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# **Geotechnical Engineering Report**

**Anita Drive Park  
Anita Drive and Ryder Avenue  
Lake Charles, Louisiana**

**for**

**CSRS, Inc.  
8555 United Plaza Blvd.  
Baton Rouge, LA 70809**

**prepared by**

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**DJH File 22-057  
12 January 2023**

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12 January 2023

CSRS, Inc.  
8555 United Plaza Blvd.  
Baton Rouge, LA 70809

Attn: Mr. Jeff Bell, PLA

RE: Geotechnical Engineering Report  
Anita Drive Park  
Anita Drive and Ryder Avenue  
Lake Charles, Louisiana  
DJH File 22-057

Dear Mr. Bell:

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 07 December 2022, and was authorized by the Professional Services Agreement and Notice to Proceed received in your e-mail dated 12 December 2022.

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



Report Distribution:

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# Geotechnical Engineering Report

Anita Drive Park  
Anita Drive and Ryder Avenue  
Lake Charles, Louisiana

DJH File 22-057; 12 January 2023

## PROJECT INFORMATION

**1. Description of Project.** According to the information provided, it is understood that this project will include a new, 20 foot square (in plan), Gazebo, a 10 by 28 foot (in plan) Restroom Building, an 8 by 8 foot (in plan) Pump Pad Building, a 1,600 square foot Splash Pad, and about 7,800 square foot of Site Pavements. Building construction has not been specified, but it is expected that the new structures will be lightly loaded, wood frame and/or concrete block buildings with sloping wood roofs (or similar construction). Building loads were not specified, but are expected to be in the range of 2 to 4 kips per foot for walls and 10 to 20 kips for columns (if any). Site pavements are expected to consist of Portland cement concrete, with vehicle loadings limited to light passenger car and truck traffic. Site grades are expected to be raised no more than about 1 to 2 feet or so to bring the site to the desired subgrade elevation. Further grading information was not provided.

The new Park will be located on the west side of Ryder Avenue, directly across from Anita Drive, 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;
- four (4) soil borings, including one (1) to the 15 foot depth in the building areas and three (3) to the 4 foot depth in the pavement and Splash Pad areas;
- engineering analyses and evaluations, and,
- the preparation of this report by the Geotechnical Engineer.

The locations of the soil borings 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 Logs, and on other figures in the Appendix, where applicable. Finally, a Description of the Field and Laboratory Testing Procedures is also included in the Appendix.

**3. Site Conditions.** The new park site is located on the west side of Ryder Avenue, directly across from Anita Drive. The site generally consists of a vacant, grass covered lot with a few scattered trees and a treeline on the west side. An open ditch along Ryder Avenue borders most of the east side of the property. The treeline and single family residences border the site to the west, a couple of trees and a single family residence to the north, the Meadow Park Public Housing Project across Ryder Avenue to the east, and the vacant property of the New Birth Holiness Church to the south. Site grades appear to be relatively flat and level, with poor drainage.

It is estimated that the center of the new park is located at an approximate latitude and longitude of N 30° 13.159' and W 93° 11.128', respectively. The appropriate U.S.G.S. Topographic Map (i.e., Figure 1) indicates that the site is at an elevation of about EL +15 or less.

According to historic aerial photographs available on the Calcasieu Parish Police Jury GIS Mapping Application (e.g., Figure 2), it appears that the site has remained relatively unchanged since the 1974-1975 photograph (which is of relatively poor resolution). In the 1963 photograph, a small structure is evident on the northeast corner of the site, and a rectangular feature (fence?) on the southeast corner. The property appears to be undeveloped in the 1953 and 1940 photographs.

According to the Geologic Map of Louisiana (Pope, et al, 1984), the site is underlain by the Prairie Formation of Pleistocene Age. These soils are described as "Light gray to light brown clay, sandy clay, silt, sand, and some gravel."

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.** In general, the soils encountered in the soil borings made for this project may be described as presented in the following table.

**Generalized Soil Stratification<sup>(1)</sup>**

<b><u>Depth<sup>(2)</sup> (ft)</u></b>	<b><u>Soil Description</u></b>
0 to 2	Firm dark grayish brown to black very SILTY CLAY (CL-ML), w/ large dark gray silt pockets & roots - poor
2 to 4	Hard to stiff dark gray w/ tan & gray SILTY CLAY (CL), w/ large dark gray silt pockets - poor

**Generalized Soil Stratification (cont.)** <sup>(1)</sup>

<b><u>Depth</u></b> <sup>(2)</sup> (ft)	<b><u>Soil Description</u></b>
4 to 6	Very stiff tan & gray SILTY CLAY (CL), w/ large dark gray silt pockets
6 to 10	Stiff reddish brown w/ light gray very SANDY CLAY (CL), w/ black oxides; grading to CLAYEY SAND (SC) – wet
10 to 15	Stiff reddish brown w/ light gray CLAY (CH), w/ light gray silt pockets & black oxides (& tan & light gray silt lenses below 13')

<sup>(1)</sup> Soil Stratification Varied. Refer to Boring Logs in Appendix.

<sup>(2)</sup> Depths Measured From Existing Ground Surface

The borings were advanced using dry auger methods to determine the presence of and the hydrostatic conditions of ground water in the boreholes. Ground water was not encountered in the soil borings, but the soils were observed to be wet below about the 6 foot depth in the deeper Boring B-1. 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 depth to ground water should be determined more accurately at the time of construction.

The information contained in this section has been generalized from the data obtained from all of 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.** Establishing and maintaining good drainage will be critical for earthwork and foundation construction at this site; 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. If dewatering is necessary, sump and pump methods may be suitable if large enough pumps are utilized and the contractor is diligent; otherwise, other measures may be required.

The upper 2 feet or so (up to 4 feet in Borings B-1 and B-3) of dark grayish brown to black silty or clayey soils are not considered suitable for the support of the building foundations, floor slabs, or pavements. In addition, the underlying clay is relatively dry and slightly to moderately "fat", and therefore has a low to moderate potential for shrink / swell movements with fluctuations in moisture content (i.e., it is expansive). The likelihood and/or the magnitude of expansive soil movements are difficult to predict, but if they do occur, they can cause significant distress to building foundations and floor slabs. Consideration should be given to removing these fat clays to some depth and replacing with compacted select fill as part of the site preparation activities to help reduce the potential for expansive movements.

The unsuitable materials described above should be removed and replaced with compacted select fill as part of the site preparation activities. Ideally, this undercut, when combined with the new fill that is to be placed to achieve the desired subgrade elevations, should provide a new, uniform building pad of compacted select fill that is at least 4 feet thick (i.e., 2 feet below the bottom of the footings and/or grade beams, and 4 feet below the bottom of the slab). The more new, net fill to be placed, the less undercut that has to be made; however, a minimum of 2 feet of undercut (i.e., the dark, silty soils) should be anticipated. Reference is made to the Recommended Procedure for New Building Pad in Figure 4 of the Appendix. Recommendations for site preparation and earthwork activities are provided in Section 6.

The new building pad described in the preceding paragraph should be suitable for the support of shallow foundations for the new Gazebo and buildings. If the buildings have a floor slab, the use of a reinforced slab foundation (i.e., a "ribbed slab") is recommended to provide rigidity in the slab to help resist differential soil movements. The slab foundation 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 under extreme conditions of moisture change (e.g., extended droughts or periods of excessive rainfall, etc.) and/or severe loading conditions. However, any such movements should be relatively minor, causing only cosmetic damages, if any; serious structural damage is not likely. Cosmetic damages that might occur include minor cracks in brick and masonry exteriors and interior finishes and floor slabs, slight unlevelness of floors and other horizontal surfaces, and door and window jambs that "stick" or become slightly out of square (these types of damages could also occur from many other sources). 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.

If the possibility of these minor movements is not acceptable and/or heavier building loads are anticipated, then drilled, cast-in-place concrete shafts should be utilized to

support the new building, along with a floor slab-on-grade supported on the new uniform building pad described above. Drilled shafts are especially suitable for supporting large column loads and resisting lateral loads and overturning moments, and/or with relatively little settlement movement(s). Excavations for drilled shafts at this site will very likely require temporary steel casing and/or full depth drilling slurry to remain stable (i.e., not cave and/or have the bottom become "quick). Temporary steel casing may be effective if the casing can be "sealed" into the underlying clays to provide a dry excavation; otherwise, full depth drilling slurry will be required. Recommendations for drilled shafts can be provided upon request, if desired.

It is anticipated that the complete removal and replacement of the unsuitable shallow soils may not be economical for the support of the pavements and concrete Splash Pad planned for this project. In these areas, although less desirable, consideration may be given to stripping the vegetation and any unsuitable soils containing roots and/or organic matter, and placing fill for the support of the pavement section on the resulting subgrade surface, provided it is firm enough to support the construction activities. Treatment of the upper 8 to 12 inches or so of the silty and/or clayey soils may assist with this option. (This option should only be considered with the understanding that significant construction difficulties could result if the subgrade is wet or yields excessively under construction activities, and that the complete removal of the shallow unsuitable soils could then be required.) Recommendations for Site Preparation and Earthwork Activities are provided in Section 6; recommendations for Site Pavements are provided in Section 8.

**6. Site Preparation and Earthwork Activities.** 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.).

The upper 2 feet or so (up to 4 feet in Borings B-1 and B-3, etc.) of dark grayish brown to black silty or clayey soils, and any underlying poor or otherwise unsuitable soils (e.g., tree root systems, etc.), should be completely removed to expose the firm tan and gray clayey subgrade. Additional undercut should be made as required to achieve the minimum building pad thickness described in Section 5. The exposed clay subgrade surface should be inspected to ensure that a suitable surface exists upon which to place select fill. This inspection may include proofrolling the subgrade with a loaded, tandem-axle dump truck or other means as determined by the inspector. The clayey subgrade material will be sensitive to moisture, and will likely 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.

Treatment of the clay subgrade may be considered, if necessary, to help provide a firm working table upon which to conduct fill operations. Lime treatment should be effective for the clayey subgrade soils and should be performed in accordance with LA DOTD Standard Specifications for Roads and Bridges, Section 304, Type D, Working Table. The treatment percentage should be determined in the lab using a procedure similar to LA DOTD TR 432, or by test strips constructed and evaluated in the field; a treatment percentage of 6 to 8% (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 stabilizer machine should be utilized for the treatment operations (farm discs will not be effective).

As noted in Section 5, treatment of the silty soils may also be considered in the pavement areas; however, all roots and organic matter and any other deleterious materials should be removed, and treatment must provide a suitable surface upon which to conduct further construction activities. Lime may not be an effective treatment agent in the silty soils; cement or lime-flyash treatment should be considered. Treatment should be performed in general accordance with LA DOTD Standard Specifications for Roads and Bridges, Section 303, In-Place Cement Stabilized and Treated Base Courses. The treatment percentage should be determined in the lab using a procedure similar to LA DOTD TR 432, or test strips may be constructed and evaluated in the field. A full depth stabilizer machine should be utilized for the treatment operations (farm discs will not be effective).

Once a firm subgrade exists upon which to conduct fill operations, select fill may be placed to achieve the desired building pad elevation, if required. The new building pad should extend a minimum horizontal distance of 5 feet outside the exterior building lines, and be sloped at a minimum of 10 Horizontal to 1 Vertical (10H:1V), but no steeper than 3H:1V, to facilitate drainage away from the building foundations.

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. Lime treated fill is commonly used in this area to expedite fill operations, and is generally considered acceptable. The requirements described earlier in this paragraph may be relaxed somewhat for lime treated fill. The proposed fill material should be approved by the engineer before fill placement takes place.

The fill should be placed in 6 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). 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.

Good surface drainage should be established prior to and during the earthwork activities. Standing water on the subgrade or in any excavations should be promptly drained or pumped off. Performing earthwork construction during wet weather conditions could be very challenging at this site.

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 building pad 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 building, provided some settlement and/or other minor soil movements can be tolerated, as described in Section 5. For buildings with a floor slab (e.g., all but the Gazebo), the use of a reinforced slab foundation is 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 and/or shallow foundations 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

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

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 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 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. 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 and concrete Splash Pad. 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 8.1.

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 8.2.

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 can be provided upon request.

#### 8.1 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.

8.2 Portland Cement Concrete (PCC) Pavements. The automobile parking pavement section should consist of 5 inches of concrete (minimum compressive strength of 3,000 psi) underlain by 4 inches of crushed aggregate or 6 inches of soil-cement base. The aggregate should meet the gradation requirements of LA DOTD Section 1003.03.1 Stone. Locally available products known as 610 Road Base or No. 57 Stone, although not strictly meeting 1003.03.1, should be suitable for use as base material. Traffic lanes should consist of 6 inches of concrete (8 inches beneath any truck or dumpster traffic) underlain by 4 inches of crushed, well graded aggregate or 6 inches of cement-treated base. If any pavements will be subject to heavy truck loading, the pavement thickness should be at least 8 inches over the aggregate or cement-treated base. The PCC pavement should be at least 9 inches thick in the dumpster loading zone, if applicable.

A suitable non-woven geotextile (US Fabrics US 160NW, or equal) should be provided between the aggregate base and the subgrade to prevent the mixing of the base and subgrade. If suitable drainage cannot be provided for a granular base, a 6 inch thick soil-cement base should be utilized. The cement-treated base, if utilized, should be constructed in accordance with *LA DOTD Standard Specifications for Roads and Bridges* Section 303. 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.

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.

8.3 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**

**9. Drainage and Landscaping.** Proper long term drainage should be provided to direct surface water away from the completed building foundations and pavements. Gutters and downspouts, as well as positive site grading, should be utilized for this purpose as required. Landscaping near the building foundations 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 than the drip line of the mature tree canopy.

**10. 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.

**11. 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. The Geotechnical Engineer of Record should be provided with timely copies of all test results. Otherwise, the suitability of these recommendations and/or the performance of the earthwork and foundations for this project cannot be assured.

