

**CONTRACT DOCUMENTS
AND
TECHNICAL SPECIFICATIONS
FOR**

**LA LA REGIRA FIELDS LIGHTING
DONALDSONVILLE, LA
PARISH OF ASCENSION**



PARISH PRESIDENT

Clint Cointment

COUNCIL MEMBERS:

Alvin "Coach" Thomas, Jr., District 1
Joel Robert, District 2
Travis Turner, District 3
Corey Orgeron, District 4
Dempsey Lambert, District 5
Chase Melancon, District 6
Aaron Lawler, District 7
Teri Casso, District 8
Dal Waguespack, District 9
John Cagnolatti, District 10
Michael Mason, District 11

September 8, 2022

Prepared By



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Prepared By

Parish Engineering, LLC
7600 Innovation Park Drive
Baton Rouge, Louisiana 70820

September 8, 2022

DIVISION 0

BIDDING AND CONTRACT REQUIREMENTS

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CONTRACT DOCUMENTS AND SPECIFICATIONS

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Parish of Ascension

BID NOTICE

Sealed bids will be received by Ascension Parish Government at the Ascension Parish Government Purchasing Office, 615 E. Worthey Street, Gonzales, Louisiana 70737 (mailing address PO Box 2392, Gonzales, LA 70707-2392) until **November 15, 2022 at 10:00 a.m. local time**. The bids will be publicly opened and read aloud for the following:

LA LA Regira Fields Lighting Donaldsonville, LA

Statement of Work:

The project consists of replacing the existing lighting, associated conduit and wiring, and poles for three (3) fields at La La Regira Baseball Fields with new LED light fixtures and new steel poles. The existing contactors will be removed as part of this project and replaced with new contactors. Existing breakers for the contactors shall be replaced with new and a new surge protection device shall be added as part of this project. New panels and low voltage transformers will be added as part of this project.

All Bids must be in accordance with the Contract Documents on file at the **Ascension Parish Purchasing Department, 615 E. Worthey Road, Gonzales, Louisiana 70737.**

Copies of Specifications, Bid Documents, Contract Documents and Construction Drawings for use in preparing Bids may be obtained from www.centralauctionhouse.com.

Where bids are to be received on forms furnished by the awarding authority, no contract documents shall be issued to anyone except a Licensed Contractor or his authorized Representatives. **In no event shall any documents for bidding be issued later than seventy-two (72) hours prior to the hour and date set for receiving bids.**

Each bid must be submitted in a sealed envelope bearing on the outside the name of the bidder, his/her address, contractor's state license number and the name of the project for which the bid is submitted. If

Parish of Ascension

forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to the **Ascension Parish Purchasing Department, 615 E. Worthey, Gonzales, LA 70737** mailed certified mail and must be received no later than the bid opening.

Contractors desiring to bid shall submit to the Engineer, with their request for Contract Documents, contract documents deposit and evidence that they hold State License of proper classification and in full force and effect.

Bid security in the amount of five percent (5%) of the Total Bid must accompany each Bid, and shall be made payable to the Owner.

The Owner reserves the right to waive any informalities or to reject any or all bids.

No bidder may withdraw his bid within forty-five (45) days after the actual date of opening thereof.

Mandatory Pre-Bid Conference(s) will be held for this project on November 1, 2022 at 10:00 am at LA LA Regira Field located at: 896 Clay Street Donaldsonville, LA 70346.

All questions regarding this project and the bid package shall be submitted to the Purchasing Department via purchasing@apgov.us by 4:00 p.m. on November 3, 2022. Responses will be coordinated with the Project Engineer and posted on the www.centrauctionhouse.com by 4:00 p.m. on November 8, 2022.

In addition to paper bids, electronic bids and electronic bid bonds for the followings project will be downloaded by the Ascension Parish Purchasing Department. Electronic bids and electronic bid bonds must be submitted through www.centrauctionhouse.com prior to the electronic bidding deadline. Beginning at **10:00 a.m.** on **November 15, 2022** all bids will be downloaded. No bids are accepted after **10:00 a.m.**

RS 38:2218. Evidence of good faith; countersigning

Parish of Ascension

- A. The public entity advertising for bids for work shall require the bidders to attach a certified check, cashier's check, or bid bond for not more than five percent of the contract price of work to be done, as an evidence of good faith of the bidder. The public entity advertising for bids for work may require the bidders to attach a certified check, cashier's check, or bid bond for not more than five percent of the estimated price of supplies or materials, as evidence of good faith of the bidder.

To address the above requirement for electronic bids Ascension Parish Government will allow electronic bids submitted via the parish approved on-line bid site to be submitted as follows:

- A. A copy of the bid bond **must** be attached to bid document submitted electronically
- B. The original bid bond document must be received in our office no later than 48 hours after bid opening date and time **(Ascension Parish Purchasing Department, 615 E. Worthey, Gonzales, Louisiana, 70737.**
- C. The bid-bond envelope must be clearly labeled as a "Bid Bond" with the project name, vendor's name as it appears on the bid documents and address.

All addenda, Amendments, Letters of Clarification, and Withdrawal Notices will be posted online in addition to electronic copies being distributed. Construction proposal information may be accessed via the internet at www.centrauctionhouse.com. Users must click on Login and create a New User Registration to view and download drawings. Once logged in, users must click on Ascension Parish Government to view current advertisement listings. This listing is titled **"La La Regira Fields Lighting Donaldsonville, LA"**. Registered users will have access to view Project Information, submit a question concerning the project, and view the drawings. All project specific notices are found here. It will be the responsibility of the bidder to check for updates. All submitted questions will be forwarded by email to the Project Manager and the Project Engineer for a response.

The Ascension Parish shall not be responsible if the bidder cannot complete and submit a bid due to failure or incomplete delivery of the files submitted via the internet.

Ascension Parish Government reserves the right to reject any and all bids for just cause.

ASCENSION PARISH GOVERNMENT

CLINT COINTMENT, PARISH PRESIDENT

Ascension Parish Governmental Complex, 615 East Gonzales, Louisiana 70737 Telephone (225) 450-

OF Aso

Parish of Ascension

CHIEF - Please publish 10/20/22, 10/27/22, 11/3/22

WEEKLY- Please publish 10/20/22, 10/27/22, 11/3/22

Worthey Street,
[www,r.ascensionparish.net](http://www.r.ascensionparish.net)

OOIOO-INSTRUCTIONS TO BIDDERS

1.1 CROSS REFERENCE TO PRIMARY STATEMENTS. Definitions, requirements, and limitations affecting the bidding are contained in the various contract documents, and are not necessarily repeated in these instructions.

1.2 QUALIFICATION OF BIDDERS. Bidders may be required to submit evidence that they have a practical knowledge of the particular task bid upon, and that they have the financial resources to complete the proposed scope in entirety.

In determining the Bidder's qualifications, the following factors will be considered: contracts previously completed by the Bidder and whether the Bidder (a) maintains a permanent place of business, (b) has adequate plant and equipment to do the task properly and expeditiously, (c) has the financial resources to meet all obligations incidental to the task, and (d) has appropriate technical experience.

Preference will be given to bidders domiciled in Louisiana as stated in Louisiana Public Contract Law (38:2281).

Each Bidder may be required to show that he has completed similar work and that there are no just claims pending against such work. No Bid will be accepted from a Bidder who is engaged on any contract which would impair his ability to perform or finance his work.

1.3 LOUISIANA LICENSE REQUIREMENTS. only Bids of Contractors licensed under LSA R.S. — 37:2150 et seq., will be considered. Licensing is supervised by the Louisiana Licensing Board for Contractors, 7434 Perkins Road, Baton Rouge, Louisiana. Contractors desiring to bid shall submit with their Bids evidence that they hold a valid license in the proper classification.

1.4 FAMILIARIZATION WITH THE WORK. Before submitting his Bid, each prospective Bidder shall familiarize himself with the scope of the task, the sites where the proposed improvements is to be performed, local labor conditions and all laws, regulations and other factors affecting performance of the work. He shall carefully correlate his observations with requirements of the Contract Documents and otherwise satisfy himself of the expense and difficulties attending performance of the Work. The submission of a Bid will constitute a representation of compliance by the Bidder. There will be no financial adjustment justification for lack of such familiarization. Additionally, evidence of having the lack of familiarization could result in contract termination or substantial financial impacts to the contractor due to liquidated damages or other variables.

1.4. I Site Conditions. Each Bidder shall visit the sites of the Work and completely inform himself relative to construction hazards and procedure, the availability of lands, the character and quantity of surface and subsurface materials, and utilities to be encountered, the arrangement and condition of existing structures and facilities, the procedure necessary for maintenance of uninterrupted operation of existing facilities, the character

of construction equipment and facilities needed for performance of the Work, and facilities for transportation, handling, and storage of materials and equipment. All such factors shall be properly investigated and considered in the preparation of the Bid.

I .4.2 Access to the Sites. The project is to be constructed within the Parish of Ascension. Contractors and Suppliers wishing to inspect the various sites may do so at their convenience.

1.5 INTERPRETATIONS. The Drawings have been prepared by Parish Engineering, LLC, 7600 Innovation Park Drive, Baton Rouge, LA 70820, (225) 332-0222, who is hereinafter called ENGINEER and who is to act as OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents. All questions about the meaning or intent of the Specifications and Contract Documents shall be submitted to the Engineer in writing. Replies will be issued by Addenda mailed or delivered to all parties recorded by Engineer as having received the bidding documents and posted on the Central Auction House website. Addenda will be issued at least 72 hours, (3 working days, excluding weekends and holidays) prior to the time stated for opening bids. Questions received less than five (5) working days prior to the date for opening Bids will not be answered. Only answers furnished by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

1.6 TAXES AND PERMITS. Attention is directed to the requirements of the General Conditions and Supplementary Conditions regarding payment of taxes and obtaining permits. All taxes that are lawfully assessed against Owner or Contractor in connection with the Work shall be paid by Contractor. The bid prices shall include all such taxes and the costs of all required permits.

1.7 BID SECURITY. The amount of bid security is stated in the Invitation. The required security must be in the form of a certified or bank cashier's check or a bid bond. The bid bond must be executed by a surety meeting the requirements set forth in the General Conditions and Supplementary Conditions. Bid bond must have attached appropriate and satisfactory Power of Attorney. The bond shall also be countersigned by a person who is under contract with the Surety Company or Bond Issuer as a Licensed Agent in this State and who is residing in the State. Refer to R.S. 38:2218

The bid security shall be made payable without condition to the Owner. The bid security may be retained by and shall be forfeited to the Owner as liquidated damages if the Bid is accepted and a contract based thereon is awarded and the Bidder should fail to enter into a contract in the form prescribed, with legally responsible sureties, within fifteen (15) days after such award is made by Owner.

1.8 RETURN OF BID SECURITY. The bid security of the successful Bidder will be retained until he has executed the Agreement and furnished the required Contract Security, whereupon checks furnished as bid security will be returned; if he fails to

execute and deliver the Agreement and furnish the required Contract Security within fifteen (15) days of the Notice of Award, Owner may annul the Notice of Award and the bid security of that Bidder will be forfeited. The bid security of any Bidder whom Owner believes 'to have a reasonable chance of receiving the award' may be retained by Owner until the seventh day after the executed Agreement is delivered by Owner to Contractor and the required Contract Security is furnished but not to exceed thirty (30) days after the Bid opening. Checks furnished as bid security by other Bidders will be returned within five (5) days of the Bid opening.

- 1.9 CONTRACT TIME. The Contract Time is an essential part of the contract and it may be necessary for each Bidder to satisfy Owner of his ability to complete the Work within the time set forth in the Bid Form. Provisions for delays, liquidated damages, and extensions of time are set forth in the General and Supplementary Conditions.

The Contractor is responsible for equipment and material delivery. A time extension to the Contract duration will not be allowed for late material or equipment delivery.

- 1.10 SUBCONTRACTORS AND SUPPLIERS. Within three (3) days after Bids are opened, the apparent low Bidder, and any other Bidder so requested, shall submit a list of all Subcontractors and Suppliers he expects to use in the Work and to submit manufacturer's data on selected equipment, if requested by Owner.

- 1.10.1 Subcontractor Qualification. Particular consideration will be given to the qualifications of each Subcontractor proposed. An experience statement with pertinent information as to similar projects and other evidence of qualification shall be furnished for each named Subcontractor, as requested by the Owner or Engineer. If Owner or Engineer, after due investigation has reasonable objection to any proposed Subcontractor, he may, before giving Notice of Award, request the apparent low Bidder to submit an acceptable substitute without an increase in his Bid. If the apparent low Bidder declines to make substitution he will not thereby sacrifice his bid security. Any Subcontractor so listed and to whom Owner or Engineer does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to the Owner and Engineer.

Contractor shall not be required to employ any Subcontractor against whom he has reasonable objection.

The use of Subcontractors listed by the Bidder and accepted by Owner prior to Notice of Award will be required in the performance of the Work.

- 1.10.2 Suppliers. The list of Subcontractors shall also include the suppliers of the principal items of materials and equipment the Bidder expects to use in the Work unless such suppliers or manufacturers are named in the Bid.

- 1 . 10.3 Manufacturer's Data. The list of Subcontractors submitted as provided herein shall be accompanied by two prints or copies of data on equipment and materials to be furnished by each supplier or manufacturer. Data so submitted shall illustrate the physical

characteristics of the equipment and materials to be furnished. Although the drawings and specifications submitted prior to the Notice of Award need not be complete, they must contain sufficient detail for Engineer to determine whether the materials and equipment will conform to the Contract Documents.

The Contract Documents will take precedence over any nonconforming data submitted.

Any Bid specifically conditioned upon furnishing equipment or materials which are not responsive to the Contract Documents will not be considered.

1.11 BIDS.

1.11.1 Bid Form. The Bid Form is bound within the Contract Documents. Bid forms must be completed in ink or typed.

Bids by corporations must be executed in the corporate name by a president or vicepresident (or other corporate officer) accompanied by evidence of authority to sign. The state of incorporation shall be shown below the corporate name. Bids by partnerships must be executed in the partnership name and signed by a partner; title and the official address of the partnership must be shown below the signature. Bids by joint ventures shall be signed by each participant in the joint venture or by an authorized agent of each participant.

