



## ST. TAMMANY PARISH

PATRICIA P. BRISTER  
PARISH PRESIDENT

**February 11, 2019**

Please find the following addendum to the below mentioned BID.

**Addendum No.:** 2

**Bid#:** 300-00-18-66-2

**Project Name:** Bootlegger Road Improvements

**Bid Due Date:** Thursday, February 14, 2019

### GENERAL INFORMATION:

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1. Section 03 – Summary of Work – Revised IV. Other Requirements (as applicable) to reflect the Louisiana Department of Transportation and Development (2016 Edition of Louisiana Standard Specifications for Roads and Bridges). **Remove “Section 03-Summary of Work” in its entirety and replace it with “Section 03-Summary of Work Revised”.** (Attached)
2. Add Geotechnical Engineering Services Report to Section 03–Summary of Work.(Attached)
  - *Summary of Drainage Structures table that correlates to these subsurface drainage improvements.*
3. Add Summary of Coquille Drainage Structures Table to Section 03-Summary of Work. (Attached)
4. Please remove the “Section 04 Louisiana Uniform Public Work Bid Form” in its entirety and replace with “Section 04 Louisiana Uniform Public Work Bid Form Revised”. (Attached)
5. Please remove “Louisiana Uniform Public Work Bid Form Unit Price Form” and replace with “Louisiana Uniform Public Work Bid Form Unit Price Form Revised”. (Attached) \***Original** Alternate No. 1 has been removed from this project altogether and replaced with the **new** Alternate #1 as described below.
  - Added bid items:
    - i. Storm Drain Pipe (15” RPVCP) (701-03-01002)
    - ii. Storm Drain Pipe Arch (42” Equiv. RCPA) (701-04-01100)
    - iii. Storm Drain Pipe Arch (48” Equiv. RCPA) (701-04-01120)
    - iv. Trench Excavation Safety Protection (Depth >5 feet) (701-17-00100)
    - v. Vibration Monitoring (804-18-00100)
  - Added **new** Alternate #1 Bid Items and Quantities:

- i. Description: Alternate #1 provides net quantities that would change the typical section of the Mill and Overlay areas by milling 3.5 inches and overlaying 3.5 inches and removing the polymer based asphalt reinforcement interlayer.  
NOTE: The polymer based asphalt reinforcement interlayer shall remain for the area of reconstruction as shown in the construction drawings on each side of the bridge replacement.
    - o Removed bid item for Imprinted Cast-In-Place Concrete System (S-001)
    - o Removed bid item for Concrete Drive (Colored)(6" Thick) (706-02-10000)
    - o Revised quantities for bid items:
      - i. Temporary Sediment Check Dams (204-05-00100)
      - ii. Class II Base Course (302-01-00100)
      - iii. Lime (304-01-00100)
      - iv. Lime Treatment (Type D)(12" Thick) (304-04-00400)
      - v. Subgrade Layer (12") (305-01-04000)
6. Section 10 - Technical Specifications - Subsection 01150 – Measurement and Payment – **REMOVE 4.01 IMPRINTED CAST-IN-PLACE CONCRETE SYSTEM (S-001) ON PAGE 01150-1 OF SPECIFICATIONS.**
7. Section 10 - Technical Specifications - Subsection 03000 - Special Items - **REMOVE S-001 IMPRINTED CAST-IN-PLACE CONCRETE SYSTEM FROM SPECIFICATIONS.**
8. Add Plan Sheet 3a- Coquille Drainage Plan. (Attached)
- o *Summary of Drainage Structures table that correlates to the Coquille subsurface drainage improvements is located in Section 03 – see note 3 of this addendum.*
9. Remove Sheet 25- Concrete Joint Layout Terra Bella Blvd in its entirety from Construction Drawings.
- o *No work shall be performed on Terra Bella Blvd. Mill and Overlay limits shall tie into existing concrete gutter bottom that runs parallel to Bootlegger Road. The entrance is constructed of pavers and shall not be disturbed.*
10. Geogrid is required between the subbase and base course for the path and sidewalk. This is found in package on plan sheet 2b-2g.
- o *Quantities in the Unit Price Bid Form reflect this quantity in SY.*
11. Glass Interlayer Reinforcement Grid has been **denied** as an approved equal for the polymer. Glass interlayer is not the same product and does not meet specifications.
12. Liquidated damages remains at \$500/day.

## QUESTION AND ANSWER:

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**Question 1: How many test piles vs production piles; plan and order lengths?**

**Answer1:** The project calls for dynamic monitoring assistance on two piles, one in the abutment and one on a middle bent for confirmation of pile capacity. Unit Price Sheet- Revised displays Item # 804-14-00100 Dynamic Monitoring Assistance for two piles.

**Question 2: Is there and time restrictions? Night work? Is night work mandatory?**

**Answer2:** The Parish instructs that there will be no pile driving during night hours. However, operations such as milling, overlay, etc. may be undertaken during after hours, per prior written approval by the Parish. No, night work isn't mandatory.

**Question 3: Extend time to 11 months instead of 9 months?**

**Answer 3:** 270 Calendar Days will remain the time period of this construction contract.

**Question 4: Can mill and overlay be completed prior to bridge replacement construction?**

**Answer 4:** The sequence of construction is part of the Contractor's means and methods.

**Question 5: The plans do not address the lime stabilization locations. The subgrade layer is shown in the typical section on plan sheet 2e. The lime quantity seems to match the subgrade quantity. Is the lime intended for use in the subgrade layer? Will the subgrade layer require cement, or just lime?**

**Answer 5:** Yes, the lime is intended for the subgrade layer. The subgrade layer will only require lime.

**Question 6: The Class II base quantity seems to be in agreement with the lime and subgrade layer quantity for the reconstruct area, but there is Class II base shown beneath the shared use path. Where will this base be paid for?**

**Answer 6:** Quantities for Bid Items – Class II Base Course, Lime, Lime Treatment (Type D) (12" Thick), and Subgrade Layer (12") are on the Unit Price Bid Form Revised.

**Question 7: What it the fee schedule for Cleco ?**

**Answer 7:** CLECO advises that the 34,500 V line along Bootlegger Road is a backup source to the LA 21 commercial corridor line. CLECO can de-energize and re-energize the lines along Bootlegger daily, however a Contractor asked for a fee schedule. The provided fee schedule is as follows:

The cost to the Contractor for Cleco to install and operate the necessary switches to de-energize/ground/re-energize the circuits in the area of the bridge replacement along bootlegger road is \$11,234. This cost is based on the installation of the switches and 2 daily trips to the site for a maximum of five days, if more than 5 days of de-energizing and re-energizing are required, a charge of \$705/day will be assessed against the contractor for each additional day beyond 5 days. The successful Contractor will be required to set up a Cleco account to allow for billing of this cost. This cost does not include any conductor or pole relocations, if necessary. This cost shall be paid under Bid Item # 740-01-00100 Construction Layout – LUMP.

**Question 8:** What is the project estimate?

**Answer 8:** Project Estimate is \$2,910,292.00

#### **ATTACHMENTS:**

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1. **“Section 03 Summary of Work revised.pdf”**
2. **“Section 03 Geotechnical Engineering Services Report.pdf”**
3. **“Section 03 Summary of Drainage Structures Table.pdf”**
4. **“Section 04 Louisiana Uniform Public Works Form Revised.pdf”**
5. **“Louisiana Uniform Public Work Bid Form Unit Price Form Revised.pdf”**
6. **“Plan Sheet 3a-Coquille Drainage Plan.pdf”**

**End of Addendum #2**

**Section 03**  
**Revised**  
**Summary of Work**

**I. Work to Include:**

The scope of work for construction includes but is not limited to the following:

- 1) Removal of the timber bridge and replacement with a concrete 3-span bridge over Timber Branch;
- 2) Mill and overlay of approximately 3.2 miles along Bootlegger Road beginning neat LA 1077 and ending near LA 21; and
- 3) Installation of an asphalt shared-use path from Ochsner/Francis Road Roundabout to Resource Bank driveway near LA 21.

Contractor must provide all labor, equipment, tools, and materials necessary for milling, overlaying, asphalt concrete pavement, guardrail, shared-use path, and bridge replacement, as specified.

**II. Location of Work:**

Bootlegger Rd (R01C018) and Bootlegger Rd Bridge (B01C018) Covington, LA Section 37 Township 6 Range 10E and Section 45 Township 7 Range 10E.

**III. Documents: Bid Documents dated December 03, 2018, and entitled:**

Bootlegger Road Improvements

Bid #300-00-18-66-2

**IV. OTHER REQUIREMENTS (as applicable)**

**When not otherwise specified herein, all work and materials shall conform to the requirements of the Louisiana Department of Transportation and Development hereafter called LDOTD (2016 Edition of Louisiana Standard Specifications for Roads and Bridges) (LSSRB). All work included in these pay items shall be constructed in strict conformance with the appropriate Sections, Sub-sections, and references made within the LSSRB including any current revisions to which as published by the LA Dept. of Transportation and Development and/or as modified, supplemented, or added to which herein. Specifications including materials, equipment, and prosecution of the work, payment, procedures, testing, sampling, quality assurance, and quality control items shall conform to the LSSRB and the latest revised Supplemental Specifications. Payment and measurement will be based on the item and unit measure specified in the LSSRB, or as amended otherwise within this document.**

## Section 03



Engineering  
and Testing

# Geotechnical Engineering Services Report

**Bootlegger Road Mill and Overlay  
and Bridge Replacement Project**

Bootlegger Road

St. Tammany Parish, Louisiana

APS File No: 1702-G009

Presented to:

**Stanley Consultants, Inc.**

721 Government Street

Baton Rouge LA 70802

Prepared by:

**APS Engineering and Testing, LLC**

8000 Innovation Park Dr.

Building 3100, Room 250

Baton Rouge, LA 70820

May 16, 2017 Sexc

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**Stanley Consultants, Inc.  
721 Government Street  
Baton Rouge TX 70802**

**Attention: Mr. Jacob M. Loeske, P.E., L.S.I.**

**Re: Geotechnical Engineering Report  
Bootlegger Road Improvements  
St. Tammany Parish, Louisiana**

**Dear Mr. Loeske:**

APS Engineering and Testing, LLC is pleased to submit our Geotechnical Engineering Report for the above referenced project. The report includes the results of field and laboratory testing and recommendations for the pavement and bridge design and general site preparation as related to soils.

