compaction. Detailed and timely CMT reports should be submitted to this office for a review of compliance to the recommendations contained in this report. These services are considered to be essential for the reliable construction of this project.

6.2 Site Preparation. Any soft, wet, or weak soils that yield excessively under the inspection activities (e.g., a proofroll) or construction operations; or any other unsuitable materials uncovered during the stripping of the project area should be removed as necessary during the site preparation activities. An initial undercut of 1 to 2 feet or so of the top of the dark silty clay soils should be performed (more, if

necessary, to provide the minimum 4 foot thick building pad described in Section 5.3, provided good drainage is established prior to and maintained during the construction activities. Additional undercut is not expected to be necessary to achieve the Recommended Procedure for the New Building Pad described in Section 5.2.

Additional undercutting and/or subgrade stabilization / treatment may be required if the underlying subgrade is too wet or weak to support further construction activities (e.g., a proofroll, and fill placement and compaction). The need for additional undercutting and/or subgrade stabilization / treatment will be highly dependent upon the moisture condition of the subgrade at the time of the construction activities.

The base of the undercut should extend a horizontal distance equal to at least 2 times the depth of the undercut outside the exterior building lines (and, the building lines should be enlarged as necessary to include any exterior sidewalks, auxiliary structures, or access for building maintenance, etc.).

The exposed subgrade surface should be inspected to ensure that a suitable surface exists upon which to place select fill, if required. This inspection may include proofrolling the subgrade with a loaded, tandem-axle dump truck or other means as determined by the inspector. The subgrade material will be sensitive to moisture, and could pump and rut excessively if it is wet and/or if exposed to excessive (or even moderate) construction traffic. Any areas that are determined to be unsuitable for fill placement should be further undercut or treated to achieve a stable subgrade surface. The amount of subgrade exposed at any given time should be limited to that which can be properly processed and backfilled before inclement weather or construction traffic, etc., can deteriorate the approved subgrade.

6.3 Subgrade Treatment. Treatment of the subgrade may be considered, if necessary, to help provide a firm working table upon which to conduct fill operations. Treatment to stabilize the subgrade soils should be performed in accordance with *LSSRB*, Section 305, Subgrade Layer. Section 305 requires that soils to be treated contain no more than 79 percent sand or 69 percent silt and have a plasticity index no greater than 35. A better requirement is to limit silt content to less than 60 percent. Section 305 further calls for cement treatment to be performed in accordance with Section 303, In-Place Cement Stabilized and Treated Base Courses; and lime treatment to be performed in accordance with Section 304, Lime Treatment, Type C (in our opinion, Type D, or working table treatment is sufficient for subgrade treatment).

The appropriate treatment percentage should be determined in the lab using a procedure similar to TR 432, or by test strips constructed and evaluated in the field. The project documents should allow for an adjustment of the treatment percentage based on the results of the lab tests. A full depth, in-place mixer (i.e., a stabilizer machine) should be used to pulverize and mix the treated soil. The pulverization should be checked in accordance with TR 431 and meet the requirements of Table

304.3.040-1 (i.e., at least 95 percent of the mixed soil particles should pass the ¾ inch Sieve, and 50 percent should pass the No. 4 Sieve).

Cement treatment is considered suitable for silty soils with a plasticity index of about 7 or less; lime treatment is considered suitable for clayey soils with plasticity indices of about 7 or higher. Recommendations for both cement and lime treatment are provided for the project team's use. Additional consultation and/or testing regarding subgrade treatment should be considered as part of the project planning process.

The shallow, very silty clay surface soils at this site generally have plasticity indices (PI's) of about 11 or higher; these soils should be able to be treated with lime. If any siltier soils are encountered, cement treatment may be more effective.

6.3.1 Cement Treatment. Cement treatment is considered suitable for silty soils with a plasticity index of about 7 or less, or for soil-cement base course. As noted in the preceding paragraph, cement treatment should be performed in accordance with *LSSRB*, Section 303, In-Place Cement Stabilized and Treated Base Courses. Section 303 specifies that the treatment percentage be determined in accordance with *LA DOTD Testing Procedure Manual* TR 432; alternately, the treatment percentage may be determined by test strips constructed and evaluated in the field. A treatment percentage of 4 to 6% (by volume) may be assumed for design purposes for stabilizing the silty soils; the project documents should allow for an adjustment of the treatment percentage based on the actual treatment percentage utilized. A full depth, in-place mixer (i.e., a stabilizer machine) should be used to pulverize and mix the treated soil. The pulverization should be checked in accordance with TR 431 and meet the requirements of Table 304.3.040-1 (i.e., at least 95 percent of the mixed soil particles should pass the ¾ inch Sieve, and 50 percent should pass the No. 4 Sieve).

6.3.2 Lime Treatment. Lime treatment is considered suitable for clayey soils with plasticity indices of about 7 or higher. As previously noted in this section, lime treatment should be performed in accordance with *LSSRB*, Section 304, Type D, Working Table. The treatment percentage should be determined in the lab using a procedure similar to TR 432, or by test strips constructed and evaluated in the field; a treatment percentage of 4 to 6% (by volume) may be assumed for design purposes. The project documents should allow for an adjustment of the treatment percentage based on the results of the lab tests. A full depth, in-place mixer (i.e., a stabilizer machine) should be used to pulverize and mix the treated soil. The pulverization should be checked in accordance with TR 431 and meet the requirements of Table 304.3.040-1 (i.e., at least 95 percent of the mixed soil particles should pass the ¾ inch Sieve, and 50 percent should pass the No. 4 Sieve).

6.4 Select Fill. Once a firm subgrade exists upon which to conduct fill operations, select fill may be placed to achieve the desired subgrade elevation, as required. The finished fill surface should be sloped at a minimum of 10 Horizontal to 1 Vertical (10H:1V) away from the completed building foundations, but no steeper than 3H:1V, to facilitate drainage away from same.

Ideally, select fill should consist of a silty or sandy clay with a Liquid Limit of 30 to 42 and a Plasticity Index of 12 to 22. The soils described in the soil borings as silty or sandy clays, from about the 4 to 10 (or 12½) foot depth are generally close to meeting these specifications, particularly if minor processing (as described in the next paragraph) can be achieved.

Natural clayey soils that do not meet the requirements for select fill can be blended (e.g., with sand) and/or treated (e.g., with lime) for improvement. Lime treatment is also commonly used to expedite fill operations (e.g., to reduce excess moisture) and/or provide additional strength. Natural clayey soils used for blending and/or lime treatment should have a maximum liquid limit of 55 and plasticity index of 35 or less. Lime treatment should be performed in accordance with *LSSRB*, Section 304, Type C Treatment. The treatment percentage should be determined using procedure TR 416, or by test strips constructed and evaluated in the field. A suitable in-place mixer (i.e., a stabilizer machine) should be used for all blending and treatment operations. Pulverization should be checked in accordance with TR 431; at least 70 percent of the mixed soil particles should pass the No. 4 sieve. In any case, the proposed fill material and processing procedures should be approved by the engineer before fill placement takes place.

The fill should be placed in 6 to 8 inch thick loose lifts or less and compacted to 95% of the Standard Proctor Maximum Dry Density at ±2% of the Optimum Moisture Content (ASTM D 698). All lifts should be placed on relatively flat, uniform surfaces; fill that is placed against existing slopes should be “benched” into the existing soils in steps at least 2 feet wide and no more than 1 lift thick. Each lift should be tested to ensure compliance with these recommendations prior to placing subsequent lifts. A minimum testing frequency of one test per 2,500 square feet, but not less than 3 tests, per lift is recommended. All completed lifts of fill should be protected from adverse weather and construction traffic, etc., and any areas that are adversely affected should be reworked as necessary to re-establish the recommended compaction criteria before placing additional fill.

Finished slopes should be no steeper than 3 Horizontal to 1 Vertical (3H:1V). Fill placed against existing slopes should be “benched in” with a horizontal “step” of about 2 feet or so for each lift. Appropriate measures should be taken to protect the slopes from erosion, etc., during and after the construction activities.

6.5 Other. Good surface drainage should be established prior to and during the earthwork activities. Standing water on the subgrade should be promptly drained or

pumped off. The water from the drainage lateral should be diverted around the project area during the construction activities, as required.

According to OSHA regulations (CFR 1926.650 through 1926.652, and Appendix A to Subpart P), the contractor is responsible for developing and maintaining the appropriate safety systems for excavations on the project. The soils should be classified as Type C for this purpose. Recommendations for temporary slopes and/or shoring are beyond the scope of this investigation, but can be provided upon request once more specific design details are available.

All site preparation and earthwork activities should be inspected and tested by qualified Construction Material Testing (CMT) personnel experienced in earthwork construction. This should include full-time inspection of the site preparation and testing of fill placement and compaction. These services are essential for the reliable construction of the earthwork for this project.

7. Shallow Foundations. Following the completion of the Site Preparation and Earthwork activities described in Section 6, shallow foundations should be suitable for the support of the new buildings, provided some settlement and/or other minor soil movements can be tolerated, as described in Section 5. The use of reinforced slab foundations are recommended to help accommodate soil movements.

7.1 Reinforced Slab (or "Ribbed") Foundation. A reinforced slab foundation consists of a monolithic slab-on-grade with turned-down edges (perimeter grade beams); interior grade beams may be included if required by the building loads and/or stiffness considerations. The perimeter grade beams function as shallow foundations to carry the exterior wall loads and serve to cutoff moisture fluctuations in the soils supporting the slab from the surrounding environment. Interior grade beams serve to stiffen the slab system, allowing it to better accommodate movements in the supporting soils. Interior grade beams should be located beneath any load bearing interior walls and/or columns, in which case they should be designed as a shallow foundation. The spacing and dimensions of the interior grade beams should be determined by the structural engineer, if applicable; typically, a maximum spacing of 15 feet or less (each way) is utilized. Adequate reinforcement, as determined by the structural engineer, should be provided in the slab-on-grade foundation and grade beams. The entire slab system should be placed monolithically (in one pour), or dowelled to provide equivalent rigidity.

The slab foundation may be reinforced with conventional reinforcing steel (rebar and welded wire mesh) or post tensioned steel tendons (i.e., a post-tensioned slab). The grade beam and slab dimensions and reinforcement of either foundation system should be determined by a qualified design professional knowledgeable in the design of slabs-on-grade.

It is recommended that consideration be given to placing a suitable polyethylene vapor barrier and a granular leveling layer beneath the floor slab. The practice of and the details of using a vapor barrier and/or granular leveling layer beneath slabs are left to the discretion of the project designer.

7.2 Bearing Capacity and Soil Movements. Shallow foundations or load bearing grade beams should bear within the new, properly placed and compacted fill pad described in Sections 5 and 6. Shallow foundations or load bearing grade beams bearing designed in accordance with these recommendations may be designed for a maximum net allowable soil bearing capacity of 2,000 pounds per square foot (psf); capacities for column footings may be increased to 2,600 psf. The exterior grade beams should extend to a depth of at least 2 feet below finished exterior grades to help minimize moisture fluctuations in the foundation soils.

Net allowable soil capacities take into account the weight of the concrete and backfill below grade; thus, no adjustments to the design loads are necessary. The bearing capacities provided in this section include a factor of safety of at least 2 against shear failure of the bearing soils. A minimum footing or grade beam width of 18 inches (24 inches for column footings) is recommended to minimize the possibility of shear "punch" failure of the bearing soils.

Post-construction soil movements from normal foundation settlements are expected to be on the order of one inch or less. Differential movements should be about one-half to two-thirds of the total observed movement.

7.3 Rectangular Footings and Overturning. Capacities for rectangular footings may be increased according to the following formula:

$$q_r = q_w (1 + 0.3\ B/L)$$

where q_r = net allowable bearing pressure for rectangular footings (psf)
q_w = net allowable bearing pressure for continuous footings given in Section 7.2 (psf)
B = footing width
L = footing length (L>B)

Resistance to overturning loads should only consider the ***effective*** footing area, i.e., the portion of the footing centered beneath and effective in carrying the load.
The equivalent footing dimensions B' and L' of the effective footing area are defined as:

$$B' = B - 2e_B \quad \text{and} \quad L' = L - 2e_L$$

where e_B and e_L are the eccentricity in each direction. Eccentricity is defined as the moment (M) divided by the axial load (P), or

$$e_B = M_B / P_B \qquad \text{and} \qquad e_L = M_L / P_L$$

7.4 Lateral Loads. Lateral loads on the foundation will be resisted by sliding resistance between the base of the foundation and the underlying soil and by lateral earth pressure against the side of the foundation; the latter should be neglected for shallow foundations for this project. The allowable sliding resistance, $f_{s,\,all}$, may be taken as 0.2 times the applied bearing pressure, not to exceed a value of 250 psf. This is an allowable value; a safety factor of about 1½ to 2 against sliding resistance has already been included.

7.5 Uplift Loads. Foundations placed to depths of about 4 feet or less should be designed for uplift by taking into account the dead weight of the concrete and any overlying backfill. A typical unit weight of 120 pounds per cubic foot (pcf) should be utilized for the soil backfill if properly placed and compacted (refer to Section 6). Granular soils should not be used for backfill over foundations subject to uplift because the soils could become saturated if poor drainage exists. Buoyant unit weights (i.e., subtract the unit weight of water, 62.4 pcf) should be used for uplift calculations if proper drainage cannot be assured.

7.6 Construction Considerations. Shallow excavations (i.e., 4 feet deep or less) for foundations in newly placed fill or firm clayey soils at this site should remain stable (i.e., should not cave) for short periods of time, particularly in the absence of surface or ground water. Deeper excavations, excavations in sandy soils, or excavations that remain open for longer periods of time could be subject to significant ground or surface water intrusion.

The reinforcing steel and concrete for the foundations should be placed expeditiously following the completion of the excavation. The excavations should not be permitted to stand open any longer than necessary. Any water that may accumulate in the excavations should be pumped out immediately.

The soils at this site can (and are expected to) become significantly weaker if wetted or disturbed during the construction operations. Traffic in the excavations should be prohibited, and drainage should be provided to direct surface and ground water (if any) away from the excavations. If the concrete for the foundation will not be placed on the same day as the excavation, a “mud mat” of lean concrete should be placed to protect the bearing surface.

According to OSHA regulations (CFR 1926.650 through 1926.652, and Appendix A to Subpart P), the contractor is responsible for developing and maintaining the appropriate safety systems for excavations on the project. The soils should be classified as Type C for this purpose. Recommendations for temporary slopes and/or shoring are beyond the scope of this investigation, but can be provided upon request once more specific design details are available.

All excavation and concreting operations should be inspected and tested by qualified Construction Material Testing (CMT) personnel experienced in shallow foundation construction. This should include full-time inspection of the foundation excavations and testing of concrete placement. These services are essential for the reliable construction of shallow foundations for this project.

8. Drilled Shaft Foundations. As noted in Section 5, drilled, cast-in-place, concrete shafts may also be considered for the support of the planned buildings, either with grade supported floor slabs, or with structurally supported floor slabs. Straight-sided drilled shafts should be utilized for this project; belled (underreamed) shafts are not recommended. Excavations for drilled shafts at this site may require the use of drilling slurry to remain stable (i.e., not cave and/or have the bottom become "quick) in the sandy clay soils from about the 4 to 10 (to 12½) foot depth. Temporary steel casing may be used to assist with the excavations, if desired, and may be effective without drilling slurry if a "seal" in the underlying clays can be made that allows the concrete for the shafts to be placed "in the dry." In any case, the contractor should be prepared to use temporary steel casing and/or full depth drilling, and should be thoroughly experienced with the use of these drilling techniques and prepared to use same or significant construction difficulties and/or inadequate shaft sections could result. Refer to Section 8.5 for construction considerations.

8.1 Axial Capacity. The compressive axial capacity of drilled shafts is derived from skin friction at the soil-shaft interface and end bearing. Uplift resistance is provided by skin friction and the buoyant weight of the shaft.

Static capacity analyses have been made using field and laboratory strength values, along with local soil strength correlations and experience. The top 4 feet or so of new select fill has been neglected to account for surface effects and/or for clearance for pile caps and/or grade beams.

Numerous shaft diameters and embedment depths were considered in order to allow the project designer to select the most suitable shaft geometry for the specific loading conditions. These values are tabulated below. The allowable shaft capacities include factors of safety of 2 and 2.5 for skin friction and end bearing in compression, respectively, and 2.5 for skin friction in uplift. The buoyant unit weight of the shaft is also included in the provided uplift capacities, along with a factor of safety of 1.1. Capacities for intermediate diameters and/or depths may be interpolated from the table. Extrapolation beyond the specified diameters and depths is not recommended without further consultation.

All shaft capacities cited above are based on good quality construction procedures being utilized. Sufficient full depth reinforcement, as determined by the structural engineer, is required to develop the full tensile capacity of the shaft.

Allowable Compression/Uplift Loads for Single Drilled Shaft Foundations (kips)

Depth[(1)] (ft)	18 Inch Diameter	24 Inch Diameter
10’	20 / 12	29 / 17
15’	35 / 23	50 / 32
20’	50 / 35	71 / 48

[(1)] Depth Measured Below Top of Existing Ground Surface.

8.2 Settlement. Total settlements for drilled shaft foundations designed and constructed in accordance with these recommendations are estimated to be about one half inch or less. Differential settlements between adjacent shafts should be about one-half to three-quarters of the observed total settlement. These settlement estimates assume that no more than 4 feet of new, net fill will be added to the site.

8.3 Lateral Loads and Overturning Moments. It is not known if the tops of the drilled shafts will be subject to lateral loads and/or overturning moments, or if these forces will be resisted by the structure itself. The evaluation of lateral loading and overturning moments on drilled shafts can be complex and time consuming for a large number of shaft geometries, such as that provided in Section 8.1. Once the final loading conditions on the drilled shafts are known, this office should be contacted for further evaluation.

8.4 Shaft Spacing and Group Effects. Shafts should be spaced a minimum of 2.5 to 3 diameters center-to-center or 5% of the shaft length, whichever is greater. Large groups of shafts are not anticipated; however, if groups of 5 or more shafts are utilized, the Geotechnical Engineer should be permitted to evaluate group efficiencies.

8.5 Construction Considerations. Excavations for drilled shafts at this site may require the use of drilling slurry to remain stable (i.e., not cave and/or have the bottom become “quick) in the sandy clay soils from about the 4 to 10 (to 12½) foot depth. Temporary steel casing may be used to assist with the excavations, if desired, and may be effective without drilling slurry if a “seal” in the underlying clays can be made that allows the concrete for the shafts to be placed “in the dry.” In any case, the contractor should be prepared to use temporary steel casing and/or full depth drilling, and should be thoroughly experienced with the use of these drilling techniques and prepared to use same or significant construction difficulties and/or inadequate shaft sections could result.

Drilling slurry, if utilized, should be introduced into the excavation immediately upon drilling, and maintained at full depth during the drilling and concreting operations. The excavation and concrete placement should proceed as expeditiously as possible.

Once the excavation is started, it should be completed and concrete placed without delay. The slurry should be premixed and brought to the proper consistency, etc., before introducing into the excavation. The drilling tools (augers) should be designed such that the slurry can pass freely around or through the tool as the auger is withdrawn, and the auger should be operated slowly enough that suction does not develop beneath the auger and cause caving. The bottom of the excavation should be cleaned out with an air lift pump or similar device; a clean-out bucket is not recommended. Prior to cleanout, the slurry should be allowed to stand undisturbed for about 15 to 30 minutes to allow all suspended solids to settle out.

The reinforcing steel and concrete for the shaft should be placed immediately after the clean out operations are complete. The reinforcing cage should be fixed in place with centralizers or other means so that it is not disturbed by the concrete placement. If temporary steel casing is used achieve a dry excavation, the concrete may be dropped freely through the excavation, provided it is not permitted to strike any obstructions on the way down and does not land in standing water. A “head” of concrete of at least 5 feet above the bottom of the casing should be maintained while the temporary casing is withdrawn.

If a dry excavation cannot be achieved or drilling slurry is utilized, a full depth tremie should be utilized to place the concrete. The concrete should be placed by means of a full depth, water-tight tremie with a valve or other means of separating the slurry from the concrete (e.g., a pig). The concrete should be proportioned so that it has the proper strength as determined by the project designers, while maintaining a slump of 6 to 8 inches at the time of placement. This is critical to ensure that the slurry is completely displaced, and that no voids remain within the completed shaft. All drilling and concreting operations should be observed by qualified personnel experienced in drilled shaft inspection techniques.