**12. 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 building foundations 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.

**13. 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.

**APPENDIX**

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

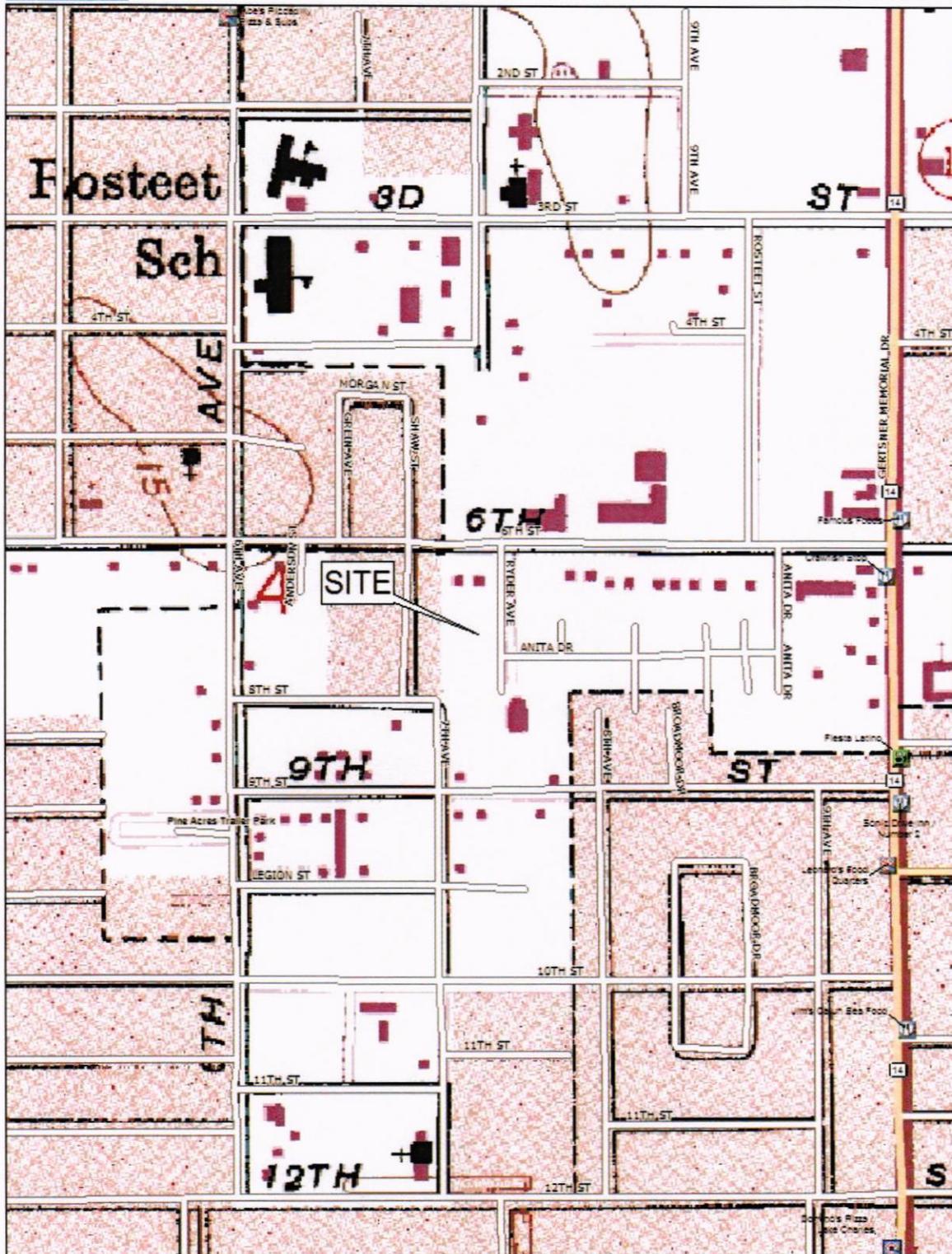
Aerial Photograph (Figure 2)

Site Plan / Boring Location Plan (Figure 3)

Recommended Procedure for New Building Pad (Figure 4)

Soil Boring Logs (4)

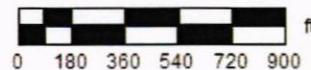
Description of Field and Laboratory Testing Procedures



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www.delorme.com



Data Zoom 15-0

Daniel J. Holder, P.E., Inc.  
 Consulting Civil / Geotechnical Engineer  
 2767 Scarborough Drive  
 Lake Charles, LA 70615  
 (337) 274-4125 [dan@danholderpe.com](mailto:dan@danholderpe.com)

Anita Drive Park  
 Lake Charles, Louisiana  
 for  
 CSRS, Inc.  
 Baton Rouge, Louisiana

Project Engineer: DJH	DJH File No. 22-057
Drawn By: dan	Date: 11 Jan 2023
Checked By: DJH	Figure No. 1

Site Vicinity Map /  
 U.S.G.S. Topographic Map



# Map



This map does not represent a legal survey or document. \*See Disclaimer

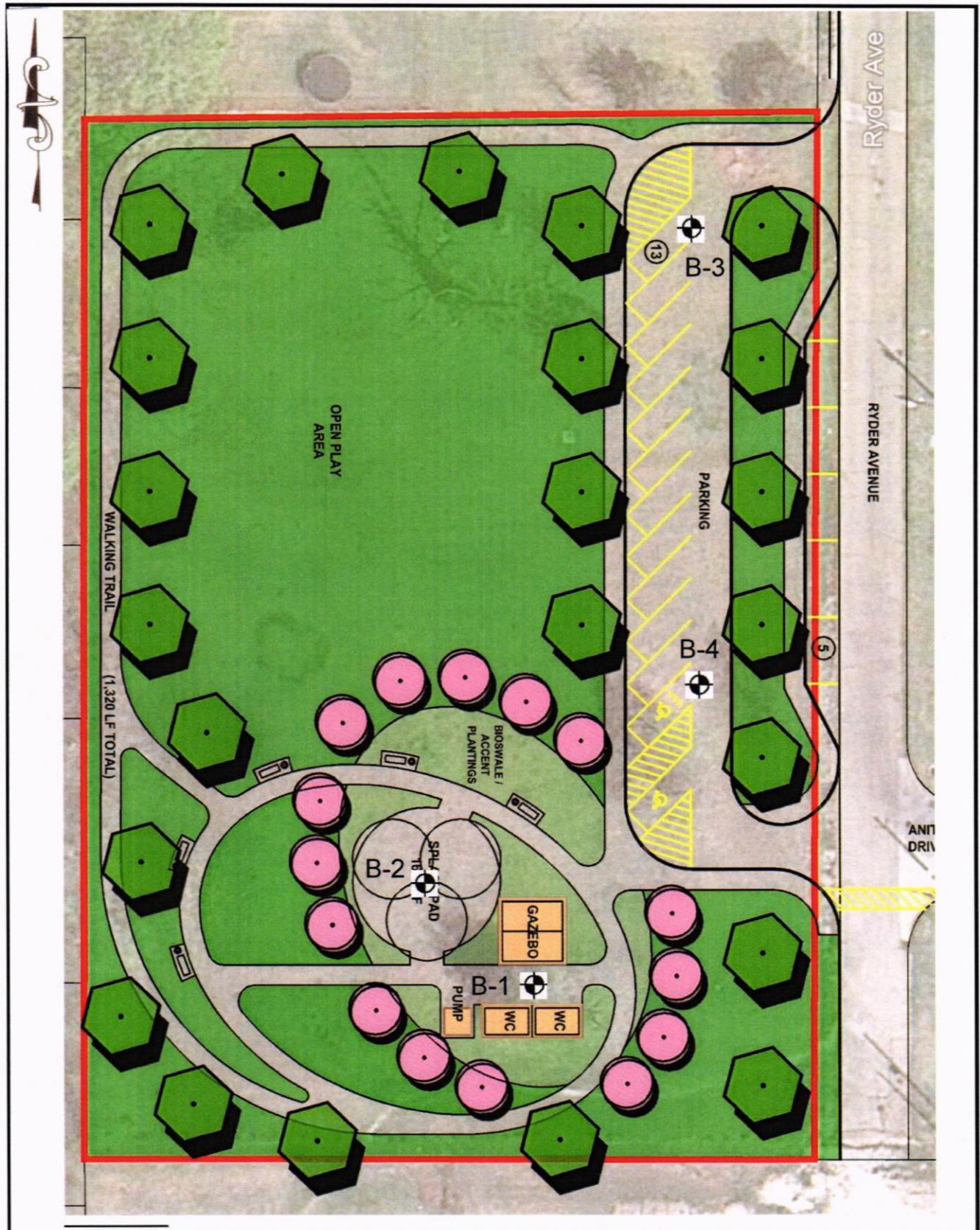


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 Lake Charles, Louisiana  
 for  
 CSRS, Inc.  
 Baton Rouge, Louisiana

Project Engineer: DJH	DJH File No. 22-057
Drawn By: dan	Date: 11 Jan 2023
Checked By: DJH	Figure No. 2
Aerial Photograph / Boring Location Plan	

Source: Calcasieu Parish Police Jury GIS Mapping Application - 2022



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Anita Drive Park  
 Lake Charles, Louisiana  
 for  
 CSRS, Inc.  
 Baton Rouge, Louisiana

Project Engineer: DJH	DJH File No. 22-057
Drawn By: dan	Date: 11 Jan 2023
Checked By: <i>[Signature]</i>	Figure No. 3
Site Plan / Boring Location Plan	

Source: Site Plan Provided by CSRS, Inc.

## RECOMMENDED PROCEDURE FOR NEW BUILDING PAD

### EXISTING

### NEW PAD

①	"topsoil"
②	"fat" clay subgrade (undercut as necessary for 4' pad)

③	new, 4' thick pad of select fill
②	"fat" clay subgrade (undercut as necessary for 4' pad)

- ① Remove all "topsoil" and other unsuitable materials to expose firm clayey subgrade.
- ② Remove (undercut) enough "fat" clay subgrade to provide at least 4' below bottom of design floor slab elevation, and 2' below bottom of any footings or grade beams.
- ③ Place and compact new, select fill pad (at least 4' thick) in 6" to 8" loose "lifts".  
Test each lift in at least three (3) locations for compaction and material verification.

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

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Anita Drive Park  
 Lake Charles, Louisiana  
 for  
 CSRS, Inc.  
 Baton Rouge, Louisiana

Project Engineer: DJH	DJH File No. 22-057
Drawn By: dan	Date: 11 Jan 2023
Checked By: <i>DJH</i>	Figure No. 4
Recommended Procedure for New Building Pad	

# SOIL BORING LOG

## Boring No. B-1

Page 1 of 1

Project: Anita Drive Park  
 Location: Anita Drive and Ryder Avenue  
 Lake Charles, Louisiana  
 Client: CSRS, Inc.  
 Baton Rouge, Louisiana

DJH File No: 22-057  
 Date Drilled: 12/16/2022  
 Logged By: Silas Henrich  
 Drilled By: Data Acquisition Services  
 Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests				Laboratory Tests					Notes / Other Tests	Symbol	Description
	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits					
							Liquid Limit, %	Plastic Limit, %	Plasticity Index, %			
1	ST	2 tsf										Firm dark brownish gray to black very SILTY CLAY (CL-ML), w/ roots - poor
2												
3	ST	2½ tsf		4.7	116	12	41	15	26	ε <sub>f</sub> = 2.1%		Hard dark gray w/ tan & gray SILTY CLAY (CL) - poor, dry
4												
5	ST	4½ tsf		3.7	106	16				ε <sub>f</sub> = 5.0%		Very stiff tan & gray SILTY CLAY (CL), w/ lots of large dark gray silt pockets
6												
7	ST	3½ tsf		1.1	110	20	37	19	18	ε <sub>f</sub> = 5.0%		Stiff reddish brown w/ light gray very SANDY CLAY (CL), w/ black oxides - wet
8												
9	ST	2½ tsf										- ditto; grading to CLAYEY SAND (SC) w/ black oxides - wet
10												
11	ST	3½ tsf		1.4	97	27				ε <sub>f</sub> = 4.3%		Stiff reddish brown w/ light gray CLAY (CH), w/ light gray silt pockets & black oxides
12												
13												
14	ST	4 tsf										Stiff reddish brown CLAY (CH), w/ lots of tan & light gray silt lenses & black oxides
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
Boring Data						Ground Water Data				Notes / Other Tests		
Boring Advancement: Dry Auger: 0' to 15' Rotary Wash: n / a						★ No Ground Water Encountered				ε <sub>f</sub> = Failure Strain		
Boring Abandonment: Boring Backfilled w/ Soil Cuttings Upon Completion						Sample Type:						
						ST: Shelby Tube (ASTM D 1587)						
						SS: Split Spoon (ASTM D 1586)				Soil Stratification is Approximate		

# SOIL BORING LOG

## Boring No. B-2

Page 1 of 1

Project: Anita Drive Park  
 Location: Anita Drive and Ryder Avenue  
 Lake Charles, Louisiana  
 Client: CSRS, Inc.  
 Baton Rouge, Louisiana

DJH File No: 22-057  
 Date Drilled: 12/16/2022  
 Logged By: Silas Henrich  
 Drilled By: Data Acquisition Services  
 Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests			Laboratory Tests						Notes / Other Tests	Symbol	Description
	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, $\gamma_d$ (pcf)	Moisture Content, w (%)	Atterberg Limits					
							Liquid Limit, %	Plastic Limit, %	Plasticity Index, %			
1	ST	2 tsf		0.6	111	17				$\epsilon_f = 4.3\%$		Firm dark brown to black very SILTY CLAY (CL-ML), w/ roots - poor
2												
3	ST	1½ tsf										Stiff tan & gray SILTY CLAY (CL), w/ large dark gray silt pockets
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						Ground Water Data				Notes / Other Tests		
Boring Advancement: Dry Auger: 0' to 4' Rotary Wash: n / a						★ No Ground Water Encountered				$\epsilon_f$ = Failure Strain		
Boring Abandonment: Boring Backfilled w/ Soil Cuttings Upon Completion						Sample Type: ST: Shelby Tube (ASTM D 1587) SS: Split Spoon (ASTM D 1586)						
											Soil Stratification is Approximate	