We appreciate the given opportunity to perform this Geotechnical study and look forward to continuing to participate during the design and construction phases of this project. If you have any questions pertaining to this report, or if we may be of further service, please contact our office.

Respectfully submitted,  
**APS ENGINEERING AND TESTING, LLC**

  
Sairam Eddanapudi, M.E., P.E.  
Project Manager

  
Sergio Aviles, P.E., M.ASCE  
President



## 1.0 PROJECT INFORMATION

### 1.1 Project Authorization

APS Engineering and Testing has completed a subsurface exploration for the proposed Bootlegger Road improvement project in St. Tammany Parish, Louisiana. Authorization to proceed with the work was received from **Mr. Jacob Loeske** on February 3, 2017. Preliminary mill and overlay recommendations were submitted on March 31, 2017.

### 1.2 Project Description

The project site is located on highway LA-1085 in St. Tammany Parish, Louisiana, northeast of the intersection between Interstate 12 (I-12) and LA-1085. The LA-1085 road improvement section is about 4 miles in length, located between intersecting streets Turnpike Road (on the west side) and South Tyler Street (on the east side). The project will consist of performing mill and overlay work on the existing LA-1085 pavement, as well as the construction of a new bridge located just south of the intersection between LA-1085 and Weston Way. The east-bound and west-bound traffic data was provided by the client.

## 2.0 PURPOSE AND SCOPE OF SERVICES

The purpose of this study was to explore the subsurface conditions at the site to enable an evaluation of an acceptable foundation for the proposed structure as well as determining the existing pavement section thickness for mill and overlay recommendations. Two soil borings were drilled to a depth of 100 feet each in the proximity of the proposed new bridge, and three (3) soil borings to a depth of six (6) feet each (P-1 through P-3). Additionally, six (6) pavement cores were performed on the existing LA-1085 pavement down to a depth of two feet.

The scope of services also included conducting laboratory tests on selected samples recovered from the soil borings. These tests included visual description and classification, moisture content, liquid limit, plastic limit and unconfined compressive strength tests. Both field and laboratory testing procedures are briefly discussed in this report.

This report discusses the conditions of the existing subsoil materials at the site, and presents recommendations on the following:

- + Site preparation Recommendations;
- + Deep Foundation Recommendations for the proposed bridge structure;
- + Mill and Overlay Recommendations;
- + General Construction Recommendation; and
- + Comments regarding factors that will impact construction and performance of the proposed project.

The scope of geotechnical services did not include an environmental site assessment for determining the presence or absence of wetlands, hazardous or toxic materials in the soil, surface water, groundwater, or air on, below, or around the site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes.

### **3.0 SITE LOCATION AND DESCRIPTION**

The project site is located on highway LA-1085 in St. Tammany Parish, Louisiana, northeast of the intersection between Interstate 12 (I-12) and LA-1085. The LA-1085 road improvement section is about 3.5 miles in length, located between intersecting streets Turnpike Road (on the west side) and South Tyler Street (on the east side). Approximate GPS coordinates of the project site are 30°28'1.27"N 90°10'46.04"W.

### **4.0 FIELD EXPLORATION**

The field exploration, performed to evaluate the engineering characteristics of the foundation materials, included a reconnaissance visit to the project site by an APS representative, drilling the soil borings and recovering soil samples.

As previously mentioned, a total of two soil borings were drilled to a depth of 100 feet each in the proximity of the proposed new bridge, and three (3) soil borings to a depth of six (6) feet each (P-1 through P-3). Additionally, six (6) pavement cores were performed on the existing LA-1085 pavement down to a depth of two feet. The soil borings were located in the field by tape measurements/GPS coordinates that were referenced to physical elements/boundaries of the site. The Boring Location Plan, included in the Appendix, presents the approximate location of the soil borings.

### **5.0 DRILLING AND SAMPLING PROCEDURES**

The borings were drilled with a track-mounted SIMCO 2800 drill rig, using dry auger and wet rotary drilling techniques to advance the boreholes. Undisturbed samples were continuously obtained from the ground surface to a depth of ten (10) feet, then at five-foot intervals to termination depth of each borings. They were obtained using thin-walled tube sampling procedures in general accordance with ASTM D-1587 Standard Practice for Thin-Walled Tube Sampling of Soils for Geotechnical Purposes. These samples were extruded in the field with a hydraulic ram, and were identified according to project number, boring number and depth, wrapped in aluminum foil and placed in plastic bags to preserve the natural moisture condition and transported to the laboratory in special containers to prevent disturbance.

For Cohesionless and semi-cohesive soils, Standard Penetration Tests (SPT) was performed at intervals to obtain standard penetration values of the soil. The standard penetration value (N) is defined as the number of blows of a 140-pound hammer, falling 30 inches, required to advance the split-barrel sampler 18 inches into the soil. To perform the test and obtain a sample, the sampler is lowered to the bottom of the previously cleaned drill rig and advanced by blows from the hammer. The number of blows is recorded for each of three successive increments of six inches penetration. The “N” value is obtained by adding the second and third incremental numbers. The results of the SPT indicate the relative density of cohesionless soils, and thereby provide a basis for estimating the relative strength and compressibility of the soil profile components. Soil samples were obtained utilizing a two inch O.D. split-barrel sampler in general accordance with procedures for “Penetration Test and Split-Barrel Sampling of Soils” (ASTM D1586).

## 6.0 LABORATORY TESTING PROGRAM

A laboratory testing program was conducted to determine pertinent engineering characteristics of the subsurface materials. This program included visual description and classification and determination of the moisture content (ASTM D2216 Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass) on all soil samples. Selected samples were subjected to ASTM D4318 Standard Test Methods for Liquid Limit, Plastic Limit and Plasticity Index of Soils, ASTM D422-63 Standard Test Method for Particle-Size Analysis of Soils, ASTM D1140-14 Standard Test Methods for determining the amount of material finer than 75- $\mu\text{m}$  (No. 200) sieve in soils by washing and ASTM D2166 Standard Test Method for Unconfined Compressive Strength of Cohesive Soils. The results of these tests are found in the accompanying boring logs located in the Appendix.

## 7.0 SUBSURFACE CONDITIONS

### 7.1 Subsurface Materials

#### **Bridge Borings**

At the bridge borings, generally, beneath minimum of three (3) inches of asphalt, medium to very stiff lean and high plasticity clays (CL/CH) with clayey silt (ML) lenses were encountered to a depth of approximately 73 feet followed by dense to very dense sands down to the boring termination depth.

#### **Pavement Borings**

At the pavement borings, generally, beneath the 4 inches of asphalt, soft to medium silty clays (CL-ML) and fat clays (CH) were encountered to the termination depth of six (6) feet.

### **Pavement cores**

The following table shows the thickness of the existing pavement sections at the six core locations:

**TABLE 1.0**

Core Location	Gravel thickness (in)	Asphalt thickness (in)	Concrete thickness (in)
C-1	6	5	-
C-2	7	6	6
C-3	6	4	-
C-4	6	4	-
C-5	7	4	-
C-6	6	10	-

## **7.2 Groundwater**

Ground water was encountered at a minimum depth of 20 feet from the existing ground surface, during our field exploration. Wet rotary drilling techniques were used from ten (10) feet to the termination depth of respective borings. It should be noted that the groundwater conditions are likely to change due to topography, permeability, weather, and other soil and terrain properties. Therefore, we recommend that the contractor determine the actual groundwater levels at the site at the time of the construction activities.

## **8.0 DISCUSSION**

Upon review of the existing subsoil conditions and laboratory tests results, we consider that the proposed project is feasible from a geotechnical point of view, provided that the included recommendations are correctly interpreted and applied.

Generally, the encountered subsoil materials provided good strength parameters; this is based on unconfined compression strength test results. Based on these conditions and the provided design loads, the proposed bridge can be supported on a deep foundation system.

Please review the following sections for further information on the corresponding site and foundation recommendations. Site development recommendations are applicable only for shallow footings.

## 9.0 GEOTECHNICAL RECOMMENDATIONS

### 9.1 Site Development Recommendations

#### 9.1.1 Site Preparation

Prior to the development of any structure or fill deposit, the complete earthwork area must be properly cleaned. The cleaning activities shall include the removal of all surface vegetation, debris and any foreign matter present on the site.

The actual removal depth of topsoil shall be determined in the field by the Geotechnical Engineer or a representative. Please note that the stripped materials can only be used in landscaping, but not at any structural area.

#### 9.1.2 Proof Rolling

Upon completion of the stripping activities, the exposed areas shall be properly proof rolled in order to prepare the natural terrain to receive the design structural fill and traffic loads. The proof roll consists of compacting the exposed surface with a 20-ton loaded dump truck. Surface soils that are observed to rut or deflect excessively under the truck load should be undercut and replaced with the proper structural fill. These activities should be performed during a period of dry weather and should be supervised by a Geotechnical Engineer or a representative.

#### 9.1.3 Structural Fill Materials

After subgrade preparation and observation has been completed, structural fill placement may begin. The first layer of structural fill should be placed in a relatively uniform horizontal lift and be adequately keyed into the properly prepared subgrade soils. The structural fill should consist of lean clays, sandy lean clays (CL) or clayey sands (SC) having the following recommended material properties:

- a. Percent Passing U.S. Sieve #200: 50 percent minimum
- b. Liquid Limit: 40 maximum
- c. Plasticity Index: 10 to 20 maximum
- d. Inert Material (Non-Expansive)
- e. Free of Organics
- f. Maximum Particle Size: 2-in

This material must be certified and approved by the Geotechnical Engineer prior to its use. In case this material is not available locally or economical for project, it is recommended to consider the following material as an alternative.

An alternative structural fill material could consist of “clean” sand or pumped sand having less than 10 percent fines passing the No. 200 Sieve. It should be compacted to at least 95 percent of Maximum Dry Density at Optimum Moisture Content according to ASTM D-698. In-place density measurements should be taken to assure that this degree of compaction is achieved. This material must be certified and approved by the Geotechnical Engineer prior to its use.

#### 9.1.4 Structural Fill Deposit Construction

After all surface preparation and observation has been completed, the structural fill activities may begin. These activities must be performed in a sequential order where lower elevations must be worked before higher ones. The structural fill shall be deposited in lifts of eight (8) inches of loose material. Each lift shall be compacted and certified by the Geotechnical Engineer or a representative prior to placement of other lifts. The passing criteria shall be a 95% of the maximum dry density as determined by ASTM D-698, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)), and a moisture content between one (1) below and three (3) above percentages of the optimum moisture content. If water must be added, it should be uniformly applied and thoroughly mixed into the soil by disking or scarifying. As a guideline, it is recommended that field density tests be performed at a frequency of not less than one test per 2,500 square feet.