According to OSHA regulations (CFR 1926.650 through 1926.652, and Appendix A to Subpart P), the contractor is responsible for developing and maintaining the appropriate safety systems for excavations on the project. The soils should be classified as Type C for this purpose. Recommendations for temporary slopes and/or shoring are beyond the scope of this investigation, but can be provided upon request once more specific design details are available.

All drilling and concreting operations should be inspected and tested by qualified Construction Material Testing (CMT) personnel experienced in drilled shaft construction. This should include full-time inspection of the shaft excavations and testing of concrete placement. These services are <u>essential</u> for the reliable construction of drilled shafts for this project.

<u>8.6 Floor Slabs and Grade Beams.</u> As long as the site preparation and earthwork activities are properly performed, as described in Section 6, the floor slabs may consist of ground supported slabs-on-grade placed monolithically with exterior and interior

grade beams, or as structural floor slabs. The grade beams should be designed to rest upon and span across the drilled shaft foundations. The exterior grade beams should extend to a minimum depth of 2 feet below exterior finished grade to help minimize moisture fluctuations of the soils supporting the floor slab. The interior grade beams may be placed at any convenient depth as required by the structural considerations for the floor slab system. The dimensions and spacing of the interior grade beams should be determined by the structural engineer. Typically, the interior beam spacing matches the drilled shaft layout; in any case, a maximum spacing of 15 feet or less (each way) is generally utilized. Sufficient reinforcement (for both positive and negative moments) and control joint spacing, as determined by the structural engineer, should be utilized.

It is recommended that consideration be given to placing a suitable polyethylene vapor barrier and a granular leveling layer beneath the floor slab. The practice of and the details of using a vapor barrier and/or granular leveling layer beneath the slab are left to the discretion of the designer of record.

9. Pavements. Following the completion of the Site Preparation and Earthwork activities described in Section 6, the prepared subgrade should be suitable for the support of the project pavements. The success of any pavement system depends primarily on the following factors: traffic volume and wheel (or axle) loadings, drainage, construction quality, and regular inspection and maintenance. These considerations are discussed in Section 9.1.

Local experience indicates that Portland cement concrete (PCC) pavements generally perform better than asphaltic concrete (AC) pavements in this area, and thus are recommended for use on this project. PCC pavements generally require a larger initial investment; however, future maintenance costs are generally less than that of AC pavements. Recommendations for PCC pavements are provided in Section 9.2.

The previous paragraph notwithstanding, properly designed and maintained asphalt pavements can also perform satisfactorily for projects of this type, and are discussed for the project designer's consideration. AC pavements generally involve less initial investment, although greater future maintenance costs are involved. Recommendations for AC pavements, although considered less desirable than PCC pavements, are provided in Section 9.3.

Lastly, it is expected that aggregate surfacing may also be considered for equipment and material storage areas for this project. Recommendations for aggregate surfacing are provided in Section 9.4.

9.1 General Considerations for Pavement Systems.

- *Traffic Loading Conditions*. Pavement sections should be designed to accommodate the anticipated traffic volume and loadings. Overloading pavement sections through excessive wheel loads and/or repetitions will lead to premature pavement failure.

It is anticipated that traffic loading conditions for this project will be limited to site access and parking for light passenger car and truck traffic, and occasional delivery trucks and/or garbage trucks. It is further expected that the larger vehicles will be separated from the parking areas of patron vehicles and limited to specific traffic lanes.

- *Drainage.* Establishing and maintaining good drainage is essential to the successful performance of pavements. Without good drainage conditions, premature pavement failure can be expected. The final subgrade surface should be contoured to channel surface and subsurface water away from the pavements. If site grades allow, the pavement sections should be elevated so that an aggregate base course can drain freely. Otherwise, a soil-cement base or other such base that will not trap water beneath the pavements should be utilized.

- *Construction Quality.* Quality construction practices and inspection services are essential for the successful installation and performance of pavements. Construction inspection services by Geotechnical Engineer's representative are considered essential for this phase of the project.

- *Inspection and Maintenance.* A regular inspection and maintenance program should be conducted to ensure that the pavement is maintained in good operating condition. The pavements should be inspected regularly to verify that adequate drainage is maintained and that all joints are properly sealed and free of vegetation or debris. When pavement distress is noted, the appropriate measures (e.g., patching, sealing, resurfacing, etc.) should be performed to keep the pavements in good operating condition.

9.2 Portland Cement Concrete (PCC) Pavements. The automobile parking pavement section should consist of 5 inches of concrete (minimum compressive strength of 3,000 psi), traffic lanes should consist of 6 inches of concrete, and pavements subject to heavy truck traffic should consist of at least 8 inches of concrete. The PCC pavement should be at least 9 inches thick in the dumpster loading zone, if applicable. All pavement sections should be underlain by suitable base course.

Base course should consist of at least 6 inches of crushed stone or 8 inches of soil-cement (LA DOTD Standard Specifications for Roads and Bridges, Section 302, Class II Base Course). Crushed stone should meet the gradation requirements of Table 1003.3.010-1. Locally available products known as 610 Road Base or No. 57 Stone, although not strictly meeting the gradation of Section 1003.3.010-1, should be suitable for use as crushed stone base course.

A suitable non-woven geotextile (e.g., US Fabrics US 160NW, or equal) should be provided between the crushed stone base course and the subgrade to help provide separation between (i.e., help prevent the mixing of) the base course and subgrade. A suitable composite geosynthetic combining a non-woven geotextile with a biaxial geogrid

(e.g., US Fabrics FabGrid® FG1200, or equal) will add strength as well as help provide separation.

If suitable drainage cannot be provided for a crushed stone base course, an 8 inch thick soil-cement base course should be utilized. A treatment percentage of 10% cement (by volume) may be used for planning purposes; however, the appropriate treatment percentage should be determined by additional laboratory testing prior to construction using LA DOTD Testing Procedure Manual TR 432, Methods B or C. Reference is made to Section 6.3.1 for further recommendations for cement treatment.

Appropriate reinforcement as determined by the design engineer should be used and adequate control joint spacing (15 feet or less is suggested) should be observed. Pavements should be isolated from building foundations by means of suitable expansion and/or control joints, if applicable.

All aspects of the pavement design and construction should conform to the American Concrete Institute (ACI) Standard 330R-08: Guide for Design and Construction of Concrete Parking Lots, the LA DOTD Standard Specifications for Roads and Bridges, Section 601 - Portland Cement Concrete, and other applicable engineering specifications.

9.3 Asphalt Concrete (AC) Pavements. As previously discussed, Portland cement concrete (PCC) pavements generally perform better than asphaltic concrete (AC) pavements in this area, and thus are recommended for this project. The previous statement notwithstanding, however, properly designed and maintained asphalt pavements can also perform satisfactorily for projects of this type. AC pavements generally involve less initial investment, although greater future maintenance costs are involved. Recommendations for AC pavements are provided in the following section.

AC pavements, if utilized, should consist of a minimum of 2 inches (3½ inches would be better) of high stability asphaltic concrete underlain by crushed stone or soil-cement base course. In the traffic lanes, at least 4½ inches of high stability asphaltic concrete underlain by base course should be utilized. Asphalt pavements should not be used in any dumpster loading zones.

Base course should consist of at least 8 inches of crushed stone or 8 inches of soil-cement (*LA DOTD Standard Specifications for Roads and Bridges, Section 302, Class II Base Course*). Reference is made to Section 9.2. Soil-cement bases have been known to propagate cracks through asphalt pavements, and should be avoided for this project if possible.

It is recommended that concrete curbs and gutters be utilized to protect the edges of the pavements and provide suitable drainage. Furthermore, accelerated deterioration should be expected in wheel paths and especially in turning radii or other areas subject to especially severe and/or magnified wheel loads. Heavy wheel loads during extreme heat can also lead to premature failure.

It is suggested that the project designers consider the "Stage Construction" concept if asphalt pavements are used for this project, which involves constructing the base course and placing an initial asphalt course to support heavier traffic during the initial construction activities, then placing an overlay following substantial completion of the construction activities. This overlay will serve to "dress up" any signs of pavement distress on the pavement surface following all the construction activities and will provide additional structural strength to the pavement section for the support of the design traffic loads. It is suggested that the Stage Construction Plan for this project consist of placing one (1) 2 inch thick lift of the asphalt pavement initially, then an additional overlay of 1½ inches of asphalt once the construction is substantially complete and no more heavy construction traffic is expected.

All aspects of the pavement design and construction should conform to the *AASHTO Guide for Design of Pavement Structures, 1993*, the *LA DOTD Standard Specifications for Roads and Bridges* (*LSSRB), Part V – Asphaltic Pavements,* and other applicable engineering specifications.

9.4 Aggregate Surfacing. The areas to be surfaced with crushed limestone aggregate should be prepared in accordance with Section 6, and the exposed surface graded to promote good drainage. A suitable non-woven geotextile (US Fabrics US 160NW, or equal) should be provided between the aggregate surface course and the subgrade to prevent the mixing of the aggregate and subgrade. A biaxial geogrid (e.g., Tensar® BX 1200, or equal) or a composite geosynthetic consisting of a non-woven geotextile bonded to a biaxial geogrid (e.g., Baselok® Fabgrid® FG1200) may also be considered to provide additional strength to the aggregate surface course.

At least 6 to 8 inches of crushed (i.e., angular), high durability, well graded, aggregate should then be placed on the filter fabric to establish the aggregate surface section for lightly loaded passenger vehicles (10 to 12 inches if heavier vehicle loads are expected). The aggregate should meet the gradation requirements of the Louisiana Standard Specifications for Roads and Bridges (LSSRB), Table 1003.3.010-1. Locally available products known as 610 Road Base or No. 57 Stone, although not strictly meeting Table 1003.3.010-1, should be suitable for use as aggregate surfacing.

The aggregate surface course should be compacted with a smooth drum roller until no deflection is observed. It should be anticipated that the placement and grading of additional aggregate will be required in any areas that deflect excessively.

The long term performance of the aggregate surface course will depend upon the quality of the initial construction, the degree to which good drainage exists, and the frequency and magnitude of the vehicular loads. In any case, regular placement and grading of additional aggregate should be anticipated to maintain the condition of the aggregate surface course.

9.5 General. Note that the pavement sections provided in this report were derived from the experience of this firm based on similar projects that have been observed to perform satisfactorily over the last 20 years. Rigorous pavement designs have not been performed because traffic data was not provided for that purpose. Minor deviations from the pavement sections provided in this section should not necessarily be detrimental to the performance of the pavements at this site, provided traffic is limited to light passenger traffic, a good subgrade is established and fill placement is of high quality, and good construction practices are utilized when constructing the pavements (especially observing minimum specified pavement thicknesses). We will be happy to provide additional analyses for the pavement sections if requested.

OTHER GEOTECHNICAL CONSIDERATIONS

10. Drainage and Landscaping. Proper long term drainage should be provided to direct surface water away from the completed foundations and pavements. Underdrains and/or positive site grading, should be utilized for this purpose as required. Landscaping near the building foundations or pavements should be avoided to minimize fluctuations in the moisture contents of the surrounding soils, or a suitable drainage barrier (e.g., geosynthetic liner) should be utilized. Trees should be located no closer to the building foundations and pavements than the drip line of the mature tree canopy.

11. Additional Consulting Services. The Geotechnical Engineer should be kept informed of and permitted to address all aspects of the soils-related aspects of the project. Often, concerns may arise that are not specifically addressed by the Geotechnical Engineering Report. A brief conference can often address any such concerns, and can identify any other issues not anticipated by the design team.

Upon completion of design, and prior to the start of construction, the Geotechnical Engineer should be provided with the opportunity to review the design drawings and specifications to assure compliance with the Geotechnical Engineering Report. Such review is considered to be an integral part of the recommendations of this report.

12. Construction Materials Testing (CMT) Services. Construction Materials Testing (CMT) services for this project are essential to assure that the soil conditions do not vary from that assumed in this report and to ensure that the recommendations in this report are followed. These services should be retained by the owner to assure that unbiased reporting is provided. Detailed and timely CMT reports should be submitted to this office for a review of compliance to the recommendations contained in this report. Otherwise, the suitability of these recommendations and/or the performance of the earthwork and foundations for this project cannot be assured.

13. Construction Means and Methods and Contractor Submittals. The Contractor's means and methods can have a substantial effect on the successful execution of the project activities. The Contractor is necessarily responsible for the means and methods employed

to accomplish the work scope. Nothing in this report should be construed as dictating the Contractor's means and methods, nor should the project documents dictate the means and methods used by the Contractor.

Certain aspects of the work (e.g., dewatering of excavations, scheduling of work activities, fill placement and compaction, drilled shaft and/or shallow foundation construction, etc.) will require expertise and/or skilled planning and execution on the part of the Contractor. It is advisable that the Contractor be required to submit acceptable work plans for such activities that clearly demonstrate that the Contractor can perform the work satisfactorily. However, it should be clearly understood by all parties that acceptance or acknowledgement of any such submittals does not imply responsibility of the Contractor's means and methods by the engineer(s) or the owner.

14. Limitations. This report is based upon the information provided by the owner's representative, as well as the soil and ground water conditions encountered during the field investigation. Variations may occur away from or between the borehole locations. If such variations become apparent, or if the nature of the project changes significantly, the Geotechnical Engineer should be consulted for additional recommendations.

The recommendations in this report pertain only to the soils-related aspects of the project. The structural design of the foundations and pavements is beyond the scope of these services. Likewise, this report does not address the environmental aspects of the project. We would be pleased to assist with these additional services if requested.

15. Compliance with Applicable Standards and Regulations. All geotechnical and related civil aspects of this project should be designed and constructed in compliance with the latest editions of any and all applicable building standards and regulations. These should include but not be limited to concrete and reinforcing steel standards by the American Concrete Institute (ACI), applicable sections of the International Building Code (IBC) and ASCE/SEI 24 (Flood Resistant Design and Construction), safety standards by the Occupational Safety and Health Administration (OSHA), and any other applicable local, state, or federal building standards, codes or permit requirements. Nothing contained in this report is intended to conflict with or should be construed to supersede any such applicable standards and regulations.
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APPENDIX

U.S.G.S. Topographic Map / Site Vicinity Map (Figure 1)

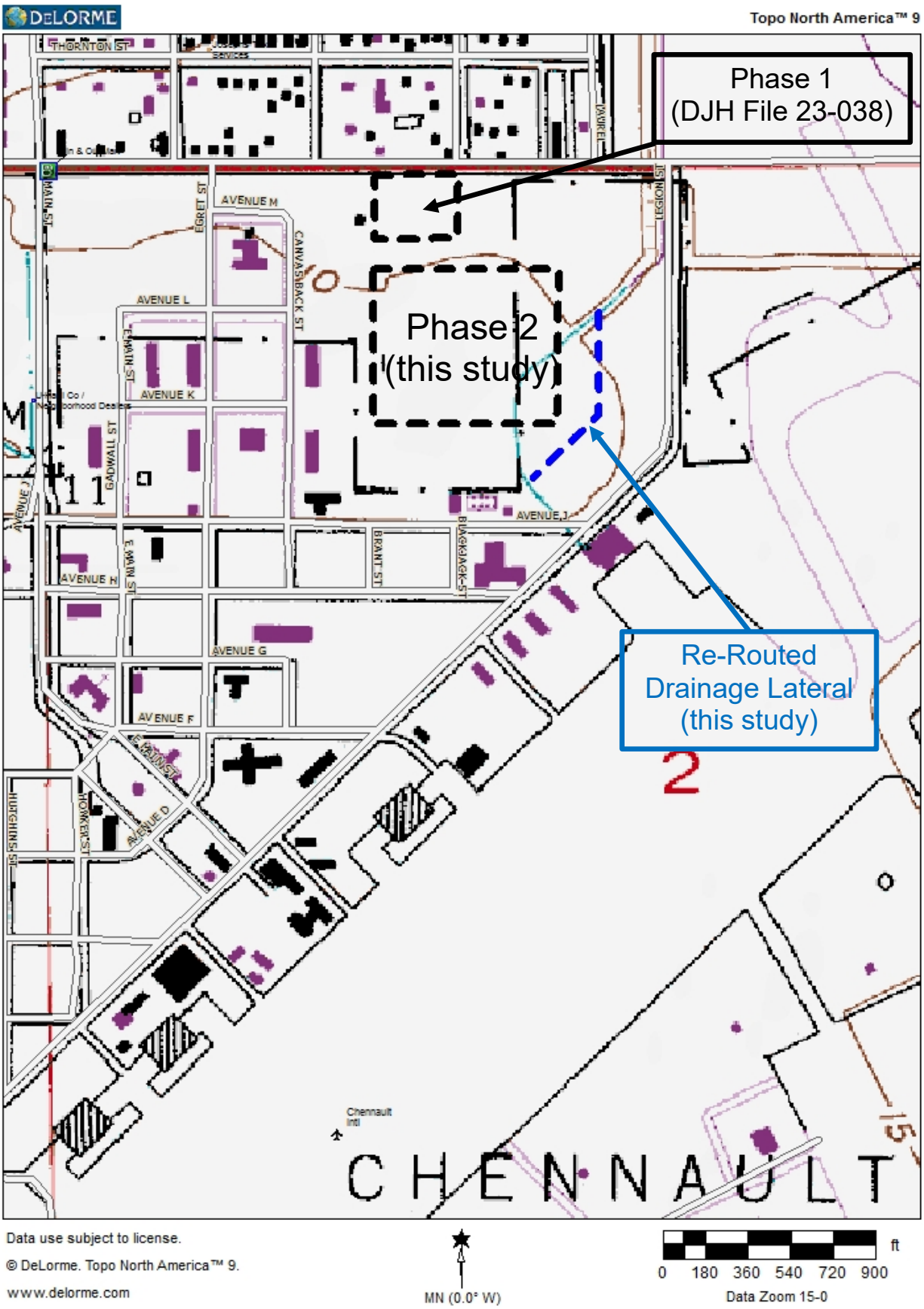
Aerial Photograph / Boring Location Plan (Figure 2)

Site Plan / Boring Location Plan (Figure 3)

Recommended Procedure for New Building Pad (Figure 4)

Soil Boring Logs (26)

Description of Field and Laboratory Testing Procedures



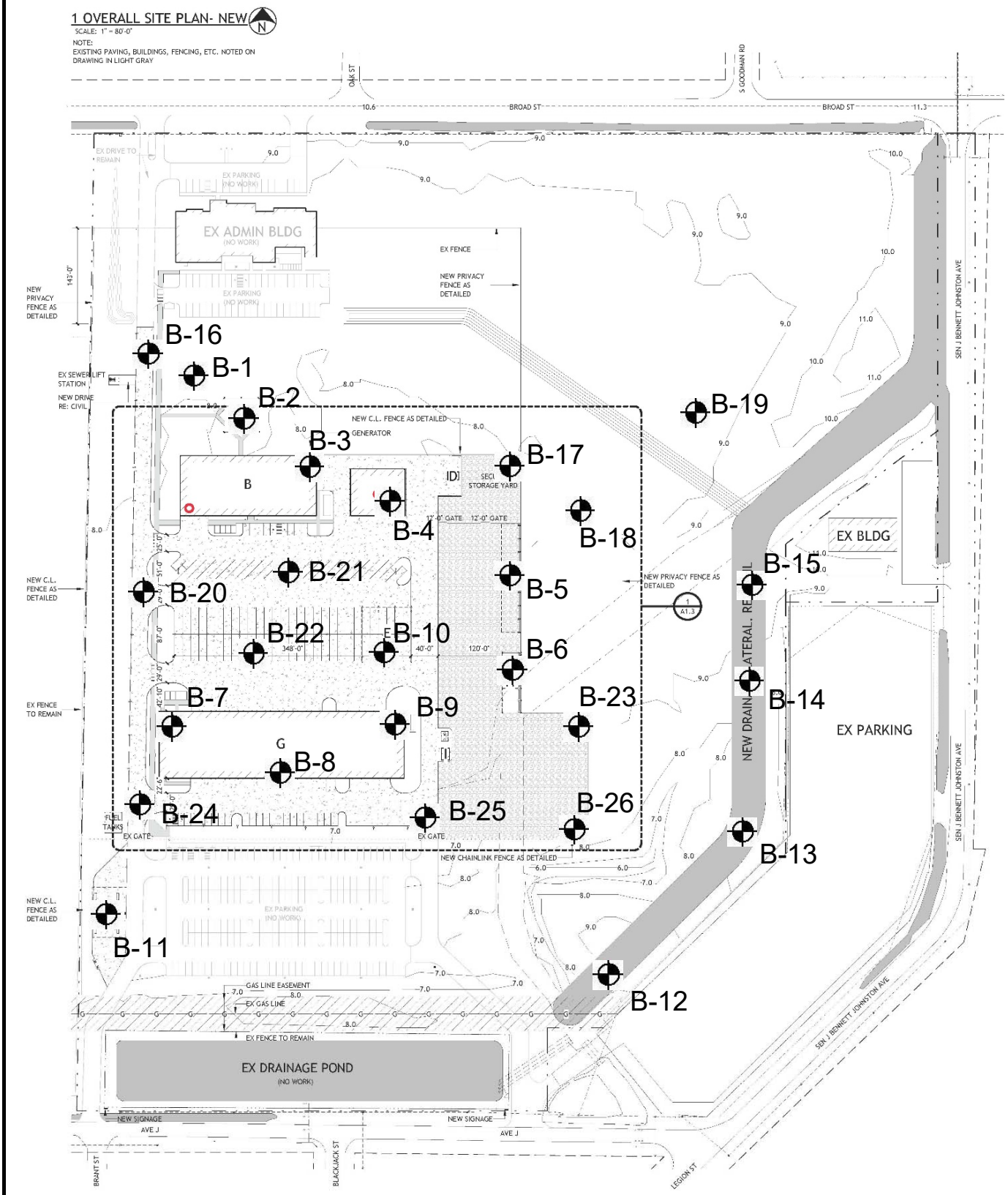
Daniel J. Holder, P.E., Inc. Consulting Geotechnical Engineer 2767 Scarborough Drive Lake Charles, LA 70615 (337) 274-4125 dan@danholderpe.com	Lake Charles Public Works Phase 2 Lake Charles, Louisiana for Brossett Architect, LLC Lake Charles, Louisiana	Project Engineer: DJH | DJH File No. 25-041 Drawn By: dan | Date: 18 Jan 2026 Checked By: | Figure No. 1 Site Vicinity Map / U.S.G.S. Topographic Map