The names of all persons signing must also be legibly printed below the signature. A Bid by a person who affixes to his signature the word "president secretary , agent", or other designation without disclosing his principal may be held to be liable for the Bid.

All blank spaces in the Bid Form shall be filled. Bids received without all such items completed will be considered as a nonresponsive Bid.

The Bid shall contain an acknowledgement of receipt of all Addenda, the numbers and dates of which shall be filled in on the Bid Form.

No alterations in the Bids, or in the printed forms therein, by erasures, interpolations, or otherwise will be acceptable unless each such alteration is signed or initialed by the Bidder. If initialed, Owner may require the Bidder to clarify any alteration so initialed.

1.11.2 Affidavit. Bidders shall include with their Bid the attached Non-Collusion Affidavit.

1.11.3 Submission of Bids. The bid shall consist of the Bid Form and the other documents that are required to be submitted along with the Bid Form.

Each Bid and accompanying data shall be enclosed in a sealed opaque envelope or wrapping, addressed to:

Ascension Parish Purchasing Department

615 E. Worthey Rd. Gonzales, Louisiana 70737

and identified on the outside with the Bidder's name, Louisiana Contractor License Number and the words

"La La Regira Fields Lighting Donaldsonville, LA"

If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "BID ENCLOSED" on the face thereof.

Bids shall be deposited at the designated location prior to the time and date for receipt of Bids indicated in the Invitation for Bids, or the modified time and date indicated by Addendum. Bids received after the time and date for receipt of Bids will be returned unopened.

Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

Oral, telephone, or telegraph Bids are invalid and will not receive consideration.

No Bidder may submit more than one Bid. Multiple Bids under different names will not be accepted from one firm or association.

1.1 1.4 Modification and Withdrawal of Bids. Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

1.1 1.5 Bids to Remain Open. All Bids shall remain open for 45 days after the day of the Bid opening. Owner shall release Bids and return bid securities as specified in Section 1.8 under "Return of Bid Security".

1.12 AWARD OF CONTRACT. Owner shall award a contract to the Bidder who, in Owner's judgment, is the lowest responsive, responsible Bidder. Owner reserves the right to reject any or all Bids, to award the contract by sections, to waive informalities, and to reject nonconforming, nonresponsive, or conditional Bids.

In evaluating Bids, Owner shall consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and alternatives and unit prices if requested in the Bid Form. Owner may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items of material or equipment), and may reject the Bid of any Bidder who does not pass any such evaluation to Owner's satisfaction.

The evaluation of manufacturer's data, when required to be submitted with the Bid or submitted upon request prior to the Notice of Award, shall include the following information at a minimum for consideration:

- Full name and address of manufacturer.
- Manufacturer's engineering or technical representative contact, including telephone number and email addresses.
- Manufacturers' service facilities and availability of qualified field service personnel.
- Manufacturer's contact information for the local sales information.
- The name (model, series number, etc.) of the product(s) that are to be listed.
- Manufacturer's inventory on-hand and demand capacity.
- Manufacturer's installation requirements and procedures, related engineering specifications, training, required certifications.
- Manufacturer's operating cost, maintenance upkeep schedule, life expectancy, and any warranty or other service included for the product listed.
- Experience and performance record of the manufacturer and specific products listed.
- Manufacturer's Cut sheet(s) / engineering details of products listed.
- A cost / benefit analysis compared to similar and common product from different manufacture.

If the contract is awarded, Owner shall give the apparent successful Bidder a Notice of Award within thirty (30) days after the date of the Bid opening.

- 1.13 EXECUTION OF THE AGREEMENT. The Contractor shall be furnished four (4) copies of the Agreement, including insurance certificates, and other Contract Documents bound therewith. Within fifteen (15) days of Notice of Award, Contractor shall execute the Agreement, insert executed copies of the required bonds and power of attorney and submit all copies to Owner. The date of contract on the Agreement and Bond forms shall be left blank for filling in by Owner. The certification date on the power of attorney also shall be left blank for filling in by Owner.

Owner shall execute all copies, insert the date of contract on the Agreement, Bonds, and power of attorney, and return all copies to Engineer for review and distribution.

Once all contract documents have been executed, the Contractor shall be furnished one (1) set of original documents. The Owner shall have one (1) set of these documents recorded in the office of the Recorder of Mortgages in the jurisdiction where the work is to be performed.

- 1.14 COPIES OF CONTRACT DOCUMENTS. copies of the drawings and specifications for use in preparing Bids may be obtained from:

Parish Engineering, LLC
7600 Innovation Park Drive

Baton Rouge, LA 70820

The Contractor to whom a contract is awarded will be furnished two (2) working copies of the specifications and the drawings, together with all Addenda thereto.

- 1.14 LOCAL MATERIAL AND FIRNIS. By statutory authority, preference is hereby given to materials, supplies, and provisions produced, manufactured, or grown in Louisiana, quality being equal to articles offered by competitors outside of the State (LSA R.S. -38:2252), and preference is hereby given to firms doing business in the State of Louisiana (LSA R.S. - 38:2253).

LOUISIANA UNIFORM PUBLIC WORK BID FORM
UNIT PRICE FORM

TO: Ascension Parish Government

BID FOR: LA LA REGIRA FIELDS LIGHTING

P.O. Box 2392

DONALDSONVILLE LA

Gonzales LA 70737

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

DESCRIPTION	O Base Bid or O Alt.#			
REF. NO	QUANTITY:	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
01		Lump Sum		
DESCRIPTION'	O Base Bid or O Alt.#			
REF. NO.	QUANTITY	OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
02		Lump Sum		
DESCRIPTION	O Base Bid or O Alt.#			
REF, NO.	QUANTITY:	UNIT OF MEASURE,	PRICE	PRICE EXTENSION (Quantity times Unit Price)
03		Lump Sum		
DESCRIPTION	O Base Bid or O Alt #			
REF. NO.	QUANTITY.	UNIT OF MEASURE:	PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
04		Lump Sum		
DESCRIPTION	O Base Bid or O Alt.#			
REF. NO.	QUANTITY:	UNIT OF MEASURE.	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
05		Lump Sum		
DESCRIPTION	a Base or O I			
REF. NO	QUANTITY.	UNIT OF MEASURE	UNIT PRICE	UNIT PRICE EXTENSION (Quantity times Unit Price)
06		Lump Sum		

Wording for "DESCRIPTION" is to be provided by the Owner

All quantities are estimated. The contractor will be paid upon actual quantities as verified by Owner.

TO: Ascension Parish Government

P.O. Box 2392

DONALDSONVILLE LA

Gonzales Louisiana 70707

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)

—Dollars (\$_____)

N/A Dollars (\$_____)

N/A Dollars (\$_____)

N/A Dollars (\$_____)

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. If 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 as prescribed by LA R.S. 38:2212(

BID SECURITY in the form of a bid bond, certified check or cashier's check as prescribed by LA RS 38:22 1 8.A is attached to and made a part of this bid.

1

00320-RESOLUTION AUTHORIZING SUBMISSION OF QUOTE, SIGNATURE
OF QUOTE AND SIGNATURE OF CONTRACT

BE IT RESOLVED by the Board of Directors of _____ a
Corporation organized and existing under the laws of the State of _____
and domiciled in the City of _____; that _____
President of the Corporation and/or _____ of the Corporation, be, and
are hereby authorized and empowered to submit quotes and to execute any and all contracts of
whatever kind on behalf of the Corporation and to do all things necessary in the premises.

CERTIFICATE

I, _____ Secretary of _____ do

hereby certify that the foregoing resolution is a true and exact copy unanimously adopted by the
Board of Directors of said corporation at a meeting thereof legally held on the _____ day of
20 , that said resolution is duly entered into the records of said corporation;
that it has not been rescinded or modified; and that it is now in full force and effect.

IN TESTIMONY WHEREOF, I have hereunto set my hand and the seal of said corporation this

_____ day of _____, 20_____

(Secretary)

0, Resolution

I I

00340-BIDDER'S NON-COLLUSION AFFIDAVIT
(FURNISH WITH BID PACKAGE)

STATE OF LOUISIANA

PARISH OF _____

BEFORE ME, the undersigned authority, personally came and appeared who after being by me
duly sworn, deposed and said

that he is the fully authorized _____ of

(Herein after referred to as "BIDDER") the party

who submitted a quote for _____ which quote

was received by ASCENSION PARISH LOUISIANA on _____ and said affiant

_____ further said:

- (1) That bidder employed no person, corporation, firm, asocial, or other organization, either directly or indirectly, to secure public contract under which he received payment, other than persons regularly employed by the affiant whose services in connection with the construction, alteration, or demolition of the public building or project or in securing the public contract were in the regular course of their duties for bidder, and
- (2) That no part of the contract price received by bidder was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the contract, other than the payment of their normal compensation to persons regularly employed by the affiant whose services in connection with the construction, alteration, or demolition of the public building or project were in the regular course of their duties for bidder.
- (3) Said bidder is genuine and the bidder has not colluded, conspired or agreed directly or indirectly with any other bidder to offer a sham or collusive quote.
- (4) Said bidder has not in any manner directly or indirectly agreed with any other person to fix the quote price of affiant or any other bidder, or to fix any overhead profit or cost element of said quote price, of that of any other bidder, or to induce any other person to refrain from bidding.

(5) Said quote is not intended to secure an unfair advantage of benefit from Ascension Parish Louisiana or in favor of any persons interested in the proposed contract.

0, 00340-Affidavit

2

(6) All statement contained in said quote are true and correct.

(7) Neither affiant nor any member of his company has divulged information regarding said quote or any data relative thereto to any person, firm, or corporation.

By:_____

(Signature)

(Type or Print Name)

(Type or Print Title)

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 20

Notary Public

00360-BID BOND FORM

Date: _____

KNOW ALL MEN BY THESE PRESENTS:

That _____ of as Principal, and as Surety, are held and firmly bound unto the (Obligee), in the full and just sum of five (5%) percent of the total _____ amount of this quote, including all alternates lawful money of the United States, for payment of which sum, well and truly be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents.

Surety represents that it is listed on the current U. S. Department of the Treasury Financial Management Service list of approved bonding companies as approved for an amount equal to or greater than the amount for which it obligates itself in this instrument or that it is a Louisiana domiciled insurance company with at least an A - rating in the latest printing of the A. M. Best's Key Rating Guide. If surety qualifies by virtue of its Best's listing, the Bond amount may not exceed ten percent of policyholders' surplus as shown in the latest A. M. Best's Key Rating Guide.

Surety further represents that it is licensed to do business in the State of Louisiana and that this Bond is signed by surety's agent or attorney-in-fact. This Bid Bond is accompanied by appropriate power of attorney.

THE CONDITION OF THIS OBLIGATION IS SUCH that, whereas said Principal is herewith submitting its proposal to the Obligee on a Contract for:

NOW, THEREFORE, if the said Contract be awarded to the Principal and the Principal shall, within such time as may be specified, enter into the Contract in writing and give a good and sufficient bond to secure the performance of the terms and conditions of the Contract with surety acceptable to the Obligee, then this obligation shall be void; otherwise this obligation shall

become due and payable.

AUTHORIZED OFFICER-OWNER-PARTNER

0, 00360 Bond

PRINCIPAL (BIDDER)_____
SURETY

BY: _____

BY: _____

AGENT OR ATTORNEY-IN-FACT(SEAL)

Page of I

* *Sample Contract Only –Final contract subject to final negotiations and special conditions that may arise for this project, until such agreement approved by Parish Legal* * _____ .

00500-SAMPLE CONTRACT

THIS AGREEMENT, made and executed in FOUR (4) original copies on this _____ day of in _____ the year _____ 20by and between:

Ascension Parish Government
(Hereinafter called OWNER) and

(hereinafter called CONTRACTOR)

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article I WORK.

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents in conjunction with:

La La Regira Fields Lighting Donaldsonville, LA

Article 2 ENGINEER.

The Drawings have been prepared by Parish Engineering, LLC, 7600 Innovation Park Drive, Baton Rouge, LA 70820, who is hereinafter called ENGINEER and who is to act as OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

Article 3 CONTRACT TIME.

3.1 The Work will be substantially completed within 365 calendar days from the date when the Contract Time commences to run as provided in paragraph 2.3 General Conditions.

3.2 Project Schedule. CONTRACTOR shall submit and strictly adhere to a project construction schedule throughout the allocated contract and associated time frame. See Sections 2.05, 2.06, and 2.07 on pages 00700-07. CONTRACTOR is aware that OWNER may have a representative at each site where Work is performed and that CONTRACTOR needs to coordinate with the OWNER'S REPRESENTATIVE where Work on the CONTRACT will be performed. CONTRACTOR will coordinate with the OWNER'S REPRESENTATIVE by strictly following the project construction schedule or Progress Schedule. OWNER recognizes and understands that changes in project construction schedule or Progress Schedule may become necessary during the course of the project. However, in the event of any such change, the CONTRACTOR shall notify the OWNER'S REPRESENTATIVE in writing of a proposed

* *Sample Contract Only – Final contract subject to final negotiations and special conditions that may arise for this project, until such agreement approved by Parish Legal* * _____ .

change. Said written notice shall be provided at least 12 hours prior to the revised construction activity. Said notice shall be provided by emailing notice of change to dean.thomason@apgov.us. Should the CONTRACTOR fail to timely notify the OWNER'S REPRESENTATIVE of such change, the OWNER'S REPRESENTATIVE will document the CONTRACTOR'S failure to notify of the change in work and SHALL assess stipulated damages as follows. For EACH failure to notify the OWNER'S REPRESENTATIVE of any change in the project construction schedule or Progress Schedule, the CONTRACTOR AGREES TO PAY \$100.00 per failure to notify the OWNER'S REPRESENTATIVE. CONTRACTOR agrees that these stipulated damages reflect the lost time, manpower, and mileage incurred by OWNER attempting to locate the CONTRACTOR where a change in schedule occurs and the required notice was not provided. CONTRACTOR further agrees that said amount shall be paid by directly reducing the amount of monthly invoices/pay applications by the amount of penalties issued. The Penalty fees shall be itemized on monthly invoices.