# SOIL BORING LOG

## Boring No. B-3

Page 1 of 1

Project: Anita Drive Park  
 Location: Anita Drive and Ryder Avenue  
 Lake Charles, Louisiana  
 Client: CSRS, Inc.  
 Baton Rouge, Louisiana

DJH File No: 22-057  
 Date Drilled: 12/16/2022  
 Logged By: Silas Henrich  
 Drilled By: Data Acquisition Services  
 Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests				Laboratory Tests					Notes / Other Tests	Symbol	Description
	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, γd (pcf)	Moisture Content, w (%)	Atterberg Limits					
							Liquid Limit, %	Plastic Limit, %	Plasticity Index, %			
1	ST	2 tsf				19	35	17	18			Firm black very SILTY CLAY (CL-ML), w/ fine roots - very poor
2												
3	ST	4½ tsf										Stiff dark gray to gray SILTY CLAY (CL), w/ very large dark gray silt pockets - poor
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						Ground Water Data				Notes / Other Tests		
Boring Advancement: Dry Auger: 0' to 4' Rotary Wash: n / a						★ No Ground Water Encountered				ε <sub>r</sub> = Failure Strain		
Boring Abandonment: Boring Backfilled w/ Soil Cuttings Upon Completion						Sample Type: ST: Shelby Tube (ASTM D 1587) SS: Split Spoon (ASTM D 1586)						
										Soil Stratification is Approximate		

# SOIL BORING LOG

## Boring No. B-4

Page 1 of 1

Project: Anita Drive Park  
 Location: Anita Drive and Ryder Avenue  
 Lake Charles, Louisiana  
 Client: CSRS, Inc.  
 Baton Rouge, Louisiana

DJH File No: 22-057  
 Date Drilled: 12/16/2022  
 Logged By: Silas Henrich  
 Drilled By: Data Acquisition Services  
 Equipment: Ardco Top Drive (Buggy)

Depth (ft)	Field Tests			Laboratory Tests						Notes / Other Tests	Symbol	Description	
	Sample Type	Penetrometer (tsf) or SPT (bpf)	Ground Water	Qu / UU (tsf)	Dry Density, $\gamma_d$ (pcf)	Moisture Content, w (%)	Atterberg Limits						
							Liquid Limit, %	Plastic Limit, %	Plasticity Index, %				
1	ST	2 tsf		1.2	109	17					$\epsilon_f = 5.0\%$		Stiff black very SILTY CLAY (CL-ML), w/ roots & large dark gray silt pockets - poor
2													
3	ST	4½ tsf											Very stiff gray & tan SILTY CLAY (CL), w/ very large dark gray silt pockets & roots
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													
Boring Data						Ground Water Data				Notes / Other Tests			
Boring Advancement: Dry Auger: 0' to 4' Rotary Wash: n / a						★ No Ground Water Encountered				$\epsilon_f$ = Failure Strain			
Boring Abandonment: Boring Backfilled w/ Soil Cuttings Upon Completion						Sample Type: ST: Shelby Tube (ASTM D 1587) SS: Split Spoon (ASTM D 1586)				Soil Stratification is Approximate			

### 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 ( $\epsilon_f$ ) 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.

From: [Marissa Jimenez](#)  
To: [Kelly Faerber](#)  
Cc: [Vivian \(Aucoin\) Johnson \(DEQ\)](#); [Chris Means](#); [DEQ SOV](#)  
Subject: DEQ SOV# 230523/0400 Anita Drive Park Project  
Date: Monday, July 17, 2023 1:03:51 PM

**EXTERNAL EMAIL:** Please do not click on links or attachments unless you know the content is safe.

July 17, 2023

Nicholas E. Hunter, Mayor

City of Lake Charles  
326 Pujoe Street P.O. Box 900  
Lake Charles, LA 70602-0900  
[Kelly.Faerber@csrsinc.com](mailto:Kelly.Faerber@csrsinc.com)

Anita Drive Park Project

RE: 230523/0400

LCDBG CARES LLOP Funding  
Calcasieu Parish

Dear Mr. Hunter:

The Louisiana Department of Environmental Quality (LDEQ) has received your request for comments on the above referenced project.

After reviewing your request, the Department has no objections based on the information provided in your submittal. However, for your information, the following general comments have been included. Please be advised that if you should encounter a problem during the implementation of this project, you should immediately notify LDEQ's Single-Point-of-contact (SPOC) at (225) 219-3640.

- Please take any necessary steps to obtain and/or update all necessary approvals and environmental permits regarding this proposed project.
- If your project results in a discharge to waters of the state, submittal of a Louisiana Pollutant Discharge Elimination System (LPDES) application may be necessary.
- If the project results in a discharge of wastewater to an existing wastewater treatment system, that wastewater treatment system may need to modify its LPDES permit before accepting the additional wastewater.
- All precautions should be observed to control nonpoint source pollution from construction activities. LDEQ has stormwater general permits for construction areas equal to or greater than one acre. It is recommended that you contact the LDEQ Water Permits Division at (225) 219-3590 to determine if your proposed project requires a permit.
- If your project will include a sanitary wastewater treatment facility, a Sewage Sludge and Biosolids Use or Disposal Permit is required. An application form or Notice of Intent will need to be submitted if the sludge management practice includes preparing biosolids for land application or preparing sewage sludge to be hauled to a landfill. Additional information may be obtained on the LDEQ website at <https://deq.louisiana.gov/page/sewage-biosolids> or by contacting the LDEQ Water Permits Division at (225) 219-3590.
- If any of the proposed work is located in wetlands or other areas subject to the jurisdiction of the U.S. Army Corps of Engineers, you should contact the Corps directly regarding permitting issues. If a Corps permit is required, part of the application process may involve a water quality certification from LDEQ.
- All precautions should be observed to protect the groundwater of the region.
- Please be advised that water softeners generate wastewaters that may require special limitations depending on local water quality considerations. Therefore if your water system improvements include water softeners, you are advised to contact the LDEQ Water Permits to determine if special water quality-based limitations will be necessary.
- Any renovation or remodeling must comply with LAC 33:III.Chapter 28, Lead-Based Paint Activities; LAC 33:III.Chapter 27, Asbestos-Containing Materials in Schools and State Buildings (includes all training and accreditation); and LAC 33:III.5151, Emission Standard for Asbestos for any renovations or demolitions.
- If any solid or hazardous wastes, or soils and/or groundwater contaminated with hazardous constituents are encountered during the project, notification to LDEQ's Single-Point-of-Contact (SPOC) at (225) 219-3640 is required. Additionally, precautions should be taken to protect workers from these hazardous constituents.
- *The following comments are provided by the USTD and are in response to SOV#230523/0400:  
A file review indicates the following AI Number is located in the vicinity of 1600 Ryder Ave in Calcasieu Parish, LA and at one time contained USTs on the properties that have been removed from the LDEQ database:  
AI No. 24225; Central Freightways; 1645 Ryder Ave  
-If the project will involve the disturbance of any soils in former UST areas which may exceed the Screening Option Standards established by the LDEQ Risk Evaluation/Corrective Action Program (RECAP) Regulation, these materials may be considered a waste and disposed of at a permitted facility, or might be managed as part of a Solid Waste Beneficial Use or Soil Reuse Plan in accordance with LAC 33:VII.Chapter 11. Alternately, a site-specific RECAP Evaluation might be conducted and submitted to the LDEQ.  
-If any underground storage tanks are encountered during the project, they must be in compliance with the regulations found in LAC 33:XI of the Environmental Regulatory Code. If any contaminated soil or groundwater is encountered, the findings should be reported to LDEQ.*

Currently, Calcasieu Parish is classified as attainment with the National Ambient Air Quality Standards and has no general conformity determination obligations.

Please send all Solicitation of Views (SOVs) requests and questions to [SOVs@la.gov](mailto:SOVs@la.gov).

Sincerely,  
**Marissa Jimenez**  
Environmental Scientist Manager  
LDEQ Office of the Secretary  
Outreach and Small Business Assistance  
225-219-3963



## CITY OF LAKE CHARLES

NICHOLAS E. HUNTER  
MAYOR

326 Pujo Street • P.O. Box 900  
Lake Charles, LA 70602-0900  
(337) 491-1201 • FAX (337) 491-1206

OFFICE OF THE MAYOR

### MEMORANDUM

City of Lake Charles

TO: FY 2021, CV-LLO ERR File – Anita Drive Park

FROM: Mayor Nicholas Hunter

CC: CSRS, LLC

DATE: 7/25/2023

RE: FY 2021 LCDBG CV Love Louisiana Outdoors Program – Anita Drive Park, Finding of No Effect for Endangered Species

---

Comments: This office agrees with the findings from the Louisiana Department of Wildlife and Fisheries' (LDWF) letter dated March 24, 2023, to Kelly Faerber with CSRS, LLC that "no impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project." Letter is provided as an attachment to this memo.

---

JOHN BEL EDWARDS  
GOVERNOR



JACK MONToucET  
SECRETARY

PO BOX 98000 | BATON ROUGE LA | 70898

**Date** March 24, 2023  
**Name** Kelly Faerber  
**Company** CSRS  
**Street Address** 8555 United Plaza Blvd.  
**City, State Zip** Baton Rouge, LA 70809  
**Project** Anita Drive Park Project  
CSRS Project No 219264  
**Project ID**  
**Invoice Number** 23032405

Personnel of the Louisiana Wildlife Diversity Program (WDP) have reviewed the preliminary data for the captioned project. After careful review of our database, no impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project. No state wildlife refuges or wildlife management areas are known to occur at the specified site within Louisiana's boundaries.

The Wildlife Diversity Program (WDP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. WDP reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the WDP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. WDP reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. WDP requires that this office be acknowledged in all reports as the source of all data provided here. If at any time WDP tracked species are encountered within the project area, please contact the WDP Data Manager at 225-763-3554. If you have any questions, or need additional information, please call 337-735-8734.

Sincerely,

Digitally signed by Carolyn Michon

Date: 2023.03.24 11:30:09 -05'00'

*for Carolyn Michon*

Nicole Lorenz, Program Manager  
Wildlife Diversity Program

# memo

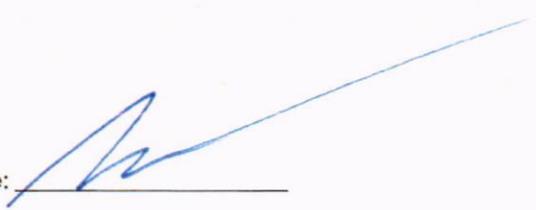
City of Lake Charles

**To:** FY 2021, CV-LLO ERR File – Anita Drive Park  
**From:** Mayor Nicholas Hunter  
**CC:** CSRS, LLC  
**Date:** 7/27/23  
**Re:** FY 2021 LCDBG CV Love Louisiana Outdoors Program – Anita Drive Park, Form A-22  
Environmental Assessment Checklist

---

**Comments:** This office has determined that the Anita Drive Park Project is adequate and will not adversely affect the following city's resources:

- Police
- Fire
- Emergency Medical
- Open Space
- Recreation
- Cultural Facilities
- Transportation
- Solid Waste
- Wastewater
- Educational Facilities
- Commercial Facilities
- Health Care Facilities
- Social Services
- Water Supply

Signature: 

---

**Table of Contents**  
**Anita Drive Park**  
**Revised Environmental Review Record (ERR) Documents**  
**July 28, 2023**

- Project Description
- Form A-15: Compliance Documentation Checklist
- Form A-17: Worksheet For Preparing 24 CFR 58.5 Statutory Checklist
- John H. Chafee Coastal Barrier Resources System Map
- Louisiana Department of Natural Resources- Office of Coastal Management Map
- Louisiana Department of Wildlife and Fisheries – Natural and Scenic Rivers Map
- Airport Hazards Exhibit
- Email correspondence received from Marissa Jimenez, Environmental Scientist Manager, LDEQ
- Louisiana Nonattainment/Maintenance Status Documentation
- Statutory Checklist for Compliance with 24 CFR 58.5 NEPA Related Federal Laws and Authorities
- Determination signature page
- A-22 Environmental Assessment Checklist and supporting documentation
  - City of Lake Charles Office of Zoning and Land Use compliance letter: Dated January 26,2023
  - Geotechnical Engineering Report, Anita Drive Park, Prepared by: Danil, J. Holder, P.E., Inc. Consulting Civil / Geotechnical Engineer: Dated January 12, 2023.
  - City of Lake Charles Permit Office compliance letter: Dated January 30, 2023.
  - City of Lake Charles Memo: Dated July 27, 2027 and signed by Mayor Hunter.
  - LDH compliance permit letter: Dated March 17, 2023.
  - City of Lake Charles Permit Office compliance letter: Dated January 24, 2023.
  - City of Lake Charles Permit Office email correspondence compliance: Dated January 25, 2023.
- City of Lake Charles Memo regarding the FY2021 LCDBG CV Love Louisiana Outdoor Program – Anita Drive Park, Finding of No Effect for Endangered Species.

**A-15: COMPLIANCE DOCUMENTATION CHECKLIST**

**Compliance Checklist for 24 CFR §58.6, Other Requirements**

**Complete for all projects, including Exempt (§58.34), Categorically Excluded Subject to §58.5 [§58.35(a)], Categorically Excluded Not Subject to §58.5[§58.35(b)], and Projects Requiring Environmental Assessments (§58.36). Must be completed for each individual property address included within the project description.**

Project Name: Anita Drive Park

**1. §58.6(A) AND (B) FLOOD DISASTER PROTECTION ACT OF 1973, AS AMENDED; NATIONAL FLOOD INSURANCE REFORM ACT OF 1994**

**a. Does the project involve: Formula grants made to states, State-owned property, small loans (\$5,000 or less), assisted leasing that is not used for repairs, improvements, or acquisition?**

Yes  No

If Yes, compliance with this section is complete.