Source: U.S.G.S. 7.5 Minute Topographic Map, 1999 (3-D TopoQuads, DeLorme)

Map

Daniel J. Holder, P.E., Inc. Consulting Geotechnical Engineer 2767 Scarborough Drive Lake Charles, LA 70615 (337) 274-4125 dan@danholderpe.com	Lake Charles Public Works Phase 2 Lake Charles, Louisiana for Brossett Architect, LLC Lake Charles, Louisiana	Project Engineer: DJH Drawn By: dan Checked By:	DJH File No. 25-041 Date: 18 Jan 2026 Figure No. 2
		Aerial Photograph / Boring Location Plan	

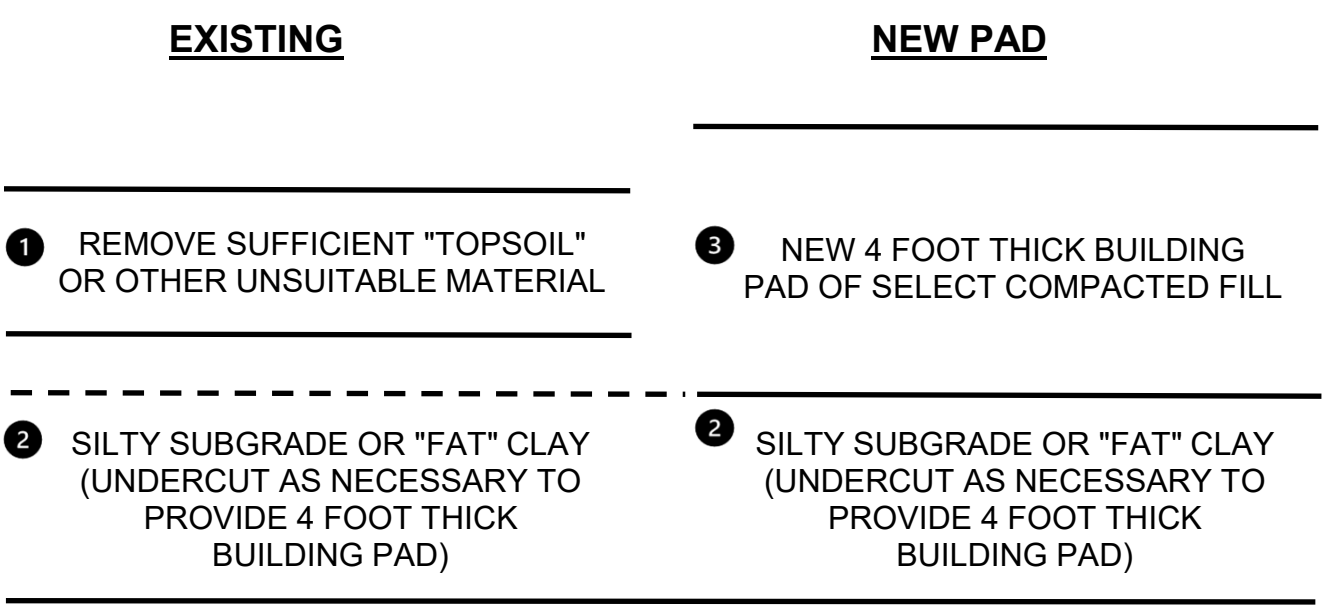
Source: Calcasieu Parish Police Jury GIS Mapping Application - 2022



Daniel J. Holder, P.E., Inc. Consulting Geotechnical Engineer 2767 Scarborough Drive Lake Charles, LA 70615 (337) 274-4125 dan@danholderpe.com	Lake Charles Public Works Phase 2 Lake Charles, Louisiana for Brossett Architect, LLC Lake Charles, Louisiana	Project Engineer: DJH | DJH File No. 25-041 Drawn By: dan | Date: 18 Jan 2026 Checked By: | Figure No. 3 Site Plan / Boring Location Plan

Source: Site Plan Provided by Brossett Architect, LLC

RECOMMENDED PROCEDURE FOR NEW BUILDING PAD



1. REMOVE SUFFICIENT "TOPSOIL" OR OTHER UNSUITABLE MATERIAL TO EXPOSE FIRM SILTY OR CLAYEY SUBGRADE.

2. REMOVE (UNDERCUT) ENOUGH SILTY SUBGRADE OR "FAT" CLAY SUBGRADE TO PROVIDE AT LEAST 4 FOOT BELOW BOTTOM OF DESIGN FLOOR ELEVATION, AND 2 FOOT BELOW BOTTOM OF ANF FOOTINGS OF GRADE BEAMS.

3. PLACE AND COMPACT NEW, APPROVED SELECT FILL PAD (AT LEAST 4 FOOT THICK) IN 6 TO 8 INCH LOOSE "LIFTS". TEST EACH LIFT IN AT LEAST 3 LOCATIONS FOR COMPACTION AND MATERIAL VERIFICATION.

NOTE: Refer to Sections 5 and 6 of Geotechnical Engineering Report

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Lake Charles Public Works Phase 2
Lake Charles, Louisiana
for
Brossett Architect, LLC
Lake Charles, Louisiana

Project Engineer:	DJH	DJH File No.	25-041
Drawn By:	dan	Date:	18 Jan 2026
Checked By:	DJH	Figure No.	4

Recommended Procedure for New Building Pad

SOIL BORING LOG

Boring No. B-1

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/24/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

From Handheld GPS (approximate):
N 30° 13.588'
W 93° 09.506'

Depth (ft)	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
1	ST	4 tsf										Firm dark gray very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
2												
3	ST	4 tsf		1.1	104	11	32	19	13	ε_f = 2.9%		Stiff dark brown w/ tan SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
4												
5	ST	1 tsf										Firm light gray & tan SILTY CLAY (CL), w/ large dark brown silt pockets - fair
6												
7	ST	1½ tsf		0.5	93	33				ε_f = 10%		Firm light gray & tan SILTY CLAY (CL), w/ tan oxides & gray silt pockets - fair
8												
9	ST	3 tsf										Stiff light gray & reddish brown SILTY to SANDY CLAY (CL), w/ brown oxides
10			▽									
11	ST	2¼ tsf	▽	0.9	100	25	42	23	19	ε_f = 2.1%		Firm to stiff reddish brown SILTY CLAY (CL), w/ tan & gray silt lenses & black oxides
12												
13												
14	ST	3 tsf										Stiff reddish brown CLAY (CH), w/ light gray & tan silt streaks / lenses
15												
16												
17												
18												
19	ST	2 tsf		1.3	89	32	69	30	39	ε_f = 1.4%		Stiff brown w/ light gray CLAY (CH), light gray silt streaks / lenses
20												
21												
22												
23												Stiff brown to tan CLAY (CH), w/ tan oxides & light gray silt streaks
24	ST	1 tsf		1.8	96	28				ε_f = 3.6%		
25												Boring Completed at 25' Depth

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: 10' to 25'

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

▽ First Encountered: 12'
▽ After 15 Minutes: 10½'
Boring Caved to 10½' After 15 Minutes

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-2

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/24/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	4½ tsf										Firm dark gray very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
2												
3	ST	1½ tsf		1.0	106	21				ε_f = 10%		Firm to stiff light gray & tan SILTY CLAY (CL), w/ tan oxides & gray silt streaks
4												
5	ST	1 tsf		1.2	110	20	43	17	26	ε_f = 10%		Stiff light gray & tan SILTY CLAY (CL), w/ tan & black oxides & gray silt pockets
6												
7	ST	2 tsf										Stiff light gray w/ tan SILTY to SANDY CLAY (CL), w/ tan oxides
8												
9	ST	2 tsf		0.9	104	22				ε_f = 5.7%		Firm reddish brown w/ light gray SILTY CLAY (CL), w/ light gray silt pockets
10												
11												Boring Completed at 10' Depth
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.580'
W 93° 09.491'

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-3

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/24/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
												From Handheld GPS (approximate): N 30° 13.567' W 93° 09.471'
1	ST	4½ tsf										Firm dark gray to black very SILTY CLAY (CL), w/ gray silt pockets & roots - poor
2												
3	ST	1 tsf		0.5	101	26				ε_f = 9.3%		Firm light gray & tan SILTY CLAY (CL), w/ tan oxides & large gray silt pockets
4												
5	ST	1 tsf										Firm light gray w/ tan SILTY CLAY (CL), w/ tan oxides, gray silt pockets & roots
6												
7	ST	½ tsf		0.4	96	28	40	18	22	ε_f = 10%		Soft tan & light gray SILTY CLAY (CL), w/ tan oxides & a large crawfish hole
8			▽									
9	ST	½ tsf										Firm reddish brown SANDY CLAY (CL), w/ large crawfish hole w/ roots - fair
10												
11	ST	2½ tsf		1.4	95	28				ε_f = 2.9%		Stiff reddish brown CLAY (CH), w/ light gray & tan silt lenses / streaks
12												
13												
14	ST	2½ tsf										Stiff reddish brown w/ light gray CLAY (CH), w/ light gray silt streaks / lenses
15												
16												Boring Completed at 15' Depth
17												
18												
19												
20												
21												
22												
23												
24												
25												

Boring Data

Boring Advancement:
Dry Auger: 0' to 8'
Rotary Wash: 8' to 15'

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

▽ First Encountered: 8'
▽ After 15 Minutes: dry
Boring Caved to 6½' After 15 Minutes

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-4

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/24/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
												From Handheld GPS (approximate): N 30° 13.558' W 93° 09.447'
1	ST	4½ tsf										Firm dark gray very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
2												
3	ST	1½ tsf										Firm tan to reddish brown w/ light gray CLAY (CH), w/ red oxides & gray silt streaks
4												
5	ST	1 tsf		1.2	101	19				ε_f = 10%		Stiff tan & light gray SILTY CLAY (CL), w/ tan oxides & gray silt streaks
6												
7	ST	2½ tsf										Stiff light gray w/ brown SILTY CLAY (CL), w/ tan, brown & black oxides & gray silt streaks
8												
9	ST	1½ tsf					24	18	6	ε_f = 10%		
10			▽									Firm light gray w/ tan & reddish brown SANDY CLAY (CL), w/ tan sand pockets
11	ST	3 tsf										Stiff reddish brown CLAY (CH), w/ tan & light gray silt seams & black oxides
12												
13												
14	ST	1½ tsf		1.6	96	27	60	27	33	ε_f = 3.6%		Stiff reddish brown CLAY (CH), w/ tan & light gray silt seams
15												
16												
17												
18												
19	ST	2 tsf		1.8	90	32				ε_f = 2.9%		Stiff brown to tan w/ light gray CLAY (CH), w/ brown oxides & light gray silt lenses / pockets
20												
21												
22												
23												Stiff tan w/ light gray CLAY (CH), w/ tan oxides & light gray & tan silt lenses
24	ST	2½ tsf		1.8	93	28	52	23	29	ε_f = 3.6%		
25												Boring Completed at 25' Depth

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: 10' to 25'

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

▽ First Encountered: 10'
▽ After 15 Minutes: 10½'
Boring Caved to 10½' After 15 Minutes

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-5

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/24/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

From Handheld GPS (approximate):
N 30° 13.546'
W 93° 09.415'

Depth (ft)	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
1	ST	3 tsf										FILL - Stiff brown SILTY CLAY (CL)
2												Firm dark gray very SILTY CLAY (CL),
3	ST	1½ tsf										w/ light gray silt pockets & roots - poor
4												Stiff dark gray & brown SILTY CLAY (CL),
5	ST	2 tsf		1.4	112	19	41	16	25	ε_f = 9.3%		w/ light gray silt pockets & roots - poor
6												Stiff light gray w/ tan SILTY CLAY (CL),
7	ST	1½ tsf										w/ tan oxides & light gray silt streaks
8												Stiff light gray w/ tan SANDY CLAY (CL),
9	ST	2¼ tsf		0.4	94	28				ε_f = 7.9%		w/ tan oxides & light gray silt streaks
10			▽									Soft gray w/ tan SANDY CLAY (CL), w/
11	ST	4½ tsf	▽	0.8	96	27	54	27	27	ε_f = 2.1%		tan oxides & gray silt streaks - moist
12												Firm to stiff reddish brown w/ light gray
13												CLAY (CH), w/ black oxides & gray
14	ST	2½ tsf		2.0	95	29				ε_f = 3.6%		silt pockets / lenses
15												Stiff reddish brown CLAY (CH), w/
16												light gray silt lenses / streaks
17												
18												Boring Completed at 15' Depth
19												
20												
21												
22												
23												
24												
25												

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: 10' to 15'

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

▽ First Encountered: 10'
▽ After 15 Minutes: 10½'
Boring Caved to 11' After 15 Minutes

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-6

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

From Handheld GPS (approximate):
N 30° 13.518'
W 93° 09.416'

Depth (ft)	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
1	ST	1 tsf										Stiff brown very SILTY CLAY (CL), w/ fine roots - poor
2												
3	ST	1½ tsf		3.5	114	16	33	18	15	ε_f = 7.1%		Very stiff dark brown SILTY CLAY (CL), w/ light gray silt pockets - poor
4												
5	ST	1 tsf										Firm tan w/ gray SILTY CLAY (CL), w/ tan oxides & large (dark) gray silt pockets
6												
7	ST	2¼ tsf		0.8	100	26				ε_f = 7.1%		Firm tan & gray SILTY CLAY (CL), w/ tan oxides & gray silt streaks - moist
8												
9	ST	1 tsf										Firm tan & gray SILTY CLAY (CL), w/ tan & black oxides & gray silt streaks - moist
10												
11												Boring Completed at 10' Depth
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-7

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

From Handheld GPS (approximate):
N 30° 13.504'
W 93° 09.510'

Depth (ft)	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
1	ST	4½ tsf										Firm dark gray very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
2												
3	ST	4½ tsf										- ditto, grading to gray - poor
4												
5	ST	1½ tsf		1.0	103	21	44	17	27	ε_f = 10%		Stiff light gray & tan SILTY CLAY (CL), w/ gray silt pockets & a large crawfish hole - fair
6												
7	ST	2 tsf										
8												Firm light gray & tan SILTY CLAY (CL), w/ tan oxides & gray silt streaks
9	ST	2½ tsf		0.9	104	22				ε_f = 5.7%		- ditto
10			▽									
11	ST	3¼ tsf										Stiff reddish brown SILTY CLAY (CL), w/ clay layers, black oxides & light gray & tan silt lenses
12												
13												
14	ST	2¾ tsf		1.9	98	28	56	26	30	ε_f = 5.0%		Stiff reddish brown CLAY (CH), w/ black oxides & light gray silt lenses
15												
16												
17												
18												
19	ST	2¾ tsf		1.3	89	32				ε_f = 2.1%		Stiff brown w/ light gray CLAY (CH), w/ brown oxides & light gray silt lenses
20												
21												
22												
23												Stiff brown to tan w/ light gray CLAY (CH), w/ brown oxides & gray silt lenses
24	ST	2¾ tsf		1.6	94	29	61	27	34	ε_f = 3.6%		
25												Boring Completed at 25' Depth

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: 10' to 25'

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

▽ First Encountered: 10'
▽ After 15 Minutes: 10½'
Boring Caved to 11 After 15 Minutes

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-8

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
1	ST	3 tsf										Firm dark brown very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
2												
3	ST	2½ tsf										- ditto, poor
4												
5	ST	1 tsf										Firm tan & light gray SILTY CLAY (CL), w/ tan oxides & gray silt streaks
6												
7	ST	1 tsf										Firm tan & light gray SANDY CLAY (CL), w/ tan oxides, gray silt pockets & roots
8												
9	ST	3¼ tsf		0.9	99	26	32	21	11	ε_f = 2.9%		Firm reddish brown SILTY CLAY (CL), w/ tan & light gray silt lenses
10												
11	ST	3 tsf	▽									Stiff reddish brown CLAY (CH), w/ black oxides & gray & tan silt lenses
12												
13												
14	ST	2½ tsf		1.3	93	30				ε_f = 2.1%		Stiff reddish brown CLAY (CH), w/ light gray silt lenses & slickensides
15			▽									
16												Boring Completed at 15' Depth
17												
18												
19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.493'
W 93° 09.480'

Boring Data

Boring Advancement:
Dry Auger: 0' to 15'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

▽ First Encountered: 15'
▽ After 15 Minutes: 11'
Boring Caved to 11' After 15 Minutes

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-9

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

From Handheld GPS (approximate):
N 30° 13.505'
W 93° 09.449'

Depth (ft)	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
1	ST	3 tsf										Firm dark gray to gray very SILTY CLAY (CL), w/ roots - poor
2												
3	ST	1½ tsf		1.4	102	23				ε_f = 10%		Stiff light gray & tan SILTY CLAY (CL), w/ tan oxides & gray silt streaks
4												
5	ST	2 tsf										Stiff light gray w/ tan SILTY CLAY (CL), w/ tan oxides & large gray silt streaks
6												
7	ST	1½ tsf		1.2	107	23	32	19	13	ε_f = 5.0%		Stiff light gray w/ reddish brown SANDY CLAY (CL), w/ tan oxides & gray silt pockets
8												
9	ST	2½ tsf										
10												Firm light gray & reddish brown very SANDY CLAY (CL)
11	ST	2 tsf	▽	1.2	98	26	50	27	23	ε_f = 2.1%		Stiff reddish brown w/ light gray CLAY (CH), w/ black oxides & light gray & tan silt lenses
12												
13			▽									
14	ST	3 tsf										- ditto
15												
16												
17												
18												
19	ST	2 tsf		1.4	90	32	68	31	37	ε_f = 1.4%		Stiff brown w/ light gray CLAY (CH), w/ black oxides & gray silt lenses
20												
21												
22												
23												Stiff brown w/ gray CLAY (CH), w/ tan oxides & gray silt pockets
24	ST	2¾ tsf		1.5	94	29				ε_f = 3.6%		
25												Boring Completed at 25' Depth

Boring Data

Boring Advancement:
Dry Auger: 0' to 13'
Rotary Wash: 13' to 25'

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

▽ First Encountered: 13'
▽ After 15 Minutes: 11½'
Boring Caved to12½ ' After 15 Minutes

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-10

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	4½ tsf										From Handheld GPS (approximate): N 30° 13.523' W 93° 09.453' — Firm dark very SILTY CLAY (CL), w/ large light gray silt pockets & roots - poor
2												
3	ST	1½ tsf					50	18	32			Firm dark gray SILTY CLAY to CLAY (CH), w/ gray silt pockets - poor
4												
5	ST	1½ tsf										Firm light gray w/ tan SILTY CLAY (CL), w/ tan oxides & gray silt pockets
6												
7	ST	1½ tsf		1.5	105	22				ε_f = 6.4%		Stiff light gray w/ tan SANDY CLAY (CL), w/ tan oxides - moist
8												
9	ST	2½ tsf										Stiff light gray & tan SANDY CLAY (CL), w/ tan oxides
10												
11												Boring Completed at 10' Depth
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-11