It is important to maintain the structural fill thickness as uniform as possible. Uneven fill thicknesses under a structure may cause differential soil responses to the applied loads which can produce cracking, settling, or tilting of the structure. Uniform fill areas shall consider the footprint of the structure plus a five (5) foot strip around its perimeter.

Fill slopes shall be maintained at a maximum 2 Horizontal: 1 Vertical steepness. The runoff of water across the faces of the slopes shall be avoided by appropriate drainage ways. In addition, appropriate drainage ways shall be maintained at all earthwork surface areas in order to not affect compaction.

## 9.2 Deep Foundation Recommendations

Driven foundation systems were evaluated for the proposed bridge structure. APS has evaluated 16-inch square precast concrete piles to support these structures. The skin friction of the top 20 feet of soil was neglected in our analysis. Single piles were modeled with the Driven 1.2 software using deep soil borings from the project site. We recommend that all the piles in a bent be embedded to the same elevation. Structural fill placement was not taken into consideration in determining the axial pile capacities. If more than two (2) feet of structural fill will be placed at the proposed structure, APS should be contacted to revise our calculations.

TABLE 2.0

Proposed Structure	Bent No.	Strength Load <sup>1</sup> (Tons)	AASHTO LRFD Resistance Factor	Factored Load (Tons)	Pile Length (feet)
					16-inch
Bridge	1	130	0.50	260	95
	2	187	0.50	374	95
	3	187	0.50	374	95
	4	130	0.50	260	95

1. Provided by the Structural Engineer

TABLE 3.0

Proposed Structure	Bent No.	Strength Load <sup>1</sup> (Tons)	AASHTO LRFD Resistance Factor <sup>2</sup>	Factored Load (Tons)	Pile Length (feet)
					16-inch
Bridge	1	130	0.80	163	80
	2	187	0.80	234	80
	3	187	0.80	234	80
	4	130	0.80	163	80

1. Provided by the Structural Engineer

2. A Static Load Test must be performed to use this factor

Medium dense to dense clayey sands and poorly graded sands may create difficult pile driving conditions, that can be encountered from 75 to 100 feet. A WEAP analysis must be performed to evaluate conditions of pile drivability once the contractor selects the actual pile driving equipment (hammer type). It is not recommended to purchase production piles prior to determining the pile drivability.

### 9.2.1 Settlement

The estimated settlement of individual piles properly driven to the design depths and loaded to the design capacities will be on the order of one (1) inch (with No Structural fill placement taken into consideration).

### 9.2.2 Group Effects

A group of piles subjected to vertical loads may not necessarily have the same capacity as the sum of the individual pile capacities. For axially loaded piles, published results indicate that the ratio of capacity per pile in a group to that of a single isolated pile typically ranges from 0.5 to 1.0. This efficiency factor depends on the spacing or distance between each pile. In planning pile groups, a minimum center-to-center spacing of four (4) diameters (4D is the diameter or width) is recommended to avoid a reduction in group capacity. Group action should be checked after the actual pile spacing is determined.

### 9.2.3 Lateral Capacity

For deep foundations, the lateral loads are resisted by the soil as well as the rigidity of the pile. Analyses can be performed by methods ranging from chart solutions to finite difference methods. It is recommended that once the pile type, length and group dimensions are determined, our office be contacted to perform lateral load analysis for the proposed project.

### 9.2.4 Pile Load Test

It is recommended that pile capacities be verified by field load test. It is recommended that at least one test pile of each type of pile to be used on the site be driven in the proposed foundation area and tested in compression as outlined by ASTM D 1143. The pile load test(s) should be performed under the guidance of the geotechnical engineer so that the data may be interpreted and the recommended pile capacity adjusted, if necessary, according to the load test results. APS highly recommends that the static load test must be performed prior to purchasing and driving any production piles.

### 9.2.5 Driven Pile Installation

Piles at this site will derive their capacity predominantly from frictional resistance between the piles and the surrounding soils. We recommend all pile driving operations be inspected by a qualified geotechnical inspector. Records of driving resistance versus depth, tip evaluation of piles, driving equipment, pile size and length, etc. should be permanently kept. The hammer selection is the responsibility of the contractor and should be adequately large enough to reach plan tip elevations and develop the required capacities.

The piles should not be jetted or spudded into place. Piles in large groups should be driven from the center outward. Any piles which have heaved  $\frac{1}{4}$  inches during driving of subsequent piles should be re-driven to their original final resistance or their original embedment if originally driven to full penetration.

### 9.2.6 Pile Driving Monitoring

Records of pile size and length, driving equipment, driving resistance versus depth, tip evaluation of piles, etc. shall be permanently kept.

Sometimes premature refusal occurs due to poor performance of the hammer rather than from soil resistance. Any changes in hammer blow counts shall be carefully examined before making any decisions about the pile penetration.

Since testing and inspection services are within APS's scope of work, we recommend that our firm be retained to assist you in establishing final pile lengths, maintain vibration and driving records of all piles installed.



### 9.2.7 Pile Driving Resistance

To determine the driving characteristics, a few probe piles should be driven beneath the proposed structures, preferably in the vicinity of the borings. Probe piles will become working piles, and must be accurately located in accordance with the project’s construction drawings. Exact driving resistance recommendations should be determined based on the actual pile driving equipment selected by the contractor and the driving results of the probe piles.

## 10. PAVEMENT RECOMMENDATIONS

### Pavement Sections

Actual traffic type and frequency were provided by the client, and data was used to estimate the Equivalent Single Axle Loads (ESALs) for the pavement rehabilitation evaluation. Mill and overlay thickness was determined using the AASHTO method. Based on the pavement core results, the existing asphalt thickness varies between 4 and 10 inches. Our recommendations are based on a pavement design life of 20 years and based on the specific wheel loads, axle configurations and frequencies provided by the client.

Proper finishing of concrete pavement requires the use of appropriate construction joints to reduce cracking. Construction joints shall be designed in accordance with the current Portland Cement Association and the American Concrete Institute guidelines. Joints should be sealed to reduce the potential for water infiltration into the supporting soils. Concrete compressive strength shall meet 3,000 psi at 28 days with a maximum slump of 4-inches.

A CBR of 3.0 and a Modulus of Subgrade Reaction (k) of 90 pci were assigned to the near surface well compacted and stable subgrade soils for the pavement evaluation. The recommended pavement mill and overlay thicknesses presented below were based on the assumed parameters at the site and pavement core results:

**TABLE 4.0**

Core Location	Existing gravel and asphalt/concrete thickness	Mill and Overlay recommendation
C-1	6" Gravel, 5" Asphalt	Mill 2 inches and overlay a minimum of 5 inches
C-2	7" Gravel, 6" Asphalt ,plus 6" Concrete	Mill 2 inches and overlay a minimum of 2 inches
C-3	6" Gravel, 4" Asphalt	Mill 2 inches and overlay a minimum of 6 inches
C-4	6" Gravel, 4" Asphalt	Mill 2 inches and overlay a minimum of 6 inches

Core Location	Existing gravel and asphalt/concrete thickness	Mill and Overlay recommendation
C-5	7" Gravel, 4" Asphalt	Mill 2 inches and overlay a minimum of 6 inches
C-6	6" Gravel, 10" Asphalt	Mill 2 inches and overlay a minimum of 2 inches

**TABLE 5.0**

FLEXIBLE PAVEMENT	
Pavement Materials	Minimum Thickness, Inches
	Sidewalk
Asphaltic Concrete	3
Well Compacted and Stable Subgrade/Fill	12

**TABLE 6.0**

Average Daily Traffic (ADT)	10,000
% Trucks	2.0%
% Growth	2.0
Directional Distribution	50%
Design Lane Distribution	100%
Design Life	20 years

**TABLE 7.0**

BOOTLEGGER ROAD - SECTION DESIGN DATA		
	MILL & OVERLAY	FULL RECONSTRUCTION
2017 ADT		10,000
2037 ADT		12,000
TWO WAY TRAFFIC (ADT)		10,000
PERFORMANCE PERIOD (YEARS)	10	20
18-KIP ESALS	1,408,900	2,817,800
SOIL RESILIENT MODULUS (PSI)	3,000	3,650
STRUCTURAL NUMBER REQUIRED (INCHES)	4.65	4.65
STRUCTURAL NUMBER PROVIDED, INCHES (PER LAYER)		
1-SUPERPAVE AC WEARING COURSE (LEVEL 2F)	2.52	1.68
2-SUPERPAVE AC BINDER COURSE (LEVEL 2)	0.50	1.60
3-CLASS II BASE COURSE	0.72	1.44
STRUCTURAL NUMBER PROVIDED (TOTAL INCHES)	3.74	4.70

FLEXIBLE PAVEMENT	
Pavement Materials	Minimum Thickness (Inches)
	Bridge Approach Pavement
Asphaltic Concrete	8
Aggregate Base Course	12
Well Compacted & Stable Subgrade or Fill	12

**11 HEADWALL RECOMMENDATIONS**

Based on the information provided by the client, wingwalls will be approximately four feet high and be supported on subsurface soils present at a depth of five to 10 feet from the ground surface (pavement). An allowable bearing capacity of 1,000 psf can be used for these soils at this depth.

Reinforced concrete, below grade walls of the Wing-wall structure will be subjected to unbalanced earth pressures and should be designed for at-rest earth pressures at least equal to those indicated in tables below. Earth pressures will be influenced by structural design of the walls, condition of wall restraint, methods of construction and/or compaction and strength of materials being restrained. The at-rest condition should be used where no wall movement is permitted. The recommended design lateral earth pressures do not include a factor of safety.