3.3 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and the OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of General Conditions. There are delays, expenses and difficulties involved in proving in a legal arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER the amount of One Thousand (\$1,000.00) Dollars for each day that expires after the time specified in paragraph 3.1 for Substantial Completion until the Work is substantially complete.

Article 4 CONTRACT PRICE.

4.1 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents in current funds the sum of (subject to adjustment as provided in the Contract Documents):

Based on unit prices specified within this Contract Document. Contract price is firm and subject only to modification by written change order agreed to by both parties.

Article 5 PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

5.1 Progress Payments. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by ENGINEER, once each month during construction. All progress payments will be on the basis of progress of the Work measured by the schedule of values established in paragraph 2.07.A of the

* *Sample Contract Only – Final contract subject to final negotiations and special conditions that may arise for this project, until such agreement approved by Parish Legal* * _____ .

General Conditions (and in each case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.

5.2 Pursuant to LA R.S. — 38.2248 (Public Contract Law), Owner shall withhold retainage from each progress payment until payment is due under terms and conditions governing substantial completion or final payment. Retainage shall be ten percent of the amount of work completed to date if the contract amount is up to \$500,000 and five percent of the work complete to date if the contract amount is over \$500,000.

5.3 Fuel or Asphalt/Concrete Adjustments. There shall be NO adjustments for prices or costs of any fuel or asphalt/concrete on this project, arising out of the work on this project/contract, or arising out of this contract. Further, the CONTRACTOR hereby waives any price adjustment for fuel or asphalt/concrete or the ability or right to request any price adjustment for fuel or asphalt/concrete. Particularly, the Louisiana DOTD provisions (or any such or similar provisions by any other third party) pertaining to or related to fuel or asphalt/concrete adjustments are not part of this contract, are not incorporated by reference or otherwise in this Contract, and shall not apply in any form or fashion to the contract. Any language in this Contract which implies that the CONTRACTOR may obtain an adjustment in price for fuel or asphalt/concrete is hereby to be interpreted that CONTRACTOR shall not receive any such adjustment. CONTRACTOR shall not assert that any language in the CONTRACT creates any vagueness or ambiguity in the CONTRACT entitling CONTRACTOR to price adjustments for fuel or asphalt/concrete. CONTRACTOR hereby waives any right or ability to request any price adjustment for fuel or asphalt/concrete and CONTRACTOR shall not submit any request for any change in price for fuel or asphalt/concrete adjustments to the

OWNER in any form.

5.4 Final Payment. Upon final completion and acceptance of the Work in accordance with paragraph 14.07 of the General Conditions and Supplementary Conditions SC-9.03(B)(13). OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER.

Article 6 CONTRACTOR'S REPRESENTATIONS.

In order to induce OWNER to enter into this Agreement, CONTRACTOR makes the following representations:

6.1 CONTRACTOR is familiar with the nature and extent of the Contract Documents, Work site, locality and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

6.2 CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies, or similar information or data in respect of said Underground Facilities are or will be required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the

* *Sample Contract Only –Final contract subject to final negotiations and special conditions that may arise for this project, until such agreement approved by Parish Legal* * _____ .

Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.3 of the General Conditions.

6.3 CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents.

6.4 CONTRACTOR has given ENGINEER written notice of all conflicts, errors, or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

Article 7 CONTRACT DOCUMENTS.

The Contract Documents which comprise the contract between OWNER and CONTRACTOR, attached hereto and made a part hereof, consist of the documents listed in Table of Contents, and the documents identified below.

- a. Quote
- b. Bid Bond
- c. Agreement
- d. Payment Bond
- e. Performance Bond
- f. Notice of Award
- g. Notice to Proceed
- h. Drawings prepared by Hartman Engineering, Inc.
- i. Specifications prepared by Hartman Engineering, Inc.

Article 8 MISCELLANEOUS

8.1 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

8.2 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representative to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

* *Sample Contract Only –Final contract subject to final negotiations and special conditions that may arise for this project, until such agreement approved by Parish Legal* *

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Contract the day and year first above written.

OWNER

CONTRACTOR

Ascension Parish Louisiana

~~** Sample Contract Only – Final contract subject to final negotiations and special conditions that may arise for this project, until such agreement approved by Parish Legal**~~

Federal Identification No.

Federal Identification No.

By Clint Cointmeent _____

ident _____

g notices

5 E. Worthey Rd

na 70707-1659

By _____

Title _____

Attest _____

Address for giving notices

License No. _____

Title Parish President_____

Attest_____

Address for giving notices

P.O. Box 1659, 615 E. Worthey Rd

Gonzales Louisiana 70707-1659

00510-PERFORMANCE BOND

as Principal, and a surety company or companies authorized to do business in Louisiana, as
_____, Surety,
are bound, in solido, unto
_____, and
unto all subcontractors, workmen, and furnishers of materials and equipment, jointly in the sum
of _____ Dollars(\$_____).

Payable in lawful money of the United States, and to this bond do obligate their heirs, successors
and assigns. In the case of co-sureties, co-sureties assume an obligation in the sum of

_____ Dollars(\$_____).

For and

_____ Dollars(\$_____).

The consideration for this bond is such, that if the Principal shall perform this contract,
made and entered into on the _____ day of _____ 20 To construct the
project entitled: "La La Regira Fields Lighting Donaldsonville. LA"

The project consists of replacing the existing lighting, associated conduit and wiring, and poles
for three (3) fields at La La Regira Baseball Fields with new LED light fixtures and new steel
poles. The existing contactors will be removed as part of this project and replaced with new
contactors. Existing breakers for the contactors shall be replaced with new and a new surge
protection device shall be added as part of this project. New panels and low voltage transformers
will be added as part of this project.

It is agreed by the parties that this bond is given in accordance with Louisiana Revised Statutes of
1950, Title 38, Chapter 10.

In faith whereof, we have subscribed this obligation at _____ Louisiana.

Witness our hands and seals, this _____ day of _____, 20_____

Witnesses

Principal
By_____

Typed or Printed Name

First Surety
By(Seal)

Performance Bond

I

Attorney-in-Fact

Typed or Printed Name

Second Surety
By(Seal)

Attorney-in-Fact

Typed or Printed Name

I certify that I am as of the date of this bond a licensed Resident Agent of Louisiana in good standing with the Louisiana Insurance Commission and authorized to countersign this bond on behalf of the Surety of Sureties.

Typed or Printed Name

First Surety
By_____

Address
s

Typed or Printed Name

Typed or Printed Name

Address

O, Performance Bond
Second Surety

By_____

Typed or Printed Name

00511-PAYMENT BOND

as Principal, and _____
a surety company or companies authorized to do business in Louisiana, as Surety, are bound, in
solido, unto _____
_____ and unto all subcontractors, workmen, and furnishers of materials and equipment, jointly
in the sum of _____
_____ Dollars(\$ _____).

Payable in lawful money of the United States, and to this bond do obligate their heirs, successors
and assigns. In the case of co-sureties, co-sureties assume an obligation in the sum of

_____ Dollars(\$ _____).
For _____ and

_____ Dollars(\$ _____).

The consideration for this bond is such, that if the Principal shall perform this contract,
made and entered into on the _____ day of _____,
20_____, To construct the project entitled: "La La Regira Fields Lighting
To construct the project entitled: "La La Re ira Fields Li htin Donaldsonville LA" The project
consists of replacing the existing lighting, associated conduit and wiring, and poles for three (3)
fields at La La Regira Baseball Fields with new LED light fixtures and new steel poles. The
existing contactors will be removed as part of this project and replaced with new contactors.
Existing breakers for the contactors shall be replaced with new and a new surge protection device
shall be added as part of this project. New panels and low voltage transformers will be added as
part of this project.

It is agreed by the parties that this bond is given in accordance with Louisiana Revised
Statutes of 1950, Title 38, Chapter 10.

Witness our hands and seals, this _____ day of _____, 20_____.

Witnesses

_____ _____ _____ _____	_____ Principal By _____ _____ Typed or Printed Name _____ First Surety By _____(Seal) _____ Attorney-in-Fact
----------------------------------	--

Payment Bond

Typed or Printed Name

Second Surety

By _____ (Seal)

Attorney-in-Fact

Typed or Printed Name

I certify that I am as of the date of this bond a licensed Resident Agent of Louisiana in good standing with the Louisiana Insurance Commission and authorized to countersign this bond on behalf of the Surety of Sureties.

First Surety

Second Surety

By _____ By _____

Typed or Printed Name

Typed or Printed Name

Typed or Printed Name

Typed or Printed Name

Address

Address

00600 - NOTICE

O, Payment Bond

OF AWARD

Date of Award: _____

TO: _____

ADDRESS: _____

PROJECT: _____

Owner's Contract No.: _____ Engineer's Project No.: 22-092_____

Contract For: La La Regira Fields Lighting, Donaldsonville, LA

You are notified that your Bid dated _____ for the above Contract has been considered. You are the apparent Successful Bidder and have been awarded a Contract for:

LA LA REGIRA FIELDS LIGHTING
DONALDSONVILLE, LA

The Contract Price of your Contract is: _____

4 Copies of each of the proposed Contracts accompany this Notice of Award.

—3 Sets of the complete Contract Documents, including Drawings, will be delivered separate
During the Pre-Construction Conference or otherwise made available to you immediately.

You must comply with the following conditions precedent within fifteen (15) days of the date of this Notice of Award, this is by:_____

1. You must deliver to the Owner four (4) fully executed counterparts of the proposed Contract, including the Agreement. Each copy of the Contract must bear your signature on all signatory lines within the Agreement
2. You must deliver with the executed Agreement, the Contract Security (Bonds) as specified in the Instructions to Bidders (Section 1.8) and General Conditions (Section 5.01).

3. You must deliver with the executed Agreement, Certificate of Insurance including certificates verifying additional insurers as required in General Conditions (Section 5.03)

00600 Noticed of Award

00600 - NOTICE
OF AWARD (Continued)

Failure to comply with these conditions within the time specified will entitle the Owner to consider your quote in default, to annul this Notice of Award and to declare your Bid Security forfeited.

Within ten (10) days after you comply with the above conditions, the Owner will return to you one (1) fully signed counterpart of the Agreement with the Contract Documents attached.

PARISH OF ASCENSION _____
(Owner)

By: _____
(Authorized Signature)

(Title)

ACCEPTANCE OF AWARD

(Contractor)

By: _____
(Authorized Signature)

(Title)

(Date)

00620 -
0, Noticed of Award

TO PROCEED

TO: _____

ADDRESS: _____

PROJECT: La La Regira Fields Lighting, Donaldsonville, LA

Owner's Contract No.: _____ Engineer's Project No.: 22-092

Contract For: La La Regira Fields Lighting, Donaldsonville, LA

You are notified that the Contract Times under the above Contract will commence to run on _____ By that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 3 of the Agreement, the dates of Substantial Completion and completion and readiness for Final Payment are: and _____

Before you may start any Work at the site, Article 2.01 of the General Conditions provides that you and the Owner must each deliver to the other (with copies to the Engineer) and other identified additional insurers) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the site you must notify Owner/Engineer of Start Date.

PARISH _____ OF _____ ASCENSION
(Owner)

By: _____
(Authorized Signature)

(Title)

ACKNOWLEDGED:

(Contractor)

By: _____

00600 - NOTICE

(Authorized Signature)

(Title)

(Date)

Section 00610 Notice to Proceed

1

APPLICATION FOR PAYMENT

NO. _____

TO: Ascension Parish Government_____

Contract For: La La Regira Fields Lighting, Donaldsonville, LA

Owner's Contract No.: Engineers Project No.: 22-092 For Work accomplished through the date of: _____

ITEM	CONTRACTORS Schedule of Values			Work Completed	
					Amount
Total (Original Contract) C.O. NO. 1					

00620 -

Accompanying Documents Gross Amount Due:	\$	_____
_____ Less(⁰ 0) Retainage:	\$	_____
_____ Amount Due to Date:	\$	_____
_____ Less Previous Payments:	\$	_____
Amount Due this Application:\$_____		

CONTRACTOR's Certification:

The undersigned CONTRACTOR certifies that: (1) all previous progress payments received from OWNER on account of Work done under the Contract referred to above have been applied to discharge in full all obligations of CONTRACTOR incurred in connection with Work covered by prior Applications for Payment numbered _____ through inclusive; (2) title to all Work materials and equipment incorporated in said Work or otherwise

_____ listed in or covered by this Application for Payment will pass to OWNER at time of payment free and clear of all liens, claims, security interest and encumbrances (except such as are covered by Bond acceptable to OWNER indemnifying OWNER against any such lien, claim, security interest or encumbrance); and (3) all Work covered by

0, Application for Payment

this Application for Payment is in accordance with the Contract Documents and not defective as that term is defined in the Contract Documents.

Dated:

CONTRACTOR

By:

Authorized Signature

Payment of the above AMOUNT DUE THIS APPLICATION is recommended.

Dated:

ENGINEER

By:

Authorized Signature

Application for Payment

2

 Parish Government

DATE

CHANGE ORDER

CHANGE ORDER NO.

OWNER Ascension Parish Government

NAME OF PROJECT: La La Regira Fields Lighting, Donaldsonville, LA

ENGINEER: Parish Engineering, LLC

CONTRACTOR:

CONTRACT DATE

It is hereby mutually agreed that when this change order has been signed by the contracting parties, the following described changes in the work required by the Contract shall be executed by the Contractor without changing the terms of the Contract except as herein stipulated and agreed.

SCOPE OF CHANGES:

JUSTIFICATION FOR CHANGES:

CONTRACTOR'S PROPOSAL FOR THE ABOVE DESCRIBED CHANGES

I/We hereby agree to the modification of the Contract as described above and agree to furnish all materials, equipment and labor necessary to perform all work in connection therewith in accordance with the requirements for similar work in the existing Contract except as otherwise stipulated herein, for the following consideration.