If No, continue.

**b. Is the project located in a FEMA identified Special Flood Hazard Area?**

Yes  No

If No, compliance with this section is complete.

If Yes, continue.

**c. Is the community participating in the National Flood Insurance Program (or has less than one year passed since FEMA notification of Special Flood Hazards)?**

Yes  No

If Yes, Flood Insurance under the National Flood Insurance Program must be obtained. If HUD assistance is provided as a grant, insurance must be maintained for the economic life of the project and in the amount of the total project cost (or up to the maximum allowable coverage, whichever is less). If HUD assistance is provided as a loan, insurance must be maintained for the term of the loan and in the amount of the loan (or up to maximum allowable coverage, whichever is less). A copy of the flood insurance policy declaration must be kept on file in the ERR.

**If No**, Federal assistance may not be used in the Special Flood Hazards Area.

Cite and attach source documentation: (Documentation should include a FEMA Flood Map showing project location in reference to flood zone designation. If flood map is not available, use best available information.)

For additional information see:

HUD Guidance on Flood Insurance: <https://www.onecpd.info/environmental-review/flood-insurance/>

FEMA Map Service Center: <http://www.msc.fema.gov>

NFIP Community Status Book: [www.fema.gov/fema/csb.shtm](http://www.fema.gov/fema/csb.shtm)

2. §58.6(C) COASTAL BARRIER IMPROVEMENT ACT, AS AMENDED BY THE COASTAL BARRIERS IMPROVEMENT ACT OF 1990 (16 U.S.C. 3501)

**a. Does the project involve new construction, conversion of land uses, major rehabilitation of existing structure, or acquisition of undeveloped land?**

Yes  No

**If No**, compliance with this section is complete.

**If Yes**, continue below.

**b. Is the project located in a coastal barrier resource area?**

Yes  No

**If No**, compliance with this section is complete.

**If Yes**, Federal assistance may not be used in such an area.

Cite and attach source documentation: (Documentation should include map (e.g. Google Earth) noting project distance from Coastal Barrier Resources.)

For more information see:

CBRS HUD Guidance: <https://www.onecpd.info/environmental-review/coastal-barrier-resources/>

CBRA mapper: <http://wim.usgs.gov/cbramapper/cbramapper.html>

3. §58.6(D) RUNWAY CLEAR ZONES AND CLEAR ZONES [24 CFR §51.303(A) (3)]

a. Does the project involve the sale or purchase of existing property?

Yes  No

If No, compliance with this section is complete.

If yes, continue below.

b. Is the project located within 2,500 feet of the end of a civil airport runway (Civil Airport's Runway Clear Zone) or within 15,000 feet of the end of a military runway (Military Airfield's Clear Zone)?

Yes  No

If No, compliance with this section is complete.

If Yes, Notice must be provided to buyer. The notice must advise the buyer that the property is in a Runway Clear Zone or Clear Zone, what the implications of such a location are, and that there is a possibility that the property may, at a later date, be acquired by the airport operator. The buyer must sign a statement acknowledging receipt of this information, and a copy of the signed notice must be maintained in this ERR.

Cite and attach source document (Map indicating project site in proximity to end of runway):

For more information see:

Airport Information: <http://www.airnav.com/airports/>

HUD Airport Hazards Guidance: <https://www.onecpd.info/environmental-review/airport-hazards/>

Notice to Prospective Buyers: <https://www.onecpd.info/resource/2758/notice-prospective-buyers-properties-in-runway-clear-zones/>

AUTHORIZED RESPONSIBLE ENTITY OFFICIAL:

  
\_\_\_\_\_  
Authorized Responsible Entity Signature

7-27-23  
\_\_\_\_\_  
Date

Nicholas E. Hunter  
\_\_\_\_\_  
Authorized Responsible Entity Name (printed)

Mayor  
\_\_\_\_\_  
Title (printed)

**A-17: WORKSHEET FOR PREPARING 24 CFR 58.5 STATUTORY CHECKLIST****Worksheet for Preparing 24 CFR §58.5 Statutory Checklist**

**[Attach this Worksheet and all documentation used to complete this Worksheet to Statutory Checklist]**

**General Project Information:**

Does the project include demolition, ground disturbance, new construction or substantial rehabilitation (increases capacity by 20% or more)?

Yes  No

**1. Historic Properties [36 CFR Part 800]**

a. Is the project located within or directly adjacent to a historic district?

Yes  No

b. Were any properties of historical, architectural, religious, or cultural significance identified in the project's Area of Potential Effect (APE)?

Yes  No

c. Did the SHPO agree that "no historic properties will be affected?"

Yes  No

d. Does the project involve the transfer, lease, or sale of a historic property of religious and cultural significance to tribes, demolition, ground disturbance, or new construction in undeveloped natural areas (if no, tribal consultation is not required)?

Yes  No

e. If yes to 1.d., does HUD's Tribal Directory Assessment Tool indicate that tribes have an interest in the location where the project is sited? (<https://egis.hud.gov/tdat/>)

Yes  No  N/A

f. If "yes" to 1.e., upon notification by Grantee in writing, did any tribe(s) respond with the following within 30 days of the receipt of the notification:

Requested inadvertent discovery clause  Requested to be a consulting party  
 Other response  No response

**If the SHPO does not agree, "no historic properties will be affected" or if a Tribe requests to be a consulting party, contact OCD to discuss further. Otherwise, record all response**

from tribes or the lack thereof in the Statutory Checklist, mark box A, and compliance is complete.

**2. §58.5(b) (1) Floodplain Management [24 CFR Part 55]**

a. Is the project located within (or have an impact on) a 100-year floodplain (Zone A) or Coastal High Hazard (Zone V) identified by FEMA maps?

Yes  No

b. Does the project involve a "critical action," per §55.2(b)(2)(i), located within a 500-year floodplain (Zone B) identified by FEMA maps?

Yes  No

c. Is the project located in a floodway? If so, contact OCD immediately to determine if this project may be completed.

Yes  No

If no to a, b and c, mark box A and compliance is complete. If yes to a, b, or c, mark box B and follow HUD's Floodplain Management Regulations 8-step decision-making process of §55.20 to comply with 24 CFR Part 55. The findings of the decision-making process must be included in the ERR and summarized in Part 58 public notices, as well as NOI/RROF and FONSI notices.

**3. §58.5(b) (2) Wetlands Protection (E.O. 11990)**

a. Does the project involve new construction, land use conversion, or major rehabilitation?

Yes  No

b. If yes to 3.a., are there wetlands in or adjacent to the area where construction will take place according to the Wetland Inventory Mapper maintained by the US Fish & Wildlife Service?

Yes  No  N/A

If no to a or b, mark box A and compliance is complete. If yes to b, mark box B and follow HUD's Floodplain Management Regulations 8-step decision-making process of §55.20 to comply with 24 CFR Part 55. The findings of the decision-making process must be included in the ERR and summarized in Part 58 public notices, as well as NOI/RROF and FONSI notices.

**4. §58.5(c) Coastal Zone Management [Coastal Zone Management Act of 1972, Sections 307(c) & (d)]**

a. If the project involves new construction, land use conversion, major rehabilitation, or substantial improvements, is the project located in the Coastal Zone?

Yes  No  N/A

If yes, mark box B and ensure that the State CZM agency finds that the project is consistent with the approved State CZM Plain. If no, mark box A and compliance is complete.

5. §58.5(d). Sole Source Aquifers [40 CFR Part 149]

- a. Is the project located within a U.S. Environmental Protection Agency (EPA)-designated sole source aquifer watershed area per EPA Ground Water Office?

Yes  No

If yes, consult with the Water Management Division of EPA to design mitigation measures to avoid contaminating the aquifer and implement appropriate mitigation measures. Include mitigation measures in mitigation section of Statutory Checklist. Mark box B on the Statutory Checklist for this authority. If No, compliance with this section is complete. Mark box A on the Statutory Checklist for this authority.

6. §58.5(e) Endangered Species [50 CFR Part 402]

- a. Does the project ONLY involve purchase and placement of playground equipment within existing parks?

Yes  No

- b. If no to 6.a., has the US Fish and Wildlife Service or the National Marine Fisheries Services identified listed species or designated critical habitat in the parish where the project is located?

Yes  No  N/A

- c. If yes to 6.b., did you contact US Fish and Wildlife Service or a qualified professional to determine if the project may affect the species or habitat?

Yes  No  N/A

If yes to a, mark box A and compliance is complete. If no to b, the Grantee is required to make a finding of "no effect" and include a memorandum to the file supporting the finding; mark box A and compliance is complete. If yes to c, the Grantee must consult with the US Dept. of Fish and Wildlife to determine if mitigation is required; mark box B.

7. §58.5(f) Wild and Scenic Rivers [36 CFR Part 297]

- a. If the project involves new construction, land use conversion or major rehabilitation, is the project located within one (1) mile of a designated Wild and Scenic River, or river being studied as a potential component of the Wild and Scenic River system?

Yes  No  N/A

If no, mark box A and compliance is complete. If yes, mark box B and a determination from the National Park Service must be obtained with a finding of no direct or adverse effect.

**8. §58.5(g) Air Quality [40 CFR Parts 6, 51, 61 and 93]**

- a. Does this project involve demolition or renovation of buildings likely to contain asbestos containing materials?

Yes  No

- b. Is the project in a non-attainment area?

Yes  No

- c. If yes to 8.b., is the project consistent with the air quality State Implementation Plan (SIP)?

Yes  No  N/A

If a and b are no, mark box A and compliance is complete. If a is yes, mark box B ensure the project is in compliance with EPA's Asbestos regulations found at 40 CFR Part 61 (NESHAP) and all State and local regulations. A worksheet with guidance on determining if the project involves Asbestos can be found at <https://www.hudexchange.info/resource/1205/hprp-lead-based-paint-screening-worksheet/>. Please include this worksheet with the report. List all required mitigation measure on statutory checklist. If yes to c, mark box B and obtain letter of consistency from cognizant agency.

**9. §58.5(h) Farmlands Protection [7 CFR Part 658]**

- a. Does the project involve new construction, conversion of undeveloped land, or site clearance?

Yes  No

- b. If yes to 9.a., is the project located in an area committed to urban uses?

Yes  No  N/A

- c. If no to 9.b., does the project site include prime or unique farmland, or other farmland of statewide or local importance as identified by the U.S. Department of Agriculture, Natural Resources Conservation Service?

Yes  No  N/A

If a is no, mark box A and compliance is complete. If b is yes, mark box A and compliance is complete. If c is yes, mark box B and request evaluation of land type from MRCS using Form AD-1006; consider resulting rating to determine what mitigation measures, if any, are necessary.

**10. §58.5(i) (1) Noise Abatement and Control [24 CFR Part 51B]**

- a. Does the project involve a noise sensitive use such as a residential structure, school, hospital, nursing home, library, etc.?

Yes  No

**If no, mark box A and compliance is complete. If yes, contact OCD to discuss further.**

**11. §58.5(i) (1) Explosive and Flammable Operations [24 CFR 51C]**

- a. Does the project involve development, construction, rehabilitation, modernization or land use conversion of a property intended for residential, institutional, recreational, commercial, or industrial use?

Yes  No

**If no, mark box A and compliance is complete. If yes, contact OCD to discuss further.**

**12. §58.5(i) (1) Airport Hazards [24 CFR 51D]**

- a. Is the project within 2,500 feet of a civilian airport [the Runway Clear Zone (RCZ)] or 15,000 feet of a military airfield [the Clear Zone (CZ) or Accident Potential Zone (APZ)]?

Yes  No

**If no, mark box A and compliance is complete. If yes, obtain written finding from airport operator stating whether or not the project is located in a RCZ, CZ, or APZ. If airport operator finds project is located in RCZ, CZ or APZ, contact OCD to discuss further.**

**13. §58.5(i) (2) Contamination and Toxic Substances – Please complete search in NETROnline <https://environmental.netronline.com/>**

- a. Has the project area ever been used as a dump, landfill, industrial site, or type of site that may have contained hazardous wastes?

Yes  No

- b. Is the project area free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances?

Yes  No

- c. Was an ASTM Phase I Environmental Site Assessment (ESA) report completed for this project? (Note: HUD regulations do not require an ASTM Phase I ESA report for single family homes of 1- 4 units. HUD requires an ASTM Phase I ESA for multifamily (5 or more units) and/or Non- residential properties for environmental review prepared under Part 50.

Yes  No

**If yes continue.**

- d. Did the ASTM Phase I ESA or other documentation uncover any Recognized Environmental Conditions (RECs) or recommend a Phase II, special/specific Phase II, or recommend Phase III environmental site assessments?
- Yes  No
- e. Did any of the ESA reports or other documentation identify the need to mitigate the environmental condition by removing, stabilizing or encapsulating the toxic substances in accordance with the requirements of the appropriate Federal, state or local oversight agency?
- Yes  No

**If no to a and yes to b, mark box A and compliance is complete. If yes to a or no to b, provide documentation from a qualified environmental professional or cognizant agency to ensure the project area is free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances or that potential sources of contamination do not pose a hazard that would restrict the intended uses of the property. If yes to d or e mark box b and provide the ASTM Phase I report along with all required mitigation efforts.**

**14. §58.5(j) Environmental Justice (E.O. 12898)**

- a. Would the proposed project have an adverse impact and would this impact disproportionately impact minority and low-income populations relative to the community-at-large?
- Yes  No

**If no, mark box A and compliance is complete. If yes, mark box B, mitigation or avoidance of adverse impacts must be considered to the extent practicable, public participation processes must involve affected population(s) in the decision-making process. Project may not move forward until EJ issue is mitigated to the satisfaction of the grantee and the impacted community.**

**15. Summary of Mitigation Measures:**

(Required for Incorporation into Project Design, included in Public Notices, and included as requirements of contracts, grants, etc. Ensure final measures are included in Project Description Section of 7015.15.) A JD from the US Army Corps of Engineers for the impacts to the wetlands would need to be obtained as well as Section 404 approval

**16. References:**

(List all resources used to complete environmental review of the proposed project.)  
 Google Earth, U.S. Environmental Protection Agency, NRCS, U.S. Department of Transportation, Louisiana Department of Wildlife and Fisheries, U.S. Fish and Wildlife Service, Federal Emergency Management Agency, Louisiana Department of Natural resources, Historic Aerials, Louisiana Office of Cultural Development, National Wild and Scenic Rivers System, EJ Screen, Netronline, and the City of Lake Charles.