**TABLE 9.0**

Material	Soil Moist Unit Weight, $\gamma$ (Pcf)	Equivalent Fluid Pressure (pcf)	Undrained Cohesion, $C_d$ And Friction Angle, $F$	Coefficient Of Earth Pressure
				$K_o$
Sand	126	63	0 psf, 30°	0.5
Native soils	120	120	1,500 psf, 0°	1.0

$Lateral\ Earth\ Pressure,\ psf = K_o \times (q + \gamma H)$
--

**AT-REST CONDITION (BELOW GROUND WATER TABLE)**

**TABLE 10.0**

Material	Soil Moist Unit Weight (Pcf)	Soil Saturated Unit Weight $\gamma_{sat}$ (pcf)	Equivalent Fluid Pressure (pcf)	Undrained Cohesion, Cd And Friction Angle, F	Coefficient Of Earth Pressure
					$K_o$
Sand	120	125	94	0 psf, 30°	0.5
Native soils	120	125	125	1,500 psf, 0°	1.0

$$\text{Lateral Earth pressure, psf} = (K_o \times q) + (\gamma \times H_w \times K_o) + [(\gamma_{sat} - \gamma_w) \times (H - H_w) \times K_o] + [\gamma_w \times (H - H_w)]$$

## 12.0 CONSTRUCTION CONSIDERATIONS

### 12.1 Observation and Testing

The preceding recommendations require a close supervision of the Geotechnical Engineer or representative; therefore, it is recommended that APS be retained to provide observation and testing for the complete duration of all earthwork and foundation activities for this project. APS cannot accept responsibility for any conditions deviated from those described in this report, nor for the performance of the foundation if not engaged to provide construction observation and testing.

### 12.2 Moisture Sensitive Soils/Weather Related Concerns

Most of the subsurface materials encountered at this site are expected to be sensitive to disturbances caused by changes in moisture content. During wet weather periods, the increment of the moisture content of the soil may cause a significant reduction of the soil strength and support capabilities. Furthermore, soils that become wet may be slow to dry, thus significantly retarding the progress of grading and compaction activities. For these reasons, it will be advantageous to perform earthwork and foundation construction activities during dry weather.

### 12.3 Excavations Regulations

In the Federal Register, Volume 54, No. 209 (October 1989), the United States Department of Labor, Occupational Safety and Health Administration (OSHA) amended its "Construction Standards for Excavations, 29 CFR, part 1926, Subpart P". This document was issued to better insure the safety of workmen entering trenches or excavations. It is mandated, by this federal regulation, that excavations, whether they be utility trenches, basement excavations or footing excavations, be constructed in accordance with the new OSHA guidelines.

The contractor is solely responsible for designing and constructing stable, temporary excavations and shall shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. The contractor's "responsible person", as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations.

We are providing this information solely as a service to our client. APS does not assume responsibility for construction site safety or the contractor's or other parties' compliance with local, state, and federal safety or other regulations.

### 13.0 REPORT LIMITATIONS

The analyses and recommendations presented in this report are based on the existing field conditions at the time of the investigation. Furthermore, they are based on the assumption that the exploratory borings are a representation of the subsoil conditions throughout the site. Please note that variations in the subsoil conditions may occur between and beyond borings. If variations in those conditions are encountered during construction, APS shall be notified immediately in order to assess the situation, confirm the recommendations included in this report, or modify them according to their own judgment. If APS is not notified of such variations, APS will not be responsible for the impact of those variations on the project.

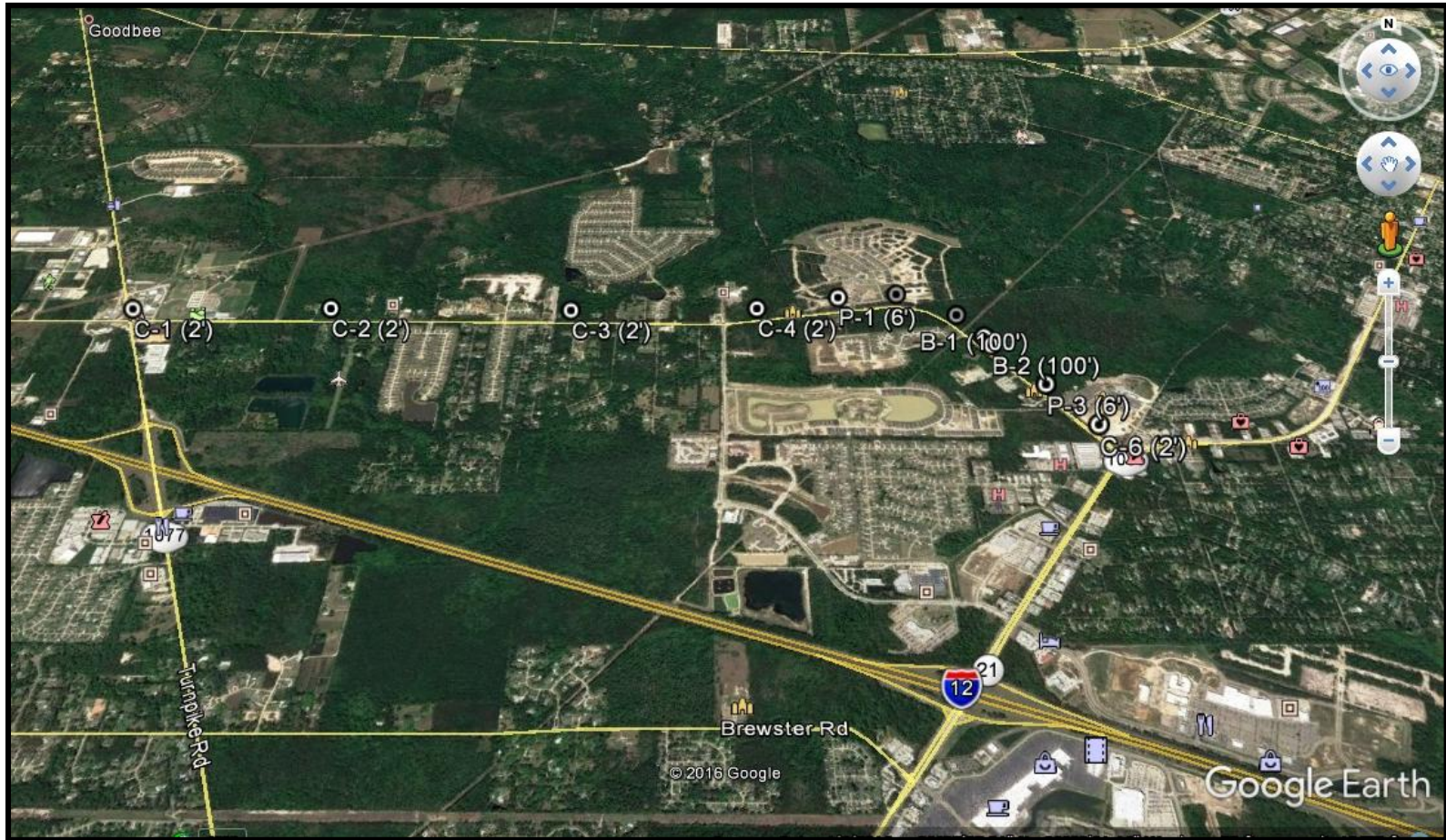
Furthermore, this report is based on the design considerations presently known to us. Project designers must be aware of this situation to check if any important design parameter has been overlooked or requires additional clarification. If the nature of the project should change, the recommendations given in this report shall be re-evaluated. If APS is not notified of such changes, APS will not be responsible for the impact of those changes on the project.

APS shall be retained for the review of final design drawings and specifications in order to ascertain whether their recommendations have been correctly interpreted and implemented and to confirm or modify them. APS is not responsible for the adequacy of recommendations if they do not inspect the construction. The only warranty regarding our services is that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with the generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

This report has been prepared for the exclusive use of **Stanley Consultants, Inc.**, and their design/construction team associated to this specific project.

## APPENDIX





**Bootlegger Road Improvements  
Louisiana**

**APS Engineering and Testing, LLC  
Geotechnical, Environmental, & Construction  
Materials Testing**

**Figure 1  
General Site Location Plan**



DEPTH Feet 0	ELEVATION	GRAPHIC	SOIL TYPE AND COLOR	WET DENSITY	MOISTURE CONTENT	LIQUID LIMIT	PLASTICITY INDEX	% PASSING #200	SPT or UU	FAILURE MODE/ SPT TERMINATION	SAMPLE TYPE NUMBER	DRILL RIG AND EQUIPMENT	
												DRILL RIG MODEL: SIMCO 2800	DRILLING METHOD: WET METHOD
0			Three (3) Inches of Asphalt Stiff, gray, FAT CLAY, (CH)										
10			Very stiff, tan gray, FAT CLAY, (CH)	126	25	51	33		1.16@2.00	SL	1		
			-with Fe nodules and traces of organics										
			Stiff, tan gray, FAT CLAY, (CH)	127	22	66	48		2.10@4.00	SL	2		
20			Stiff, tan gray, FAT CLAY, (CH)	127	22						3		
			Stiff, tan gray, FAT CLAY, (CH)	115	39	91	63		1.24@8.00	60 S.	4		
			Medium stiff, gray, FAT CLAY, (CH)	112	44						5		
30			Stiff gray, LEAN CLAY, (CL) -with sand pockets	100	62	98	72		0.56@12.00	60 S.	6		
			Medium dense, gray, Clayey Silt, (ML) -with sand	127	24	40	23		1.89@14.00	SL	7		
40			Stiff gray, LEAN CLAY, (CL) -with sand	126	25	41	21		2.03@16.00	60 S.	8		
			Gray, LEAN CLAY, (CL) -with silt	128	29		51.3		1.75@18.00	60 S.	9		
50			Stiff, gray, FAT CLAY, (CH)	119	30	36	17				10		
			Very stiff, gray, FAT CLAY, (CH)	113	41	73	48		1.65@22.00	60 S.	11		
60			Very stiff, gray, FAT CLAY, (CH)	115	41	85	60		2.06@24.00	60 S.	12		
			Stiff, tan gray, FAT CLAY, (CH) -with sand	113	37						13		
70			Stiff, gray, FAT CLAY, (CH)	114	36	77	54		1.92@28.00	60 S.	14		
			Dense, tan gray, CLAYEY SAND, (SC)		21		24.2		8-14-18 (32)	4	15		
80			Dense, gray, POORLY GRADED SAND WITH CLAY, (SP-SC)		24		6.7		16-19-22 (41)	4	16		
					19				22-25-30 (56)	4	17		
90			Very dense, gray, POORLY GRADED SAND, (SP)		19		3.0		26-28-43 (71)	4	18		
			Very dense, gray, POORLY GRADED SAND WITH CLAY, (SP-SC)		19		9.0		26-28-43 (71)	4	19		
100			Very dense, gray, POORLY GRADED SAND, (SP)		20		4.7		26-39-50 (88)	4	20		
Bottom of hole at 100 feet Backfilled with grout upon completion.													