CONTRACT Amount Add to or _____ Deduct from the Contract amount the sum of
\$ _____

Time for Completion Add to or _____ Deduct from the Contract Time: _____ Days.

The New Date for Completion is _____

CONTRACTOR: _____

SIGNATURE:

DATE

RECOMMENDED BY: Parish Engineering, LLC_____

BY: _____

DATE _____

0,

Order

CHANGE ORDER (Continued)

APPROVED BY:

PUBLIC WORKS BY: _____ DATE _____

PARISH PRESIDENT BY: _____ DATE _____

ORIGINAL	TRACT AMOUNT:.....	\$ _____
CONTRACT	\$ _____
AMOUNT:	is.....	\$ _____
Previous	o this Change.....	\$ _____
Additions	ange ____ Add ____ Deduct....	\$ _____
Previous	UNT TO DATE.....	\$ _____
Deductions		

STATEMENT OF
CONTRACT AMOUNT

Net Amount Prior to this Change
Amount of This Change
CONTRACT AMOUNT TO DATE..

00620 -

Order

2

WORK CHANGE DIRECTIVE

NO. _____

PROJECT: La La Regira Fields Lighting, Donaldsonville, LA

DATE OF ISSUANCE: _____

EFFECTIVE DATE: _____

OWNER: PARISH OF ASCENSION

OWNER'S CONTRACT NO.: _____

ENGINEER: Parish Engineering, LLC

Engineer's Project No.: 22-092

CONTRACTOR: _____

You are directed to make the following changes in the Contract Documents: Description:

Purpose of Work Change Directive:

Attachments (List documents supporting changes):

If a claim is made that the above change(s) have affected the Contract Price or Contract Times, any claim for a change order based thereon will involve one or more of the following methods of determining the effect of the change(s).

Method of determining change in Contract Price:
 _____ Unit Prices

Method of determining change in Contract Time
 Contractor's Records _____ Lump Sum _____

Estimated increase (decrease) in Contract Price:

Estimated increase (decrease) in Contract Times:

Substantial Completion: _____ Days

Ready for Final Payment: _____ Days

If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

If the change involves an increase, the estimated are not to be exceeded without further authorization.

RECOMMENDED: By: _____
 Engineer (A uthorized Signature)

Date: _____

APPROVED: By: _____
 \$ _____
 _____ Engineer's Records _____

Other: _____ Other: _____

Owner (A uthorized Signature)

ACCEPTED:

Date:

Contractor (Authorized Signature)

EJCDC No. 1910-E-F (1990 Edition)

Prepared by the Engineers Joint Contract Documents Committee and Endorsed
by The Associated General Contractors of America

Directive

1

SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC C-700 (2007 Edition). All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

sc-2.02 Delete Paragraph 2.02.A in its entirety and insert the following in its place:

A. Owner shall furnish to Contractor up to 3 printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

sc-2.03 Delete Paragraph 2.03.A in its entirety and insert the following in its place:

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed.

sc-4.06 Delete Paragraphs 4.06.A and 4.06.B in their entirety and insert the following:

A. No reports or drawings related to Hazardous Environmental Conditions at the Sites are known to Owner.

B. Not Used.

sc-5.01 Add the following language after the last sentence of paragraph 5.01 A:

"All bonds must be countersigned by a resident agent of the State in which the Project is done."

Add the following new paragraph immediately after Paragraph 5.04.B:

C. The limits of liability for the insurance required by Paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers' Compensation, and related coverages under Paragraphs 5.04.A.1 and A.2 of the General Conditions:

a. State: Statutory b. Applicable Federal
(e.g., Longshoreman's): Statutory c. Employer's
Liability: Statutory

2. Contractor's General Liability under Paragraphs 5.04.A.3 through A.6 of the General Conditions which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody and control of Contractor:

a. General Aggregate \$300,000

b. Products - Completed
Operations Aggregate \$300,000

c. Personal and Advertising
Injury \$300,000

d. Each Occurrence
(Bodily Injury and
Property Damage) \$100,000

e. Property Damage liability insurance will provide Explosion,
Collapse, and Under-ground coverages where applicable.

f. Excess or Umbrella Liability

General Aggregate \$1,000,000

Each Occurrence \$300,000

3. Automobile Liability under Paragraph 5.()4.A.6 of the General Conditions:

a. Bodily Injury:

Each person \$100,000

Each Accident \$300,000

b. Property Damage:

Each Accident \$300,000

or

a. Combined Single Limit of \$500,000

4. The Contractual Liability coverage required by Paragraph 5.04.B.4 of the General Conditions shall provide coverage for not less than the following amounts:

a. Bodily Injury:

Each person	\$1 00,000
Each Accident	\$300,000

b. Property Damage:

Each Accident	\$300,000
---------------	-----------

SC-5.06.A. Delete Paragraph 5.06.A in its entirety and insert the following in its place:

- A. Contractor shall purchase and maintain property insurance upon the Work at the Sites in the amount of the full replacement cost thereof. Contractor shall be responsible for any deductible or self-insured retention. This insurance shall:
1. include the interests of Owner, Contractor, Subcontractors, Engineer, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or loss payee;
 2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, falsework, and materials and equipment in transit and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by these Supplementary Conditions.
 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
 5. allow for partial utilization of the Work by Owner;
 6. include testing and startup;
 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued; and
 8. comply with the requirements of Paragraph 5.06.C of the General Conditions.

SC-5.06.B Change the first word "Owner" to "Contractor" in paragraph 5.06.B of the General Conditions. The Contractor shall be responsible for this coverage.

SC-6.06 Add a new paragraph immediately after Paragraph 6.06.G:

- H. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor or Supplier.

sc-9.03

Add the following new paragraphs immediately after Paragraph 9.03.A:

B. The Resident Project Representative (RPR) will be Owner's employee or agent at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions. RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall be through or with the full knowledge and approval of Contractor. The RPR shall:

1. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.
2. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
3. Liaison:
 - a. Serve as Engineer's liaison with Contractor, working principally through Contractor's authorized representative, assist in providing information regarding the intent of the Contract Documents.
 - b. Assist Engineer in serving as liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
4. Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
5. Shop Drawings and Samples:
 - a. Record date of receipt of Samples and approved Shop Drawings.

- b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.

Division 0,

- 6. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.

7. Review of Work and Rejection of Defective Work:

- a. Conduct onsite observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
- b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

8. Inspections, Tests, and System Startups:

- a. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
- b. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.

9. Records:

- a. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
- b. Maintain records for use in preparing Project documentation.

10. Reports:

- a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.

Division

- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Hazardous Environmental Condition.

11. Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

12. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

13. Completion:

- a. Participate in a Substantial Completion inspection, assist in the determination of Substantial Completion and the preparation of lists of items to be completed or corrected.
- b. Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied.
- c. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.

C. The RPR shall not:

- 1 . Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.

Division O,

3. Undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's superintendent.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents.
5. Advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.

SC-11.03.D Delete Paragraph I I .03.D in its entirety and insert the following in its place:

- D. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:
 - 1 . if the Quote price of a particular item of Unit Price Work amounts to 25% percent or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 10% percent from the estimated quantity of such item indicated in the Agreement; and
 2. if there is no corresponding adjustment with respect to any other item of Work; and
 3. if Contractor believes that Contractor has incurred additional expense as a result thereof or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, either Owner or Contractor may make a Claim for an adjustment in the

Contract Price in accordance with Article 10 if the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

SC-12.01.C Delete the semicolon at the end of GC 12.01.C.2.c, and add the following language:

, provided, however, that on any subcontracted work the total maximum fee to be paid by Owner under this subparagraph shall be no greater than 27 percent of the costs incurred by the Subcontractor who actually performs the work;

Division

SC-Article 16 Delete Article 16 of the General Conditions in its entirety and replace with the following:

"16.01 Any and all disputes that arise out of the performance of this Contract shall be litigated in the 23rd Judicial District Court in and for the Parish of Ascension. Any reference to arbitration in any Contract Documents is hereby expressly waived and deleted. ';

Section

00800 - SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC C-700 (2007 Edition). All provisions which are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

sc-2.02 Delete Paragraph 2.02.A in its entirety and insert the following in its place:

- A. Owner shall furnish to Contractor up to 3 printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

sc-2.03 Delete Paragraph 2.03.A in its entirety and insert the following in its place:

- A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed.

sc-4.06 Delete Paragraphs 4.06.A and 4.06.B in their entirety and insert the following:

- A. No reports or drawings related to Hazardous Environmental Conditions at the Sites are known to Owner.
- B. Not Used.

SC-5.01 Add the following language after the last sentence of paragraph 5.01 A:

"All bonds must be countersigned by a resident agent of the State in which the Project is done."

sc-5.04

Add the following new paragraph immediately after Paragraph 5.04.B:

- C. The limits of liability for the insurance required by Paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:
 - 1 . Workers' Compensation, and related coverages under Paragraphs 5.04.A.1 and A.2 of the General Conditions:
 - a. State: Statutory b. Applicable Federal
(e.g., Longshoreman's): Statutory c. Employer's
Liability: Statutory

Division

- 2. Contractor's General Liability under Paragraphs 5.04.A.3 through

A.6 of the General Conditions which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody and control of Contractor:

a. General Aggregate \$300,000

b. Products - Completed Operations Aggregate \$300,000

c. Personal and Advertising Injury \$300,000

d. Each Occurrence (Bodily Injury and Property Damage) \$1 00,000

e. Property Damage liability insurance will provide Explosion, Collapse, and Under-ground coverages where applicable.

f. Excess or Umbrella Liability
General Aggregate \$1,000,000
Each Occurrence \$300,000

3. Automobile Liability under Paragraph 5.04.A.6 of the General Conditions:

a. Bodily Injury:
Each person \$1 00,000
Each Accident \$300,000

b. Property Damage:
Each Accident \$300,000

or

a. Combined Single Limit of \$500,000

4. The Contractual Liability coverage required by Paragraph 5.04.B.4 of the General Conditions shall provide coverage for not less than the following amounts:

a. Bodily Injury:
Each person \$1 00,000
Each Accident \$300,000

b. Property Damage:

Section	Each Accident	\$300,000
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SC-5.06.A. Delete Paragraph 5.06.A in its entirety and insert the following in its place:

- A. Contractor shall purchase and maintain property insurance upon the Work at the Sites in the amount of the full replacement cost thereof. Contractor shall be responsible for any deductible or self-insured retention. This insurance shall:
1. include the interests of Owner, Contractor, Subcontractors, Engineer, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or loss payee;
 2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss and damage to the Work, temporary buildings, falsework, and materials and equipment in transit and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by these Supplementary Conditions.
 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
 5. allow for partial utilization of the Work by Owner;
 6. include testing and startup;
 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued; and
 8. comply with the requirements of Paragraph 5.06.C of the General Conditions.

SC-5.06.B Change the first word "Owner" to "Contractor" in paragraph 5.06.B of the General Conditions. The Contractor shall be responsible for this coverage.

SC-6.06 Add a new paragraph immediately after Paragraph 6.06.G:

H. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by a particular Subcontractor or Supplier.

sc-9.03

Add the following new paragraphs immediately after Paragraph 9.03.A:

B. The Resident Project Representative (RPR) will be Owner's employee or agent at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions. RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall be through or with the full knowledge and approval of Contractor. The RPR shall:

- 1 . Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.
2. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
3. Liaison:
 - a. Serve as Engineer's liaison with Contractor, working principally through Contractor's authorized representative, assist in providing information regarding the intent of the Contract Documents.
 - b. Assist Engineer in serving as liaison with Contractor when Contractor's operations affect Owner's on-Site operations.
 - c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.
4. Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
5. Shop Drawings and Samples:
 - a. Record date of receipt of Samples and approved Shop Drawings.

- b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
- 6. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
- 7. Review of Work and Rejection of Defective Work:
 - a. Conduct onsite observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
- 8. Inspections, Tests, and System Startups:
 - a. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
 - b. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
- 9. Records:
 - a. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
 - b. Maintain records for use in preparing Project documentation.
- 10. Reports:
 - a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress

schedule and schedule of Shop Drawing and Sample submittals.

Division O,

- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, damage to property by fire or other causes, or the discovery of any Hazardous Environmental Condition.

I 1 . Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

12. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

13. Completion:

- a. Participate in a Substantial Completion inspection, assist in the determination of Substantial Completion and the preparation of lists of items to be completed or corrected.
- b. Participate in a final inspection in the company of Engineer, Owner, and Contractor and prepare a final list of items to be completed and deficiencies to be remedied.
- c. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.

C. The RPR shall not:

- 1 . Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items).
- 2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.

Section

3. Undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's superintendent.
4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents.
5. Advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.
6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.
7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
8. Authorize Owner to occupy the Project in whole or in part.

SC-1 1.03.D Delete Paragraph I I .03.D in its entirety and insert the following in its place:

D. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment under the following conditions:

- 1 . if the Quote price of a particular item of Unit Price Work amounts to 25% percent or more of the Contract Price and the variation in the quantity of that particular item of Unit Price Work performed by Contractor differs by more than 10% percent from the estimated quantity of such item indicated in the Agreement; and
2. if there is no corresponding adjustment with respect to any other item of Work; and
3. if Contractor believes that Contractor has incurred additional expense as a result thereof or if Owner believes that the quantity variation entitles Owner to an adjustment in the unit price, either Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Article 10 if the parties are unable to agree as to the effect of any such variations in the quantity of Unit Price Work performed.

SC-12.Ol.C Delete the semicolon at the end of GC 12.01.C.2.c, and add the following language:

, provided, however, that on any subcontracted work the total maximum fee to be paid by Owner under this subparagraph shall be no greater than 27 percent of the costs incurred by the Subcontractor who actually performs the work; of8

Division O,
SC-Article 1 6 Delete Article 16 of the General Conditions in its entirety and replace with the following:

"16.01 Any and all disputes that arise out of the performance of this Contract shall be litigated in the 23rd Judicial District Court in and for the Parish of Ascension. Any reference to arbitration in any Contract Documents is hereby expressly waived and deleted."
"

DIVISION 16
ELECTRICAL SPECIFICATIONS

DIVISION 16 • ELECTRICAL

SECTION 16010 • BASIC ELECTRICAL REQUIREMENTS

PART 1 - GENERAL

1.1 SCOPE

A. The work to be performed under these specifications shall include the furnishing of all labor, materials, equipment and services required for a complete electrical system as specified herein and as shown by the Drawings. A state of Louisiana licensed Electrical

Contractor shall perform the work specified herein. The work includes but is not limited to: 1 . Modification of existing field lighting service racks including replacement of lighting contactors and providing new panels for all three fields as shown on the drawings, including coordinating with the utility company and including all associated costs in bids.