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

From Handheld GPS (approximate):
N 30° 13.459'
W 93° 09.530'

Depth (ft)	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
1	ST	4½ tsf										Firm dark gray very SILTY CLAY (CL), w/ roots - poor
2												
3	ST	2 tsf		2.9	112	13				ε_f = 7.1%		Very stiff dark brown & gray SILTY CLAY (CL), w/ gray silt pockets & roots - poor
4												
5	ST	1½ tsf										Firm tan & gray SANDY CLAY (CL), w/ tan oxides & large gray silt pockets
6												
7	ST	1½ tsf		1.2	100	25	42	20	22	ε_f = 7.1%		Stiff light gray & tan SILTY CLAY (CL), w/ tan & black oxides & gray silt streaks
8												
9	ST	2 tsf										Firm light gray SANDY CLAY (CL), w/ black oxides & reddish brown sand layer
10												
11												
12												Boring Completed at 10' Depth
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-12

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	2 tsf										Firm dark brownish gray very SILTY CLAY (CL), w/ roots & shells - poor
2												
3	ST	2½ tsf										Firm tan w/ gray CLAYEY to SILTY fine SAND (SC-SM), w/ tan oxides
4												
5	ST	2¼ tsf		1.4	123	8				ε_f = 10%		Stiff light gray w/ tan SILTY CLAY (CL), w/ tan & black oxides
6												
7	ST	2¾ tsf										- ditto
8												
9	ST	3 tsf		1.3	114	16				ε_f = 2.9%		Stiff light gray w/ reddish brown SANDY CLAY (CL), w/ reddish brown oxides
10												
11												Boring Completed at 10' Depth
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.445'
W 93° 09.387'

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-13

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	2½ tsf										Firm gray to light gray very SILTY CLAY (CL), w/ roots & gray silt pockets - poor
2												
3	ST	2 tsf		2.3	111	19	40	18	22	ε_f = 10%		Very stiff light gray & tan SILTY CLAY (CL), w/ tan oxides & gray silt streaks
4												
5	ST	2¾ tsf										Stiff light gray w/ tan SANDY CLAY (CL), w/ black oxides, gray silt streaks & roots
6												
7	ST	2 tsf		1.9	112	18				ε_f = 5.7%		Stiff light gray w/ tan SANDY CLAY (CL), w/ tan & black oxides - moist
8												
9	ST	3 tsf										Firm reddish brown & tan w/ gray SANDY CLAY (CL), w/ black oxides & light gray silt pockets / lenses
10												
11												
12												Boring Completed at 10' Depth
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.479'
W 93° 09.350'

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-14

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	2 tsf										Firm dark grayish brown very SILTY CLAY (CL), w/ roots - poor
2												
3	ST	2 tsf										Firm light gray & tan SILTY CLAY (CL), w/ tan oxides & dark gray silt streaks
4												
5	ST	1½ tsf		1.2	107	21	41	17	24	ε_f = 10%		Stiff light gray w/ tan SILTY CLAY (CL), w/ tan oxides & light gray silt streaks
6												
7	ST	2½ tsf										Stiff light gray w/ tan to reddish brown SANDY CLAY (CL), w/ reddish brown oxides & light gray silt streaks
8												
9	ST	2½ tsf		0.6	108	19	25	18	7	ε_f = 2.9%		
10												Firm gray w/ reddish brown very SANDY CLAY (CL), w/ reddish brown oxides & gray silt pockets - very moist, fair
11												
12												
13												Boring Completed at 10' Depth
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.516'
W 93° 09.348'

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-15

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	4 tsf										Firm dark brown very SILTY CLAY (CL), w/ gray & tan silt pockets & roots - poor
2												
3	ST	2 tsf		1.2	105	15				ε_f = 3.6%		Stiff dark gray to black SILTY CLAY (CL), w/ gray silt pockets & roots - poor
4												
5	ST	2 tsf										Firm tan & light gray SILTY CLAY (CL), w/ tan oxides & light gray silt streaks
6												
7	ST	1½ tsf		1.5	112	19				ε_f = 10%		Stiff light gray & tan SILTY CLAY (CL), w/ tan oxides & light gray silt streaks
8												
9	ST	2¼ tsf										Stiff light gray w/ tan SANDY CLAY (CL), w/ tan & black oxides & gray silt streaks
10												
11												Boring Completed at 10' Depth
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.539'
W 93° 09.348'

Boring Data

Boring Advancement:
Dry Auger: 0' to 10'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-16

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/24/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	3 tsf				16	41	17	24			Firm dark brown very SILTY CLAY (CL), w/ silty clay pockets & roots - poor
2												
3	ST	1 tsf		1.6	108	17				ε_f = 4.3%		Stiff light gray & tan SILTY CLAY (CL), w/ tan oxides, gray silt streaks & a large crawfish hole
4												
5												Boring Completed at 4' Depth
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.594'
W 93° 09.518'

Boring Data

Boring Advancement:
Dry Auger: 0' to 4'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-17

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/24/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	4½ tsf										From Handheld GPS (approximate): N 30° 13.568' W 93° 09.415' Stiff dark brown to black very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
2												
3	ST	4 tsf										- ditto
4												
5												Boring Completed at 4' Depth
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

Boring Data

Boring Advancement:
Dry Auger: 0' to 4'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-18

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/24/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Atterberg Limits: Liquid Limit, %	Atterberg Limits: Plastic Limit, %	Atterberg Limits: Plasticity Index, %	Notes / Other Tests	Symbol	Description
1	ST	1 tsf				12	27	16	11			Firm dark brown very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
2												
3	ST	2 tsf										Firm dark brown to black SILTY CLAY (CL), w/ gray silt pockets & roots - poor
4												
5												Boring Completed at 4' Depth
6												
7												
8												
9												
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23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.556'
W 93° 09.396'

Boring Data

Boring Advancement:
Dry Auger: 0' to 4'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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Consulting Geotechnical Engineer
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SOIL BORING LOG

Boring No. B-19

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	4½ tsf										Firm dark brown to black very SILTY CLAY (CL), w/ silty clay pockets & roots - poor
2												
3	ST	2 tsf		1.4	98	26				ε_f = 8.6%		Stiff tan w/ gray SILTY CLAY (CL), w/ dark gray silt streaks - fair
4												Boring Completed at 4' Depth
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
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19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.581'
W 93° 09.364'

Boring Data

Boring Advancement:
Dry Auger: 0' to 4'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-20

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	2½ tsf		1.2	108	19				ε_f = 9.3%		Stiff dark gray very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
2												
3	ST	3 tsf										Firm dark gray, gray & tan SILTY CLAY (CL), w/ gray silt pockets - fair
4												
5												Boring Completed at 4' Depth
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.536'
W 93° 09.519'

Boring Data

Boring Advancement:
Dry Auger: 0' to 4'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-21

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	2½ tsf										From Handheld GPS (approximate): N 30° 13.543' W 93° 09.478'
2												Firm dark gray very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
3	ST	2½ tsf		2.2	113	13				ε_f = 3.6%		- ditto, very stiff
4												
5												Boring Completed at 4' Depth
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
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20												
21												
22												
23												
24												
25												

Boring Data

Boring Advancement:
- Dry Auger: 0' to 4'
- Rotary Wash: n / a

Boring Abandonment:
- Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
- ST: Shelby Tube (ASTM D 1587)
- SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-22

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	4½ tsf				11	38	19	19			Firm dark gray very SILTY CLAY (CL), w/ light gray silt pockets & roots - poor
2												
3	ST	4 tsf										Firm tan CLAYEY to SILTY fine SAND (SC-SM), w/ fine roots & a large crawfish hole - fair
4												
5												Boring Completed at 4' Depth
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.523'
W 93° 09.489'

Boring Data

Boring Advancement:
Dry Auger: 0' to 4'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-23

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	4½ tsf				11	39	21	18			Firm brownish gray very SILTY CLAY (CL), w/ lots of roots & gravel - poor
2												
3	ST	3 tsf										Firm dark brown very SILTY CLAY (CL), w/ fine roots & large pieces of gravel
4												
5												Boring Completed at 4' Depth
6												
7												
8												
9												
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23												
24												
25												

From Handheld GPS (approximate):
N 30° 13.505'
W 93° 09.397'

Boring Data

Boring Advancement:
Dry Auger: 0' to 4'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-24

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	2 tsf				11	29	17	12			From Handheld GPS (approximate): N 30° 13.485' W 93° 09.520' Firm dark gray very SILTY CLAY (CL),
2												w/ light gray silt pockets & roots - poor
3	ST	2 tsf										- ditto
4												
5												Boring Completed at 4' Depth
6												
7												
8												
9												
10												
11												
12												
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15												
16												
17												
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23												
24												
25												

Boring Data

Boring Advancement:
Dry Auger: 0' to 4'
Rotary Wash: n / a

Boring Abandonment:
Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
ST: Shelby Tube (ASTM D 1587)
SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-25

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	4½ tsf				12	38	18	20			From Handheld GPS (approximate): N 30° 13.482' W 93° 09.439'
2												Firm dark gray very SILTY CLAY (CL), w/ light gray silt pockets, roots & red clay pockets
3	ST	4½ tsf										
4												FILL - Firm dark gray SILTY CLAY
5												Firm gray w/ tan SILTY CLAY (CL), w/ tan oxides
6												
7												
8												Boring Completed at 4' Depth
9												
10												
11												
12												
13												
14												
15												
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17												
18												
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21												
22												
23												
24												
25												

Boring Data

Boring Advancement:
- Dry Auger: 0' to 4'
- Rotary Wash: n / a

Boring Abandonment:
- Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
- ST: Shelby Tube (ASTM D 1587)
- SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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SOIL BORING LOG

Boring No. B-26

Project: Lake Charles Public Works New Facility, Phase 2
Location: Broad Street, west of Senator J. Bennett Johnston Avenue
Lake Charles, Louisiana
Client: Brossett Architects
Lake Charles, Louisiana

DJH File No: 25-041
Date Drilled: 11/25/2025
Logged By: Silas Henrich
Drilled By: Data Acquisition Services
Equipment: Ardco Top Drive (Buggy)

From Handheld GPS (approximate):
N 30° 13.480'
W 93° 09.398'

Depth (ft)	Field Tests: Sample Type	Field Tests: Penetrometer (tsf) or SPT (bpf)	Field Tests: Ground Water	Laboratory Tests: Qu / UU (tsf)	Laboratory Tests: Dry Density, γd (pcf)	Laboratory Tests: Moisture Content, w (%)	Laboratory Tests: Atterberg Limits: Liquid Limit, %	Laboratory Tests: Atterberg Limits: Plastic Limit, %	Laboratory Tests: Atterberg Limits: Plasticity Index, %	Laboratory Tests: Notes / Other Tests	Symbol	Description
1	ST	4½ tsf										Firm dark brown to black very SILTY CLAY (CL), w/ roots - poor
2												
3	ST	2 tsf		2.4	117	17				ε_f = 7.1%		Stiff tan w/ gray SILTY CLAY (CL), w/ dark gray silt pockets
4												Very stiff black SILTY CLAY (CL) - poor
5												Boring Completed at 4' Depth
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												

Boring Data

Boring Advancement:
- Dry Auger: 0' to 4'
- Rotary Wash: n / a

Boring Abandonment:
- Boring Backfilled w/ Soil Cuttings Upon Completion

Ground Water Data

★ No Ground Water Encountered

Sample Type:
- ST: Shelby Tube (ASTM D 1587)
- SS: Split Spoon (ASTM D 1586)

Notes / Other Tests

ε_f = Failure Strain

Soil Stratification is Approximate

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Description of Field and Laboratory Testing Procedures

Field Testing Procedures. The borings were located in the field using the information provided by the client's representative and standard GPS and/or taping procedures from relevant physical features shown on the site plan provided for our use. The borings were (initially) advanced using dry auger methods. Soil samples were obtained continuously in the upper 10 foot and on 5 foot centers thereafter. The sample depths and types are recorded on the soil boring logs.

In general, relatively undisturbed "Shelby" tube samples (ASTM D 1587) were taken in clays and silty clays. Undisturbed soil samples are required for strength and density tests, and other properties that are dependent upon the soil being close to its natural state. In this procedure, the boring is advanced to the desired sampling depth, then a 3 inch diameter, thin-walled "Shelby" tube is inserted into the borehole. The tube is then pushed hydraulically about 2 feet into the undisturbed soil. The tube is withdrawn, and the sample extruded with a hydraulic piston. The sample is visually classified and tested with a spring loaded penetrometer, which provides a crude estimate of the unconfined compressive strength. The penetrometer test result is recorded on the soil boring log, and a representative portion of the sample is secured for transport to the laboratory.

In sands and silts, Standard Penetration Tests (ASTM D 1586) are generally made. This test provides a measure of the in-situ density or stiffness of the soil and provides a relatively disturbed sample that may be used for classification testing. In this procedure, the boring is advanced to the desired sampling depth, and a relatively heavy walled "split spoon" sampler is inserted into the borehole. The sampler is driven into the soil using a 140 pound "drop" hammer with 30 inch strokes. The number of blows required to drive each 6 inch increment is recorded. The first increment is a seating drive; the number of blows required to drive the second and third increments are added together to determine the "N-value," which has units of blows per foot (bpf). The N-value and the number of blows per increment are recorded on the soil boring log. The sample is visually classified, and a representative portion secured for transport to the laboratory.

Laboratory Testing Procedures. Representative samples from the field investigation were selected by the project engineer for laboratory testing to determine their relevant engineering characteristics. These tests generally fall into one of the following categories.

Strength Tests. Strength tests generally consist of the Unconfined Compressive Strength, or Qu Test, (ASTM D 2166), and the Unconsolidated, Undrained Triaxial Compressive Strength, or UU Test, (ASTM D 2850). In each of these tests, a cylindrical sample of undisturbed soil is subjected to an axial load until failure occurs, yielding the compressive strength of the soil. The principal difference between the two tests is that the Qu is not confined laterally, which can lead to premature failure, and thus, lower compressive strength values. The UU test is confined laterally in a triaxial cell, typically to the lateral stress that the in-situ soil sample was subject to. The compressive strength and axial strain at failure (ε_f) are recorded on the soil boring log. The confining stress of UU tests is also recorded.

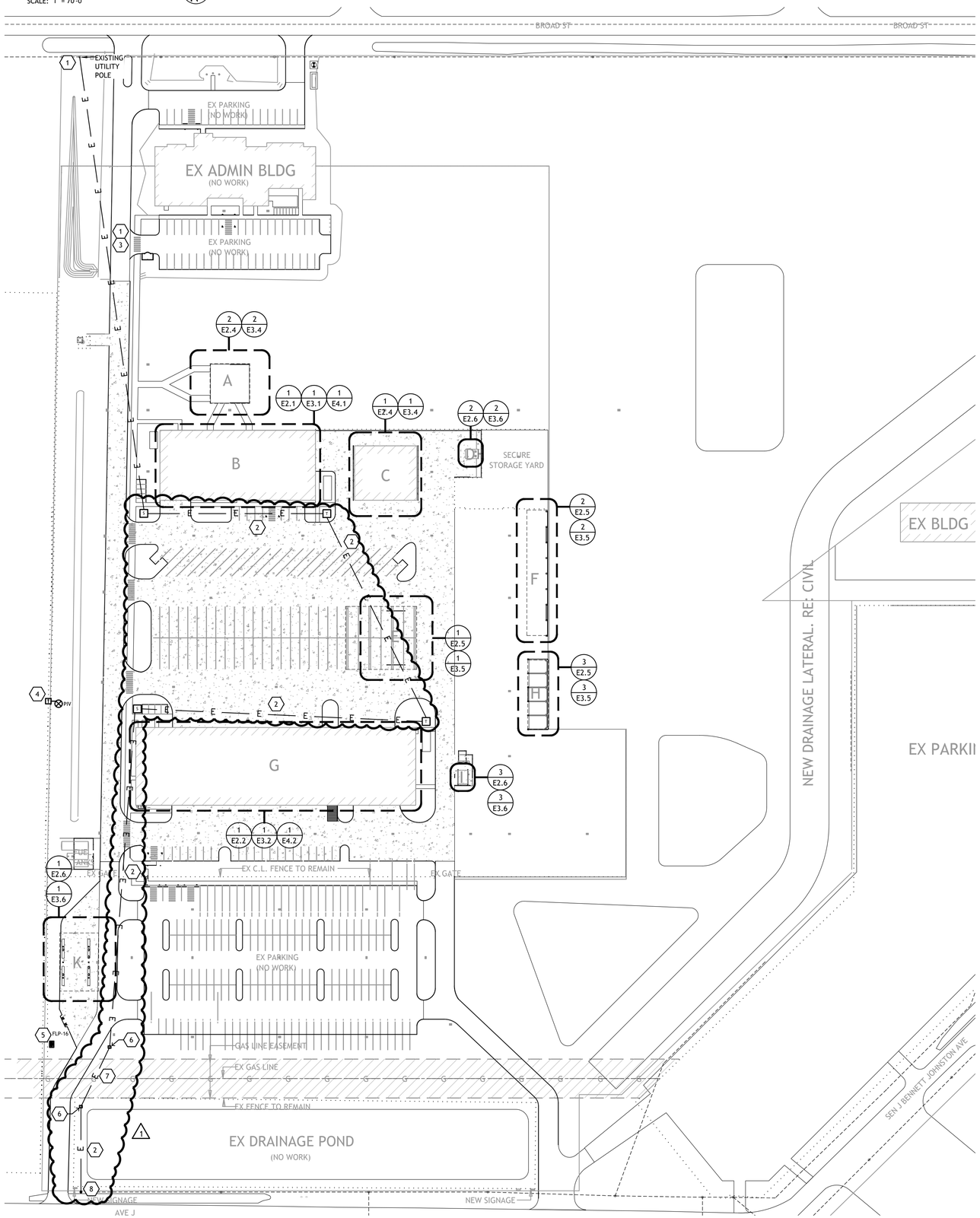
Classification Tests. Common classification tests include the Atterberg Limit Tests and Particle Size Analyses. Atterberg Limit Tests (ASTM D 4318) are performed to determine the consistency (or "clayeyness") of a soil. The Atterberg limits consist of the Liquid Limit (LL) and the Plastic Limit (PL), and the Plasticity Index (PI), which is the difference between the LL and the PL. These values are recorded on the soil boring log.

The Particle Size Analysis Test (ASTM D 422) is performed to determine the distribution of the individual particle sizes of a soil sample. The test is typically performed using mechanical sieves for soils containing gravel and sands, or a "hydrometer" for clayey and silty soils. The results of the Particle Size Analysis are typically plotted on a log scale.

Physical Tests. Common physical tests include the Moisture Content Test (ASTM D 2216) and the Dry Density Test (ASTM D 7263). As the names indicate, these tests determine the moisture content and dry density (or dry unit weight) of a soil sample.

1 ELECTRICAL SITE PLAN

SCALE: 1" = 70'-0"



ELECTRICAL SITE GENERAL NOTES

A. CONTRACTOR SHALL REFER TO ALL OTHER PORTIONS OF THE CONTRACT DOCUMENTS (PLANS, SPECIFICATIONS, ADDENDA, ARCHITECTURAL SUPPLEMENTAL INSTRUCTIONS AND ANY APPROVED CHANGE ORDERS) AND PROVIDE ALL LIGHT FIXTURES, OUTLETS, TELE/DATA OUTLETS, SPEAKERS, AND ASSOCIATED CIRCUITRY AS IF ORIGINALLY INCLUDED ON THE ELECTRICAL PLANS. IF THERE ARE ANY DISCREPANCIES, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IN WRITING PRIOR TO ORDERING EQUIPMENT, ROUGH-IN FOR EQUIPMENT AND/OR INSTALLATION OF EQUIPMENT. PRIOR TO ROUGH-IN OF EQUIPMENT, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING COPIES OF APPROVED SHOP DRAWINGS OF SUCH EQUIPMENT AND REVIEWING SAID SUBMITTALS TO ENSURE COMPATIBILITY WITH THE ELECTRICAL SYSTEM. CONTRACTOR SHALL IMMEDIATELY NOTIFY ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE REQUIRED ROUGH-IN REQUIREMENTS AND THE ELECTRICAL SYSTEM.