DEPTH Feet 0	ELEVATION	GRAPHIC	SOIL TYPE AND COLOR	WET DENSITY	MOISTURE CONTENT	LIQUID LIMIT	PLASTICITY INDEX	% PASSING #200	SPT or UU	FAILURE MODE/ SPT TERMINATION	SAMPLE TYPE NUMBER	DRILL RIG AND EQUIPMENT	
												DRILL RIG MODEL: SIMCO 2800	DRILLING METHOD: WET METHOD
0			Three (3) Inches of Asphalt Medium stiff, tan gray, FAT CLAY, (CH)										
10			Stiff, tan gray, FAT CLAY, (CH)	117	41	77	52		0.53@2.00	60 S.	1		
			Stiff, tan gray, FAT CLAY, (CH)	128	23	51	35		1.50@4.00	60 S.	2		
20			Stiff, tan gray, FAT CLAY, (CH)	125	23	50	34		1.47@6.00	60 S.	3		
			Medium stiff, gray, LEAN CLAY, (CL) -with sand	122	34						4		
30			Medium stiff, gray, LEAN CLAY, (CL) -with sand	130	28	31	10	49.9	0.74@10.00	SL	5		
			Stiff, tan gray, FAT CLAY, (CH)	127	26						6		
40			Very stiff, gray, LEAN CLAY, (CL)	112	42	104	76		1.62@14.00	60 S.	7		
			Loose, gray, Clayey Silt, (ML) -with sand lenses	127	24						8		
50			Stiff, tan gray, LEAN CLAY, (CL) -with silt	125	25	35	17		2.77@18.00	60 S.	9		
			Very stiff, gray, FAT CLAY, (CH)	122	28						10		
60			Very stiff, gray, FAT CLAY, (CH)	128	35	45	24		1.91@22.00	60 S.	11		
			Very stiff, gray, LEAN CLAY, (CL) -with sand	111	43	90	62		2.40@24.00	60 S.	12		
70			Very stiff, gray, LEAN CLAY, (CL) -with sand	127	25	46	26		2.63@26.00	SL	13		
			Stiff, gray, FAT CLAY, (CH)	108	31	77	54		1.72@28.00	60 S.	14		
80			Gray, CLAYEY SAND, (SC)		32			21.6			15		
			Dense, tan, CLAYEY SAND, (SC)		21				20-23-25 (46)	4	16		
90			Dense, gray, POORLY GRADED SAND WITH CLAY, (SP-SC)		16		8.3		17-20-23 (43)	4	17		
			Very dense, gray, POORLY GRADED SAND WITH CLAY, (SP-SC)		18				19-23-26 (49)	4	18		
100			Very dense, gray, POORLY GRADED SAND WITH CLAY, (SP-SC)		19			10.6	19-39-50 (89)	4	19		
					18			7.8	19-35-50 (86)	4	20		
Bottom of hole at 100 feet Backfilled with grout upon completion.													

BORING NO. B-1	STATION:	WATER LEVEL:
LATITUDE: 30.46504	OFFSET:	
LONGITUDE: -90.13664	DATE TAKEN: 3/24/2017	BACKFILL METHOD: GROUT
LRS ID:	FIELD BOOK:	DRILLER: VG

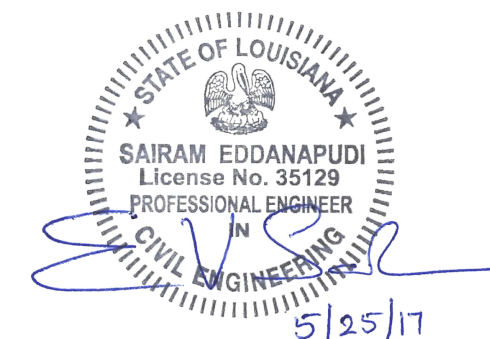
BORING NO. B-2	STATION:	WATER LEVEL:
LATITUDE: 30.46447	OFFSET:	
LONGITUDE: -90.13637	DATE TAKEN: 3/23/2017	BACKFILL METHOD: GROUT
LRS ID:	FIELD BOOK:	DRILLER: VG

STANDARD ABBREVIATIONS & DEFINITIONS	
ASPHALT	CH
CL	ML
SC	SP-SC
SP	
N.P. = Non-Plastic	ORG. = Organic
FAILURE MODE:	
M.S. = Multiple Shear	SL = Slump
S/S = Slickensides	YLD. = Yield
V.S. = Vertical Shear	60 S. = Shear Angle
SPT TERMINATION, AASHTO T 206	
1 = 7.2.1 - 50 Blows Within A 6" Interval	
2 = 7.2.2 - 100 Blows Total	
3 = 7.2.3 - No Advancement for 10 Blows	
4 = 7.2.4 - Sampler Driven the Entire 18"	
5 = Non-standard	

SOIL PROPERTIES	
WET DENSITY	= SOIL TYPE nomenclature is based on ASTM D 2487
MOISTURE CONTENT	= Wet density of in-place soil, (pounds per cu. ft.) determined by AASHTO T 208.
LIQUID LIMIT & PLASTICITY INDEX	= Moisture Content of in-place soil, expressed as a percentage of the dry weight of the soil, (%), determined by DOTD TR 403, Method B.
SPT	= Atterberg limits and indices, DOTD TR 428
UU	= Standard Penetration Test, AASHTO T 206, number of blows per each 6 inch increment, unless amount of penetration is shown
C	= Unconsolidated Undrained triaxial test, AASHTO T 296, compressive strength (tons per sq. ft.), of one specimen confined at noted pressure (pounds per sq. in.)
+	= Soil cohesion (tons per sq. ft.)
Δ	= Soil angle of internal friction (degrees)
Δ	= Unconsolidated Undrained triaxial test, AASHTO T 296, three specimens, (c - φ).
+	= Consolidated drained direct shear test, AASHTO T 235, (c - φ).
.	= Hydrometer test performed

MISCELLANEOUS	
D-3	= Location and Identification of thin-walled tube sample, AASHTO T 207
(D-3)	= Location and Identification of thin-walled tube sample, AASHTO T 207, with a portion of the sample saved for consolidation testing
D-3	= Location and Identification of SPT sample, AASHTO T 206
G-3	= Location and Identification of sample recovered using an auger as per ASTM D1452
G-3	= Grab Sample, unable to recover undisturbed sample for strength testing and material retained for classification.
NO RECV.	= No Recovery, unable to recover sample for testing or classification.
DIST.	= Disturbed sample recovered with thin-walled tube sampler.
W	= Water Table depth below ground surface at time of drilling
W	= Water Table depth below ground surface after drilling as noted
ETR =	= Energy Transfer Ratio determined according to ASTM D4633

CORRELATION OF PENETRATION RESISTANCE AND SOIL PROPERTIES		
SOIL	DESIGNATION	"N" (blows per ft.)
SAND AND SILT	VERY LOOSE	LESS THAN 4
	LOOSE	4 - 10
	MEDIUM DENSE	10 - 30
	DENSE	30 - 50
CLAY	VERY DENSE	OVER 50
	VERY SOFT	LESS THAN 2
	SOFT	2 - 4
CLAY	MEDIUM STIFF	4 - 8
	STIFF	8 - 15
	VERY STIFF	15 - 30
	HARD	OVER 30

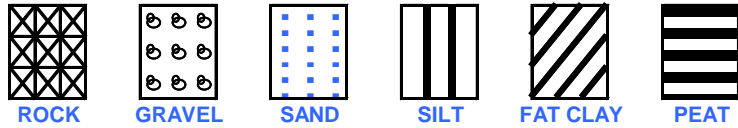


SHEET NUMBER	
ST. TAMMANY	
PARRISH	
CONTROL SECTION	
STATE PROJECT	
DESIGNED	
CHECKED	
DETAILED	
CHECKED	
DATE	4/20/17
SHEET	
BY	
REVISION DESCRIPTION	
DATE	
NO.	
<b>SAIRAM EDDANAPUDI</b> License No. 35129 PROFESSIONAL ENGINEER IN CIVIL ENGINEERING 5/25/17	
<b>GEOTECHNICAL EXPLORATION LOGS</b> Bootlegger Road Improvements	
THIS SIGNATURE AND SEAL IS AFFIXED TO THIS DRAWING AS CERTIFICATION THAT THE LABORATORY TESTING AND ANALYSIS WAS PERFORMED ACCORDING TO THE LISTED PROCEDURES. NO DESIGN COMPUTATIONS WERE PERFORMED OR REVIEWED BY ME.	
NO.	DATE
LOG/UPDATE DESCRIPTION	BY



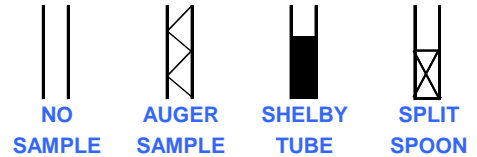
# KEY TO TERMS AND SYMBOLS USED ON LOGS

## SOIL TYPE



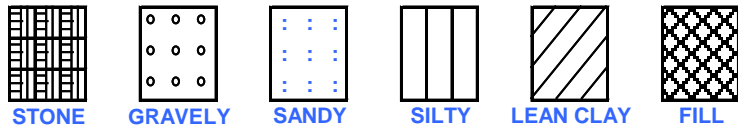
ROCK      GRAVEL      SAND      SILT      FAT CLAY      PEAT