**17. List of Major Reports Obtained:**

(Attach report(s), such as wetlands delineation studies, biological evaluations or habitat assessments, Phase I and II environmental site assessments.)  
 Wetland Delineation, Southland Environmental, LLC January 2023  
 NetrOnline Report  
 USFWS IPaC

**18. List of Preparers and Summary of Qualifications:**

Kelly Faerber, 11 years in Environmental Consulting

**Statutory Checklist for Compliance with 24 CFR §58.5 – NEPA Related Federal Laws and Authorities**

Use this worksheet for projects that are Categorically Excluded Subject to 24 CFR §58.5 listed at 24 CFR §58.35(a) and for projects that require an Environmental Assessment.

Project Name: [Anita Drive Park](#)

ERR FILE # [Application No. LO2021-116](#)

**Definitions:**

**A:** The project is in compliance.

**B:** The project requires an additional compliance step or action.

Statute, Authority, Executive Order Cited at 24 CFR §58.5	A	B	COMPLIANCE FINDING	SOURCE DOCUMENTATION
1. 58.5(a) Historic Properties [36 CFR 800]	X		Review of the Historic Preservation database did not indicate the presence of historic properties on site. SHPO was consulted and a "no effect" determination was given	Historic Preservation Exhibit, Letters were sent to SHPO and the tribes on March 28, 2023. Correspondence was received from SHPO on April 28, 2023. No responses were received from the tribes.
2. 58.5(b)(1) Floodplain Management [24 CFR 55, Executive Order 11988]	X		The property is located in Flood Zone X	FEMA Firm Map, Panel No. 22019C0485F eff, 2/18/2011
3. 58.5(b)(2) Wetland Protection [24 CFR 55, Executive Order 11990]		X	The NWI Mapper does not indicate wetlands within boundaries of the site. However, approximately 0.2 acres of wetlands were identified at the site by Southland Environmental, LLC during a wetland delineation.	NWI Mapper, 8-step process, and Wetland Delineation.
4. 58.5(c) Coastal Zone Management [Coastal Zone Management Act sections 307(c) & (d)]	X		Subject Property is outside of the Coastal Zone	Coastal Zone Map and John H Chaffe Coastal Barrier Resource System.
5. 58.5(d) Sole Source Aquifers [40 CFR 149]		X	The subject property is located above the Chicot Aquifer System. The Chicot Aquifer is divided in the shallow alluvial sands, the "200-foot" sand, the "500-foot" sand, and the "700-foot" sand. The equipment proposed for the Anita Drive Park is not anticipated to be at depths that would interfere with the Chicot Aquifer	Letter sent to EPA on March 28, 2023 and concurrence received from Omar Martinez, EPA Region VI on April 4, 2023.

6. 58.5(e) Endangered Species [50 CFR 402]	X		<p>There are no critical habitats on the subject property. Consultation with USFWS and LDWF determined a "no effect" for the project</p>	<p>USFWS IPaC. Correspondence was sent on March 10, 2023 to Carolyn Michon of LDWF by CSRS, LLC. Concurrence from Carolyn Michon was received on March 24, 2023 stating "no impact to rare, threatened, or endangered species or habitats are anticipated" Letter from the City of Lake Charles was sent to LDWF on March 28, 2023. There has been no response to the City of Lake Charles' letter to date. A memo from Mayor Hunter, dated July 25, 2023 is provided as an Attachment stating concurrence on the LDWF findings</p>
7. 58.5(f) Wild and Scenic Rivers [36 CFR 297]	X		<p>There are no wild and scenic rivers located on or near the subject property</p>	<p>Wild and Scenic River Exhibit and list of study rivers for the state of Louisiana</p>
8. 58.5(g) Air Quality [40 CFR parts 6, 51,61, 93]	X		<p>The subject property is located with a Maintenance for 1-Hour Ozone (1979). The 1-hour Ozone (1979) standard was revoked on June 15, 2005</p>	<p>The Louisiana Nonattainment/Maintenance Status Exhibit. The City of Lake Charles sent on March 28, 2023 to Linda Piper of LDEQ. A response was received from Marissa Jimenz of LDEQ on July 17, 2023 stating that LDEQ has no objection to the project. The Nonattainment list for Louisiana can be found at <a href="http://www3.epa.gov/airquality/greenbook/ancl.htm#LA">http://www3.epa.gov/airquality/greenbook/ancl.htm#LA</a> .</p>
9. 58.5(h) Farmland Protection [7 CFR 658]	X		<p>The subject property is located in an area deemed as prime farmland by the NRCS Web Soil Survey, however, the subject property is located within an urbanized area therefore does not fall under protection of the Farmland Protection Act</p>	<p>Farmland Classification &amp; 2020 Census Address Count Listing Files Viewer</p>
10. 58.5(i)(1) Noise Control and Abatement [24 CFR 51B]	X		<p>The proposed project does not involve a noise sensitive use such as a residential structure, school, hospital, nursing home, library, etc.</p>	<p>Project Description</p>
11. 58.5 (i) (1) Explosive and Flammable Operations [24 CFR 51C]	X		<p>The proposed project does involve construction of a neighborhood park and conversion of a vacant land to the park; however, does not include a hazardous waste facility</p>	<p>Project Description</p>

12. 58.5(i)(1) Airport Hazards (Runway Clear Zones and Clear Zones/Accident Potential Zones) [24 CFR 51D]	X	The subject property is approximately 1.2 miles from the Chennault International Airport and approximately 56 miles from Johnson Army Airfield in Pitkin, Louisiana	Airport Hazard Exhibit; The subject property is approximately 1.2 miles from the Chennault International Airport and approximately 56 miles from Johnson Army Airfield in Pitkin, Louisiana
13. 58.5(i)(2)(i-iv) Contamination and Toxic Substances [24 CFR 58.5(i)(2)]	X	The intended use of the parks will not include contamination and toxic substances	NetrOnline Report
14. 58.5(j) Environmental Justice [Executive Order 12898]	X	According to the EJ Screen Report, the area around the subject property is approximately 88% people of color and 60% people of low-income	EJ Screen Report and Map

**DETERMINATION:**

**Box "A" has been checked for all authorities.** For Categorical Exclusions pursuant to §58.35(a) [Does not apply to EA or EIS level of review which can never convert to Exempt], the project can convert to Exempt, per §58.34(a) (12), since the project does not require any compliance measures (e.g., consultation, mitigation, permit or approval) with respect to any law or authority cited at §58.5. The project is now made Exempt and **funds may be drawn down; OR**

**Box "B" has been checked for one or more authority.** For Categorical Exclusions pursuant to §58.35(a), the project cannot convert to Exempt since one or more authority requires compliance, including but not limited to consultation with or approval from an oversight agency, performance of a study or analysis, completion of remediation or mitigation measure, or obtaining of license or permit. **Complete pertinent compliance requirement(s), publish NOI/RROF, request release of funds (HUD-7105.15), and obtain HUD's Authority to Use Grant Funds (HUD-7015.16) per §58.70 and §58.71 before committing funds; OR**

This project is not a Categorical Exclusion pursuant to §58.35(a), or may result in a significant environmental impact to the environment, and requires preparation of an Environmental Assessment (EA). Prepare the EA according to 24 CFR Part 58 Subpart E.

**MITIGATION MEASURES AND CONDITIONS FOR PROJECT APPROVAL:** *(If Box B is checked, provide details regarding further consultation, mitigation, permit requirements or approvals required to be incorporated into public notices and project requirements such as contracts, grants, loan conditions, etc as described in the Statutory Worksheet). Ensure required measures are included in 7015.15 Project Description Section.*

**PREPARER:**

\_\_\_\_\_  
Preparer's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Preparer's Name (printed)

\_\_\_\_\_  
Title (printed)

**AUTHORIZED RESPONSIBLE ENTITY OFFICIAL:**

\_\_\_\_\_  
Authorized Responsible Entity Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Authorized Responsible Entity Name (printed)

\_\_\_\_\_  
Title (printed)

**Environmental Assessment Checklist**

**PRINT**

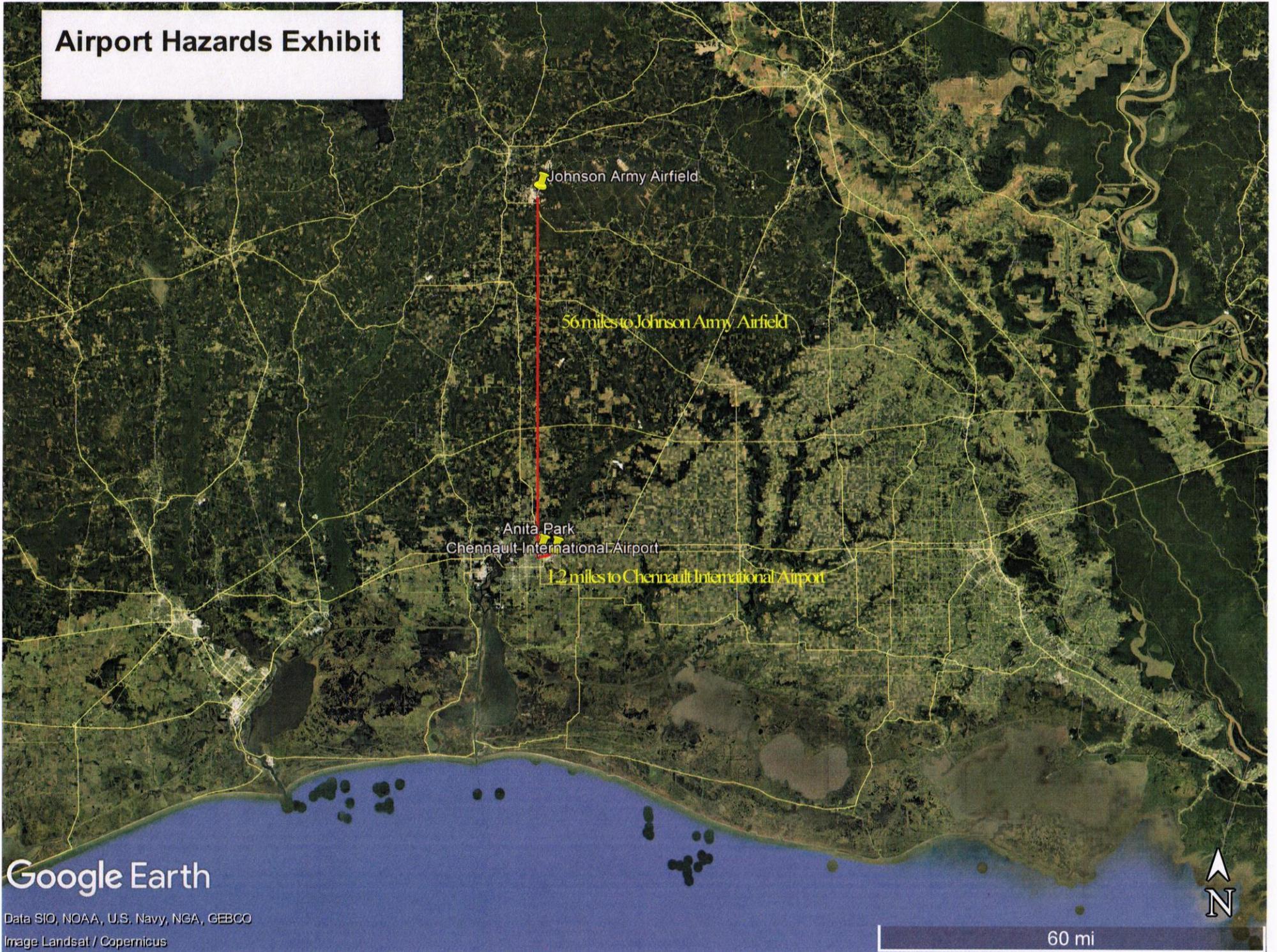
**Instructions:** Summarize the findings from the EA Worksheet here by choosing the appropriate determination in the determination column for each resource. Then, cite the source document in the appropriate column.