2. Demolition of existing feeder conductors and conduits feeding the field lighting, as shown on the drawings.
3. Furnishing and installing power panelboards, underground conduits, pull boxes and wiring as shown to feed new lighting as shown on the drawings.
4. Furnishing and installing new lighting poles with fixtures, mounting hardware, lightning protection, surge protection, and pole foundations. A licensed Louisiana civil engineer shall design all pole foundations to meet AASHTO Standards.
5. Furnishing, installing, and aiming all field sports lighting fixtures.
6. Furnishing and installing ground rods and grounding conductors.
7. Removal and reinstallation of fencing to allow construction vehicles into the construction site.
8. Furnishing and installing a new galvanized steel rack with housekeeping pad as shown on the Drawings.
9. Installation of temporary construction power required during the construction period.
10. Furnishing and installing surge protection for all lighting as shown on the drawings.

1.2 GENERAL CONDITIONS

A. The General Conditions and Supplementary General Conditions are a part of this section of these Specifications. The Contractor is cautioned to read and be thoroughly familiar with all provisions of the General Conditions. These conditions shall be complied with in every aspect. The word "shall" where used, is to be understood, as mandatory and the word "should" as advisory. "May" is used in the permissive sense.

1.3 GENERAL REQUIREMENTS

- A. The Contractor is referred to all Drawings for construction as well as the electrical Drawings.
- B. The Contractor shall examine the site and shall verify to his own satisfaction the location of all utilities, and shall adequately inform himself as to their relation to his work before entering into a Contract and he shall base his bid on any conditions, which may be encountered during the progress of the work.
- C. The Contractor shall furnish and install properly all materials, devices, equipment, supports, controls, appurtenances, etc., mentioned or required to make complete or satisfactory

installations in working order whether shown or not. All electrical equipment shall be connected in accordance with manufacturer's instructions. All work shall be executed in a workmanlike manner and shall present a neat and mechanical appearance when completed.

- D. Electrical service required for all equipment furnished under this general contract shall be roughed-in and connected by the Contractor. It is the responsibility of the Contractor to obtain correct roughing-in dimensions and requirements for this equipment.

1.4 MINIMUM STANDARDS

- A. Applicable rules of the National Electrical Code apply as a minimum standard for this contract, but do not replace or reduce any specific requirement herein.

1.5 DRAWINGS

- A. Plans and detail sketches are submitted to limit, explain, and define structural conditions, specified requirements, conduit sizes, and manner of erecting work. The Contractor is cautioned to field check and verify all existing conditions before bidding, as no extra compensation will be allowed for conditions found different than represented in the construction drawings and/or specifications.
- B. Structural or other conditions may require certain modifications from the manner of installation shown, and such deviations are permissible and shall be made as required, but specified sizes and requirements necessary for satisfactory operations shall remain unchanged. Shifting of conduits or equipment shall be referred to the Engineer for approval.
- C. The drawings and these specifications are complementary to each other and what is called for by one shall be binding as if called for by both.
- D. General arrangement of work is indicated on plans. Due to the small scale of the drawings, offsets, fittings, and boxes required are not all indicated; provide fittings, boxes, etc., as needed in accordance with codes and accepted practices.

1.6 SUPERVISION

- A. The Contractor shall personally or through an authorized and competent representative, constantly supervise the work from beginning to completion and final acceptance. So far as possible, he shall keep the same foreman and workmen throughout the project duration.
- B. It is not the Engineer's duty to direct or guarantee the work of the Contractor, but to assist the Owner in obtaining a complete building in accordance with plans, specifications and addenda and to furnish engineering services in accordance with recognized practices.

1.7 PRIOR APPROVALS

- A. The Contractor shall base his proposal on materials as specified herein. Any references to a specific manufacturer or trade name is made to establish a standard of quality and to define a type of product and is not intended to indicate a preference for a particular manufacturer. It is the intent of these specifications to allow all manufacturers of equipment, products, etc., judged equal to the specified product to bid on a competitive basis.

- B. Requests for substitutions shall be made as indicated in the Instructions to Bidders, General Conditions of the Contract for Construction, Supplementary General Conditions, Special Conditions and/or general requirements.

1.8 MEASUREMENTS

- A. The Contractor shall verify all measurements and shall be responsible for the correctness of same, before ordering any materials or doing any work. No extra charge or compensation will be allowed for any differences between the actual measurements and those indicated on the drawings.

1.9 LAWS, PERMITS AND FEES

- A. The entire electrical work shall comply with the rules and regulations of the City, Parish, and State, including the State Fire Marshal and State Board of Health, whether so shown on plans or not. The Contractor shall pay fees for permits, inspections, etc., and shall arrange with the inspecting authorities all required inspections. The Contractor shall contact utility company and arrange for service modification and connections.

1.10 SITE INSPECTION

- A. The Contractor shall visit the site and familiarize himself with difficulties attendant to the successful execution of the work before bidding. Failure to visit the site shall not relieve the Contractor of the extent or conditions of the work required of him

PART 2 PRODUCTS

2.1 MATERIAL AND EQUIPMENT

- A. All materials, equipment, and accessories installed under this Contract, whether approved or not, shall be new and shall conform to all rules, codes, etc., as recommended or adopted by the National Association(s) governing the manufacture, rating and testing of such materials, equipment, and accessories.

2.2 SHOP DRAWINGS

- A. The Contractor shall submit complete descriptive and dimensional data on the following items for review and approval:

1. Photometric Printout of Field Lighting Levels
2. Panelboards
3. Pull Boxes
4. Direct Burial Light Poles
5. Civil Engineer Prepared Foundation Plans
6. LED Sports Lighting Fixtures
7. Lighting Controls System
8. Service Entrance Rated Disconnect Switch
9. Surge Protection System
10. Lighting Fixtures

PART 3 • METHODS OF INSTALLATIONS

3.1 CONTRACTOR COORDINATION

- A. The Drawings are diagrammatic in nature. Cooperate with other trades so the interferences of facilities and equipment will be avoided.

3.2 OPENINGS, CUTTING AND PATCHING

- A. Cut and patch all openings as required for the electrical work.

3.3 PAINTING

- A. No painting will be required by the Contractor except for touch-up of factory finishes on equipment furnished under this contract.

3.4 APPLICABLE GENERAL CODES AND REGULATIONS

- A. All electrical work and equipment, in whole or in part, shall conform to the applicable portions of the following specifications, codes and regulations in effect on that date of invitation for bids, and shall form a part of this specification.
 - 1. National Electrical Code, 2014 Edition
 - 2. National Electrical Manufacturers Association Standards
 - 3. National Fire Protection Association Recommended Practices
 - 4. Local, City and State Codes and Ordinances
 - 5. National Board of Fire Underwriters Recommended Practices
 - 6. Life Safety Code
 - 7. International Building Code
 - 8. Illuminating Engineering Society Lighting Handbook, 10th Edition
- B. Equipment that has been inspected and approved by the Underwriter's Laboratory shall bear its label or appear on its list of approved apparatus.

3.5 TESTS AND INSPECTIONS

- A. The Contractor shall assist in making periodic inspections or tests required by the Engineer. When requested, the Contractor shall provide the assistance of foremen and qualified craftsmen for reasonable duration of each test, etc.

3.6 SAFETY PRECAUTIONS DURING CONSTRUCTION

- A. It shall be the Contractor's responsibility to furnish and install proper guards and instruction signs for prevention of accidents and to provide and maintain for the duration of construction any installations needed for safety of life and property.

3.7 EQUIPMENT NAMEPLATE

- A. Each item of electrical equipment installed by the Contractor shall be provided with an engraved nameplate noting the equipment's function or designation. Nameplates shall be engraved laminated plastic with black letters on a white background. Letters shall be 1/4" high, all caps.

3.8 PANELBOARD SCHEDULES

- A. The Contractor shall provide and affix typed panelboard schedules for each panelboard. Schedule will accurately list equipment served by each branch circuit.

3.9 COMPLETION

- A. The Contractor shall leave all electrical equipment with proper connections, and in proper working order. He shall test the entire electrical system in the presence of the Engineer or his representative to show that it is properly installed. Contractor shall leave all panels and switches completely fused or complete with circuit breakers.

3.10 RECORD DRAWINGS

- A. The Contractor shall furnish one (1) complete set of drawings on which any changes in the work shall be shown. These drawings must be turned over to the Engineer prior to final acceptance of the work. In the event unforeseen obstructions occur in the work, the Contractor shall confer with the Engineer and obtain his written consent before undertaking any deviation from the governing plans.

3.1.1 GUARANTEE

- A. The Contractor shall guarantee to keep the entire electrical system as installed by him or his subcontractors in repair and in perfect working order for one (1) year from the date of the final Certification of Final Acceptance and ten (10) years for the lighting system, and shall furnish free of cost to the Owner, all material and labor necessary to comply with the above guarantee; said guarantee shall be based upon defective material and workmanship. In any case where equipment has a factory warranty exceeding this oneyear limit, the full extent of the warranty shall apply.

3.12 CLEANING

- A. When all work has been finally tested, the Contractor shall clean all fixtures, equipment, conduits, ducts, and all exposed work. All cover plates and other finished products shall be thoroughly cleaned.

3.13 INSTRUCTION MANUALS

- A. The Contractor shall provide three (3) operating and maintenance instruction manuals on all systems and equipment installed in the electrical work.

3.14 CONTRACTOR SPECIAL NOTE

- A. The Contractor shall be required to install electrical services underground. Contractor is cautioned to exercise extreme care when digging to not damage any existing utilities or equipment. Contractor shall be required to repair any utilities or equipment he may damage during construction. Directional boring underground service conduits is recommended. Direction boring shall not route under the football field play areas.
- B. Access to the construction site for installation and delivery of poles and installation equipment will be restricted. Contractor may need to remove and replace existing fencing to gain access to work areas.

- c. Contractor may be required to cross fields to gain access to work areas. Contractor will not be allowed to cross play areas of the field. Crossing the grassy areas may require utilization of protective mats or other protective measures. Contractor shall repair any field damages caused by construction.

3.15 10-YEAR WARRANTY

- A. Each manufacturer shall supply a signed warranty covering the entire system for 10 years OR for the maximum hours of coverage based on the estimated annual usage, whichever occurs first. Warranty shall guarantee light levels will not fall below target maintained levels. A +1-10% design/testing allowance will not be allowed. Warranty shall also cover fixture replacements and fuses along with any equipment and labor needed to repair/replace, Manufacturer shall maintain specifically-funded financial reserves to assure fulfillment of the warranty for the full term. Warranty may exclude storm damage, vandalism, abuse and unauthorized repairs or alterations, but must provide documentation showing such within 30 working days.

END OF SECTION

DIVISION 16 - ELECTRICAL SECTION 16050 • BASIC ELECTRICAL MATERIALS AQND METHODS

PART 1 • GENERAL

1 . 1 GENERAL REQUIREMENTS

- A. All material furnished shall be new and shall conform to all rules and codes as recommended or adopted by the National Association governing the manufacture, rating and testing of the material. All electrical equipment shall be UL listed for the intended use.

PART 2 - PRODUCTS

2.1 RACEWAYS AND FITTINGS

- A. Raceways permitted on this project shall be hot dipped galvanized rigid steel conduit; flexible metallic tubing; liquid-tight flexible metal conduit; and rigid polyvinyl chloride (PVC) conduit. All conduits shall be new and shall bear the inspection label of the Underwriter's Laboratories, Inc.
- B. Metallic conduit shall be metalized, or hot-dipped galvanized. Non-metallic conduit shall be schedule 40 PVC.
- c. Fittings for conduit shall be an approved type specially designed and manufactured for their purpose. Rigid metal conduit fittings, bushings, and other components shall be galvanized. Setscrew connector fittings shall not be permitted. All fittings for rigid steel or aluminum conduit shall be threaded and coupled unless specifically approved otherwise by the Engineer.

2.2 FLEXIBLE CONDUIT

- A. Liquid-tight flexible metal conduit shall have a spiral wound, flexible, galvanized steel core and a tough extruded synthetic moisture-tight outer covering. All flexible conduits shall be UL listed.

2.3 GALVANIZED CONDUIT

- A. Galvanized conduit furnished in accordance with these specifications shall be of mild steel piping, galvanized inside and outside, and shall conform in all respects to the American Standard Association Rigid Steel Conduit Specification C80.1-1959 and Underwriter's Laboratories Specifications.
- B. The galvanized coat of zinc shall be of uniform thickness applied by the hot-dipped process to not only the inside surfaces of the conduit, but also to the threads of the conduit. It shall be further dipped in a chromic acid bath so as to chemically form a corrosive resistant protective coating of zinc chromate over hot-dipped galvanized surface. Each piece of conduit shall be straight, free from blisters and other debris, cut square and taper reamed, and furnished with coupling in 10-foot length threaded each end. The interior threaded surface of each coupling shall be galvanized to insure 100% galvanic

protection on all surfaces. The hot galvanized zinc chromate on the inside and outside surfaces shall be sufficiently elastic to prevent cracking or flaking when sample of finished conduit is bent 90° at a minimum temperature of 60°F, the inner edge of the bend having a radius of six (6) times the inside diameter of the conduit.

2.4 RACEWAYS

- A. Lay-in duct, JIC Wireway and troughs shall be NEMA 1 for indoor application and NEMA 3R for out door or applications exposed to weather or water. Raceways shall be sized as noted on Drawings, and shall have hinged or screw covers with captive screws. Finish shall be gray enamel. All components shall be UL listed for steel enclosed wireway or auxiliary gutter.