## SAMPLER TYPE

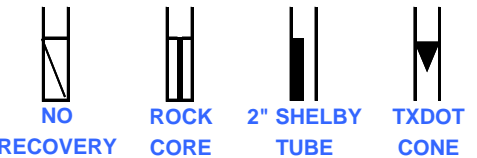


NO SAMPLE      AUGER SAMPLE      SHELBY TUBE      SPLIT SPOON

## MODIFIERS



STONE or CONCRETE      GRAVELY      SANDY      SILTY      LEAN CLAY      FILL



NO RECOVERY      ROCK CORE      2" SHELBY TUBE      TXDOT CONE

## UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D 2487 (1980)

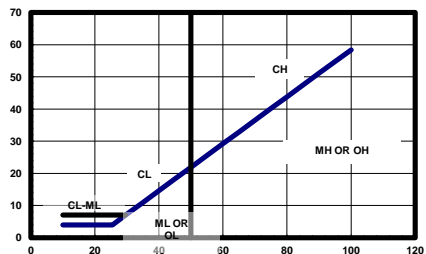
MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS	
COARSE GRAINED SOILS LESS THAN 50% PASSING NO. 4 SIEVE	GRAVEL & GRAVELY SOILS LESS THAN 50% PASSING NO. 4 SIEVE	CLEAN GRAVEL (LITTLE OR NO FINES)	<b>GW</b>	WELL GRADED GRAVEL, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
		GRAVEL (LITTLE OR NO FINES)	<b>GP</b>	POORLY GRADED GRAVEL, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES	
	SANDS MORE THAN 50% PASSING NO. 4 SIEVE	W/ APPRECIABLE FINES	<b>GM</b>	SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURES	
		CLEAN SANDS (LITTLE FINES)	<b>SW</b>	WELL GRADED SAND, GRAVELY SAND (LITTLE FINES)	
	SANDS WITH APPRECIABLE FINES	LITTLE FINES	<b>SP</b>	POORLY GRADED SANDS, GRAVELY SAND (L.FINES)	
		SANDS WITH APPRECIABLE FINES	<b>SM</b>	SILTY SANDS, SAND-SILT MIXTURES	
	FINE GRAINED SOILS MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50	CLEAN SANDS (LITTLE FINES)	<b>SC</b>	CLAYEY SANDS, SAND-CLAY MIXTURES
			SANDS WITH APPRECIABLE FINES	<b>ML</b>	INORGANIC SILTS & VERY FINE SANDS, ROCK FLOUR SILTY OR CLAYEY FINE SANDS OR CLAYEY SILT W/ LOW PI
			SANDS WITH APPRECIABLE FINES	<b>CL</b>	INORGANIC CLAY OF LOW TO MEDIUM PI LEAN CLAY GRAVELY CLAYS, SANDY CLAYS, SILTY CLAYS
		SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50	SANDS WITH APPRECIABLE FINES	<b>OL</b>	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PI
SANDS WITH APPRECIABLE FINES	<b>MH</b>		INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS		
SANDS WITH APPRECIABLE FINES	<b>CH</b>		INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAYS		
		<b>OH</b>	ORGANIC CLAYS OF MED TO HIGH PI, ORGANIC SILT		
HIGHLY ORGANIC SOIL		<b>PT</b>	PEAT AND OTHER HIGHLY ORGANIC SOILS		
UNCLASSIFIED FILL MATERIALS		ARTIFICIALLY DEPOSITED AND OTHER UNCLASSIFIED SOILS AND MAN-MADE SOIL MIXTURES			

## CONSISTENCY OF COHESIVE SOILS

CONSISTENCY	UNCONFINED COMPRESSIVE STRENGTH IN TONS/FT <sup>2</sup>
VERY SOFT	0.0 TO 0.25
SOFT	0.25 TO 0.50
MEDIUM	0.50 TO 1.0
STIFF	1.0 TO 2.0
VERY STIFF	2.0 TO 4.0
HARD	> 4.0 OR 4.0+

## RELATIVE DENSITY - GRANULAR SOILS

CONSISTENCY	N-VALUE (BLOWS/FOOT)
VERY LOOSE	0-4
LOOSE	4-9
MEDIUM DENSE	10-29
DENSE	30-49
VERY DENSE	> 50 OR 50+



## ABBREVIATIONS

HP - HAND PENETROMETER      UC - UNCONFINED COMPRESSION TEST  
 TV - TORVANE      UU - UNCONSOLIDATED UNDRAINED TRIAXIAL  
 MV - MINIATURE VANE      CU - CONSOLIDATED UNDRAINED

▼ GROUNDWATER FIRST ENCOUNTERED  
 ▽ 24-HOUR GROUNDWATER READING

## CLASSIFICATION OF GRANULAR SOILS

### U.S. STANDARD SIEVE SIZE(S)

	6"	3"	3/4"	4	10	40	200	
<b>BOUL- -DERS</b>	<b>COBBLES</b>	<b>GRAVEL</b>		<b>SAND</b>			<b>SILT OR CLAY</b>	<b>CLAY</b>
		<b>COARSE</b>	<b>FINE</b>	<b>COARSE</b>	<b>MEDIUM</b>	<b>FINE</b>		
	152	76.2	19.1	4.76	2.0	0.42	0.074	0.002
	<b>GRAIN SIZE IN MM</b>							

# BORING LOG

**BORING NO.:** P-1

**PROJECT NO.:** APS1702-G009

**PROJECT:** Bootlegger Road Improvements

**METHOD:** AUGER

**PROJECT LOCATION:** St. Tammany Parish, LA

**BORING ELEVATION:** Not Surveyed

**BORING LOCATION:** N-3639.94 E4023193.7

**DATE COMPLETED:** 03/24/2017

**DATE DRILLED:** 3/24/2017

**WATER LEVEL DATE:** 03/24/2017

**WATER LEVEL:** Not Encountered

**GEOL/ENGR:** SE/SA

**DRILLER:** VG

DEPTH (FEET)	SAMPLE	Moisture Content (%)	LL	PI	Symbol	MATERIAL CLASSIFICATION
1		21				Gray Lean Clay (CL) -with sand @ 0'-1' : -200 = 60.6 %
2		21	43	27		Tan and Gray Lean Clay (CL) -with Fe nodules
3		27				Reddish Tan and Gray Fat Clay (CH)
4		26				Reddish Tan and Gray Lean Clay (CL)
5		22				Reddish Tan and Gray Lean Clay (CL)
6		20				Reddish Tan and Gray Lean Clay (CL)
6						Boring terminated @ 6.0 feet. Boring backfilled with cuttings upon completion.
7						
8						
9						
10						

**COMMENTS:**

Auger Cuttings

# BORING LOG

**BORING NO.:** P-2

**PROJECT:** Bootlegger Road Improvements

**PROJECT LOCATION:** St. Tammany Parish, LA

**BORING LOCATION:** N-4053.68 E4025175.4

**DATE DRILLED:** 3/24/2017

**WATER LEVEL:** Not Encountered

**GEOL/ENGR:** SE/SA

**PROJECT NO.:** APS1702-G009







**METHOD:** AUGER

**BORING ELEVATION:** Not Surveyed


**DATE COMPLETED:** 03/24/2017

**WATER LEVEL DATE:** 03/24/2017

**DRILLER:** VG

DEPTH (FEET)	SAMPLE	Moisture Content (%)	LL	PI	Symbol	MATERIAL CLASSIFICATION
1		20	21	6		Reddish Tan Silty Clay (CL-ML) -with sand @ 0'-1' : -200 = 29.4 %
2		23	28	8		Reddish Tan and Gray Lean Clay (CL)
3		25				Tan and Gray Fat Clay (CH)
4		27				
5		37				Reddish Tan and Gray Fat Clay (CH)
6		36				
6						Boring terminated @ 6.0 feet. Boring backfilled with cuttings upon completion.
7						
8						
9						
10						

**COMMENTS:**

 Auger Cuttings

# BORING LOG

**BORING NO.:** P-3

**PROJECT:** Bootlegger Road Improvements

**PROJECT LOCATION:** St. Tammany Parish, LA

**BORING LOCATION:** N-5737.87 E4026416.99

**DATE DRILLED:** 3/24/2017

**WATER LEVEL:** Not Encountered

**GEOL/ENGR:** SE/SA

**PROJECT NO.:** APS1702-G009



**METHOD:** AUGER

**BORING ELEVATION:** Not Surveyed


**DATE COMPLETED:** 03/24/2017

**WATER LEVEL DATE:** 03/24/2017

**DRILLER:** VG

DEPTH (FEET)	SAMPLE	Moisture Content (%)	LL	PI	Symbol	MATERIAL CLASSIFICATION
1		23	34	15		Gray Lean Clay (CL) -with roots
2		29				Gray and Reddish Tan Lean Clay (CL)
3		20				Reddish Tan and Gray Lean Clay (CL)
4		30				Gray Fat Clay (CH)
5		30				
6		32				
6						Boring terminated @ 6.0 feet. Boring backfilled with cuttings upon completion.
7						
8						
9						
10						

**COMMENTS:**

 Auger Cuttings

## Section 03

# COQUILLE AREA DRAINAGE IMPROVEMENTS

## Summary of Drainage Structures

STRUCTURE NO.	STATION	SIDE OF C/L	DESCRIPTION	STORM DRAIN PIPE (T3 JOINTS)	STORM DRAIN PIPE ARCH (T3 JOINTS)		CATCH BASIN		BEDDING MATERIAL
				15" (FEET)	42" (FEET)	48" (FEET)	CB-02 (EACH)	CB-04 (EACH)	CU. YD.
<b>STA. ALONG BOOTLEGGER RD</b>									
100	108+66	LT.	RCPA, 42 in. x 24 ft.		24				3.4
101	108+78	LT.	CATCH BASIN				1		1.4
102	109+34	LT.	RCPA, 48 in. x 112 ft.			112			16.6
103	109+90	LT.	CATCH BASIN				1		1.4
103A	109+90	LT.	RPVCP, 15 in. x 11 ft.	11					0.9
103B	109+90	LT.	CATCH BASIN					1	0.7
104	110+60	LT.	RCPA, 48 in. x 140 ft.			140			20.7
105	111+30	LT.	CATCH BASIN				1		1.4
105A	111+30	LT.	RPVCP, 15 in. x 11 ft.	11					0.9
105B	111+29	LT.	CATCH BASIN					1	0.7
106	111+70	LT.	RCPA, 48 in. x 80 ft.			80			11.9
107	112+26	LT.	CATCH BASIN				1		1.4
107A	112+26	LT.	RPVCP, 15 in. x 11 ft.	11					0.9
107B	111+26	LT.	CATCH BASIN					1	0.7
108	112+95	LT.	RCPA, 48 in. x 170 ft.			170			25.2
109	113+80	LT.	CATCH BASIN				1		1.4
110	114+66	LT.	RCPA, 48 in. x 40 ft.			40			5.9
111	114+86	LT.	CATCH BASIN				1		1.4
112	114+97	LT.	RCPA, 48 in. x 24 ft.			24			3.6
<b>GENERAL TOTAL</b>				<b>33</b>	<b>24</b>	<b>566</b>	<b>6</b>	<b>3</b>	<b>100.4</b>

Section 04  
Revised

**LOUISIANA UNIFORM PUBLIC WORK BID FORM**

TO: St. Tammany Parish Government  
21454 Koop Dr., Suite 2F  
Mandeville, La 70471

*(Owner to provide name and address of owner)*

**BID FOR:**Bootlegger Road Improvements  
Bid #300-00-18-66-2

*(Owner to provide name of project and other identifying information.)*

The undersigned bidder hereby declares and represents that she/he; a) has carefully examined and understands the Bidding Documents, b) has not received, relied on, or based his bid on any verbal instructions contrary to the Bidding Documents or any addenda, c) has personally inspected and is familiar with the project site, and hereby proposes to provide all labor, materials, tools, appliances and facilities as required to perform, in a workmanlike manner, all work and services for the construction and completion of the referenced project, all in strict accordance with the Bidding Documents prepared by: \_\_\_\_\_

St. Tammany Parish Procurement and dated: December 3, 2018.  
*(Owner to provide name of entity preparing bidding documents.)*

Bidders must acknowledge all addenda. The Bidder acknowledges receipt of the following **ADDENDA:** (Enter the number the Designer has assigned to each of the addenda that the Bidder is acknowledging) \_\_\_\_\_ .