Resource	Determination	Source Documentation
<b>Land Development</b>		
1. Conformance with Comprehensive Plans and Zoning	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> In Conformance <input type="checkbox"/> Zoning Permit Required <input type="checkbox"/> Project Modification Required	The subject property is zoned for residential use. According to the Lake Charles Code of Ordinances, Appendix A, Article V, Part 3, Section 5-301, low-intensity recreational uses are listed under conditional uses as long as the parcel of land has an area of sufficient size to accommodate use and the operation of use will not adversely affect the residential character of the neighborhood. <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023.</b>
2. Land Use Compatibility and Urban Impact	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Compatible <input type="checkbox"/> Land Use Change Required <input type="checkbox"/> Project Modification Required	As noted above, the land is zoned for residential use and a park is a permitted use as long as the conditions are met; therefore the proposed Anita Drive Park is compatible with land use. <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023.</b>
3. Slope and Erosion	Choose from list: <input checked="" type="checkbox"/> Not Applicable (State Why) <input type="checkbox"/> Slight Slope – No Impact <input type="checkbox"/> Moderate to Steep Slope – Considered in Project Design <input type="checkbox"/> Project Modification Required	The project site has minimal topographic slope. Recommendations for construction activity are address in the geotechnical report. The City of Lake Charles Office of Zoning and Land Use additionally provide a compliance letter for Stormwater Protection Plan. <b>Sources: Geotechnical Engineering Report, Anita Drive Park, Lake Charles, LA., January 12, 2023, Prepared by Daniel J. Holder, P.E., Inc. Consulting Civil / Geotechnical Engineer. The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023.</b>
4. Soil Suitability	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> No Evidence of Soil Issues <input type="checkbox"/> Project Design Includes Soil Mitigation <input type="checkbox"/> Project Modification Required	Recommendations for construction activity are address in the geotechnical report. <b>Source: Geotechnical Engineering Report, Anita Drive Park, Lake Charles, LA., January 12, 2023, Prepared by Daniel J. Holder, P.E., Inc. Consulting Civil / Geotechnical Engineer.</b>
5. Hazards and Nuisances and Site Safety	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> No Impact <input type="checkbox"/> Hazards and Nuisances Considered in Project Design <input type="checkbox"/> Project Modification Required	During construction, the work area will be barricaded to prevent incidents. Construction will adhere to noise ordinances as defined in the City of Lake Charles Zoning Ordinance. <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023.</b>
6. Energy Consumption	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Energy Conservation Measures in Project Design <input type="checkbox"/> Project Modification Required	Energy consumption is expected to power lighting for the park/ restrooms, and the pump for the splash pad. The City of Lake Charles review the electrical components of the project and provided a compliance letter. <b>Source: City of Lake Charles Permit Office compliance letter, dated: January 30, 2023.</b>
<b>Socioeconomic Factors</b>		
7. Demographic Character Changes	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> No Impact <input type="checkbox"/> Project Modification Required	The addition of a park between the existing residential housing will have no effect on demographic. The City of Lake Charles Office of Zoning and Land Use provided a letter stating the project complies with development and land use standards. <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and E.J. Screen.</b>
8. Displacement	Choose from list: <input checked="" type="checkbox"/> No Displacement <input type="checkbox"/> Displacement and Payment covered by Uniform Relocation Act <input type="checkbox"/> Project Modification Required <input type="checkbox"/> Other (Describe)	The addition of a park between the existing residential housing will not cause displacement as the subject property's intended use is for open space. The City of Lake Charles Office of Zoning and Land Use provided a letter stating the project complies with zoning, land use, and development standards. <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023.</b>

Resource	Determination	Source Documentation
9. Employment and Income Patterns	Choose from list: <input checked="" type="checkbox"/> No Impact <input type="checkbox"/> Beneficial <input type="checkbox"/> Adverse	The addition of the park between existing residential housing will have no effect on employment and income patterns for the area. The City of Lake Charles Office of Zoning and Land Use provided a letter stating the project complies with zoning, land use, and development standards. <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023.</b>
<b>Community Facilities and Service</b>		
10. Educational Facilities	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park provides a public space that can potentially be used for educational and cultural activities. The City of Lake Charles Office of Zoning and Land Use provided a letter stating the project complies with zoning, land use, and development standards. <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
Commercial Facilities	Choose from list: <input checked="" type="checkbox"/> Not Applicable (State Why) <input type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park will not be used as a commercial facility. The City of Lake Charles Office of Zoning and Land Use provided a letter stating the project complies with zoning, land use, and development standards.  <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
Health Care	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park provides a public space for citizens to exercise and relieve stress. The City of Lake Charles Office of Zoning and Land Use provided a letter stating the project complies with zoning, land use, and development standards.  <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
Social Services	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park provides a public space for citizens to meet outdoors and will provide amenities. The City of Lake Charles Office of Zoning and Land Use provided a letter stating the project complies with zoning, land use, and development standards.  <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
Solid Waste	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park will add waste and recyclable material to the Lake Charles' waste management system. The City of Lake Charles Office of Zoning and Land Use provided a letter stating the project complies with zoning, land use, and development standards.  <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
Waste Water	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park will add wastewater to the Lake Charles' municipal system. The project is found to be compliant with the City of Lake Charles and the Louisiana Department of Health (LDH).  <b>Sources: City of Lake Charles Permit Office compliance letter dated: January 24, 2023. LDH compliance letter, dated March 17, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
Storm Water	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	Storm water is anticipated to stay within the boundaries of the park. A minimal amount of storm water is expected to drain to the street and enter the city's drainage system. The City of Lake Charles reviewed the project and provided compliance correspondence.  <b>Source: Email correspondence compliance dated, January 25, 2023 from Kelli Van Norman.</b>
Water Supply	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park's splash pad will use potable water from the City of Lake Charles. The project has been reviewed by the City of Lake Charles Permit Office.  <b>Sources: City of Lake Charles Permit Office compliance letter dated: January 24, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
Public Safety • Police	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The addition of a park between the existing residential housing will have no effect on the Police Department of the City of Lake Charles.  <b>Source: Memo from Mayor Hunter dated July 27, 2023.</b>

Resource	Determination	Source Documentation
<ul style="list-style-type: none"> <li>Fire</li> </ul>	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The addition of a park between the existing residential housing will have no effect on the Fire Department of the City of Lake Charles  <b>Source: Memo from Mayor Hunter dated July 27, 2023.</b>
<ul style="list-style-type: none"> <li>Emergency Medical</li> </ul>	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The addition of a park between the existing residential housing will have no effect on the Emergency Medical Services of the City of Lake Charles  <b>Source: Memo from Mayor Hunter dated July 27, 2023.</b>
Open Space and Recreation <ul style="list-style-type: none"> <li>Open Space</li> </ul>	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park will be added to the City of Lake Charles' Recreation and Parks Department's system. The City of Lake Charles Office of Zoning and Land Use provided a letter stating the project complies with zoning, land use, and development standards. <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
<ul style="list-style-type: none"> <li>Recreation</li> </ul>	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park will be added to the City of Lake Charles' Recreation and Parks Department's system.  <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
<ul style="list-style-type: none"> <li>Cultural Facilities</li> </ul>	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park will not have an effect on cultural facilities.  <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
Transportation	Choose from list: <input type="checkbox"/> Not Applicable (State Why) <input checked="" type="checkbox"/> Existing/Planned Facilities are Adequate <input type="checkbox"/> Project Modification Required	The proposed park will not have an effect on transportation. The proposed park will have handicap accessibility for parking and path access.  <b>Source: The City of Lake Charles Office of Zoning and Land Use compliance letter, dated: January 26, 2023, and memo from Mayor Hunter dated July 27, 2023.</b>
<b>Natural Features</b>		
Water Resources	Choose from list: <input type="radio"/> Not Applicable (State Why) <input checked="" type="radio"/> No Impact <input type="radio"/> Permit Required	The proposed park will not impact any natural water resource features.  <b>Source: Memo from Mayor Hunter dated July 27, 2023.</b>
Unique Natural Features and Agricultural Lands	Choose from list: <input type="radio"/> Not Applicable (State Why) <input type="radio"/> No Impact to or from Unique Natural Features <input checked="" type="radio"/> Unique Natural Features Considered in Project Design <input type="radio"/> Project Modification Required	The subject property has approximately 0.2 acres of wetlands  <b>Source: Wetland Delineation conducted by Southland Environmental, LLC, January 3, 2023</b>
Vegetation and Wildlife	Choose from list: <input type="radio"/> Not Impact <input checked="" type="radio"/> Beneficial <input type="radio"/> Adverse	Trees will be planted and a bioswale will be constructed on the subject property. The trees and bioswale will increase biodiversity of the current vegetation and the habitat potential for wildlife.  <b>Source: Project Design Plans</b>

# Airport Hazards Exhibit



Google Earth

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat / Copernicus

60 mi



## City of Lake Charles

326 Pujot St. - P.O. Box 900  
Lake Charles, LA 70602-0900  
Phone: (337) 491-1294  
Fax: (337) 491-1571

Date: Tuesday, January 24, 2023

Kevin Chenevert  
CSRS  
935 Gravier St., Suite 1650  
New Orleans LA 70112  
kevin.chenevert@csrsinc.com

Permit Number 2023-40343  
Job Address: Anita Dr and Ryder Ave, Lake Charles, LA 70601

Dear Kevin Chenevert,

Staff has completed its review of plans for the project that is to be located at Anita Dr and Ryder Ave, Lake Charles, LA 70601. Comments from this review follow.

Code compliance issues unintentionally omitted through the review process, shall be complied with upon inspections. It shall be the permit holder's responsibility to comply with the individual inspectors corrections.

A copy of these comments is required to be furnished to the Building Contractor and all Subcontractors.

An approved set of job plans as well as a copy of all reviews shall be on site at all times.

The actual signer of the permit becomes the "PERMITTEE" and is responsible for compliance with codes. All calls for inspections shall be the responsibility of the "PERMITTEE" or their representatives.

**All work must be in compliance with the 2015 International Building/Residential Codes as applicable.**

### ***Plumbing/Mechanical***

All plumbing shall be done in accordance with the 2015 International Plumbing Code and LSUCCC amendments. The Plumbing contractor shall be a state licensed master plumber and shall be registered with the City of Lake Charles.

All mechanical work shall be done in accordance with the 2015 International Mechanical Code. The Contractor shall have a State of Louisiana Mechanical License and be registered with the City of Lake Charles.

***Note: (Commercial construction only) The "Application for Certificate of Occupancy" must be available for inspectors to sign at the final inspection. After all inspectors have signed, please return to the Permit Center to obtain a "Certificate of Occupancy." This is required prior to receiving an Occupational License. If this form is lost or misplaced, application may be obtained from the Permit Center for a charge of \$15.00.***

1/24/2023 9:42:17 AM

2023-40343

Page 2

**Building Code Compliance Review Comments**

The following comments have been provided by Cliff Fontenot. Should you have any questions or require additional information regarding any of these comments, please contact Cliff Fontenot at by telephone at (337) 491-9196 or by email at cliff.fontenot@cityoflc.us.

Group B, Type VB

Compliance to be verified upon inspection.

**Mechanical/HVAC Review Comments**

The following comments have been provided by Cliff Fontenot. Should you have any questions or require additional information regarding any of these comments, please contact Cliff Fontenot at by telephone at (337) 491-9196 or by email at cliff.fontenot@cityoflc.us.

Compliance to be verified upon inspection.

**Plumbing Review Comments**

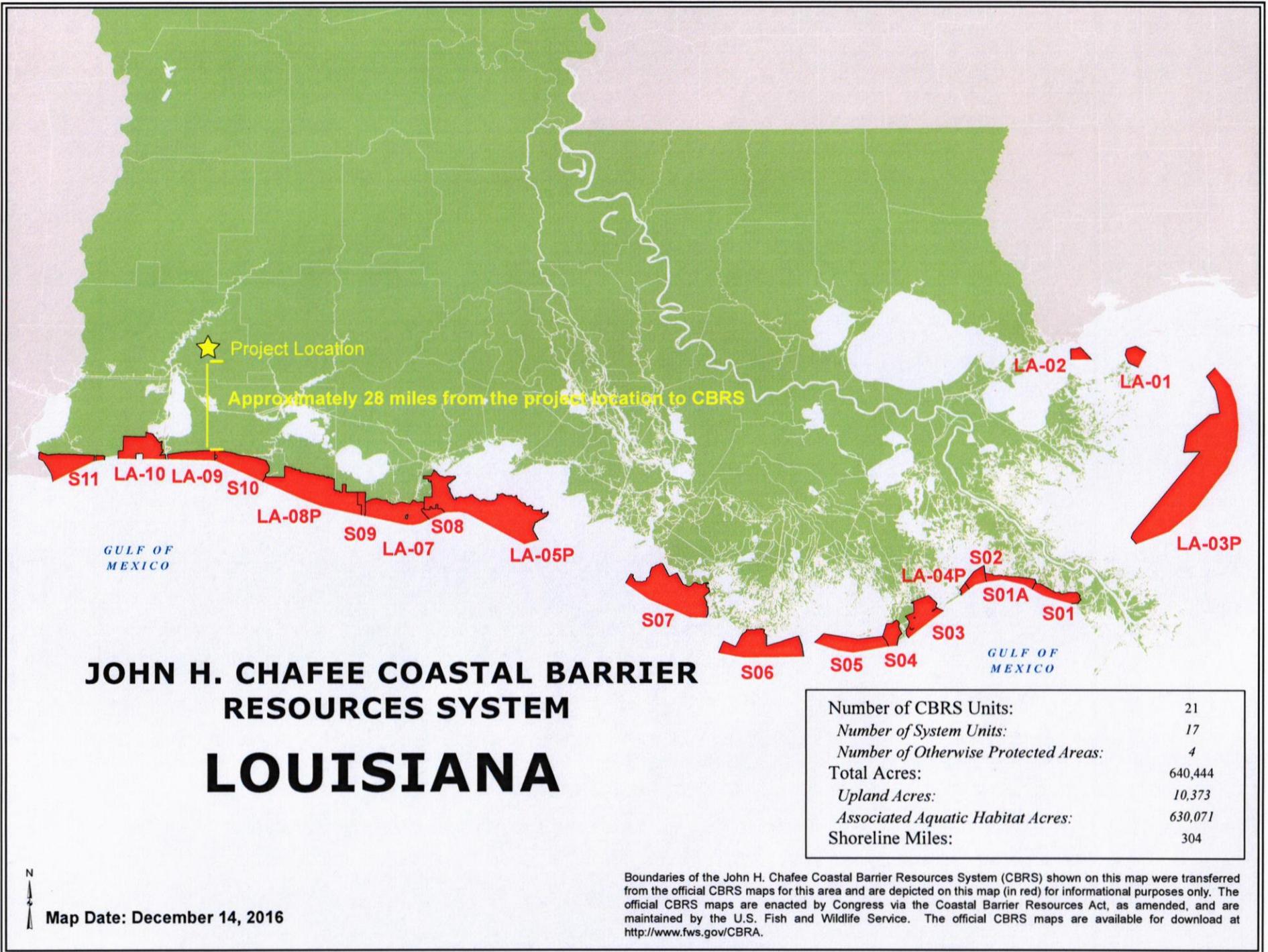
The following comments have been provided by Cliff Fontenot. Should you have any questions or require additional information regarding any of these comments, please contact Cliff Fontenot at by telephone at (337) 491-9196 or by email at cliff.fontenot@cityoflc.us.