B. SHOULD IT BE NECESSARY TO RUN ANY ELECTRICAL SERVICES, CONDUITS, ETC. THROUGH THE BUILDING'S FOOTINGS CONTRACTOR SHALL REFER TO THE STRUCTURAL DRAWINGS FOR ADDITIONAL REINORCEMENT REQUIREMENTS. WHERE ELECTRICAL SERVICES ARE RUN PARALLEL TO FOOTINGS, ALSO REFER TO STRUCTURAL DRAWINGS FOR THE MINIMUM CLEAR DISTANCE TO MAINTAIN BETWEEN FOOTING AND CONDUIT.

C. CONTRACTOR SHALL PROPERLY SEAL PENETRATIONS TO RATED ASSEMBLIES AND ALL EXTERIOR WALLS TO PROPERLY MAINTAIN RATING & ASSEMBLIES AND BUILDING ENVELOPE.

D. AS A MINIMUM ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE.

E. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

F. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING ANY WORK TO BE DONE.

ELECTRICAL SITE KEYNOTES

1. CONTRACTOR SHALL INSTALL (2) 5" CONDUIT FROM EXISTING UTILITY POLE TO SECTIONALIZER FOR UNDERGROUND PRIMARY CABLING. LEAVE PULL TAPE IN EACH CONDUIT RUN. CONTRACTOR SHALL COORDINATE ALL WORK WITH ENTERGY PRIOR TO ROUGH-INS.
2. CONTRACTOR SHALL INSTALL (2) 5" CONDUITS TO PRIMARY SIDE OF PAD MOUNT TRANSFORMER INDICATED FOR UNDERGROUND UTILITY CABLING. LEAVE PULL TAPE IN EACH CONDUIT. CONTRACTOR SHALL COORDINATE ALL WORK WITH ENTERGY PRIOR TO ROUGH-INS.
3. CONTRACTOR SHALL MARK EXISTING UNDERGROUND ELECTRICAL ALONG THE PATH OF THE NEW UTILITY CONDUIT PRIOR TO INSTALL TO AVOID CONFLICTS.
4. CONTRACTOR SHALL INTEGRATE TAMPER SWITCH ON THE 6" PIV WITH BUILDING B FIRE ALARM SYSTEM. PROVIDE REQUIRED CABLING AND CONDUIT FROM SWITCH LOCATION TO FIRE ALARM PANEL. REFER TO FIRE SUPPRESSION SHEETS AND COORDINATE WITH GENERAL CONTRACTOR FOR EXACT LOCATION PRIOR TO ROUGH-IN.
5. CONTRACTOR SHALL RUN CONDUIT UNDERGROUND FROM PANEL FLP TO HEATED ENCLOSURE. PROVIDE 2p30A N3R, HD, 240V FDS WITHIN HEATED ENCLOSURE.

1
6. CONTRACTOR SHALL PROVIDE PULLBOX AND/OR PEDESTAL AT APPROXIMATE LOCATION INDICATED FOR PRIMARY CONDUIT. COORDINATE WITH ENTERGY FOR REQUIREMENTS PRIOR TO ROUGH-IN.
7. CONDUIT CROSSING THE EXISTING GAS LINE EASEMENT SHALL BE BORED 15' BELOW THE BOTTOM OF THE LOWEST GAS LINE WITHIN THE EASEMENT. CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES INVOLVED FOR GAS LINE CROSSING PRIOR TO ROUGH-INS. REFER TO SHEET FP1.0 KEYNOTE 2 FOR GAS LINE COMPANY CONTACT INFORMATION.
8. NEW UTILITY POLE. CONTRACTOR SHALL COORDINATE WITH ENTERGY FOR NEW POLE PRIOR TO CONDUIT ROUGH-IN.

ELECTRICAL CONTRACTOR SHALL PROVIDE A NEW UL APPROVED LIGHTNING PROTECTION SYSTEM FOR BUILDING B (CREW BUILDING), BUILDING G (VEHICLE MAINTENANCE), STRUCTURE E (BUS CANOPY) AND STRUCTURE K (FUEL DEPOT). CERTIFY THE ENTIRE SYSTEM WITH NO EXCLUSIONS NOR EXCEPTIONS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION. COORDINATE INSTALLATION METHODS AND CABLE ROUTING WITH ARCHITECT PRIOR TO ROUGH-IN TO AVOID UNSIGHTLY SYSTEM COMPONENTS.

STATE OF LOUISIANA
DAVID B. STELLY
License No. 26070
02/23/2026
PROFESSIONAL ENGINEER

Brossett Architect
Brossett Architect, LLC · 414 Pujo St., Lake Charles, LA 70601

CONSTRUCTION DOCUMENTS

LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
4200 BROAD STREET
LAKE CHARLES, LA 70615
ELECTRICAL SITE PLAN

SHEET NO. E1.0R1

ARCH #24009 BA

VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS

ADG ENGINEERING
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3909 W Congress Street, Suite 201
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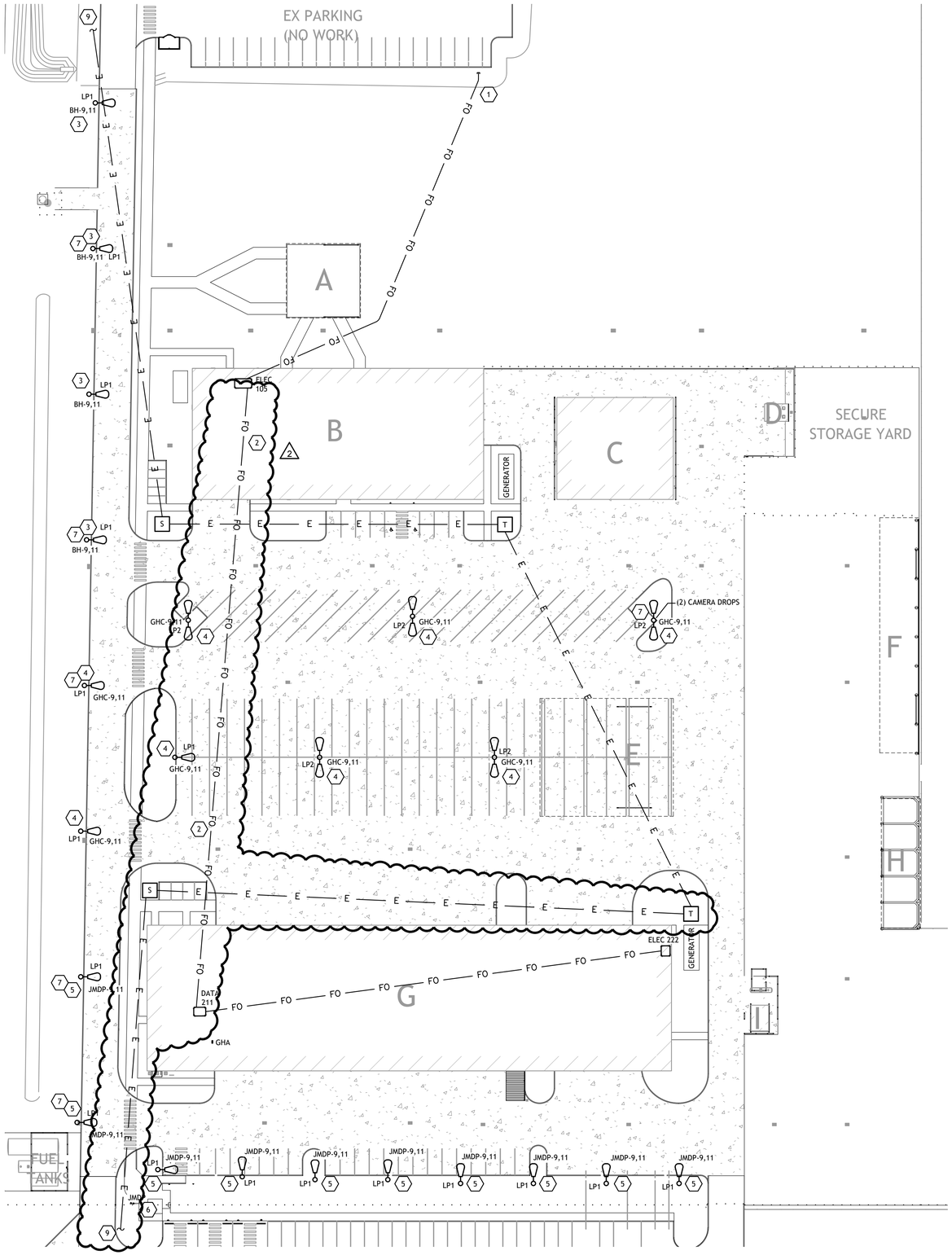
Project No. 25082

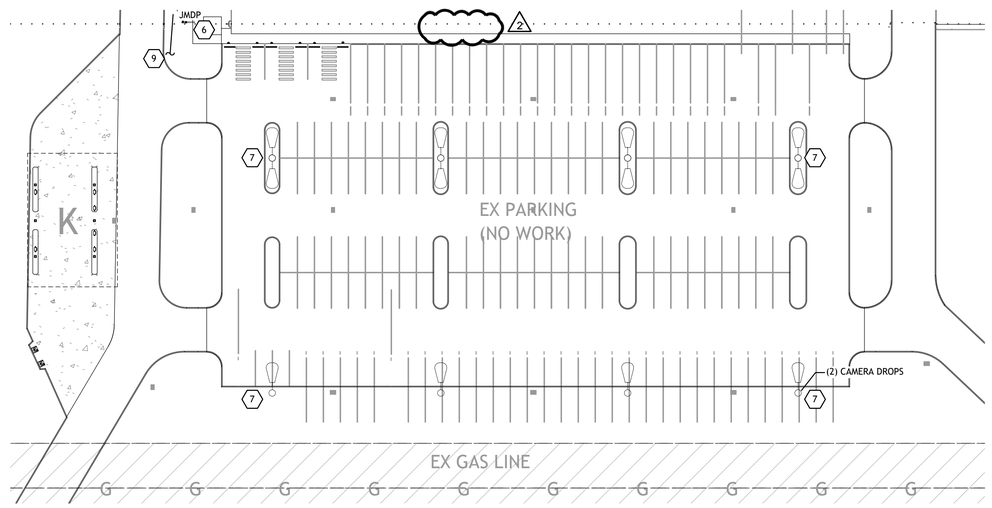
1 ENLARGED ELECTRICAL SITE PLAN

SCALE: 1" = 40'-0"



2 ENLARGED ELECTRICAL SITE PLAN - AVENUE J PARKING LOT

SCALE: 1" = 40'-0"



ELECTRICAL SITE GENERAL NOTES

A. CONTRACTOR SHALL REFER TO ALL OTHER PORTIONS OF THE CONTRACT DOCUMENTS (PLANS, SPECIFICATIONS, ADDENDA, ARCHITECTURAL SUPPLEMENTAL INSTRUCTIONS AND ANY APPROVED CHANGE ORDERS) AND PROVIDE ALL LIGHT FIXTURES, OUTLETS, TELE/DATA OUTLETS, SPEAKERS, AND ASSOCIATED CIRCUITRY AS IF ORIGINALLY INCLUDED ON THE ELECTRICAL PLANS. IF THERE ARE ANY DISCREPANCIES, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IN WRITING PRIOR TO ORDERING EQUIPMENT, ROUGH-IN FOR EQUIPMENT AND/OR INSTALLATION OF EQUIPMENT. PRIOR TO ROUGH-IN OF EQUIPMENT, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING COPIES OF APPROVED SHOP DRAWINGS OF SUCH EQUIPMENT AND REVIEWING SAID SUBMITTALS TO ENSURE COMPATIBILITY WITH THE ELECTRICAL SYSTEM. CONTRACTOR SHALL IMMEDIATELY NOTIFY ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE REQUIRED ROUGH-IN REQUIREMENTS AND THE ELECTRICAL SYSTEM.

B. VERIFY EXACT MOUNTING HEIGHT OF ALL WALL MOUNTED FIXTURES W/ARCHITECT/OWNER PRIOR TO ROUGH-IN UNLESS SPECIFICALLY NOTED OTHERWISE.

C. SHOULD IT BE NECESSARY TO RUN ANY ELECTRICAL SERVICES, CONDUITS, ETC. THROUGH THE BUILDING'S FOOTINGS CONTRACTOR SHALL REFER TO THE STRUCTURAL DRAWINGS FOR ADDITIONAL REINORCEMENT REQUIREMENTS. WHERE ELECTRICAL SERVICES ARE RUN PARALLEL TO FOOTINGS, ALSO REFER TO STRUCTURAL DRAWINGS FOR THE MINIMUM CLEAR DISTANCE TO MAINTAIN BETWEEN FOOTING AND CONDUIT.

D. CONTRACTOR SHALL PROPERLY SEAL PENETRATIONS TO RATED ASSEMBLIES AND ALL EXTERIOR WALLS TO PROPERLY MAINTAIN RATING & ASSEMBLIES AND BUILDING ENVELOPE.

E. ALL 20 AMP 125 VOLT DUPLEX RECEPTACLES INSTALLED OUTDOORS SHOULD HAVE GFCI PROTECTION AND SHALL RECEIVE WEATHER PROOF WHILE IN USE COVER, AS SPECIFIED.

F. AS A MINIMUM ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE.

G. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

H. COORDINATE EXACT LOCATION OF ALL OUTLETS WITH ARCHITECT/OWNER PRIOR TO ROUGH IN. CONTRACTOR SHALL MAKE ALL ELECTRICAL CONNECTIONS TO ALL OWNER FURNISHED EQUIPMENT.

I. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING ANY WORK TO BE DONE.

J. CIRCUITS SHALL HAVE DEDICATED NEUTRALS. NEUTRALS SHALL NOT BE SHARED.

K. VERIFY REQUIREMENTS FOR ALL OWNER FURNISHED EQUIPMENT PRIOR TO ROUGH-IN.

L. EXTERIOR LIGHTING CONTROLLED VIA PHOTOCELL.

M. REFER TO FIRE ALARM/FIRE PROTECTION PLAN FOR LOCATIONS OF PIV VALVES, FLOWS, AND TAMPERS.

ELECTRICAL SITE KEYNOTES

1. CONTRACTOR TO EXTEND (1) EXISTING 4" CONDUIT, AT APPROXIMATE LOCATION, WITH INNERDUCTS TO DATA RACK IN BUILDING B. CONTRACTOR SHALL RUN FIBER OPTIC CABLE FROM ADMIN BUILDING NETWORK RACK TO NEW NETWORK RACK IN BUILDING B. CONDUIT SHALL STUB UP INTO WALL AND TERMINATE ABOVE ACCESSIBLE CEILING. PROVIDE AND INSTALL PULL BOXES AS NEEDED. PULL BOX COVERS SHALL BE LABELED AS "FIBER OPTIC".
2. CONTRACTOR TO RUN (1) 4" CONDUIT WITH INNERDUCTS TO DATA RACK IN BUILDING G FROM BUILDING B. CONTRACTOR SHALL RUN FIBER OPTIC CABLE FROM BUILDING B NETWORK RACK TO NEW NETWORK RACK IN BUILDING G. CONDUIT SHALL STUB UP INTO WALL AND TERMINATE ABOVE ACCESSIBLE CEILING. PROVIDE AND INSTALL PULL BOXES AS NEEDED. PULL BOX COVERS SHALL BE LABELED AS "TELECOMMUNICATIONS".
3. AREA LIGHTING TO BE CONTROLLED VIA PHOTOCELL ON BUILDING B.
4. AREA LIGHTING TO BE CONTROLLED VIA PHOTOCELL ON BUILDING G.
5. AREA LIGHTING TO BE CONTROLLED VIA PHOTOCELL AT JMDP GEAR RACK.
6. CONTRACTOR SHALL INSTALL NEW FEEDERS FOR JMDP FROM PANEL GHA AS SCHEDULED. DISCONNECT EXISTING TEMPORARY SERVICE AT AVENUE J AND TERMINATE FEEDER FROM PANEL GHA TO JMDP. COORDINATE WITH ENTERGY FOR DISCONNECTING AVENUE J SERVICE PRIOR TO SWITCHING FEEDERS AND ROUGH-IN.

2

7. CONTRACTOR TO PROVIDE AND INSTALL 1" CONDUIT WITHIN POLE FOUNDATION FOR ETHERNET CABLING (GENSPEED 6 MAX OR APPROVED EQUIVALENT) TO CAMERA(S) MOUNTED ON LIGHT POLE. CAT6 SHALL BE RUN TO NEAREST NETWORK RACK. CAMERA MOUNTING SHALL BE COORDINATED WITH OWNER PROVIDED CAMERAS. CONTRACTOR SHALL VERIFY POLES COMPLY WITH 140MPH WIND RATING WITH CAMERA AND LIGHT FIXTURES MOUNTED ONTO POLES PRIOR TO PLACING ORDERS.
8. NOT USED.
9. CONTINUED ON SHEET E1.0.

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Project No. 25082

CONSTRUCTION DOCUMENTS

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LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
4200 BROAD STREET
LAKE CHARLES, LA 70615
ENLARGED ELECTRICAL SITE PLAN

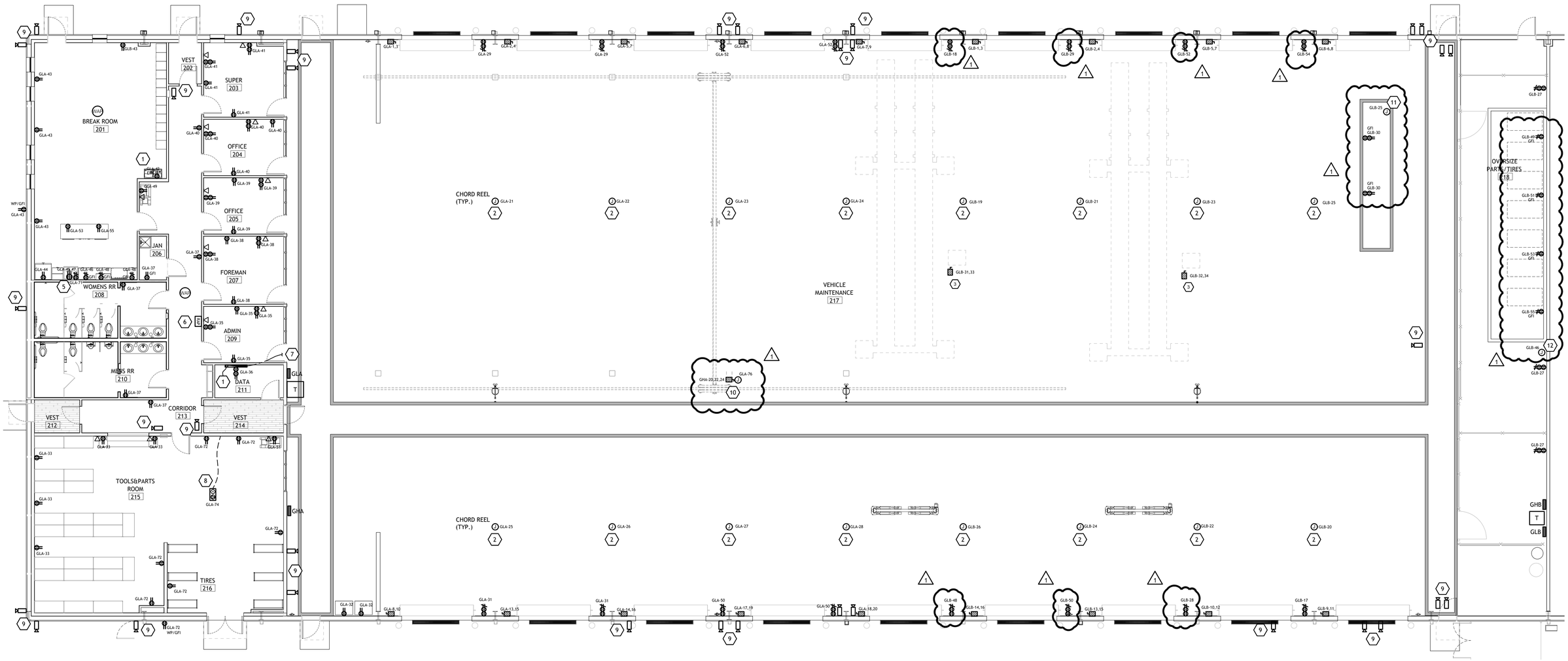
SHEET NO. E1.1R2

ARCH #24009 BA

VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS

1 POWER AND SPECIAL SYSTEMS PLAN - VEHICLE MAINTENANCE

SCALE: 1/8" = 1'-0"



POWER & SPECIAL SYSTEMS GENERAL NOTES

A. CONTRACTOR SHALL REFER TO ALL OTHER PORTIONS OF THE CONTRACT DOCUMENTS (PLANS, SPECIFICATIONS, ADDENDA, ARCHITECTURAL SUPPLEMENTAL INSTRUCTIONS AND ANY APPROVED CHANGE ORDERS) AND PROVIDE ALL LIGHT FIXTURES, OUTLETS, TELE/DATA OUTLETS, SPEAKERS, AND ASSOCIATED CIRCUITRY AS IF ORIGINALLY INCLUDED ON THE ELECTRICAL PLANS. IF THERE ARE ANY DISCREPANCIES, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IN WRITING PRIOR TO ORDERING EQUIPMENT, ROUGH-IN FOR EQUIPMENT AND/OR INSTALLATION OF EQUIPMENT. PRIOR TO ROUGH-IN OF EQUIPMENT, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING COPIES OF APPROVED SHOP DRAWINGS OF SUCH EQUIPMENT AND REVIEWING SAID SUBMITTALS TO ENSURE COMPATIBILITY WITH THE ELECTRICAL SYSTEM. CONTRACTOR SHALL IMMEDIATELY NOTIFY ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE REQUIRED ROUGH-IN REQUIREMENTS AND THE ELECTRICAL SYSTEM.