**TOTAL BASE BID:** For all work required by the Bidding Documents (including any and all unit prices designated "Base Bid" \* but not alternates) the sum of:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**ALTERNATES:** For any and all work required by the Bidding Documents for Alternates including any and all unit prices designated as alternates in the unit price description.

**Alternate No. 1** for the lump sum of:

\_\_\_\_\_ Dollars (\$ \_\_\_\_\_)

**Alternate No. 2** (N/A) for the lump sum of:

N/A Dollars (\$ N/A)

**Alternate No. 3** (N/A) for the lump sum of:

N/A Dollars (\$ N/A)

**NAME OF BIDDER:** \_\_\_\_\_

**ADDRESS OF BIDDER:** \_\_\_\_\_

**LOUISIANA CONTRACTOR'S LICENSE NUMBER:** \_\_\_\_\_

**NAME OF AUTHORIZED SIGNATORY OF BIDDER:** \_\_\_\_\_

**TITLE OF AUTHORIZED SIGNATORY OF BIDDER:** \_\_\_\_\_

**SIGNATURE OF AUTHORIZED SIGNATORY OF BIDDER \*\*:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**THE FOLLOWING ITEMS ARE TO BE INCLUDED WITH THE SUBMISSION OF THIS LOUISIANA UNIFORM PUBLIC WORK BID FORM:**

\* The Unit Price Form shall be used if the contract includes unit prices. Otherwise it is not required and need not be included with the form. The number of unit prices that may be included is not limited and additional sheets may be included if needed.

\*\* **A CORPORATE RESOLUTION OR WRITTEN EVIDENCE** of the authority of the person signing the bid for the public work as prescribed by LA R.S. 38:2212(B)(5).

**BID SECURITY** in the form of a bid bond, certified check or cashier's check as prescribed by LA R.S. 38:2218(A) attached to and made a part of this bid.

# LOUISIANA UNIFORM PUBLIC WORK BID FORM

## UNIT PRICE FORM

Revised

TO:

St. Tammany Parish Government  
 21454 Koop Drive, Suite 2F  
 Mandeville, LA. 70471  
(OWNER TO PROVIDE NAME AND ADDRESS OF OWNER)

BID FOR:

Bootlegger Road Improvements  
 Bid No. 300-00-18-66-2  
 Revised  
(OWNER TO PROVIDE PROJECT NAME & OTHER IDENTIFYING INFO)

**UNIT PRICES: This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.**

<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVAL OF BRIDGE (TIMBER) (SUB/SUPERSTRUCTURE, & APPROACH SLAB)	
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
202-02-00100	1		LUMP		
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVAL OF CONCRETE WALKS AND DRIVES	
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
202-02-06100	120		SQYD		
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVAL OF CURBS (CONCRETE)	
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
202-02-06140	120		LNFT		
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	REMOVAL OF GUARD RAIL	
<b>REF NO.:</b>	<b>QUANTITY</b>		<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
202-02-14500	287.00		LNFT		

**Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.**

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # REMOVAL OF SURFACING AND STABILIZED BASE				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
202-02-38500	3,986.50	SQYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # EXCAVATION AND EMBANKMENT				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
203-05-00100	1	LUMP		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # TEMPORARY SEDIMENT CHECK DAMS				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
204-05-00100	74	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # TEMPORARY SILT FENCING				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
204-06-00100	8,200	LNFT		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # CLASS II BASE COURSE				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
302-01-00100	4,035	CUYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # LIME				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
304-01-00100	100	TON		

Version 2017 Q2

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**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # LIME TREATMENT (TYPE D) (12" THICK)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
304-04-00400	12,100	SQYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # SUBGRADE LAYER (12")				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
305-01-04000	12,100	SQYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # NON-MAINLINE TRAFFIC MAINTENANCE SURFACING (AGGREGATE) (VEHICU				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
402-03-00100	200	CUYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # ASPHALT CONCRETE				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
502-01-00100	7663.3	TON		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # ASPHALT CONCRETE DRIVES, TURNOUTS AND MISCELLANEOUS				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
502-01-00200	16	TON		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # MILLING ASPHALT PAVEMENT (2" THICK)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
509-01-00100	50,850	SQYD		

Version 2017 Q2

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**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PAVEMENT PATCHING (10" MINIMUM THICKNESS)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
510-01-00104	300.00	SQYD			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	STORM DRAIN PIPE (15" RPVCP)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
701-03-01002	33	LNFT			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	STORM DRAIN PIPE (18" POLYMER COATED SPIRAL RIB CORRUGATED STEEL	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
701-03-01022	80	LNFT			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	STORM DRAIN PIPE (36" POLYMER COATED SPIRAL RIB CORRUGATED STEEL	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
701-03-01082	650	LNFT			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	STORM DRAIN PIPE ARCH (42" EQUIV. RCPA)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
701-04-01100	24	LNFT			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	STORM DRAIN PIPE ARCH (48" EQUIV. RCPA)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
701-04-01120	566	LNFT			

Version 2017 Q2

**Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.**

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	STORM DRAIN PIPE (12" POLYMER COATED 2 2/3" x 1/2" CORRUGATED STEEL)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
701-05-01001	70	LNFT			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	TRENCH EXCAVATION SAFETY PROTECTION (DEPTH >5 FEET)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
701-17-00100	665	LNFT			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	MANHOLES (MH-06)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
702-02-00100	5	EACH			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	CATCH BASIN (CB-01)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
702-03-00100	1	EACH			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	CATCH BASIN (CB-02)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
702-03-00200	6	EACH			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	CATCH BASIN (CB-04)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
702-03-00300	3	EACH			

Version 2017 Q2

**Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.**

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	BLOCKED OUT GUARDRAIL	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
704-03-00100	450	LNFT			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	GUARDRAIL TRANSITIONS (DOUBLE THRIE BEAM)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
704-07-00200	100	LNFT			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	GUARDRAIL END TREATMENT (FLARED)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
704-10-00100	2	EACH			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	GUARDRAIL END TREATMENT (TANGENT)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
704-10-00200	2	EACH			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	CONCRETE WALK (4" THICK)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
706-01-00100	90	SQYD			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	CONCRETE DRIVE (6" THICK)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
706-02-00200	120	SQYD			

Version 2017 Q2

Wording for "description" is to be provided by the Owner. All Quantities Estimated. The Contractor will be paid based upon actual quantities as verified by the Owner.

**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # RIPRAP (55 LB, 18" THICK)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
711-01-04000	720	SQYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # GEOTEXTILE FABRIC				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
711-04-00100	720	SQYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # TEMPORARY SIGNS AND BARRICADES				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
713-01-00100	1	LUMP		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # MULCH (VEGETATIVE)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
716-01-00100	1.4	TON		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # SEEDING				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
717-01-00100	21.6	LB		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # FERTILIZER				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
718-01-00100	720	LB		

Version 2017 Q2

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**UNIT PRICES:** This form shall be used for any & all work required by the Bidding Documents & described as unit prices. Amounts shall be stated in figures & only in figures.

<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # RUMBLE STRIPS (SHOULDER/EDGE)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
724-02-00100	6.286	MILE		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # MOBILIZATION				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
727-01-00100	1	LUMP		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # OBJECT MARKER ASSEMBLY (TYPE 3)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
729-16-00300	4	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # SIGN (TYPE A)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
729-01-00100	16.8	SQFT		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # SQUARE TUBING POST WITH 2-1/4" ANCHOR				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
729-22-00100	2	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # REFLECTORIZED RAISED PAVEMENT MARKERS				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
731-02-00100	796	EACH		

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<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT STRIPING (SOLID LINE)(4" WIDTH)(THERMOPLASTIC 90	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-02-02000	10.197	MILE			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT STRIPING (SOLID LINE) (6" WIDTH) (THERMOPLASTIC 9	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-02-02020	4.349	MILE			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT STRIPING (SOLID LINE) (8" WIDTH) (THERMOPLASTIC 9	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-02-02040	0.132	MILE			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT STRIPING (SOLID LINE) (12" WIDTH) (THERMOPLASTIC	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-02-02060	0.411	MILE			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT STRIPING (SOLID LINE) (24" WIDTH) (THERMOPLASTIC	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-02-02080	0.209	MILE			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT STRIPING (BROKEN LINE) (4" WIDTH) (THERMOPLASTI	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-03-02000	1.497	MILE			

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<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT STRIPING (DOTTED LINE)(8" W)(2' L)(THERMO 90 MIL)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-03-02030	0.108	MILE			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT STRIPING (DOTTED LINE)(24" W)(2' L)(THERMO 90 MIL)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-03-02060	0.045	MILE			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (ARROW - DOUBLE)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-04-01040	7	EACH			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (ARROW - LEFT TURN)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-04-01080	3	EACH			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLASTIC PAVEMENT LEGENDS AND SYMBOLS (ARROW - RIGHT TURN)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-04-01100	4	EACH			
<b>Description:</b>	<input checked="" type="checkbox"/> BASE BID	OR	<input type="checkbox"/> ALT #	PLSTC PVMT LGNDS AND SYMB (DIR ARR RNDDBT - FSHK) (TYPE LTRC)	
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>	
732-04-01130	4	EACH			