Compliance to be verified upon inspection.

Should you have questions regarding specific comments, please contact the staff member referenced under the section in which the comment occurs. Should you have questions or require additional information regarding the plan review process itself, please feel free to contact me directly. I can be reached by telephone at (337) 491-9196, or by e-mail at cliff.fontenot@cityoflc.us.

Thank you,

Cliff Fontenot





# Coastal Barrier Resources System Mapper

U.S. Fish & Wildlife Service

BASEMAPS

MAP LAYERS



CBRS Units

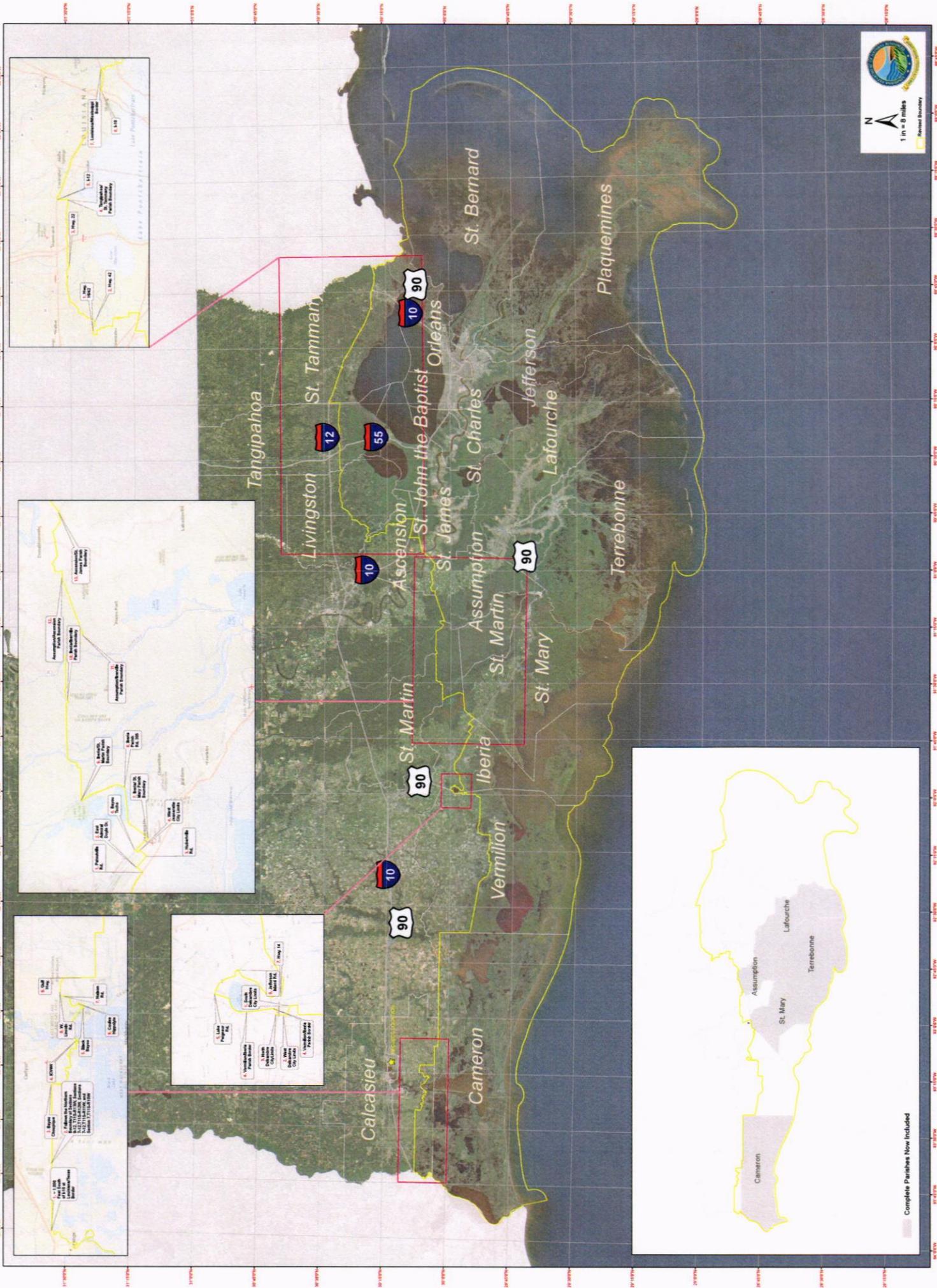
[Click here to learn more about CBRS Units.](#)

ABOUT

FIND LOCATION

FIND CBRS UNIT





Complete Parishes Now Included

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

**DETERMINATION:**

**Box "A" has been checked for all authorities.** For Categorically Excluded actions pursuant to §58.35(a) [Does not apply to EA or EIS level of review which can never convert to Exempt], the project can convert to Exempt, per §58.34(a) (12), since the project does not require any compliance measures (e.g., consultation, mitigation, permit or approval) with respect to any law or authority cited at §58.5. The project is now made Exempt and **funds may be drawn down; OR**

**Box "B" has been checked for one or more authority.** For Categorically Excluded actions pursuant to §58.35(a), the project cannot convert to Exempt since one or more authority requires compliance, including but not limited to consultation with or approval from an oversight agency, performance of a study or analysis, completion of remediation or mitigation measure, or obtaining of license or permit. **Complete pertinent compliance requirement(s), publish NOI/RROF, request release of funds (HUD-7105.15), and obtain HUD's Authority to Use Grant Funds (HUD-7015.16) per §58.70 and §58.71 before committing funds; OR**

This project is not a Categorically Excluded action pursuant to §58.35(a), or may result in a significant environmental impact to the environment, and requires preparation of an Environmental Assessment (EA). Prepare the EA according to 24 CFR Part 58 Subpart E.

**MITIGATION MEASURES AND CONDITIONS FOR PROJECT APPROVAL:** *(If Box B is checked, provide details regarding further consultation, mitigation, permit requirements or approvals required to be incorporated into public notices and project requirements such as contracts, grants, loan conditions, etc as described in the Statutory Worksheet). Ensure required measures are included in 7015.15 Project Description Section.*

**PREPARER:**

William J. Bell  
Preparer's Signature

7/28/23  
Date

WILLIAM J. "JEFF" BELL  
FOR  
KELLY FAERBER  
Preparer's Name (printed)

JEFF BELL, LANDSCAPE ARCHITECT  
KELLY FAERBER, ENVIRONMENTAL  
PROJECT  
MANAGER  
Title (printed)

**AUTHORIZED RESPONSIBLE ENTITY OFFICIAL:**

[Signature]  
Authorized Responsible Entity Signature

7-27-23  
Date

Nicholas E. Hunter  
Authorized Responsible Entity Name (printed)

Mayor  
Title (printed)



## City of Lake Charles

326 Pujo St. - P.O. Box 900  
Lake Charles, LA 70602-0900  
Phone: (337) 491-1294  
Fax: (337) 491-1571

Date: Monday, January 30, 2023

Kevin Chenevert  
CSRS  
935 Gravier St., Suite 1650  
New Orleans LA 70112  
kevin.chenevert@csrsinc.com

Permit Number 2023-40343  
Job Address: 1600 RYDER AVE , Lake Charles, LA 70601

Dear Kevin Chenevert,

Staff has completed its review of plans for the project that is to be located at 1600 RYDER AVE , Lake Charles, LA 70601. Comments from this review follow.

Code compliance issues unintentionally omitted through the review process, shall be complied with upon inspections. It shall be the permit holder's responsibility to comply with the individual inspectors corrections.

A copy of these comments is required to be furnished to the Building Contractor and all Subcontractors.

An approved set of job plans as well as a copy of all reviews shall be on site at all times.

The actual signer of the permit becomes the "PERMITTEE" and is responsible for compliance with codes. All calls for inspections shall be the responsibility of the "PERMITTEE" or their representatives.

**All work must be in compliance with the 2014 National Electric Code as applicable.**

### Electrical Review Comments

The following comments have been provided by Kirby White. Should you have any questions or require additional information regarding any of these comments, please contact Kirby White at by telephone at 337-274-2114 or by email at kirby.white@cityoflc.us.

Electrical Review Comments Approved 1/30/2023 by Kirby White

Compliance is to be verified upon inspection. Plan notes on Utility Page 7 indicate the following requirement:

**10. DO NOT ALLOW OR CAUSE ANY OF THE WORK PERFORMED OR INSTALLED TO BE COVERED UP OR ENCLOSED BY WORK OF THIS SECTION PRIOR TO ALL REQUIRED INSPECTIONS, TESTS, AND APPROVALS. SHOULD ANY OF THE WORK BE SO ENCLOSED OR COVERED UP BEFORE IT HAS BEEN APPROVED, UNCOVER ALL SUCH WORK AT NO ADDITIONAL COST TO THE OWNER**

1/30/2023 8:54:03 AM

2023-40343

Page 2

Should you have questions regarding specific comments, please contact the staff member referenced under the section in which the comment occurs. Should you have questions or require additional information regarding the plan review process itself, please feel free to contact me directly. I can be reached by telephone at 337-274-2114, or by e-mail at [kirby.white@cityoflc.us](mailto:kirby.white@cityoflc.us).

Thank you,

Kirby White

John Bel Edwards  
GOVERNOR



Dr. Courtney N. Phillips  
SECRETARY

**State of Louisiana**  
Louisiana Department of Health  
Office of Public Health

March 17, 2023

Attn: CSRS, Inc.  
Mr. Joseph Yarbrough, P.E.  
6767 Perkins Road, Suite 200  
Baton Rouge, LA 70808

City of Lake Charles  
Parks and Recreation Department  
326 Pujoe Street  
Lake Charles, LA 70601

Re: Anita Drive Park – Splash Pad (Pool)  
- *Splash Pad with associated appurtenances (Waste generated from pad to be discharged into local storm drainage (DEQ AI# 237628))*  
1600 Ryder Ave  
Lake Charles, LA  
Calcasieu Parish  
LDH Plans Tracking 60004030  
Permit #: P-23-05-019-109

Dear Applicant:

Plans and specifications of the above named project have been reviewed and found to be in substantial conformity with applicable provisions of the Sanitary Code.

This permit approval refers to the sanitary features of the design only, and is not to be taken as an approval of structural details, except insofar as they may affect sanitation.

This permit approval is given with the stipulation that the splash pad and its associated appurtenances, will be owned, operated, and maintained by the City of Lake Charles, 326 Pujoe Street, Lake Charles, LA 70601.

The plans and specifications are being sent to the Calcasieu Parish Health Unit.

This permit is automatically canceled if construction of the project has not been started within two (2) years after the date of this letter.

Re: Anita Drive Park – Splash Pad (Pool)  
- *Splash Pad with associated appurtenances (Waste generated from pad to be discharged into local storm drainage (DEQ AI# 237628)*  
1600 Ryder Ave  
Lake Charles, LA  
Calcasieu Parish  
LDH Plans Tracking 60004030  
Permit #: P-23-05-019-109

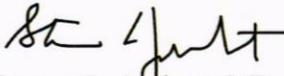
After construction is completed, the responsible party for the design of the project shall submit a Confirmation Letter to this office certifying that the project was constructed in accordance with the plans and specifications approved by this office. As of February 1, 2007 this Confirmation Letter shall be required prior to occupancy.

If construction commences before a permit is granted, a Notice of Violation will be issued for the project. A letter of “no objection” will not be issued on any pre-constructed project unless the project fully complies with the requirements of the Sanitary Code.

In the event that it is determined at some point in the future that a design error escaped our detection during our review of these plans and specifications, that oversight shall not relieve you, the applicant, of the responsibility for complete compliance with the applicable requirements of the Louisiana Administrative Code [particularly, LAC 51 (Public Health Sanitary Code) and LAC 48 (Public Health – General), specifically including correcting the violations inadvertently overlooked.

Please be reminded that this office reviews for the sanitary and specific safety features of the design only and the pool owner or designer should consult with The Office of State Fire Marshal relative to any required compliance with the federal Americans with Disabilities Act (ADA) Standards for Accessible Design. The new 2010 ADA Standards for Accessible Design includes design requirements which will provide individuals with disabilities a means to access swimming pools, wading pools, aquatic recreation facilities, and spas. This new ADA standard has been adopted by the legislature under Act 398 of the 2011 Regular Session and became effective August 15<sup>th</sup>, 2011. Compliance with the new standard will be enforced by the Office of State Fire Marshal beginning on this date. (More information may be found relative to the ADA swimming pool and spa design requirements at <http://www.access-board.gov/recreation/guides/pools.htm>.)

At the direction of the State Health Officer,



Steven R. Joubert, P.E.  
District III Engineer  
SA: SRJ

cc: Amy Courtney, Region V Sanitarian Director  
Taylor Lafleur, Calcasieu Parish Sanitarian Manager  
DEQ



You are here: EPA Home > Green Book > >National Area and County-Level Multi-Pollutant Information >Louisiana Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

## Louisiana Nonattainment/Maintenance Status for Each County by Year for All Criteria Pollutants

Data is current as of April 30, 2023

Listed by County, NAAQS, Area. The 8-hour Ozone (1997) standard was revoked on April 6, 2015 and the 1-hour Ozone (1979) standard was revoked on June 15, 2005.