B. COORDINATE INSTALLATION OF ALL CEILING MOUNTED DEVICES w/ARCHITECT PRIOR TO ROUGH-IN.

C. COORDINATE EXACT PLACEMENT FOR ALL DEVICES WHERE MILLWORK IS PRESENT PRIOR TO ROUGH-IN. DO NOT ROUGH-IN BEHIND CABINETS, DRAWERS, ETC RENDERING DEVICE UNUSABLE.

D. CONTRACTOR SHALL PROPERLY SEAL PENETRATIONS TO RATED ASSEMBLIES AND ALL EXTERIOR WALLS TO PROPERLY MAINTAIN RATING & ASSEMBLIES AND BUILDING ENVELOPE.

E. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING ANY WORK TO BE DONE.

F. AS A MINIMUM ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE.

G. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

H. RECEPTACLES WITHIN 6' OF A SINK OR LAVATORY SHALL HAVE GFCI PROTECTION.

I. ALL 120V 15A & 20 RECEPTACLES IN FOOD PREP AREAS SHALL BE GFCI PROTECTED AS REQUIRED BY NEC.

J. ALL NEW CIRCUIT BREAKERS WITHIN EACH EXISTING PANELBOARD SHALL BE THE SAME MANUFACTURER TYPE, STYLE AND A.I.C. RATING OF EXISTING PANELBOARD.

K. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE INTERNATIONAL ENERGY CODE (IECC) 2021 RESIDENTIAL AND COMMERCIAL BUILDING ENERGY CODE FOR LIGHTING AND CONTROLS.

POWER & SPECIAL SYSTEMS KEYNOTES

1. MOUNT RECEPTACLE IN WATER COOLER FRAME. COORDINATE FINAL LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN. CIRCUIT BREAKER TO BE GFCI TYPE.
2. RACK MOUNTED RECEPTACLE FOR INSTALLATION OF RETRACTABLE ELECTRICAL CORD REEL. REFER TO AND COORDINATE WITH ARCHITECTURAL RCP AND ARCHITECT PRIOR TO ROUGH-IN.
3. CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH AT APPROXIMATE LOCATION FOR LARGE VEHICLE LIFT. COORDINATE FINAL EXACT ROUGH-IN LOCATION WITH FINAL EQUIPMENT SHOP DRAWINGS AND INSTALLATION INSTRUCTIONS PRIOR TO ROUGH-WORK.
4. CONDUIT STUB UP FROM BUILDING B FOR NETWORK FIBER RUN. REFER TO SITE PLAN SHEET 1.1 FOR ADDITIONAL INFO.
5. CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR FOR HOOD EXACT DIMENSIONS TO AVOID CONFLICT WITH PRIOR TO ELECTRICAL ROUGH-IN.
6. GENERATOR REMOTE ANNUNCIATOR PANEL.
7. CONTRACTOR TO RUN FIBER OPTIC TO ELEC 222 UNDERGROUND IN 2" CONDUIT. REFER TO SHEET E3.2 FOR ELEC 222 LOCATION.
8. CONTRACTOR SHALL INSTALL FLOOR BOX WITH FURNITURE FEED TO POWER CUBICLES. COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN. RUN (2) 3/4" CONDUITS FROM WALL TO FLOOR BOX FOR POWER AND DATA.
9. CONTRACTOR SHALL INSTALL BACK BOX AND CAT6 CABLE FOR CAMERA (OWNER PROVIDED). CABLING SHALL BE ROUTED FROM APPROXIMATE CAMERA LOCATION TO NETWORK RACK IN BUILDING ELECTRICAL ROOM. COORDINATE FINAL EXACT CAMERA LOCATION AND HEIGHT WITH ARCH/OWNER PRIOR TO ROUGH-IN.
10. 10-TON CRANE. CONTRACTOR SHALL PROVIDE ALL REQUIRED MATERIALS NECESSARY TO INSTALL CRANE POWER AND USER CONTROLS. PROVIDE 120V CIRCUIT FOR CONTROLS; REFER TO PANEL GLA SCHEDULE. CONTRACTOR SHALL COORDINATE WITH FINAL APPROVED CRANE SHOP DRAWINGS PRIOR TO ROUGH-IN. CONTRACTOR SHALL ADVISE OF ANY CIRCUITRY CHANGES.
11. OIL PIT SUMP PUMP. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF PUMP CONTROL PANEL PRIOR TO ROUGH-IN. CIRCUIT AS INDICATED.
12. CONTRACTOR SHALL PROVIDE POWER AND DATA TO FLUID MONITORING SYSTEM PULSE HUB. VERIFY FINAL LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN. CAT6 CABLE SHALL RUN TO DATA 211 CLOSET UNDERGROUND IN 3/4" CONDUIT.

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LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
4200 BROAD STREET
LAKE CHARLES, LA 70615
POWER AND SPECIAL SYSTEMS PLAN - VEHICLE MAINTENANCE

SHEET NO. E3.3R1

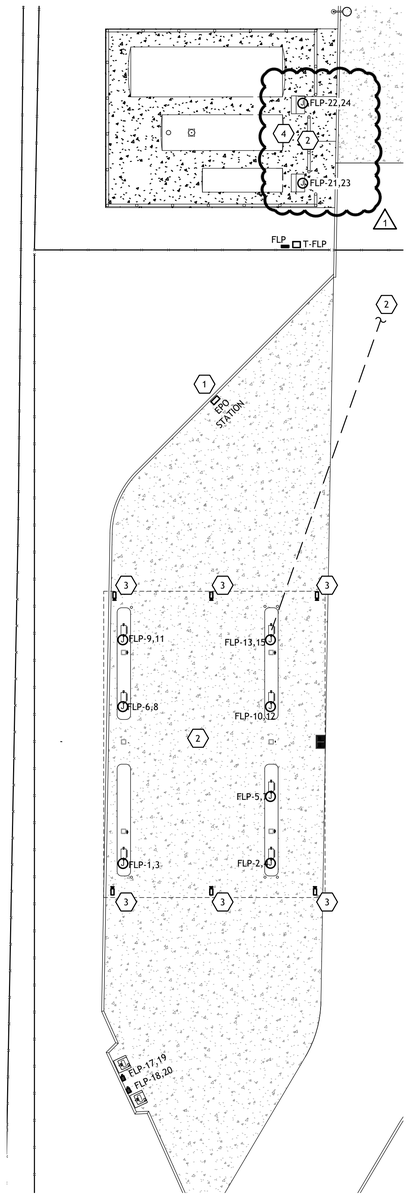
ARCH #24009 BA

CONSTRUCTION DOCUMENTS

VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS

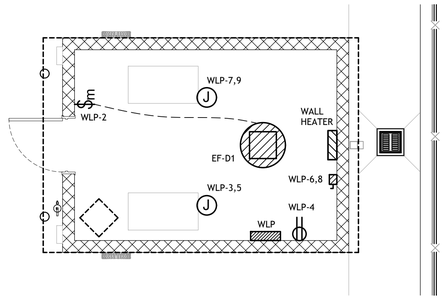
1 POWER & SPECIAL SYSTEMS PLAN - FUEL STATION

SCALE: 1/16" = 1'-0"



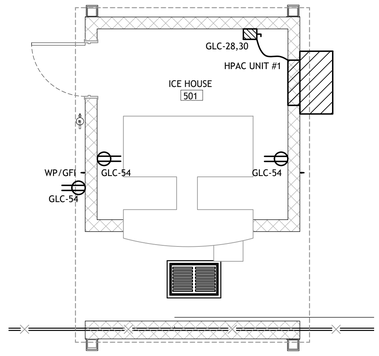
2 POWER & SPECIAL SYSTEMS PLAN - WASH ROOM

SCALE: 1/4" = 1'-0"



3 POWER & SPECIAL SYSTEMS PLAN - ICE HOUSE

SCALE: 1/4" = 1'-0"



POWER & SPECIAL SYSTEMS GENERAL NOTES

A. CONTRACTOR SHALL REFER TO ALL OTHER PORTIONS OF THE CONTRACT DOCUMENTS (PLANS, SPECIFICATIONS, ADDENDA, ARCHITECTURAL SUPPLEMENTAL INSTRUCTIONS AND ANY APPROVED CHANGE ORDERS) AND PROVIDE ALL LIGHT FIXTURES, OUTLETS, TELE/DATA OUTLETS, SPEAKERS, AND ASSOCIATED CIRCUITRY AS IF ORIGINALLY INCLUDED ON THE ELECTRICAL PLANS. IF THERE ARE ANY DISCREPANCIES, CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER IN WRITING PRIOR TO ORDERING EQUIPMENT, ROUGH-IN FOR EQUIPMENT AND/OR INSTALLATION OF EQUIPMENT. PRIOR TO ROUGH-IN OF EQUIPMENT, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING COPIES OF APPROVED SHOP DRAWINGS OF SUCH EQUIPMENT AND REVIEWING SAID SUBMITTALS TO ENSURE COMPATIBILITY WITH THE ELECTRICAL SYSTEM. CONTRACTOR SHALL IMMEDIATELY NOTIFY ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BETWEEN THE REQUIRED ROUGH-IN REQUIREMENTS AND THE ELECTRICAL SYSTEM.

B. COORDINATE INSTALLATION OF ALL CEILING MOUNTED DEVICES w/ARCHITECT PRIOR TO ROUGH-IN.

C. COORDINATE EXACT PLACEMENT FOR ALL DEVICES WHERE MILLWORK IS PRESENT PRIOR TO ROUGH-IN. DO NOT ROUGH-IN BEHIND CABINETS, DRAWERS, ETC RENDERING DEVICE UNUSABLE.

D. CONTRACTOR SHALL PROPERLY SEAL PENETRATIONS TO RATED ASSEMBLIES AND ALL EXTERIOR WALLS TO PROPERLY MAINTAIN RATING & ASSEMBLIES AND BUILDING ENVELOPE.

E. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY EXISTING CONDITIONS PRIOR TO BIDDING ANY WORK TO BE DONE.

F. AS A MINIMUM ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE.

G. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

H. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE INTERNATIONAL ENERGY CODE (IECC) 2021 RESIDENTIAL AND COMMERCIAL BUILDING ENERGY CODE FOR LIGHTING AND CONTROLS.

POWER & SPECIAL SYSTEMS KEYNOTES

1. CONTRACTOR SHALL INSTALL EMERGENCY POWER OFF (EPO) STATION AT APPROXIMATE LOCATION. STATION SHALL BE TIED TO PANEL FLP MAIN BREAKER SHUNT TRIP CONTACTS. IF BUTTON IS ENGAGED, PANEL MAIN BREAKER SHALL BE TRIPPED OFF, SHUTTING POWER FROM FUEL PUMPS.
2. CONTRACTOR SHALL HOMERUN CAT6 ETHERNET CABLE TO PUMP STATION IDENTIFIED FROM DATA 211 IN BUILDING G UNDERGROUND IN 3/4" CONDUIT. CONTRACTOR SHALL INTERCONNECT ALL PUMP STATIONS WITH CAT6 CABLE. CAT6 SHALL BE GENSPEED 6 MAX OR APPROVED EQUIVALENT.
3. CONTRACTOR SHALL INSTALL BACK BOX AND CAT6 CABLE (GENSPEED 6 MAX OR APPROVED EQUIVALENT) FOR CAMERA (OWNER PROVIDED). CABLING SHALL BE ROUTED FROM APPROXIMATE CAMERA LOCATION TO NEAREST NETWORK RACK. COORDINATE FINAL EXACT CAMERA LOCATION AND HEIGHT WITH ARCH/OWNER PRIOR TO ROUGH-IN.
4. ALL ELECTRICAL EQUIPMENT AND MATERIALS WITHIN FENCE PERIMETER SHALL BE CLASS 1 DIV 1 RATED. CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS AND ACCESSORIES TO ROUGH-IN AND COMPLETE FUEL SYSTEM CONTROLS FOR STORAGE TANKS. CONTRACTOR SHALL REFER TO FINAL APPROVED FUEL PUMP SHOP DRAWINGS PRIOR TO ROUGH-IN. ADVISE ARCHITECT/ENGINEER OF ANY CIRCUIT CHANGES. ALL CONTROL WIRE CONDUIT SHALL BE 3/4".

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LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
4200 BROAD STREET
LAKE CHARLES, LA 70615
POWER & SPECIAL SYSTEMS PLANS - FUEL STATION,
ICE HOUSE, WASHROOM

SHEET NO. E3.6R1

ARCH #24009 BA

VER.	DATE	DESCRIPTION
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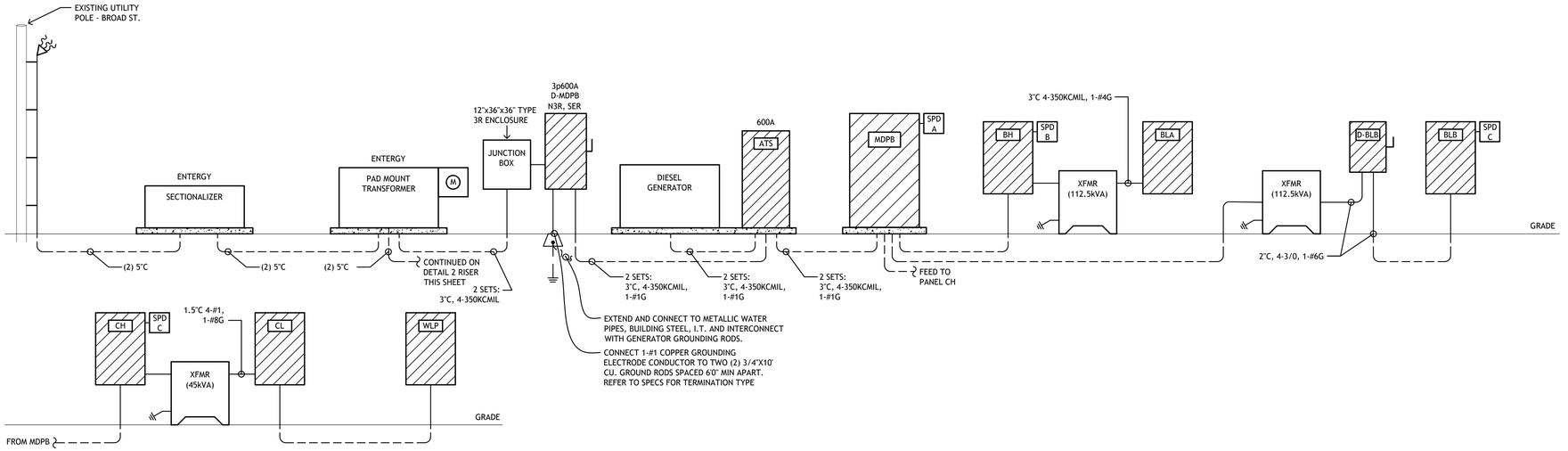
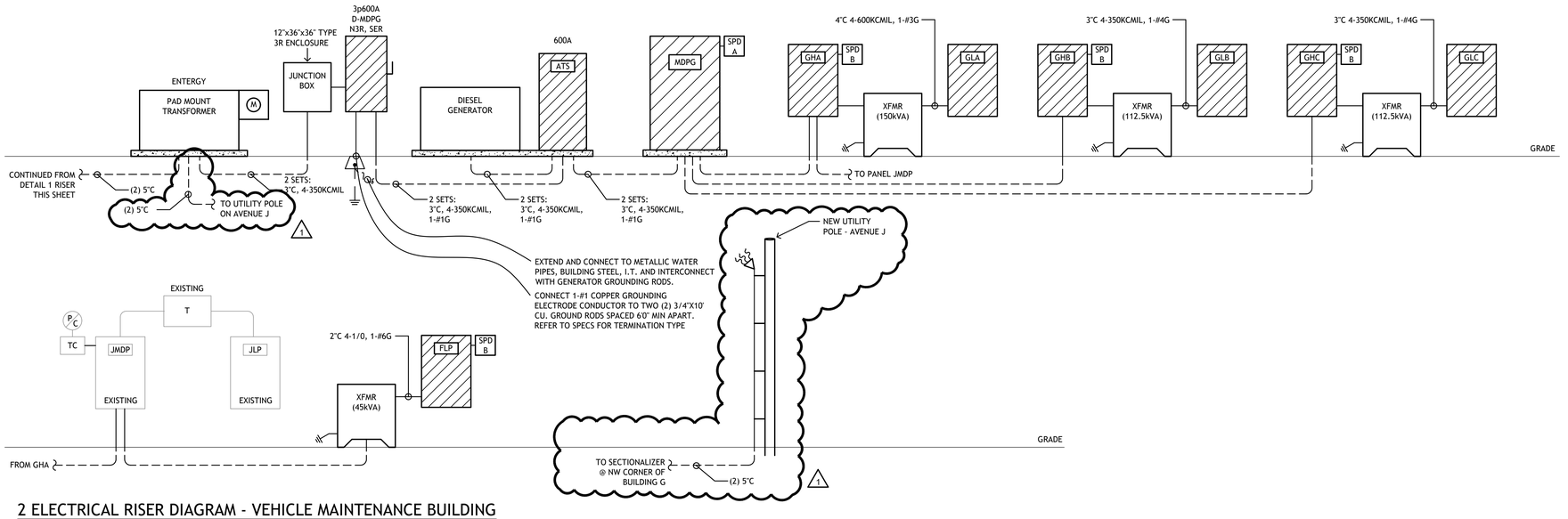
ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
	LIGHTING FIXTURE - SEE FIXTURE SCHEDULE
	LIGHTING FIXTURE - SEE FIXTURE SCHEDULE
	EXIT SIGN FIXTURE - SEE FIXTURE SCHEDULE
$	SINGLE POLE TOGGLE SWITCH
$a	SUBSCRIPT DENOTES FIXTURE BEING CONTROLLED
$3	THREE-WAY TOGGLE SWITCH
$4	FOUR-WAY TOGGLE SWITCH
$D	DIMMER SWITCH
$T	TIMER SWITCH
	OCCUPANCY SENSOR
	CEILING MOUNTED OCCUPANCY SENSOR
	LIGHTING CONTROL POWER PACK RELAY
	PHOTOELECTRIC CONTROL
	DUPLEX CONVENIENCE OUTLET
	COUNTER TOP MOUNTING HEIGHT (CLEAR BACK SPLASH)
	DOUBLE-DUPLEX CONVENIENCE OUTLET
	SPECIAL OUTLET
J	JUNCTION BOX
	JUNCTION BOX W/FLEXIBLE CONDUIT
	ELECTRIC MOTOR
$m	MOTOR RATED SWITCH
$2m	2 POLE MOTOR RATED SWITCH
	AUTOMATIC TRANSFER SWITCH (ATS)
	FLOOR BOX WITH DUPLEX POWER OUTLET
	FLOOR BOX WITH COMBINATION DUPLEX POWER OUTLET AND DATA OUTLET
	ELECTRICAL PANELBOARD - SURFACE MOUNTED (HATCHING DENOTES NEW EQUIPMENT)
	ELECTRICAL PANELBOARD (HATCHING DENOTES NEW EQUIPMENT)
	TELEDATA BACKBOARD
	UTILITY METER
	DISCONNECT SWITCH (HATCHING DENOTES NEW EQUIPMENT)
T	TRANSFORMER
	DATA/COMMUNICATIONS OUTLET (SEE SPECIFICATIONS FOR ROUGH-IN REQUIREMENTS)
WAP	WIRELESS ACCESS POINT
	CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING
	HOMERUN TO ELECTRIC PANELBOARD
	CONDUIT RUN CONCEALED BELOW FLOOR OR IN SLAB
FO	UNDERGROUND FIBER OPTIC
E	ELECTRICAL UNDERGROUND CONDUIT
D	SMOKE DETECTOR (CEILING MOUNTED)
F	FIRE ALARM PULL STATION
	FIRE ALARM AUDIO/VISUAL UNIT
	FIRE ALARM AUDIO/VISUAL UNIT - CEILING MOUNTED
	FIRE ALARM VISUAL UNIT
	FIRE ALARM VISUAL UNIT - CEILING MOUNTED
F	FIRE ALARM AUDIO UNIT
	FIRE ALARM DUCT DETECTOR (MOUNT IN HVAC SUPPLY AND RETURN DUCT)
	FIRE ALARM CONTROL PANEL
T	TAMPER
F	FLOW
P	PRESSURE
MH	MAGNETIC HOLD OPEN
CR	CARD READER
ML	MAG LOCK
ES	ELECTRIC STRIKE
KP	KEYPAD
CT	COUNTER-TOP-HEIGHT MOUNTED
EWC	ELECTRIC WATER COOLER
GFI	GROUND FAULT INTERRUPTER PROTECTED
LC	LIGHTING CONTACTOR
PB	PULLBOX
SER	SERVICE ENTRANCE RATED
TC	TIME CLOCK
WP	WEATHERPROOF



1 ELECTRICAL RISER DIAGRAM - CREW BUILDING

SCALE: N.T.S.