2.5 PVC CONDUIT

- A. PVC Schedule 40 Conduit shall be used for application underground, encased, or exposed applications in accordance with the National Electrical Code (Article 347). Conduit shall be rated for use with 90°C conductors, UL Listed or approved equal. Material shall comply to NEMA Specification TC-2 (Conduit), TC-3 (Fittings) and UL 651 (Conduit) and 514b (Fittings). Conduit and fittings shall carry a UL label (Conduit - on each 10 foot length; Fittings - stamped or molded on each fitting). Conduit and fittings shall be identified for type and manufacturer and shall be traceable to location of plant and date manufactured. The markings shall be legible and permanent.
- B. The Conduit shall be made from polyvinyl chloride compound (recognized by UL), which includes inert modifiers to improve weatherability and heat distortion. Clean rework material, generated by the manufacturer's own conduit production, may be used by the same manufacturer, provided the end products meet the requirements of this specification. The conduit and fittings shall be homogeneous plastic material free from visible cracks, holes or foreign inclusions. The conduit bore shall be smooth and free of blisters, nicks or other imperfections which could mar conductors or cables. The same manufacturer to assure system integrity shall produce conduit, fittings, and cement.
- c. Testing and Acceptance Criteria: Conduit and fittings shall be tested in accordance with the testing requirements defined in NE-MA TC-2, NEMA TC-3 and U-651 and 514. The acceptance criteria shall be given in the same standards. All conduit and fittings shall be solvent cemented in applications in accordance with instructions from the manufacturer.
- D. Continuous roll PVC conduits used for boring applications shall be schedule 80.

2.6 OUTLET BOXES

- A. Outlet boxes shall be galvanized steel of sufficient size to accommodate devices shown and shall have raised covers where required to meet requirements of NEC Article 314.

2.7 WIRE (600 VOLT AND BELOW)

- A. All conductors used in the work shall be of soft drawn annealed copper having a conductivity of not less than 98% of that of pure copper. Conductors shall be standard code gauge in size, insulated and shall have insulation rated for use at 600 volts.
- B. Unless noted otherwise or specified, insulation shall be type THW, THWN, or THHN for sizes up to and including No. 2 AWG. Insulation for wire sizes larger than No. 2 AWG shall be type THW, XHHW, or THHN. Lighting fixture wire shall be heat resistant type TF (150°C) with 300-volt insulation minimum. Wires shall be of the single conductor type. Sizes No. 8 AWG and larger shall be stranded. Sizes No. 12 thru No. 14 shall be single strand solid copper.
- C. Throughout the system, all conductors shall be identified as to the phase and voltage of the system by color-coding in accordance with NEC 210.5. Color-coding shall be continuous the full length of the wire with surface printing at regular intervals on all conductors and for neutral conductors.
- D. Color coding shall be as follows:
- | <u>3phase, 480V System</u> | <u>1 phase, 240V System</u> |
|----------------------------|-----------------------------|
| Phase 1-Brown | Phase 1-Black |
| Phase 2-Orange | Phase 2-Red |
| Phase 3-Yellow | |
| Neutral-Gray | Neutral-White |
| Ground-Green | Ground- Green |

2.8 IN GROUND PULL BOXES

- A. In ground pull boxes shall be heavy duty, traffic bearing type. Boxes shall be polymer concrete and fiber reinforced polyester construction. Boxes shall be open bottom furnished complete with bolted cover and logo. All pull boxes shall be nominal sized 12" wide x 24" long x 18" deep. Boxes shall be straight wall type, Tier 8 strength, and furnished with appropriate extension section, and shall be factory assembled.
- B. Power pull boxes for low voltage cables and wiring shall have ELECTRIC legend. Boxes shall be CDR Systems Corporation #B13132418A, Quazite Composolite "PC" Style, or equal.

2.9 LIGHTING CONTACTOR

- A. Lighting contactors shall be furnished and installed where shown on the drawings with the number of poles as indicated. Contactors shall be mechanically held with minimum contact rating of 70 amperes or as shown on the Drawings, suitable for the type loads connected. Voltage shall be suitable for the system voltage shown. Lighting contactors shall be open type and shall be mounted in enclosure as shown on the drawings. Lighting contactors shall be equal to Square D Type "S", or prior approved equal.

- B. Contactors shall be mounted in lockable enclosure and shall be connected with ON-OFF pushbutton station to control each lighting contactor. ON-OFF stations shall be rated for 480 volt, single-phase control voltage. Momentary control voltage shall be applied to ON or OFF coils to operate contactors.

2.10 STAINLESS STEEL ENCLOSURES

- A. Lighting contactors shall be mounted in a NEMA 3R enclosure sized as shown on the drawings. Enclosure shall the following features and accessories:
 1. Seams continuously welded and ground smooth, with no holes or knockouts.
 2. Drip shield top and seam-free sides, front, and back.
 3. Captive plated steel screws.
 4. Hasp and staple for padlocking.
 5. Continuous hinge with removable hinge pin.
 6. Unpainted aluminum equipment mounting panel.
 7. Wall mounting eye or boltholes.
- B. Enclosure shall be equal to Hoffman #A-36R2412HCR with aluminum A-36P24AL panel.

2.1 1 WEATHERPROOF RECEPTACLES

- A. Weatherproof receptacles shall be GFCI duplex receptacles as specified under WIRING DEVICES, mounted in a cast iron type FD conduit box and fitted with gasketed metal cover with spring. Weatherproof receptacles shall be flush mounted in exterior walls.

2.12 WIRING DEVICES

- A. Wiring devices shall be as listed. The color of device shall match color of outlet cover plate. It shall be the responsibility of the Contractor to provide plugs, receptacles and fittings required for any equipment furnished or installed or connected under the contract. Color as selected by the Engineer.

	Leviton	P	Hubbell
Toggle Switches: 20A 120/277V			
Single pole	1221-1	20AC1-I	1221-1
Three-way	1223-1	20AC3-I	1223-1
Duplex Receptacle: 20A, 125V, NE-MA 5-20R	5362-1	5362-1	5363-1
Ground Fault Circuit Interrupter: 20A, 125V, Feed Through, NE-MA 5-20R	6899-1	2091 -S	GF-5362-I

- B. Quad receptacles shall be 20-amp, 125 volt rated, NEMA 5-20R, with two (2) duplex receptacles or single four-plex device.

2.13 OUTLET COVER PLATES

- A. Unless otherwise specified, all outlets shall be fitted with cover plates. Cover plates shall be standard size, uniform in design and finish for switches, receptacles and other outlets requiring cover plates. Plates shall be one piece of the required number of gangs. All cover plates shall be lexan unbreakable type. Engineer shall select coverplate color.

PART 3 • EXECUTION

3.1 WIRING - GENERAL

- A. Unless otherwise specified, all wiring shall be installed in conduit. No wire shall be smaller than No. 12 unless noted otherwise. Wiring for low voltage control may be #14 AWG. Wire for each branch circuit shall be of single size and type from the branch circuit protective device the last outlet of the circuit. BX wiring shall not be allowed.
- B. Feeders and main service entrance conductors shall run their entire length without joints or splices. Wiring for branch circuits shall run the entire length without splices, with splices and joints made only at outlets or in accessible junction boxes only when absolutely necessary and approved by the Engineer. Joints and splices in branch circuit wiring shall be made with compression type solderless connectors.
- C. Connectors of the non-metallic screw on type are not acceptable. Terminations or splices for conductors No. 6 AWG and larger shall utilize bolted connecting lugs. All splices and terminations shall be insulated in an approved manner by an integral or separate cover or by taping to provide insulating value equal to that of the conductors being joined.
- D. Branch circuit home run numbers shown on the drawings shall be used as a guide for connection of circuit wiring to similarly number protective devices in branch circuit panelboards. Requests for changes in the plans shall be directed to the Engineer. No changes shall be made without approval from the Engineer.

3.2 ELECTRICAL SERVICE GROUNDING

- A. Main electrical service equipment, conduit work, panelboards and all other electrical equipment shall be effectively and permanently grounded. Grounding connections and conductor sizes shall be in accordance with requirements of the National Electrical Code, Article 250, and local or State ordinances.

3.3 CONDUIT - MATERIALS AND METHODS

- A. Conduit shall be installed as per NEC and NEMA regulations and the manufacturer's recommendations. Conduit shall be as follows:
- B. Rigid Steel Conduit shall be used for all conduits exposed to the weather, and underground conduit except where non-metallic conduit is specified or approved.
Underground and under slab runs are to be watertight. All horizontal runs of underground conduit shall utilize rigid steel elbows on vertical risers.
- C. All conduits routed underground shall not be placed in building slab. Conduits larger than 1" routed under building slab shall be routed below the vapor barrier. Minimum conduit size allowed to be routed underground shall be 3/4". Conduits routed under building slab may be PVC. All conduits rising vertically out of slab or out of ground shall be rigid steel.

- D. Non-metallic conduit, minimum schedule 40 PVC, shall be permitted to be installed underground. If PVC conduit is run, a full-sized grounding conductor shall be pulled with the circuit conductors. PVC conduit shall not be run exposed. Where PVC conduit is run underground, it shall be encased in concrete or run minimum 24" below grade, or at the depth below grade shown on the drawings. Provide marker warning tape 12" above underground conduits.
- E. Flexible metal conduit or liquid-tight flexible metal conduit shall be used for the final connection of runs to motors. Flexible conduit shall be at least twelve (12) inches, but not more than 48 inches long. Where used, an external grounding conductor shall be run with conduit unless conductor is made as a part of the conduit.

3.4 CONDUIT - GENERAL

- A. Fittings for rigid steel conduits shall be hot-dipped galvanized steel and shall be of a type especially designed and manufactured for their purpose. Rigid conduit joints for single conduit runs shall be made with threaded fittings made tight with at least five threads fully engaged. Compression type threadless fittings and setscrew type fittings shall not be used for rigid conduit. Fittings for rigid non-metallic conduit shall be solvent welded.
- B. Where they enter boxes or cabinets that do not have threaded hubs, conduits shall be secured in place with galvanized locknuts inside and outside the cabinet and shall have bushings inside. Conduits larger than 1-1/4 inch shall have galvanized locknuts and galvanized bushings.
- C. Conduit runs shall be straight; elbows and bends shall be uniform, symmetrical and free from dents or flattening. Exposed conduit shall be firmly supported on galvanized brackets, hangers, pipe straps; or by beam clamps. Conduit installed exposed shall be neatly aligned and run at right angles to building walls.
- D. Pull boxes shall be installed as required to permit proper installation of conductors and expansion fittings installed where conduit runs cross building expansion joints.
- E. Conduit shall be held securely in place by hangers and fasteners of appropriate design and dimensions for the particular application. Support shall be such that no strain will be transmitted to outlet box and pull box supports. Wire shall not be used, with or without spring steel fasteners, clips or clamps, for the support of any conduit.
- F. All conduits shall be cut square and reamed at the ends. The conduit system shall be complete and cleaned before any conductors are installed. Open ends of all conduits shall be capped until conductors are installed. A non-metallic fish wire shall be installed in all empty conduits. Empty conduit shall remain capped.

3.5 FLEXIBLE CONDUIT

- A. Flexible metal conduit may be used for short final connections to equipment where permitted by governing codes. Flexible metal conduit shall be sized and supported in accordance with Article 350 of the NEC or more stringent local codes. A separate equipment-grounding conductor sized in accordance with NEC Table 250.122 shall be installed in flexible

conduit unless exceptions are allowed by governing codes and if the fittings used are UL listed for the purpose.

- B. Liquid-tight flexible metal conduit shall be used where flexible conduit is permitted and desired and conditions of installation, operation, or maintenance require protection from liquids, vapors, or solids and in other hazardous locations where specifically approved. Flexible conduit for all exterior motor connections shall be liquid-tight. Liquid-tight flexible conduit shall be used with terminal fittings approved for the purpose.

3.6 SUPPORTS

- A. The Contractor shall furnish and install all supports for equipment under this contract. Supports shall be spaced at intervals of eight (8) feet maximum for rigid conduit. Perforated strap supports will not be permitted.
- B. All conduits shall be firmly secured with pipe clamps, conduit straps, or suspension hangers as appropriate. All conduit, fixtures, and accessories shall be rigidly supported to form a firm, well-braced installation.

3.7 WEATHERPROOF EQUIPMENT

- A. All electrical equipment located on the exterior of the building or exposed to the outside shall be enclosed in a rain-tight enclosure.

3.8 MOUNTING HEIGHTS

- A. Unless otherwise noted on the drawings or required by the Engineer, the following mounting heights shall apply:

Panelboards	6'-0" to top
Safety Switches	5'-0" to top
Toggle Switches	4'-0"

3.9 UNDERGROUND CONDUIT

- A. Conduit run underground shall be routed at least 24" below top of grade. Conduit shall be securely supported on plastic spacers placed at intervals of 4' maximum and tied in place securely. Maintain 2" separation between conduits. Conduit joints shall be made up watertight to prevent the entrance of moisture. Provide warning tape approximately 12" above buried conduits.
- B. Horizontal portions of conduit installed underground 1" and larger may be schedule 40 PVC plastic. Vertical portions of underground conduit shall be rigid galvanized steel with an approved metallic bushing at point of entry. Termination elbows shall be rigid galvanized steel installed using a plastic-to-metal adapter. A full sized copper, grounding conductor shall be provided for the full length of each non-metallic conduit, terminated with an accessible connection to a ground lug on the cabinet or steel conduit extension.
- c. Underground conduits shall be installed pitched to drain away from the building and shall use long radius bend instead of standard elbows. Empty conduits shall be capped with an approved plug. Where conduits, ducts, etc., pass under sidewalks,

roads, or curbs, this Contractor shall use rigid steel conduit. The conduit shall extend at least 3' on either side

of the sidewalk, road, etc.

- D. Before installing cables in underground conduits, the Contractor shall have a mandrel 1/4" smaller than the conduit inside diameter pulled through each conduit. If any concrete or obstructions are found the Contractor shall remove them and clear all conduits. All underground conduits shall be swabbed before cables are pulled.