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<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # PLASTIC PAVEMENT LEGENDS AND SYMBOLS (ONLY)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
732-04-15020	7	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # PLASTIC PAVEMENT LEGENDS AND SYMBOLS (YIELD)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
732-04-25000	5	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # PLASTIC PAVEMENT LEGENDS AND SYMBOLS (YIELD LINE)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
732-04-25020	25	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # MAILBOXES				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
735-01-00100	17	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # MAILBOX SUPPORTS (SINGLE)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
735-02-00100	15	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # MAILBOX SUPPORTS (DOUBLE)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
735-03-00100	1	EACH		

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<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # CONSTRUCTION LAYOUT				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
740-01-00100	1	LUMP		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # PRECAST CONCRETE PILES (16")				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
804-01-00300	2,000	LNFT		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # DYNAMIC MONITORING ASSISTANCE				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
804-14-00100	2	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # VIBRATION MONITORING				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
804-18-00100	20	DAY		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # CLASS A1 CONCRETE (BENT CAP)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
805-01-00300	48	CUYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # CLASS A2 CONCRETE				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
805-02-00900	166	CUYD		

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<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # DEFORMED REINFORCING STEEL				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
806-01-00100	67,443	LB		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # CONCRETE BRIDGE RAILING (SLOTTED BARRIER)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
810-01-00200	94	LNFT		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # CONCRETE BRIDGE RAILING				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
810-01-00400	110	LNFT		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # CONCRETE AND METAL BRIDGE RAILING				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
810-03-00400	290	LNFT		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # CONCRETE APPROACH SLABS				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
813-01-00100	206	SQYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # SEAL EXPANSION JOINT				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
815-02-00500	98	LNFT		

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<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # GEOGRID				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
NS-300-00060	13,030	SQYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # POLYMER BASED ASPHALT REINFORCEMENT INTERLAYER				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
S-002	54,836	SQYD		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # POLYMER COATED CMP SADDLE TEE (36" X 12")				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
S-003	3	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # ASPHALT COATED CMP END SECTION (12")				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
S-004	7	EACH		
<b>Description:</b> <input checked="" type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT # TRASH GUARDS FOR CM END SECTIONS				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
S-005	7	EACH		
<b>Description:</b> <input type="checkbox"/> BASE BID OR <input checked="" type="checkbox"/> ALT # ASPHALT CONCRETE				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
502-01-00100	4,700	TON		

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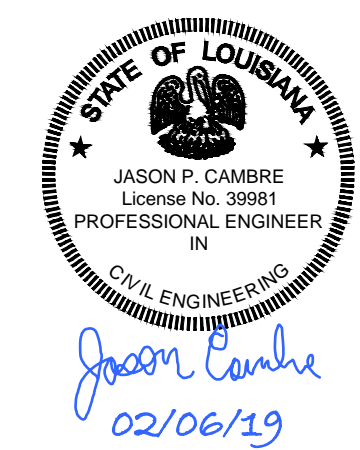
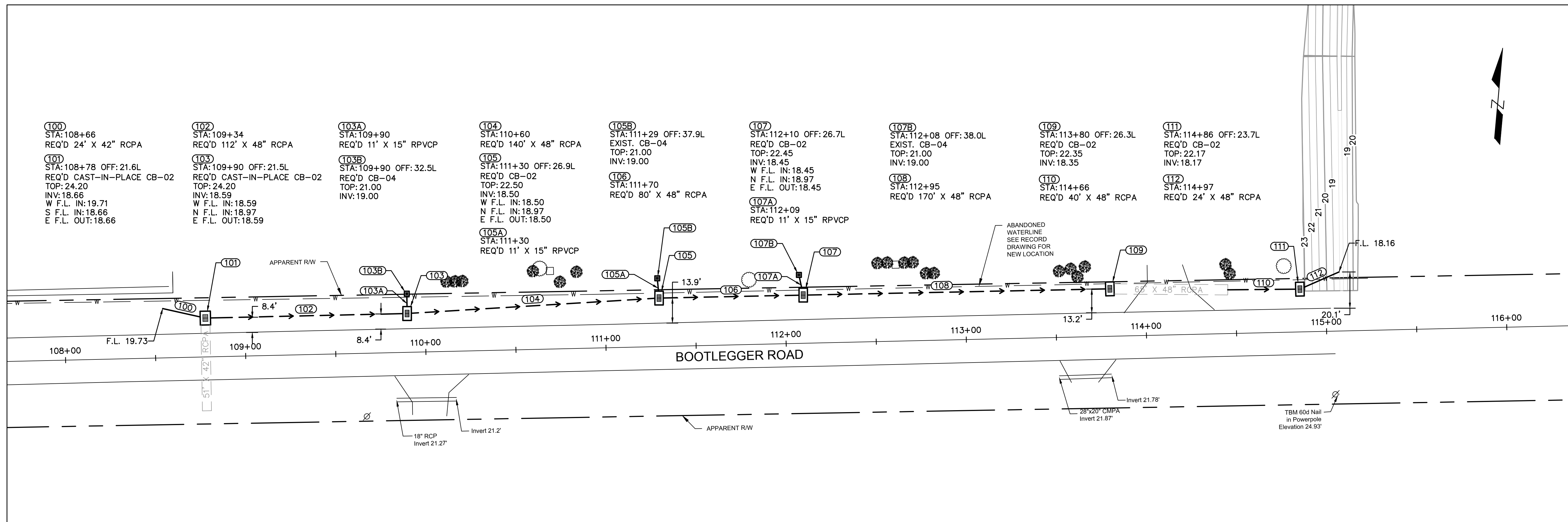
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<b>Description:</b> <input type="checkbox"/> BASE BID OR <input checked="" type="checkbox"/> ALT # MILLING ASPHALT PAVEMENT (2" THICK)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
509-01-00100	-50,850	SQYD		
<b>Description:</b> <input type="checkbox"/> BASE BID OR <input checked="" type="checkbox"/> ALT # MILLING ASPHALT PAVEMENT (3.5" THICK)				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
509-01-00200	50,850	SQYD		
<b>Description:</b> <input type="checkbox"/> BASE BID OR <input checked="" type="checkbox"/> ALT # POLYMER BASED ASPHALT REINFORCEMENT INTERLAYER				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
S-002	-50,000	SQYD		
<b>Description:</b> <input type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT #				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
<b>Description:</b> <input type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT #				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>
<b>Description:</b> <input type="checkbox"/> BASE BID OR <input type="checkbox"/> ALT #				
<b>REF NO.:</b>	<b>QUANTITY</b>	<b>UNIT OF MEASURE</b>	<b>UNIT PRICE</b>	<b>UNIT PRICE EXTENSION (Quantity times unit price)</b>

Version 2017 Q2

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BOOTLEGGER ROAD IMPROVEMENTS  
COQUILLE DRAINAGE PLAN

Rev. No.	Date	Description

St. Tammany Parish  
Department of Engineering  
P.O. Box 628 Bogalusa, LA 70434  
Phone: (850) 865-2512  
Fax: (850) 875-2616

Project No. EN16000039  
Date 2/6/2019  
Scale 1" = 30'  
Drawn By JPC

3a

Sheet  
Date 2/6/2019  
Scale 1" = 30'  
Drawn By JPC



## ST. TAMMANY PARISH

PATRICIA P. BRISTER  
PARISH PRESIDENT

**January 24, 2019**

Please find the following addendum to the below mentioned BID.

**Addendum No.:** 1

**Bid#:** 300-00-18-66-2

**Project Name:** Bootlegger Road Improvements

**Bid Due Date:** Thursday, February 14, 2019

### **GENERAL INFORMATION:**

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1. Please note that the Bid Opening has been pushed to Thursday, February 14, 2019. Time and location remain the same. The last Day to submit inquiries is Tuesday, February 5, 2019 at 2:00pm. The last day for an Addendum is Monday, February 11, 2019 is at 2:00pm.
2. Mandatory Pre-bid Meeting Sign in sheet. (Attached)

### **ATTACHMENTS:**

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1. Mandatory Pre-Bid Sign in Sheet.pdf

**End of Addendum #1**

Location: Staff Conference Rm. 3rd Floor

21454 (Building B) Koop Dr., Mandeville, LA 70471

**Pre-Bid Sign-In Sheet**  
**Bootlegger Road Improvements**

	Name	Company	Email	Phone	Time In	Time Out
1	Marcus Leart	McDonald Const	marcus.mcdonald@construction@yahoo.com	985-641-8621	1:43	2:21
2	Mark Peterson	Tensar	MPeterson@kusaexp.com	985-501-0273	1:43	2:20
3	Larry Lazar	Beverly Const.	Larry@Beverlyinc.com	985-264-8725		2:21
4	MARK Guinn	Guinn Construction	MARK@GUINNCONSTRUCTIONLLC.COM	337-824-0630	1:45	2:24
5	Stacey Deshotel	Cleo	stacey.deshotel@cleo.com	337-501-2688	1:45	2:23
6	Eric Beach	QSM	eric@qualitysiteworkmaterials.com	504-908-8401	1:45	2:10
7	Ross Crnk	JB James Construction LLC	ROSS@JBjamesllc.com estimating@jbjmedllc.com	225-927-3131	1:50	2:20
8	Cecil Hushes	Diamond B	Cecil.Hushes@diamondb.com	985-474-4985	1:51	2:21
9	Tawisha Pena	Industrial Fabrics	tpena@ind-fab.com	225-9077116	1:42	2:20
10	Jacobs Macheba	Barriere Construction Co, LLC	JacobsM@barriere.com	504-421-0819	1:50	2:20
11	Dona Nugent	Magee Excavation	Skip@mageeexcavation.net	985-892-4001	1:50	2:23
12	Sky Foxworth	Kota Construction Services	SFOXWORTH@KOTACONSTRUCTIONSERVICES.COM	(985) 590-0985	1:55	2:23



	Name	Company	Email	Phone	Time In	Time Out
13	Kyle Hartzog	Koets Construction Services	KHartzog@koetsconstruction.com	(985-515-1842	1:55	2:23
14	Tyson Cambre	St Tammany Parish Govt	jcambre@stpgov.org	985-898-2552	1:55	2:23
15	Anthony Matherue	CECO	ANTHONY.MATHERUE@CECO.COM	985-807-6777	2:00	2:23
16	IMREY HARDY	St. Tammany Parish	lerardy@stppv.org		2:00	1:24
17	Timothy Mann	Stranco, L.L.C.	tmann@stranco.net	985-630-4667	1:50	2:18
18						
19						
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