2 ELECTRICAL RISER DIAGRAM - VEHICLE MAINTENANCE BUILDING

SCALE: N.T.S.

SAFETY SWITCH SCHEDULE

EQUIPMENT SERVED	AMPERAGE RATING	VOLTAGE RATING	POLES	DUTY LISTING	NEMA RATING	FUSE SIZE
AHU-G1	100	240	2	HEAVY	1	*
AHU-G2	60	240	2	HEAVY	1	*
AHU-G3	60	240	2	HEAVY	1	*
AHU-G4	100	240	2	HEAVY	1	*
AHU-G5	100	240	2	HEAVY	1	*
AIR CURTAIN	30	600	3	HEAVY	1	*
CAS-1	30	600	3	HEAVY	1	*
CAS-2	30	600	3	HEAVY	1	*
CU-1	60	600	3	HEAVY	3R	*
CU-2	60	600	3	HEAVY	3R	*
CU-G1	30	600	3	HEAVY	3R	*
CU-G2	30	240	2	HEAVY	3R	*
CU-G3	30	240	2	HEAVY	3R	*
CU-G4	30	240	2	HEAVY	3R	*
CU-G5	30	240	2	HEAVY	3R	*
CU-DOAS-1	30	600	3	HEAVY	3R	*
CU-DOAS-2	30	600	3	HEAVY	3R	*
CU-DOAS-2	30	600	3	HEAVY	3R	*
D-BLB	300	240	3	HEAVY	3R	300

* FUSE SWITCH AT EQUIPMENT MANUFACTURER'S NAMEPLATE RECOMMENDATIONS

** DISCONNECTS SHALL BE LABELED WITHIN SUBMITTALS FOR EQUIPMENT IT SERVES

SAFETY SWITCH SCHEDULE

EQUIPMENT SERVED	AMPERAGE RATING	VOLTAGE RATING	POLES	DUTY LISTING	NEMA RATING	FUSE SIZE
D-MDPB	600	600	3	HEAVY	3R	600
D-MDPG	600	600	3	HEAVY	3R	600
DUST COLLECTOR	30	600	3	HEAVY	3R	*
EF-G4	60	240	3	HEAVY	1	*
EF-G5	60	240	3	HEAVY	1	*
EF-G6	30	600	3	HEAVY	1	*
EF-G7	30	600	3	HEAVY	1	*
EF-G8	30	600	3	HEAVY	1	*
EF-G9	30	240	3	HEAVY	1	*
EWH-B	30	600	3	HEAVY	1	*
EWH-G1	30	600	2	HEAVY	1	*
EWH-G2	30	600	2	HEAVY	1	*
HEATED ENCLOSURE	30	240	2	HEAVY	3R	20
HVLS-A	30	600	3	HEAVY	1	*
LARGE LIFT	60	240	2	HEAVY	1	*
MSCU-1	30	240	2	HEAVY	3R	*
MSCU-G1	30	240	2	HEAVY	3R	*
MSCU-G2	30	240	2	HEAVY	3R	*
OVERHEAD DOOR	30	240	3	HEAVY	1	*

* FUSE SWITCH AT EQUIPMENT MANUFACTURER'S NAMEPLATE RECOMMENDATIONS

** DISCONNECTS SHALL BE LABELED WITHIN SUBMITTALS FOR EQUIPMENT IT SERVES

STATE OF LOUISIANA
DAVID B. STELLY
License No. 26070
02/12/2026
PROFESSIONAL ENGINEER

Brossett Architect

Brossett Architect, LLC · 414 Pujo St., Lake Charles, LA 70601

CONSTRUCTION DOCUMENTS

LAKE CHARLES PUBLIC WORKS

NEW FACILITY PHASE 2

4200 BROAD STREET
LAKE CHARLES, LA 70615

ELECTRICAL LEGEND, RISER & SCHEDULES

SHEET NO. E5.0R1

ARCH #24009 BA

VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS

ADG ENGINEERING

ASSOCIATED DESIGN GROUP, INC.
3909 W Congress Street, Suite 201
Lafayette, Louisiana 70506
Phone: (337) 234-5710
Email: adginc@adginc.org

Project No. 25082

PANEL GHA

VOLTAGE: ■ 480/277V, 3Ø, 4W, WYE; ☐ 208/120V, 3Ø, 4W, WYE; ☐ 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

400 AMP: ■ FACTORY MAIN CIRCUIT BREAKER; ☐ SHUNT TRIP MAIN CB; ☐ MAIN LUGS ONLY; ☐ UL LISTED FEED-THRU LUGS

NEUTRAL: ■ 100% ☐ 200%

MOUNTING: ■ SURFACE ☐ RECESSED; ☐ FREE STANDING (FRONT ACCESS ONLY); ☐ FREE STANDING (FRONT AND REAR ACCESS)

ENCLOSURE: ■ NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION); ☐ NEMA 3R; ☐ NEMA 4X 320 STAINLESS STEEL; ☐ LOCKABLE COVER

FEED: ☐ TOP; ■ BOTTOM

BRANCHES: ■ BOLT-ON, PANELBOARD CONSTR.; ☐ FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5; ☐ PLUG-ON, LOADCENTER CONSTR.

AIC RATING 22K: ■ FULLY RATED; ☐ SERIES RATED

■ FURNISH GROUND BAR KIT; ☐ FURNISH ADDITIONAL ISOLATED GROUND BAR KIT; ☐ SERVICE ENTRANCE LABEL

ALL COPPER BUSSING

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	200	3-3/0	6	2"	PANEL GLA VIA TRX	--		--	PANEL JMDP	2"	8	4-3/0	100	2
3														4
5														6
7	20	2-8	8	1/2"	EXTERIOR LIGHTS	--		--	SHOP LIGHTS	3/4"	10	4-10	20	8
9	20	4-12	12	1/2"	HVLS-A	--								10
11								--	SPACE	--	--	--	--	12
13								--	CU-G1	1/2"	12	4-12	20	14
15	20	3-12	12	1/2"	EWH-G1	--								16
17														18
19	20	4-12	12	1/2"	AIR CURTAIN	--		--	10-TON CRANE	1"	10	4-8	50	20
21														22
23														24
25	--	--	--	--	SPACE	--		--	SPD	1"	10	4-6	60	26
27	--	--	--	--	SPACE	--								28
29	--	--	--	--	SPACE	--								30

NOTES:

(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 230.35 KVA
TOTAL AMPS = 277.06 AMPS

PANEL GHB

VOLTAGE: ■ 480/277V, 3Ø, 4W, WYE; ☐ 208/120V, 3Ø, 4W, WYE; ☐ 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

400 AMP: ■ FACTORY MAIN CIRCUIT BREAKER; ☐ SHUNT TRIP MAIN CB; ☐ MAIN LUGS ONLY; ☐ UL LISTED FEED-THRU LUGS

NEUTRAL: ■ 100% ☐ 200%

MOUNTING: ■ SURFACE ☐ RECESSED; ☐ FREE STANDING (FRONT ACCESS ONLY); ☐ FREE STANDING (FRONT AND REAR ACCESS)

ENCLOSURE: ■ NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION); ☐ NEMA 3R; ☐ NEMA 4X 320 STAINLESS STEEL; ☐ LOCKABLE COVER

FEED: ☐ TOP; ■ BOTTOM

BRANCHES: ■ BOLT-ON, PANELBOARD CONSTR.; ☐ FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5; ☐ PLUG-ON, LOADCENTER CONSTR.

AIC RATING 22K: ■ FULLY RATED; ☐ SERIES RATED

■ FURNISH GROUND BAR KIT; ☐ FURNISH ADDITIONAL ISOLATED GROUND BAR KIT; ☐ SERVICE ENTRANCE LABEL

ALL COPPER BUSSING

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	200	3-3/0	6	2"	PANEL GLB VIA TRX	--		--	SHOP LIGHTS	1/2"	10	4-10	20	2
3														4
5								--	SPACE	--	--	--	--	6
7	20	4-12	12	1/2"	EF-G6	--		--	HVLS-A	1/2"	12	4-12	20	8
9														10
11														12
13	40	4-8	10	1"	CAS-2	--		--	HVLS-A	1/2"	12	4-12	20	14
15														16
17														18
19	--	--	--	--	SPACE	--		--	SPACE	--	--	--	--	20
21	--	--	--	--	SPACE	--		--	SPACE	--	--	--	--	22
23	--	--	--	--	SPACE	--		--	SPACE	--	--	--	--	24
25	--	--	--	--	SPACE	--		--	SPD	1"	10	4-6	60	26
27	--	--	--	--	SPACE	--								28
29	--	--	--	--	SPACE	--								30

NOTES:

(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 117.05 KVA
TOTAL AMPS = 140.79 AMPS

PANEL GHC

VOLTAGE: ■ 480/277V, 3Ø, 4W, WYE; ☐ 208/120V, 3Ø, 4W, WYE; ☐ 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

200 AMP: ■ FACTORY MAIN CIRCUIT BREAKER; ☐ SHUNT TRIP MAIN CB; ☐ MAIN LUGS ONLY; ☐ UL LISTED FEED-THRU LUGS

NEUTRAL: ■ 100% ☐ 200%

MOUNTING: ☐ SURFACE ☐ RECESSED; ☐ FREE STANDING (FRONT ACCESS ONLY); ☐ FREE STANDING (FRONT AND REAR ACCESS)

ENCLOSURE: ■ NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION); ☐ NEMA 3R; ☐ NEMA 4X 320 STAINLESS STEEL; ☐ LOCKABLE COVER

FEED: ☐ TOP; ■ BOTTOM

BRANCHES: ■ BOLT-ON, PANELBOARD CONSTR.; ☐ FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5; ☐ PLUG-ON, LOADCENTER CONSTR.

AIC RATING 22K: ■ FULLY RATED; ☐ SERIES RATED

■ FURNISH GROUND BAR KIT; ☐ FURNISH ADDITIONAL ISOLATED GROUND BAR KIT; ☐ SERVICE ENTRANCE LABEL

ALL COPPER BUSSING

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	150	3-1/0	6	2"	PANEL GLC VIA TRX	--		--	FIRE MAINT LIGHTS	1/2"	10	4-10	20	2
3														4
5								--	SPACE	--	--	--	--	6
7	150	3-1/0	6	2"	EXTERIOR LIGHTS	--		--	OFFICE LIGHTS	1/2"	12	2-12	20	8
9	20	3-10	10	1/2"	EXTERIOR LIGHTS	--		--	BUS CANOPY LIGHTS	1/2"	10	2-10	20	10
11								--	EQUIP/SAND LIGHTS	1/2"	10	2-10	20	12
13	20	4-12	12	1/2"	HVLS-A	--		--	ICE HOUSE LIGHTS	1/2"	12	2-12	20	14
15								--	EWH-G2	1/2"	12	2-12	20	16
17														18
19	20	4-12	12	1/2"	EF-G8	--		--	SPACE	--	--	--	--	20
21								--	SPACE	--	--	--	--	22
23								--	SPACE	--	--	--	--	24
25	--	--	--	--	SPACE	--		--	SPD	1"	10	4-6	60	26
27	--	--	--	--	SPACE	--								28
29	--	--	--	--	SPACE	--								30

NOTES:

(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 103.88 KVA
TOTAL AMPS = 124.95 AMPS

PANEL GLA

VOLTAGE: ☐ 480/277V, 3Ø, 4W, WYE; ■ 208/120V, 3Ø, 4W, WYE; ☐ 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

400 AMP: ■ FACTORY MAIN CIRCUIT BREAKER; ☐ SHUNT TRIP MAIN CB; ☐ MAIN LUGS ONLY; ☐ UL LISTED FEED-THRU LUGS

NEUTRAL: ■ 100% ☐ 200%

MOUNTING: ■ SURFACE ☐ RECESSED; ☐ FREE STANDING (FRONT ACCESS ONLY); ☐ FREE STANDING (FRONT AND REAR ACCESS)

ENCLOSURE: ■ NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION); ☐ NEMA 3R; ☐ NEMA 4X 320 STAINLESS STEEL; ☐ LOCKABLE COVER

FEED: ☐ TOP; ■ BOTTOM

BRANCHES: ■ BOLT-ON, PANELBOARD CONSTR.; ☐ FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5; ☐ PLUG-ON, LOADCENTER CONSTR.

AIC RATING 22K: ■ FULLY RATED; ☐ SERIES RATED

■ FURNISH GROUND BAR KIT; ☐ FURNISH ADDITIONAL ISOLATED GROUND BAR KIT; ☐ SERVICE ENTRANCE LABEL

ALL COPPER BUSSING

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	10	3-10	30	2
3														4
5	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	10	3-10	30	6
7														8
9	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	10	3-10	30	10
11														12
13	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	10	3-10	30	14
15														16
17	20	2-12	12	1/2"	RECPT	--		--	OH DOOR	1/2"	10	3-10	30	18
19	20	2-12	12	1/2"	CORD REEL	--								20
21	20	2-12	12	1/2"	CORD REEL	--		--	CORD REEL	1/2"	12	2-12	20	22
23	20	2-12	12	1/2"	CORD REEL	--		--	CORD REEL	1/2"	12	2-12	20	24
25	20	2-12	12	1/2"	CORD REEL	--		--	CORD REEL	1/2"	12	2-12	20	26
27	20	2-12	12	1/2"	CORD REEL	--		--	CORD REEL	1/2"	12	2-12	20	28
29	20	2-12	12	1/2"	VEH MAINT. RECEPT	--		--	VEH MAINT. RECEPT	1/2"	12	2-12	20	30
31	20	2-12	12	1/2"	VEH MAINT. RECEPT	--		--	VEH MAINT. RECEPT	1/2"	12	2-12	20	32
33	20	2-12	12	1/2"	PARTS ROOM RECEPT	--		*	EWC	1/2"	12	2-12	20	34
35	20	2-12	12	1/2"	ADMIN 209 RECEPT	--		--	DATA 211 RECEPT	1/2"	12	2-12	20	36
37	20	2-12	12	1/2"	RR RECEPTS	--		--	FOREMAN 207 RECEP	1/2"	12	2-12	20	38
39	20	2-12	12	1/2"	OFFICE 205 RECEPT	--		--	OFFICE 204 RECEPT	1/2"	12	2-12	20	40
41	20	2-12	12	1/2"	SUPER 203 RECEPT	--		*	EWC	1/2"	12	2-12	20	42
43	20	2-12	12	1/2"	ROOM 201 RECEPT	--		--	BREAK ROOM REF	1/2"	12	2-12	20	44
45	50	3-8	10	1"	BREAK ROOM OVEN	--		--	BREAK RM RECEPT	1/2"	12	2-12	20	46
47								--	BREAK RM RECEPT	1/2"	12	2-12	20	48
49	20	2-12	12	1/2"	PRINTER	--		--	RECEPT	1/2"	12	2-12	20	50
51	20	2-12	12	1/2"	PRINTER	--		--	RECEPT	1/2"	12	2-12	20	52
53	20	2-12	12	1/2"	MICROWAVE	--		--	GUH-A	1/2"	12	2-12	20	54
55	20	2-12	12	1/2"	MICROWAVE	--		--	GUH-A	1/2"	10	2-10	30	56
57	20	2-12	12	1/2"	HVLS CONTROLLER	--		--	CU-G2	1/2"	10	3-10	30	58
59	30	3-10	10	1/2"	CU-G3	--								60
61								--	EF-G(1-3,13,15)	1/2"	12	2-12	20	62
63	30	3-10	10	1/2"	MSCU-G1	--		--	AHU-G1	1-1/4"	8	3-3	100	64
65														66
67	60	3-6	10	3/4"	AHU-G3	--		--	AHU-G2	1"	10	3-6	60	68
69														70
71	20	2-12	12	1/2"	RANGE HOOD	--		--	TIRE 216	1/2"	12	2-12	20	72
73	20	2-12	12	1/2"	VEH MAINT. RECEPT	--		--	TIRE 215	1/2"	12	2-12	20	74
75	20	2-12	12	1/2"	VEH MAINT. RECEPT	--		--	CRANE CONTROLS	3/4"	12	2-12	20	76
77	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	78
79	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	80
81	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	82
83	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	84

NOTES:

(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

- BREAKER TO BE GFCI TYPE.

TOTAL LOAD = 123.60 KVA
TOTAL AMPS = 343.09 AMPS

PANEL GLB

VOLTAGE: ☐ 480/277V, 3Ø, 4W, WYE; ■ 208/120V, 3Ø, 4W, WYE; ☐ 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

400 AMP: ■ FACTORY MAIN CIRCUIT BREAKER; ☐ SHUNT TRIP MAIN CB; ☐ MAIN LUGS ONLY; ☐ UL LISTED FEED-THRU LUGS

NEUTRAL: ■ 100% ☐ 200%

MOUNTING: ■ SURFACE ☐ RECESSED; ☐ FREE STANDING (FRONT ACCESS ONLY); ☐ FREE STANDING (FRONT AND REAR ACCESS)

ENCLOSURE: ■ NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION); ☐ NEMA 3R; ☐ NEMA 4X 320 STAINLESS STEEL; ☐ LOCKABLE COVER

FEED: ☐ TOP; ■ BOTTOM

BRANCHES: ■ BOLT-ON, PANELBOARD CONSTR.; ☐ FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5; ☐ PLUG-ON, LOADCENTER CONSTR.