3.10 EXCAVATING, BACK FILLING AND REPAIR

- A. After trenches have been dug and all conduits properly installed, the trenches shall be back filled with material free of grass, roots and other debris in 6" layers and tamped thoroughly. After settling is complete, the surface shall be repaired to its original condition. For trenches in areas to be paved, back fill shall be placed in 6" layers and each layer compacted to not less than 95% density.
- B. The Contractor shall repair the ground disturbed in the installation of underground conduits. The dirt above the new conduits shall be compacted and final grading shall be made after the soil has had a chance to settle. The Contractor shall repair the ground to an equal or better condition than the condition prior to initiating the work. Concrete shall not be cut, but removed between construction joints. Finish on new concrete shall match or exceed the quality of finish on the existing concrete. Grass shall be planted in trenches cut in grassy areas. Plants shall be installed in landscaped areas. Any damaged plants or plants that die because of work performed as part of this contract shall be replaced by the Contractor.

3.1.1 DIRECTIONAL BORE

- A. Conduits may be installed underground using directional bore equipment in lieu of open cut at no additional cost to the Owner. The installation shall utilize continuous roll, heavy wall PVC conduits in lieu of individual conduit sections.

3.12 HOUSE KEEPING PADS

- A. All floor and ground mounted electrical equipment - panels, switchboards, motor control centers, transformers, etc. shall be installed with a reinforced concrete housekeeping pad, whether shown on the drawings or not. The pad shall extend 4" above either the finished floor or final grade (as applicable), have 45 degree chamfered edges, and be constructed of 3000psi concrete. The pad shall extend 3" beyond the edge of the respective electrical equipment.

END OF SECTION

DIVISION 16 • ELECTRICAL

SECTION 16400 - SERVICE AND DISTRIBUTION

PART 1 GENERAL

1.1 SYSTEM VOLTAGE

- A. The service from the existing transformer is rated 277/480V, 3 phase, 4 wire and shall be stepped down to 120/240V, 1 phase, 3 wire via dry type transformers.

1.2 TERMINATIONS

- A. All wiring shall be sized based on 75°C rated conductors. All connectors shall be rated for 75°C in accordance with N.E.C. Article 110-14 requirements.

PART 2 • PRODUCTS

2.1 SAFETY SWITCHES

- A. Furnish and install safety switches as shown on the Drawings. All switches shall be fused NEMA Heavy Duty Type HD and Underwriter's Laboratories listed. All switches shall have blades that are fully visible in the "OFF" position with the door open. Switches shall be dead-front construction with permanently attached arc suppressers. Lugs shall be UL listed for copper and aluminum conductor and front removable. All current carrying parts shall be plated to resist corrosion. Switches shall be quick-make, quick-break type. During operation of the switch, the movable contacts shall not be able to be restrained by the handle once the closing or the opening action of the contacts has been initiated. Switches shall have cover interlocks to prevent opening of the switch door while the switch is in the "ON" position or closing the switch with the door open. Switch shall have padlocking capabilities in the "OFF" position.
- B. Safety switches shall be rated 600 volts for 480-volt service and rated 240 volts for 208volt service. Switches shall be motor rated when used for motor loads. Switches shall be NEMA 1 enclosed for indoor applications and NEMA 3R for outdoor or wet area locations.
- c. Switches used for service entrance shall be service entrance rated. Safety switches shall be furnished complete with fuses.
- D. Safety switches shall be Square D Heavy Duty Class 3110 type, Cutler-Hammer type DH, or Eaton.

2.2 FUSES

- A. All fuse holders shall be provided with dual-element, time-lag fuses as scheduled on the Drawings or as recommended by the equipment manufacturer. Fuses shall be rated 200,000 AIC. Fuses shall be Buss Fusetron, Economy Econ, or Gould Shawmut Tri-Onic

for component protection and Buss Limitron, Economy Econolin, or Gould Shawmut AmpTrap for circuit protection.

2.3 CIRCUIT BREAKER PANELBOARDS

- A. Panelboards shall be sized as shown on the drawings and schedules, and shall be the bolted breaker panelboard type. Panelboards shall have copper bussing.
- B. All branch breakers are to be quick-make, quick-break (over center toggle device) with trip indication and common trip on all multiple breakers. Trip indication shall be clearly shown by breaker handle taking a position between "ON" and "OFF" position. Breakers shall be ambient compensated to carry full NEC load in 120 degree F room temperature.
Panelboards shall have distributed phase busing throughout. Any two adjacent single pole breakers shall be replaceable by a two-pole breaker, and any three adjacent single pole breakers shall be replaceable by a three pole breaker.
- C. Minimum interrupting capacity of breakers shall be as shown on panel schedules. No breakers shall be rated less than 10,000 RMS symmetrical amperes.
- D. Branch breakers shall be numbered 1, 3, 5, etc. from top to bottom beginning at the top of the left-hand column so that #1 shall be on phase A, #3 on phase B, and #5 on phase C.
- E. All breakers shall be bolt on type. Panelboards for 120/208 volt or 120/240-volt service shall be Square D type NQOD, Cutler-Hammer POW-R-LINE series, or equal.
Panelboards for 480/277-volt service shall be Square D type NEHB or Eaton, or equal.
- F. Panels shall be service entrance rated when installed at main service point.

2.4 DRY TYPE TRANSFORMERS

- A. Contractor shall install dry type transformer(s) in the size and at the location(s) as shown on the drawings. Transformers will be used to step down voltage from 480 volts to 120/240 volts. All transformers shall comply and must be tested in accordance with UL, NEMA and ANSI standards. Transformers shall be energy efficient and shall meet NEMA Standard TP-I requirements.
- B. Transformers shall have the KVA ratings shown on the drawings. Transformers shall be three phase type rated for 480 volts primary and 120/240 volt secondary as shown on the drawings. Transformers shall be self-cooled. When transformer is delivering full KVA load continuously, temperature rise shall not exceed 150 degrees C above a 40 degree C ambient with 200 degrees C temperature class insulation system. The average sound level shall not exceed NEMA standards. Transformers shall have four external type taps, two 2-1/2⁰/0 FCBN and two 2-1/2⁰/0 FCAN. Windings shall be copper.
- C. Transformers rated larger than 112.5KVA shall be provided with Class 155 or higher insulation system and shall be completely enclosed except for ventilating openings.

Transformers larger than 112.5KVA shall comply with NEC Article 450.21 (B) Exception No. 2, to allow transformers to be installed inside non fire rated rooms.

- D. Transformers shall be floor mounted on isolation pads. Enclosure shall be heavy gauge steel with ventilation openings protected against falling dirt and drip, and shall be shielded against actual touching of live parts. A nameplate in accordance with NEMA standards

shall be permanently affixed to the enclosure.

- E. Transformers shall be equal to Square D Class 7400 Dry Type, Eaton DT-3 Series, or prior approved equal.

PART 3 - EXECUTION

3.1 COORDINATION

- A. Contractor shall coordinate all service and distribution work with activities at the site. Contractor shall schedule work to not interrupt use of the baseball field by coaches, players, and other authorized persons.

3.2 TEST AND BALANCING

- A. At such times as the Engineer directs, the Contractor shall conduct operating tests to demonstrate the electrical systems are installed and will operate properly and in accordance with the requirements of the specifications. The Contractor shall furnish instruments and personnel required for such tests. Any work that is found to be defective or material found to vary from the requirements of the drawings or specifications shall be replaced by the Contractor without additional cost of the Owner.

3.3 EQUIPMENT FUSING

- A. All equipment shall be furnished complete with fuses as described herein and/or as shown on the Drawings. Contractor shall furnish one set of spare fuses for each size fuse furnished on the project. Fuses shall be delivered to Owner prior to acceptance of project.
- B. Fusing for protective equipment shall be of the type specifically designed for the intended application. Fuses for service entrance rated equipment shall be Class L. Fuses for branch circuit protection shall be Class RK5 unless specified otherwise. Provide protective fuses as specifically required by the equipment manufacturer.

END OF SECTION

DIVISION 16 • ELECTRICAL

SECTION 16410 • SURGE PROTECTION DEVICES FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUITS

PART 1 - GENERAL

1.1 SCOPE

- A. This section describes the materials and installation requirements for surge protective devices (SPD) for the protection of all AC electrical circuits.

1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section. Other sections that may relate to the work in this section include, but are not limited to, the following:

- 1. Section 16050 - Basic Electrical Materials and Methods

1.3 SUBMITTALS

- A. Submit shop drawings and product information for approval and final documentation in the quantities listed according to the Conditions of the Contract. Customer name, customer location, and customer order number shall identify all transmittals.
- B. Submittals shall include UL 1449 3rd Edition Listing documentation verifiable by visiting www.UL.com, clicking "Certifications" link, searching using UL Category Code: VZCA.
 - 1. Short Circuit Current Rating (SCCR)
 - 2. Voltage Protection Ratings (VPRs) for all modes
 - 3. Maximum Continuous Operating Voltage rating (MCOV)
 - 4. I-nominal rating (I-n)
 - 5. SPD shall be Type 1 UL listed and labeled
- C. Upon request, an unencapsulated but complete SPD formally known as TVSS shall be presented for visual inspection.
- D. Minimum of ten (10) year warranty

1.4 RELATED STANDARDS

The following codes and standards shall be referenced:

IEEE C62.41.1, IEEE Guide on the surge Environment in Low-voltage (1 000 V and Less) AC Power Circuits,
IEEE C62.41.2, IEEE Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and Less) AC Power Circuits,
IEEE C62.45, IEEE Recommended Practice on Surge Testing for Equipment Connected to LowVoltage (1000 V and Less) AC Power Circuits. National Electrical Code: Article 285

UL 1283 - Electromagnetic Interference Filters

UL 1449, Third Edition, effective September 29, 2009 - Surge Protective Devices

1.5 LISTING REQUIREMENTS

- A. SPD shall bear the UL Mark and shall be Listed to most recent editions of UL 1449 and UL 1283. "Manufactured in accordance with" is not equivalent to UL listing and does not meet the intent of this specification.
- B. SPD and performance parameters shall be posted at www.UL.com under Category Code: VZCA. Products or parameters without posting at UL.com shall not be approved.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engage a firm with at least ten (10) years' experience in manufacturing transient voltage surge suppressors.
- B. Manufacturer shall be ISO 9001 or 9002 certified.
- C. The manufacturer of this equipment shall have produced similar electrical equipment for a minimum period of five (10) years. When requested by the Engineer, an acceptable list of installations with similar equipment shall be provided demonstrating compliance with this requirement.
- D. The SPD shall be compliant with the Restriction of Hazardous Substances (ROHS) Directive 2002/95/EC.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Handle and store equipment in accordance with manufacturers Installation and Maintenance Manuals. One (1) copy of this document to be provided with the equipment at time of shipment.

PART 2 - PRODUCTS

21 MANUFACTURERS

- A. Provide externally mounted transient voltage suppressors as described herein.
- B. Manufacturer and/or manufacturers model number listed in this Specification are used to establish general style, type, character, and quality of product desired. Similar items manufactured by manufacturers other than those listed will be considered, providing submittals are made according to Pre-Bid Approval requirements of Instructions to Bidders.
- C. Where no manufacturer or model number are given, any product meeting performance or design criteria, or referenced trade association standard may be used and Pre-Bid Approval is not required.
- D. Subject to compliance with the specified requirements, provide products by one of the following manufacturers:

2.2 SURGE PROTECTIVE DEVICE FEATURES

- A. SPD shall be UL 1449 labeled with 200kA Short Circuit Current Rating (SCCR). Fuse ratings shall not be considered in lieu of demonstrated withstand testing of SPD, per NEC 285.6.
- B. SPD shall be UL 1449 labeled as Type 1 intended for use without need for external or supplemental overcurrent controls. Internal overcurrent and thermal overtemperature controls shall protect every suppression component of every mode, including N-G. SPDs relying upon external or supplementary installed safety disconnectors do not meet the intent of this specification.
- c. SPD shall be UL 1449 labeled with 20kA I-nominal (I-n) (verifiable at UL.com) for compliance to UL 96A Lightning Protection Master Label and NFPA 780.
- D. Suppression components shall be heavy duty 'large block' MOVs, each exceeding 30mm diameter.
- E. Standard 7 Mode Protection paths: SPD shall provide surge current paths for all modes of protection: L-N, L-G, L-L, and N-G for Wye systems; L-L, L-G in Delta and impedance grounded Wye systems.
- F. If a dedicated breaker for the SPD is not provided in the switchboard, the service entrance SPD shall include an integral UL Recognized disconnect switch. A dedicated breaker shall serve as a means of disconnect for distribution SPD's.
- G. SPD shall meet or exceed the following criteria: 1. Minimum surge current capability (single pulse rated) per phase shall be:
 - a. Service Entrance applications:
Siemens Model TPS3 12 with Maximum 7-Mode surge current capability shall be 300kA per phase.
Advanced Protection Technologies Model TE_XAS30 series with Maximum 7-Mode surge current capability of 300kA per phase.
 - b. Distribution applications:
Siemens Model TPS3 12 with Maximum surge current capability of 200kA per phase.
Advanced Protection Technologies Model TE_XAS20 series with Maximum surge current capability of 200kA per phase
 - c. Branch Panel applications:
Siemens Model TPS3 12 with Maximum surge current capability of 100kA per phase.
2) Advanced Protection Technologies Model TE_XDS104 series with Maximum surge current capability of 100kA per phase
- 2. UL 1449 Listed Voltage Protection Ratings VPRs shall not exceed the following:

VOLTAGE			
208Y/120V	nov	nov	nov
480Y/277V	1500V	1500V	1500V

H.UL 1449 Listed Maximum Continuous Operating Voltage MCOV (verifiable at UL.com):

System Voltage	Allowable System Voltage Fluctuation %	MCOV
208Y/120		1501/
480Y/277V		320V

I. SPD shall include a serviceable, replaceable module (excluding Distribution).

J. Service Entrance SPD shall have UL 1283 EMI/RFI filtering with minimum attenuation of 50dB at 100kHz.

K. SPD shall have a warranty for a period of ten (10) years, incorporating unlimited replacements of suppressor parts if they are destroyed by transients during the warranty period.