\* The 1997 Primary Annual PM-2.5 NAAQS (level of 15 µg/m<sup>3</sup>) is revoked in attainment and maintenance areas for that NAAQS. For additional information see the PM-2.5 NAAQS SIP Requirements Final Rule, effective October 24, 2016. (81 FR 58009)

Change the State:

LOUISIANA

Important Notes

Download National Dataset: [dbf](#) | [xls](#) | [Data dictionary \(PDF\)](#)

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/Part County	Population (2010)	State/County FIPS Codes
<b>LOUISIANA</b>								
Ascension Parish	1-Hour Ozone (1979)-NAAQS revoked	Baton Rouge, LA	92939495969798990001020304	//	Severe-15	Whole	107,215	22/005
Ascension Parish	8-Hour Ozone (1997)-NAAQS revoked	Baton Rouge, LA	04050607080910	12/30/2011	Moderate	Whole	107,215	22/005
Ascension Parish	8-Hour Ozone (2008)	Baton Rouge, LA	1213141516	03/21/2017	Marginal	Whole	107,215	22/005
Beauregard Parish	1-Hour Ozone (1979)-NAAQS revoked	Beauregard Parish, LA	929394	10/17/1995	Incomplete Data	Whole	35,654	22/011
Calcasieu Parish	1-Hour Ozone (1979)-NAAQS LA revoked	Lake Charles, LA	9293949596	06/02/1997	Marginal	Whole	192,768	22/019

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or Part County	Population (2010)	State/County FIPS Codes
East Baton Rouge Parish	1-Hour Ozone (1979)-NAAQS revoked	Baton Rouge, LA	92939495969798990001020304	//	Severe-15	Whole	440,171	22/033
East Baton Rouge Parish	8-Hour Ozone (1997)-NAAQS revoked	Baton Rouge, LA	04050607080910	12/30/2011	Moderate	Whole	440,171	22/033
East Baton Rouge Parish	8-Hour Ozone (2008)	Baton Rouge, LA	1213141516	03/21/2017	Marginal	Whole	440,171	22/033
Evangeline Parish	Sulfur Dioxide (2010)	Evangeline Parish (Partial), LA	181920212223	//		Part	124	22/039
Grant Parish	1-Hour Ozone (1979)-NAAQS revoked	Grant Parish, LA	929394	10/17/1995	Incomplete Data	Whole	22,309	22/043
Iberville Parish	1-Hour Ozone (1979)-NAAQS revoked	Baton Rouge, LA	92939495969798990001020304	//	Severe-15	Whole	33,387	22/047
Iberville Parish	8-Hour Ozone (1997)-NAAQS revoked	Baton Rouge, LA	04050607080910	12/30/2011	Moderate	Whole	33,387	22/047
Iberville Parish	8-Hour Ozone (2008)	Baton Rouge, LA	1213141516	03/21/2017	Marginal	Whole	33,387	22/047
Jefferson Parish	1-Hour Ozone (1979)-NAAQS revoked	New Orleans, LA	929394	12/01/1995	Section 185A	Whole	432,552	22/051
Lafayette Parish	1-Hour Ozone (1979)-NAAQS revoked	Lafayette, LA	929394	10/17/1995	Section 185A	Whole	221,578	22/055

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or Part County	Population (2010)	State/County FIPS Codes
Lafourche Parish	1-Hour Ozone (1979)-NAAQS revoked	Lafourche Parish, LA	92939495969798990001	02/25/2002	Incomplete Data	Whole	96,318	22/057
Livingston Parish	1-Hour Ozone (1979)-NAAQS revoked	Baton Rouge, LA	92939495969798990001020304	//	Severe-15	Whole	128,026	22/063
Livingston Parish	8-Hour Ozone (1997)-NAAQS revoked	Baton Rouge, LA	04050607080910	12/30/2011	Moderate	Whole	128,026	22/063
Livingston Parish	8-Hour Ozone (2008)	Baton Rouge, LA	1213141516	03/21/2017	Marginal	Whole	128,026	22/063
Orleans Parish	1-Hour Ozone (1979)-NAAQS revoked	New Orleans, LA	929394	12/01/1995	Section 185A	Whole	343,829	22/071
Pointe Coupee Parish	1-Hour Ozone (1979)-NAAQS revoked	Pointe Coupee Parish, LA	92939495	12/20/1996	Marginal	Whole	22,802	22/077
St. Bernard Parish	1-Hour Ozone (1979)-NAAQS revoked	New Orleans, LA	929394	12/01/1995	Section 185A	Whole	35,897	22/087
St. Bernard Parish	Sulfur Dioxide (2010)	St. Bernard Parish, LA	1314151617181920212223	//		Whole	35,897	22/087
St. Charles Parish	1-Hour Ozone (1979)-NAAQS revoked	New Orleans, LA	929394	12/01/1995	Section 185A	Whole	52,780	22/089
St. James Parish	1-Hour Ozone (1979)-NAAQS revoked	St. James Parish, LA	929394	11/13/1995	Incomplete Data	Whole	22,102	22/093

County	NAAQS	Area Name	Nonattainment in Year	Redesignation to Maintenance	Classification	Whole or/Part County	Population (2010)	State/County FIPS Codes
St. Mary Parish	1-Hour Ozone (1979)-NAAQS revoked	St. Mary Parish, LA	929394	10/17/1995	Incomplete Data	Whole	54,650	22/101
West Baton Rouge Parish	1-Hour Ozone (1979)-NAAQS revoked	Baton Rouge, LA	92939495969798990001020304	//	Severe-15	Whole	23,788	22/121
West Baton Rouge Parish	8-Hour Ozone (1997)-NAAQS revoked	Baton Rouge, LA	04050607080910	12/30/2011	Moderate	Whole	23,788	22/121
West Baton Rouge Parish	8-Hour Ozone (2008)	Baton Rouge, LA	1213141516	03/21/2017	Marginal	Whole	23,788	22/121

Important Notes

Discover.

Connect.

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2023-04-30

## **Project Description**

The Anita Drive Park located at 1600 Ryder Avenue, is a city owned, vacant 1.56-acre tract within the City of Lake Charles. The City's desire and vision is to create a neighborhood park with multiple recreation uses for surrounding residents. The proposed park uses include a children's splash pad, a picnic pavilion shade structure, a restroom building, picnic/resting areas, lighted-walking path, parking, benches and litter receptacles, landscaped areas with trees and shrubs, and car & bicycle parking. All facilities will be handicap accessible.

The new park facility will be owned, operated, and maintained by the City of Lake Charles and will be incorporated into the existing parks and recreation system. The parks and recreation department has an annual operating budget that will address the day-to-day needs of utilities and maintenance. Therefore, no user fees will be charged. Incorporating this facility into the parks and recreation department portfolio provides a sustainable plan for a fixed asset that has its functional and maintenance needs addressed. Longer term, any capital maintenance that may be necessary longer term through the capital budget process in a 5-year window.

The FY 2021 CDBG-CV Love Louisiana Outdoors Program (LLOP) funding award of \$400,000.00 will be utilized for construction and contingencies as defined in the September 20, 2022 selected recipient letter addressed to City of Lake Charles Mayor Nicholas Hunter and prepared by Traci Watts, Director, Local Government Assistance, Office of Community Development.

Legal Description: @041008-0000-2400002 0000 COM 271 FT W AND 230 FT S OF NE COR NW SE 4.10.8 W 221 FT S 306.6 FT ETC. REF1- JOSEPH E CARNAHAN AND WANDA B 1389 P 373-77

Estimated Total Project Cost: \$1,062,014

Amount of HUD Assistance: \$400,000

The project is site-specific.

**From:** [Kelli Van Norman](#)  
**To:** [Kevin Chenevert](#)  
**Cc:** [Jeff Bell](#); [Joseph Yarbrough](#)  
**Subject:** RE: Anita Drive Park Development Engineering Plan Review was FW: Project 2023-40343 - Engineering Plan Review Letter  
**Date:** Wednesday, January 25, 2023 8:27:39 AM  
**Attachments:** [image003.png](#)  
[image004.png](#)

**EXTERNAL EMAIL:** Please do not click on links or attachments unless you know the content is safe.

Thank you for providing this information. You are correct, a DIA is not required.

The permit letter is an automated letter, it has this written for all developments. You guys do not need DOTD approval or DIA since this development is not located near a State Highway.

Thanks,  
Kelli

**From:** Kevin Chenevert <[kevin.chenevert@csrsinc.com](mailto:kevin.chenevert@csrsinc.com)>  
**Sent:** Tuesday, January 24, 2023 2:59 PM  
**To:** Kelli Van Norman <[kelli.vannorman@cityoflc.us](mailto:kelli.vannorman@cityoflc.us)>  
**Cc:** Jeff Bell <[jeff.bell@csrsinc.com](mailto:jeff.bell@csrsinc.com)>; Joseph Yarbrough <[joseph.yarbrough@csrsinc.com](mailto:joseph.yarbrough@csrsinc.com)>  
**Subject:** Anita Drive Park Development Engineering Plan Review was FW: Project 2023-40343 - Engineering Plan Review Letter

Ms. Van Norman,

The impervious area is approximately 23,148sf. See attachment.

In the review letter (attached) there was a comment that did not appear complete. See **highlight** in the snippet below. We are more than 0.25 miles from Highway 14 (Gertsner Memorial Drive) so believe that the DIA is not required. Let me know if you have any concerns..

City of Lake Charles: Ordinance Sec. 6-842 requires the submission of a Drainage Impact Analysis (DIA) for any proposed development (new or expanded existing) that includes more than **40,000 square feet** of (net) new impervious surface area. Based on your submission, the City has determined that:

Qualifies for RMP Waiver. Please answer question below:

- How much impervious area will be added in the proposed development?

**Louisiana Department of Transportation & Development (LaDOTD)** requires a submission of a Drainage Impact Analysis (DIA) for a proposed development on, or within 0.25 miles, of a State Highway. Based on your submission, the City has determined that: ???

#### Engineering Review Comments

The following comments have been provided by Kelli Van Norman. Should you have any questions or require additional information regarding any of these comments, please contact Kelli Van Norman at by telephone at (337) 491 -1490 or by email at [kelli.vannorman@cityoflc.us](mailto:kelli.vannorman@cityoflc.us).

If you have any questions or need to discuss, do not hesitate to call or email.

Sincerely,

**Kevin Chenevert, AIA**

*Deputy Director - Design*

Direct. | Cell. (504) 605-7545 | Main. 1-833-523-2526 | Ext.

935 Gravier St., Suite 1650, New Orleans, LA 70112 | [kevin.chenevert@csrsinc.com](mailto:kevin.chenevert@csrsinc.com) | [www.csrsinc.com](http://www.csrsinc.com)

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SMARTER COMMUNITIES  
TOGETHER.



This e-mail and attachments are CONFIDENTIAL for the recipients only.

**From:** [no-reply@mygovernmentonline.org](mailto:no-reply@mygovernmentonline.org) <[no-reply@mygovernmentonline.org](mailto:no-reply@mygovernmentonline.org)>

**Sent:** Tuesday, January 24, 2023 10:46 AM

**To:** Kevin Chenevert <[kevin.chenevert@csrsinc.com](mailto:kevin.chenevert@csrsinc.com)>

**Subject:** Project 2023-40343 - Engineering Plan Review Letter

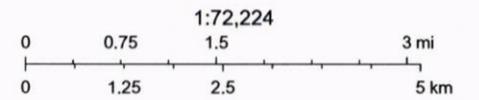
**EXTERNAL EMAIL:** Please do not click on links or attachments unless you know the content is safe.

Lake Charles has emailed a copy of Engineering Plan Review Letter

# LDWF Natural and Scenic Rivers, Anita Drive Park



3/15/2023, 3:22:37 PM



Esri, HERE, Garmin, Earthstar Geographics



## City of Lake Charles

326 Pujo St. - P.O. Box 900  
Lake Charles, LA 70602-0900  
Phone: (337) 491-1294  
Fax: (337) 491-1571

Date: Thursday, January 26, 2023

Nic Hunter  
326 W. Pujo St.  
Lake Charles, LA 70601

**SUBJECT:** Anita Dr and Ryder Ave, Lake Charles, LA 70601  
**ZONE:** Residential  
**HISTORICAL:** Not Assigned  
**FLOOD ZONE:** X  
**PERMIT NUMBER:** 2023-40343

### CONDITIONS:

#### **Storm Water Protection Plan (SWPPP) Comments**

The following comments have been provided by Terry Magnon. Should you have any questions or require additional information regarding any of these comments, please contact Terry Magnon at by telephone at (337) 491-1294 or by email at [terry.magnon@cityoflc.us](mailto:terry.magnon@cityoflc.us)

**APPEARS TO COMPLY ASSUMING THE USE OF A CONSTRUCTION ENTRANCE AND GRASS BUFFERS.** Erosion controls shall be maintained throughout construction to prohibit transfer of sediment to adjacent property, public right of way, or public drainage system.

#### **Zoning and Land Use Review Comments**

The following comments have been provided by Terry Magnon. Should you have any questions or require additional information regarding any of these comments, please contact Terry Magnon at by telephone at (337) 491-1294 or by email at [terry.magnon@cityoflc.us](mailto:terry.magnon@cityoflc.us)

#### **Proposed construction of a public park appears to comply with development standards.**

The Office of Zoning and Land Use reviewed the site plan for the to be located at the above-referenced location. The staff's review of the plans indicates that with adherence to the above referenced conditions, the project should be in substantial compliance with Zoning Ordinance No. 10598.

Once you obtain approval on the plans and specifications from The Permit Center, you may obtain the necessary permits to proceed with this project. Please be advised that prior to any foundation inspection by the Building Inspector, corner stakes must be located to verify property line locations. ***Also, note that any conditions listed above must be reflected on a revised site plan prior to issuance of permit.***

If you have any questions or concerns, please do not hesitate to contact my office at (337) 491-1294.

Sincerely,

Terry Magnon, Project Specialist  
Office of Zoning and Land Use