AIC RATING 22K: ■ FULLY RATED; ☐ SERIES RATED

■ FURNISH GROUND BAR KIT; ☐ FURNISH ADDITIONAL ISOLATED GROUND BAR KIT; ☐ SERVICE ENTRANCE LABEL

ALL COPPER BUSSING

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	12	3-12	20	2
3														4
5	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	10	3-10	30	6
7														8
9	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	10	3-10	30	10
11														12
13	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	10	3-10	30	14
15														16
17	20	2-12	12	1/2"	VEH MAINT. RECEPT	--		--	VEH MAINT. RECEPT	1/2"	12	2-12	20	18
19	20	2-12	12	1/2"	CORD REEL	--		--	CORD REEL	1/2"	12	2-12	20	20
21	20	2-12	12	1/2"	CORD REEL	--		--	CORD REEL	1/2"	12	2-12	20	22
23	20	2-12	12	1/2"	CORD REEL	--		--	CORD REEL	1/2"	12	2-12	20	24
25	20	2-12	12	1/2"	CORD REEL	--		--	CORD REEL	1/2"	12	2-12	20	26
27	20	2-12	12	1/2"	ROOM 218 RECEPT	--		--	RECPT	1/2"	12	2-12	20	28
29	20	2-12	12	1/2"	RECPT	--		--	OIL PIT RECPT	1/2"	12	2-12	20	30
31	30	3-10	10	1/2"	LARGE LIFT	--		--	LARGE LIFT	1/2"	10	3-10	30	32
33														34
35	20	2-12	12	1/2"	GUH-A	--		--	GWH-G3	1/2"	12	2-12	20	36
37	30	2-10	10	1/2"	GUH-A	--		--	EF-G4	1"	10	4-8	40	38
39	20	2-12	12	1/2"	CAS-2 HEATER	--								40
41	40	4-8	10	1"	EF-G5	--								42
43								--	PIT/STORAGE LIGHTS	1/2"	12	2-12	20	44
45								--	FLUID HUB	1/2"	12	2-12	20	46
47	20	2-10	10	3/4"	OIL SUMP	*		--	VEH MAINT. RECEPT	1/2"	12	2-12	20	48
49	20	2-12	12	1/2"	FLUID PUMP	--		--	VEH MAINT. RECEPT	1/2"	12	2-12	20	50
51	20	2-12	12	1/2"	FLUID PUMP	--		--	VEH MAINT. RECEPT	1/2"	12	2-12	20	52
53	20	2-12	12	1/2"	FLUID PUMP	--		--	VEH MAINT. RECEPT	1/2"	12	2-12	20	54
55	20	2-12	12	1/2"	FLUID PUMP	--		--	SPARE	--	--	--	20	56
57	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	58
59	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	60
61	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	62
63	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	64
65	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	66
67	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	68
69	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	70
71	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	72
73	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	74
75	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	76
77	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	78
79	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	80
81	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	82
83	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	84

NOTES:

(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

- BREAKER TO BE GFCI TYPE.

TOTAL LOAD = 74.58 KVA
TOTAL AMPS = 207.02 AMPS

PANEL GLC

VOLTAGE: ☐ 480/277V, 3Ø, 4W, WYE; ■ 208/120V, 3Ø, 4W, WYE; ☐ 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

300 AMP: ■ FACTORY MAIN CIRCUIT BREAKER; ☐ SHUNT TRIP MAIN CB; ☐ MAIN LUGS ONLY; ☐ UL LISTED FEED-THRU LUGS

NEUTRAL: ■ 100% ☐ 200%

MOUNTING: ■ SURFACE ☐ RECESSED; ☐ FREE STANDING (FRONT ACCESS ONLY); ☐ FREE STANDING (FRONT AND REAR ACCESS)

ENCLOSURE: ■ NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION); ☐ NEMA 3R; ☐ NEMA 4X 320 STAINLESS STEEL; ☐ LOCKABLE COVER

FEED: ☐ TOP; ■ BOTTOM

BRANCHES: ■ BOLT-ON, PANELBOARD CONSTR.; ☐ FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5; ☐ PLUG-ON, LOADCENTER CONSTR.

AIC RATING 22K: ■ FULLY RATED; ☐ SERIES RATED

■ FURNISH GROUND BAR KIT; ☐ FURNISH ADDITIONAL ISOLATED GROUND BAR KIT; ☐ SERVICE ENTRANCE LABEL

ALL COPPER BUSSING

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	12	3-12	20	2
3														4
5	30	3-10	10	1/2"	OH DOOR	--		--	OH DOOR	1/2"	10	3-10	30	6
7														8
9	20	2-12	12	1/2"	TELE/DATA RECEPT	--		--	BRK ROOM RECEPT	1/2"	12	2-12	20	10
11	20	2-12	12	1/2"	BRK ROOM RECEPT	--		--	BREAK ROOM REF	1/2"	12	2-12	20	12
13	20	3-12	12	1/2"	BREAK ROOM OVEN	--		--	BRK ROOM RECEPT	1/2"	12	2-12	20	14
15								--	LOCKER RM RECEPT	1/2"	12	2-12	20	16
17	20	2-12	12	1/2"	EWC	*		--	CONF. ROOM RECEPT	1/2"	12	2-12	20	18
19	20	2-12	12	1/2"	OFFICE 229 RECEPT	--		--	OFFICE 230 RECEPT	1/2"	12	2-12	20	20
21	20	2-12	12	1/2"	FIRE SHOP RECEPT	--		--	GEN ENCL LIGHTS	1/2"	12	2-12	20	22
23	20	2-12	12	1/2"	GEN ALT HEATER	--		--	GEN BATT CHARGER	1/2"	10	3-10	30	24
25	30	3-10	10	1/2"	GEN BLOCK HEATER	--								26
27								--	HPAC-1	3/4"	10	3-8	40	28
29	20	2-12	12	1/2"	HVLS CONTROLLER	--								30
31	20	2-12	12	1/2"	GAS HEATER	--		--	EF-G(10-12,14)	1/2"	12	2-12	40	32
33	20	2-12	12	1/2"	GAS HEATER	--		--	AHU-G4	1"	8	3-4	70	34
35	30	3-10	10	1/2"	CU-G4	--								36
37								--	AHU-G5	1"	8	3-4	70	38
39	30	3-10	10	1/2"	CU-G5	--								40
41								--	RANGE HOOD	1/2"	12	1-12	20	42
43	20	3-12	12	1/2"	MSCU-G2	--		--	EF-G9	1/2"	12	4-12	20	44
45														46
47	20	2-12	12	1/2"	FIRE SHOP RECEPT	--								48
49	20	2-12	12	1/2"	FIRE SHOP RECEPT	--		--	FIRE SHOP RECPT	1/2"	12	1-12	20	50
51	20	2-10	10	1/2"	BUS RECEPT	--		--	FIRE SHOP RECPT	1/2"	12	1-12	20	52
53	20	2-10	10	1/2"	SAND PIT RECEPT	--		--	ICE HOUSE	1/2"	10	2-10	20	54
55	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	56
57	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	58
59	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	60

NOTES:

(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

- BREAKER TO BE GFCI TYPE.

TOTAL LOAD[2] = 83.08 KVA
TOTAL AMPS[2] = 230.62 AMPS

CONSTRUCTION DOCUMENTS

ADG ENGINEERING
ASSOCIATED DESIGN GROUP, INC.
3909 W Congress Street, Suite 201
Lafayette, Louisiana 70506
Phone: (337) 234-5710
Email: adginc@adginc.org
Project No. 25082

STATE OF LOUISIANA
DAVID B. STELLY
License No. 26070
02/13/2026
PROFESSIONAL ENGINEER

Brossett Architect
Brossett Architect, LLC · 414 Pujo St., Lake Charles, LA 70601

LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
4200 BROAD STREET
LAKE CHARLES, LA 70615
ELECTRICAL PANEL SCHEDULES

SHEET NO. E5.2R2

ARCH #24009 BA

VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS

PANEL **MDPG**

VOLTAGE ■ 480/277V, 3Ø, 4W, WYE
□ 208/120V, 3Ø, 4W, WYE
□ 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

600 AMP ■ FACTORY MAIN CIRCUIT BREAKER
□ SHUNT TRIP MAIN CB
□ MAIN LUGS ONLY
□ UL LISTED FEED-THRU LUGS

NEUTRAL ■ 100% □ 200%

MOUNTING ■ SURFACE □ RECESSED
□ FREE STANDING (FRONT ACCESS ONLY)
□ FREE STANDING (FRONT AND REAR ACCESS)

ENCLOSURE ■ NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
□ NEMA 3R
□ NEMA 4X 320 STAINLESS STEEL
□ LOCKABLE COVER

FEED □ TOP ■ BOTTOM

BRANCHES ■ BOLT-ON, PANELBOARD CONSTR.
□ FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
□ PLUG-ON, LOADCENTER CONSTR.

AIC RATING 42K
■ FULLY RATED
□ SERIES RATED

■ FURNISH GROUND BAR KIT
□ FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
□ SERVICE ENTRANCE LABEL

ALL COPPER BUSSING

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	400	2 SETS			PANEL GHA	--		--	PANEL GHC	2"	6	4-3/0	200	2
3		4-3/0	6	2"										4
5														6
7	400	2 SETS			PANEL GHB	--		--	SPACE	--	--	--	--	8
9		4-3/0	6	2"				--	SPACE	--	--	--	--	10
11								--	SPACE	--	--	--	--	12
13					SPACE	--		--	SPD	1-1/4"	8	4-3	100	14
15	--	--	--	--	SPACE	--								16
17	--	--	--	--	SPACE	--								18

NOTES:

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(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 468.08 KVA
TOTAL AMPS = 563.01 AMPS

PANEL **FLP**

VOLTAGE □ 480/277V, 3Ø, 4W, WYE
■ 208/120V, 3Ø, 4W, WYE
□ 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

200 AMP □ FACTORY MAIN CIRCUIT BREAKER
■ SHUNT TRIP MAIN CB
□ MAIN LUGS ONLY
□ UL LISTED FEED-THRU LUGS

NEUTRAL ■ 100% □ 200%

MOUNTING ■ SURFACE □ RECESSED
□ FREE STANDING (FRONT ACCESS ONLY)
□ FREE STANDING (FRONT AND REAR ACCESS)

ENCLOSURE □ NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
□ NEMA 3R
■ NEMA 4X 320 STAINLESS STEEL
□ LOCKABLE COVER

FEED □ TOP ■ BOTTOM

BRANCHES ■ BOLT-ON, PANELBOARD CONSTR.
□ FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
□ PLUG-ON, LOADCENTER CONSTR.

AIC RATING 14K
■ FULLY RATED
□ SERIES RATED

■ FURNISH GROUND BAR KIT
□ FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
■ SERVICE ENTRANCE LABEL

ALL COPPER BUSSING

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	30	3-10	10	3/4"	FUEL PUMP	--		--	FUEL PUMP	3/4"	10	3-10	30	2
3														4
5	30	3-10	10	3/4"	FUEL PUMP	--		--	FUEL PUMP	3/4"	10	3-10	30	6
7														8
9	30	3-10	10	3/4"	FUEL PUMP	--		--	FUEL PUMP	3/4"	10	3-10	30	10
11														12
13	30	3-10	10	3/4"	FUEL PUMP	--		--	HEATED ENCLOSURE	3/4"	6	2-6	20	14
15								--	AIR COMP	--	--	--	20	16
17	30	3-10	10	3/4"	AIR COMP	--								18
19								--	STOR TANK PUMP	3/4"	10	3-10	30	20
21	30	3-10	10	3/4"	STOR TANK PUMP	--								22
23								--	SPARE	--	--	--	20	24
25	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	26
27	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	28
29	20	--	--	--	SPARE	--		--	SPARE	--	--	--	20	30

NOTES:

(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 47.90 KVA
TOTAL AMPS = 132.96 AMPS

PANEL **WLP**

VOLTAGE □ 480/277V, 3Ø, 4W, WYE
■ 208/120V, 3Ø, 4W, WYE
□ 240/120V, 3Ø, 4W, DELTA W/ 3Ø "STINGER"

125 AMP ■ FACTORY MAIN CIRCUIT BREAKER
□ SHUNT TRIP MAIN CB
□ MAIN LUGS ONLY
□ UL LISTED FEED-THRU LUGS

NEUTRAL ■ 100% □ 200%

MOUNTING ■ SURFACE □ RECESSED
□ FREE STANDING (FRONT ACCESS ONLY)
□ FREE STANDING (FRONT AND REAR ACCESS)

ENCLOSURE □ NEMA 1 (TOOL-LESS DOOR-IN-DOOR CONSTRUCTION)
■ NEMA 3R
□ NEMA 4X 320 STAINLESS STEEL
□ LOCKABLE COVER

FEED □ TOP ■ BOTTOM

BRANCHES ■ BOLT-ON, PANELBOARD CONSTR.
□ FUSIBLE SWITCHES, FURNISH ALL FUSES, RK5
□ PLUG-ON, LOADCENTER CONSTR.

AIC RATING 14K
■ FULLY RATED
□ SERIES RATED

■ FURNISH GROUND BAR KIT
□ FURNISH ADDITIONAL ISOLATED GROUND BAR KIT
□ SERVICE ENTRANCE LABEL

ALL COPPER BUSSING

CKT. #	TRIP AMPS	WIRE	GND	COND.	LOAD DESCRIPTION	NOTES	A B C	NOTES	LOAD DESCRIPTION	COND.	GND	WIRE	TRIP AMPS	CKT. #
1	20	2-12	12	1/2"	LIGHTS	--		--	EF-D1	1/2"	12	2-12	20	2
3	60	3-6	10	3/4"	WASHER	--		--	RECEPTACLE	1/2"	12	2-12	20	4
5								--	WALL HEATER	1/2"	10	2-10	30	6
7	60	3-6	10	3/4"	WASHER	--								8
9								--	SPACE	--	--	--	--	10
11	--	--	--	--	SPACE	--		--	SPACE	--	--	--	--	12
13	--	--	--	--	SPACE	--		--	SPACE	--	--	--	--	14
15	--	--	--	--	SPACE	--		--	SPACE	--	--	--	--	16
17	--	--	--	--	SPACE	--		--	SPACE	--	--	--	--	18

NOTES:

(1) FINAL AIC RATING FOR THE PANEL TO BE BASED UPON FAULT CURRENT STUDY. FAULT CURRENT VALUE PROVIDED IS FOR BIDDING PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

(2) ALL SPARE CIRCUIT BREAKERS SHALL INSTALLED IN THE 'OFF' POSITION

TOTAL LOAD = 23.42 KVA
TOTAL AMPS = 65.0 AMPS

BUILDING B

NOTE: *This inquiry is NOT an application for service. It is a request for information only.*
To Apply For Service: Call 1-800-368-3749

ELECTRIC SERVICE INQUIRY

entergy

RETURN TO: ENTERGY

CUSTOMER INFORMATION:
Name CITY OF LAKE CHARLES
Address .
P.O. Box
City State ZIP
Contact Voice Phone ( ) FAX ( )

SERVICE LOCATION: (Attach applicable maps or prints such as site, utility plan, etc.)
Lot or Tract
Street BROAD STREET City LAKE CHARLES State LA ZIP 70615

SERVICE DETAILS: (*check one response for items 1 through 3*):
1. ☑New customer *or* ☐ Increased load w/Acct# *or* Existing Building Turn-On
2. Requesting: ☐ Overhead Service ☑ Underground Service
3. Has point of service (metering location) been approved by ENTERGY? ☐ Yes ☑ No

REQUESTED IN-SERVICE DATES: *temporary* *permanent*

PROPOSED BUILDING CLASSIFICATION:
SIC Code (*or, check one of the following*):
☐ residential ☑ office ☐ restaurant/bar ☐ retail ☐ grocery ☐ warehouse ☐ school ☐ university ☐ hospital ☐ hotel/motel ☐ mobile home ☐ nursing home ☐ misc. non-manufacturing building ☐ misc. non-manufacturing (no building) ☐ misc. manufacturing

LOAD SUMMARY:
Phase/Voltage: ☐ 1Ø-**120/240** ☐ 3Ø-**120/240** ☐ 3Ø-**120/208** ☑3 Ø-**277/480** ** ☐ Other
Service Entrance Ampacity: 600
Quantity & Size of Conductors Being Run by Electrician: Qty.: 2 SETS OF 4 Size: 350 KCMIL
All-electric facility? ☑ yes ☐ no Computer equipment? ☑ yes ☐ no

	Single Ø	*Three* Ø	*Comments*
Square Footage	26492 SQ/FT.		MULTIPLE ENCLOSED BUILDINGS AND OPEN STRUCTURES
Lights	17.69 KW	KW	
Cooking	KW	KW	
Heating	11.66 KW	KW	
A/C (heat pump)	11.69 KW	135.51 KW	VRF CASSETTES, CONDENSING UNITS
	Note: If more than one A/C unit please list the total load in the appropriate column and largest unit in the comment section.		
Refrigeration	2.0 KW	KW	
Water Heating	KW	18.0 KW	
Motors	38.34 KW	21.5 KW	OVERHEAD DOORS, EXHAUST FANS, AIR CURTAINS
Motors	HP	HP	
Receptacles	104.0 KW	KW	
Miscellaneous	4.4 KW	KW	
Total Connected	189.78 KW	175.01 KW	
Existing Peak Load	KW	KW	
Total Diversified	KW	KW	

Largest Motor: 7.5 HP~ ☑ 1Ø ☐ 3Ø Motor HP Code No.
Locked Rotor Current: Amps. Motor Duty: hrs./day~ ☐ continuous ☐ intermittent

Submitted by: CONNOR J MARTIN ***Title:*** ELECTRICAL PROJECT MANAGER
Date: 2-6-26 ***Phone No.:*** 337-234-5710 ***Alt. No.:*** Rev.7/28/14

BUILDING G

NOTE: *This inquiry is NOT an application for service. It is a request for information only.*
To Apply For Service: Call 1-800-368-3749

ELECTRIC SERVICE INQUIRY

entergy

RETURN TO: ENTERGY

CUSTOMER INFORMATION:
Name CITY OF LAKE CHARLES
Address .
P.O. Box
City State ZIP
Contact Voice Phone ( ) FAX ( )

SERVICE LOCATION: (Attach applicable maps or prints such as site, utility plan, etc.)
Lot or Tract
Street BROAD STREET City LAKE CHARLES State LA ZIP 70615

SERVICE DETAILS: (*check one response for items 1 through 3*):
1. ☑New customer *or* ☐ Increased load w/Acct# *or* Existing Building Turn-On
2. Requesting: ☐ Overhead Service ☑ Underground Service
3. Has point of service (metering location) been approved by ENTERGY? ☐ Yes ☑ No

REQUESTED IN-SERVICE DATES: *temporary* *permanent*

PROPOSED BUILDING CLASSIFICATION:
SIC Code (*or, check one of the following*):
☐ residential ☑ office ☐ restaurant/bar ☐ retail ☐ grocery ☐ warehouse ☐ school ☐ university ☐ hospital ☐ hotel/motel ☐ mobile home ☐ nursing home ☐ misc. non-manufacturing building ☐ misc. non-manufacturing (no building) ☐ misc. manufacturing

LOAD SUMMARY:
Phase/Voltage: ☐ 1Ø-**120/240** ☐ 3Ø-**120/240** ☐ 3Ø-**120/208** ☑3 Ø-**277/480** ** ☐ Other
Service Entrance Ampacity: 600
Quantity & Size of Conductors Being Run by Electrician: Qty.: 2 SETS OF 4 Size: 350 KCMIL
All-electric facility? ☐ yes ☑ no Computer equipment? ☑ yes ☐ no

	Single Ø	*Three* Ø	*Comments*
Square Footage	46907 SQ/FT.		MULTIPLE ENCLOSED BUILDINGS AND OPEN STRUCTURES
Lights	28.72 KW	KW	
Cooking	KW	KW	
Heating	62.34 KW	KW	AIR HANDLERS, WALL HEATERS
A/C (heat pump)	35.17 KW	8.5 KW	CONDENSING UNITS
	Note: If more than one A/C unit please list the total load in the appropriate column and largest unit in the comment section.		
Refrigeration	1.2 KW	KW	
Water Heating	8.5 KW	KW	
Motors	172.71 KW	71.83 KW	OVERHEAD DOORS, EX FANS, 10-TON CRANE, FUEL PUMPS
Motors	HP	HP	
Receptacles	74.73 KW	KW	
Miscellaneous	4.4 KW	KW	
Total Connected	387.77 KW	80.33 KW	
Existing Peak Load	KW	KW	
Total Diversified	KW	KW	

Largest Motor: 10.0 HP~ ☐ 1Ø ☑3Ø Motor HP Code No.
Locked Rotor Current: Amps. Motor Duty: hrs./day~ ☐ continuous ☑ intermittent

Submitted by: CONNOR J MARTIN ***Title:*** ELECTRICAL PROJECT MANAGER
Date: 2-23-26 ***Phone No.:*** 337-234-5710 ***Alt. No.:*** Rev.7/28/14

STATE OF LOUISIANA
DAVID B. STELLY
License No. 26070
02/23/2026
PROFESSIONAL ENGINEER

Brossett Architect

Brossett Architect, LLC · 414 Pujo St., Lake Charles, LA 70601

LAKE CHARLES PUBLIC WORKS
NEW FACILITY PHASE 2
4200 BROAD STREET
LAKE CHARLES, LA 70615
ELECTRICAL PANEL SCHEDULES

SHEET NO. E5.3R2

ARCH #24009 BA

VER.	DATE	DESCRIPTION
0	12/20/2025	CONSTRUCTION DOCUMENTS

CONSTRUCTION DOCUMENTS

ADG ENGINEERING
ASSOCIATED DESIGN GROUP, INC.
3909 W Congress Street, Suite 201
Lafayette, Louisiana 70506
Phone: (337) 234-5710
Email: adginc@adginc.org

Project No. 25082