L. Service Entrance SPDs shall be equipped with the following diagnostics:

1. Visual LED diagnostics including a minimum of one green LED indicator per phase, and one red service LED.
2. Audible alarm with on/off silence function and diagnostic test function (excluding branch).
3. Form C dry contacts
4. Surge Counter
5. No other test equipment shall be required for SPD monitoring or testing before or after installation.

M. Distribution Panels and Branch Panels SPDs shall be equipped with the following diagnostics:

1. Visual LED diagnostics including a minimum of one green LED indicator per phase, and one red service LED.
2. No other test equipment shall be required for SPD monitoring or testing before or after installation.

. Surge protection devices installed for individual equipment items shall meet or exceed the following criteria:

Minimum surge current capability (single pulse rated) per phase shall be:

Siemens Model TPS3 0305 series with dry contacts and audible alarm and surge current capability shall be 50kA per phase. Advanced Protection Technologies Model S50A series with dry contact and surge current capability shall be 50kA per phase.

UL 1449 Listed Voltage Protection Ratios VPRs shall not exceed the following:

VOLTAGE			
208Y/120V	600V	1000V	1000V

480Y/277V		2000v	1000v
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UL 1449 Listed Maximum Continuous Operating Voltage MCOV (verifiable at UL.com):

System Voltage	Allowable System Voltage Fluctuation %	MCOV
208Y/120		150V
4. 480Y/277V		320V

NEMA 4X enclosure.

Furnished with Polycarbonate

PART 3 - EXECUTION

3.1 INSTALLATION

- A. The installation shall meet the following criteria:
1. Install per manufacturer's recommendations and contract documents.
 2. Install units plumb, level and rigid without distortion
 3. One primary suppressor shall be installed external to the service entrance in accordance with manufacturer instructions.
 4. Service Entrance SPD shall be installed on the line or load side of the main service disconnect.
 5. Service Entrance SPD ground shall be bonded to the service entrance ground.
 6. At Service Entrance or Transfer Switch, a UL approved disconnect switch shall be provided as a means of servicing disconnect if a 60A breaker is not available. 7. One SPD shall be installed external to each designated distribution panelboard.
 8. At Distribution, MCC and Branch, TVSS shall have an independent means of servicing disconnect such that the protected panel remains energized. A 30A breaker (or larger) may serve this function.
 9. SPD shall be installed per manufacturers installation instructions with lead lengths as short (less than 24") and straight as possible. Gently twist conductors together.
 10. Installer may reasonably rearrange breaker locations to ensure short & straightest possible leads to SPDs.
 11. Before energizing, installer shall verify service and separately derived system Neutral to Ground bonding jumpers per NEC.

3.2 ADJUSTMENTS AND CLEANING

- A. Remove debris from SPD and wipe dust and dirt from all components.
- B. Repaint marred and scratched surfaces with touch up paint to match original finish.

3.3 TESTING

- A. Check tightness of all accessible mechanical and electrical connections to assure they are torqued to the minimum acceptable manufacture's recommendations.
- B. Check all installed panels for proper grounding, fastening and alignment.

3.4 WARRANTY

- A. Equipment manufacturer warrants that all goods supplied are free of non-conformities in workmanship and materials for one year from date of initial operation, but not more than eighteen months from date of shipment.

END OF SECTION

DIVISION 16 • ELECTRICAL

SECTION 16500 • LIGHTING

PART 1 GENERAL

1.1 LIGHTING SCHEDULE

- A. The Contractor shall install lighting fixtures and accessories as shown on the drawings and/or described herein. The Contractor shall also install lamps for all fixtures.

1.2 LIGHTING SUBMITTALS

- A. Prior to ordering field lighting poles and light fixtures, the Contractor shall submit for approval drawings indicating pole locations and calculated light levels as described below. Printout of light levels shall be prepared with a 20' grid that show light levels as specified are achieved. Contractor shall prepare additional printouts of light levels to accommodate repositioning fixtures or to accommodate adding fixture to achieve the desired field lighting.

PART 2 • PRODUCTS

2.1 FIELD LIGHTING

- A. The field lighting arrangement shown on the Drawings shall be used as a guideline for locating poles and quantities of fixtures. Fixture quantities shown shall be considered as a minimum quantity required. The Contractor shall furnish computer generated field lighting point-by-point lighting calculations and aiming chart for each fixture to meet the following requirements:
 - 1. Baseball Field - Infield illumination shall be maintained at a minimum of 50 footcandles at 36" above grade using a 0.95 maintenance factor as described by current I.E.S. standards. Outfield illumination shall be 30 footcandles at 36" above grade. Maximum to minimum light ratio shall not exceed 2.0 to 1 for infield, and 2.5 to 1 for outfield. No test point shall exceed 10% illumination of the adjacent test point. Test points shall be on nominal 20-foot grid.
- B. Sports Lighting Fixture - The field lighting fixture shall be a nominal 630-watt LED sports floodlight, with 613 lumen output. Fixture shall have a maximum power consumption of 630 watts. Fixture shall be enclosed in die cast aluminum, NEMA 4X housing. Fixtures shall include NEMA 4 and NEMA 5 beam patterns as required for the lighting distribution specified. Provide other beam patterns as required. Fixture brackets shall include onebolt mounting with vertical and horizontal aiming protractors. Fixture shall be UL listed for wet locations, IP66 rating, and 25°C ambient temperature.

2.2 SPORTS LIGHTING POLES

- A. Refer to specification Section 16510 for description of the Stadium Lighting poles.

PART 3 • EXECUTION

3.1 INSTALLATION

A. Unless otherwise specified, lighting fixtures shall be permanently installed and connected to the wiring system.

B. The Contractor shall support each fixture in accordance with manufacturers installation requirements.

3.2 FIXTURE AIMING

A. The Contractor shall aim all light fixtures in accordance with the manufacturer's field lighting plan. Aiming of fixtures shall occur before final inspection and acceptance of work. Contractor shall schedule an inspection of the field lighting at a time convenient with the engineer after all fixtures have been properly aimed and all lamps are operating.

END OF SECTION

DIVISION 16 • ELECTRICAL

SECTION 16510 • EXTERIOR LIGHTING

PART 1 - SPORTS LIGHTING POLE SPECIFICATION

1.1 SCOPE

- A. The following specification covers design, fabrication and installation of galvanized steel direct embedded sports lighting poles.
- B. Poles shall be designed and constructed so that all wiring and grounding facilities are concealed within the pole. All hand holes, wire inlets/outlets, inserts for pole steps, thru-bolt holes and ground wires shall be cast into the pole during the manufacturing process.
- C. The manufacturer shall have a minimum of 15 years of experience in the design, testing, and manufacturing of steel sports lighting poles.
- D. The pole foundation shall be designed by a Louisiana registered, Professional Civil Engineer. Foundation designs for the poles shall be submitted for approval, and a safety factor of 3 shall be used in the foundation design. The poles and foundation shall be designed to meet the 2013 AASHTO Standards with a minimum wind withstand rating of 110 mph. The poles shall be designed to provide a mounting height above the surface at its foundation as shown on the Drawings, and shall be of sufficient strength to support the effective projected area (EPA) of the pole and all of the attached devices included as applicable, lighting fixtures, cross arms, mounting brackets, and any other device which are to be attached to the pole.

1.2 APPLICABLE SPECIFICATION AND STANDARDS

All specifications, codes or documents referred to in this specification are to be considered as part of this specification. If a conflict should arise between this specification and any referenced material, this specification shall take precedence. The latest revision of the following specifications, standards and codes shall apply:

- 1. American Association of State Highway Transportation Officials (AASHTO).
- 2. American Society for Testing and Standards (ASTM)
 - a. ASTM A-123 Standard Specification for Hot-Dip Galvanized Coatings
 - b. ASTM A-153 Standard Specification for Hot-Dip Galvanized Hardware
 - c. ASTM A-572 Standard Specification for High-Strength Low-Alloy Steel
- 3. American Welding Society (AWS)
 - a. AWS D1.1 Code for welding in building materials

1.3 STORAGE AND HANDLING OF POLES

- A. General: Store poles on decay-resistant treated skids at least 1 foot above grade and vegetation. Support pole to prevent distortion and arrange to provide free air circulation.
- B. Metal Poles: Retain factory-applied pole wrappings until just before pole installation. For poles with nonmetallic finishes, handle with web fabric straps.

PART 2 - PRODUCTS

2.1 STEEL POLES

- A. All poles shall be designed to meet AASHTO requirements for wind loading. All design theories shall be accepted by industry as good engineering practices.
- B. Poles shall be designed considering the application of both dead load and wind load. The moment at any point along the length of the pole is to be the sum of moments resulting from dead loads and dynamic loads developed by a sustained wind of 110 MPH. The wind force is to be computed by multiplying the specified wind pressure by the effective projected area (EPA) of the individual components.
- C. All welds shall be of the highest quality and performed by American Welding Society certified welders conforming to the latest version of the American Welding Society specification AWS D1. 1.
- D. All poles, mounting brackets and platforms are furnished with a coating of hot-dip galvanized to ASTM A-123. Miscellaneous hardware will be galvanized to ASTM A-153.
- E. The steel pole shall consist of the appropriate number of pole sections, either round or multi-sided, for the height specified. Each section shall be fabricated from high strength low alloy steel conforming to ASTM A-572, with a minimum yield strength of 55,000 psi. These shafts shall telescope over each other to match the overall desired pole height. The overlap telescoping joint shall have a length that is the larger of 2 feet or 1 1/2 times the diameter of the inside of the female tube. The sections shall be pre-fitted and match marked at the factory. All sections shall maintain a uniform taper from top to bottom. There shall be at least one longitudinal seam weld in the tapered section of the shaft. The longitudinal seam weld shall have at least 60% penetration, except in the areas where the shaft section telescopes over another. In overlapping areas, the weld penetration shall be 100%. No circumferential weld splices may be used in fabricating the shafts.
- F. An oval reinforced hand hole, having a nominal 4" x 6" x .25" wall, will be installed 18" above the ground line. A hand hole cover and attaching hardware is included with each hand hole assembly. A ground lug will be welded inside the pole opposite the hand hole. This is standard on all poles unless otherwise specified.
- G. The embedded portion of the pole which will be 10% of the free pole height + 2 ft, will include two 3" x 5" reinforced hand holes at 180 degrees apart, 24" below ground level for wire access. A 1/4" thick bearing plate will be integrally welded to the base of the shaft to aid in anti-rotation. A mastic coating may be applied at the ground level of the pole shaft +1- one foot to serve as added protection against the elements.

- H. The manufacturer shall supply engineering calculations, which support pole design, hardware when applicable and foundation design when soil borings are provided. Calculations shall be approved and stamped by a registered professional engineer.

I. Pole shall be designed so that the deflection does not exceed 1.1% of the free height of the pole at its maximum EPA under a wind loading equivalent to $\frac{1}{2}$ the designated ultimate wind speed, including gust factor.

- J. Poles shall include lightning rod with ground conductor to ground rod a pole base.

2.2 MARKING

- A. All poles shall be clearly identified with an identification plate fabricated from Brass. The plate shall be aligned horizontally and vertically and shall have suitable anchors welded to the back to permit permanent bond to the pole.

B. The following information shall be stamped into the identification plate with letters not less than one-eighth (1/8) inch high:

1. Name of manufacturer;
2. Customer name;
3. Date of manufacture;
4. Pole class and/or ground line moment;
5. Length of pole;
6. Pole weight;
7. Fabrication number;
8. Structure number.

2.3 SAFETY HARNESS

- A. Each pole shall be furnished with a safety cable with cable grab. Furnish one safety harness with D ring and 6-foot lanyard.

2.4 FIXTURE ARMS & BRACKETS

- A. Fixture support arms and brackets shall be galvanized steel. Number of arms and brackets will vary per pole. Refer to the photometric plans for quantity of fixtures and aiming instructions for each pole.

PART 3 • EXECUTION

3.1 QUALITY CONTROL AND TESTING

- A. The Supplier shall, at any time deemed appropriate by the Purchaser, supply a written statement describing the Quality Control Program currently implemented.

- B. The Purchaser shall maintain the right to perform partial or complete inspections of the Supplier's facility. The Supplier shall advise the Purchaser one-week in advance of fabrication of the Purchaser's order in order that the inspection can be made.
- c. Certified copies of test reports for the structural members, and other materials shall be supplied by the Supplier to the Purchaser upon request.

3.2 INSTALLATION

- A. Set units plumb, square, level, and secure according to manufacturer(s) written instructions and shop drawings.
- B. Pole Installation: Use fabric web slings (not chain or cable) to raise and set poles.
- C. Fixture Attachment: Fasten to indicated structural supports.
- D. Fixture Attachment with Adjustable Features or Aiming: Attach fixtures and supports to allow aiming for indicated light distribution.
- E. Lamp fixtures with indicated lamps according to manufacturer's instructions. Replace malfunctioning lamps.

3.3 GROUNDING

- A. Lightning Protection: Manufacturer shall provide integrated lightning grounding via concrete encased electrode grounding system as defined by NFPA 780 and be UL Listed per UL 96 and UL 96A. If grounding is not integrated into the structure, the manufacturer shall supply grounding electrodes, copper down conductors, and exothermic weld kits. Electrodes and conductors shall be sized as required by NFPA 780. The grounding electrode shall be minimum size of 5/8 inch diameter and 8 feet long, with a minimum of 10 feet embedment. Grounding electrode shall be connected to the structure by a grounding electrode conductor with a minimum size of 2 AWG for poles with 75 feet mounting height or less, and 2/0 AWG for poles with more than 75 feet mounting height.

3.4 FIELD QUALITY CONTROL

- A. Inspect installed units for damage.
- B. Provide advance notice of dates and times for field tests.
- c. Provide instruments to make and record test results.

3.5 DELIVERY

- A. The pole delivery schedule shall be at the discretion of the Contractor and coordinated with the Owner.

END OF SECTION