

BID PROPOSAL

The City of Rolla, MO herein City, desires to establish pricing for the purchase and delivery of **Kingshighway Roadway Lighting** meeting the listed specification(s).

General Requirements

This Request For Bid seeks bids from qualified organizations to provide Kingshighway Roadway Lighting purchased and delivered to a City facility. Each bid must be mailed or delivered in a sealed envelope to Rolla City Clerk. All questions regarding the RFB shall be submitted to Darin Pryor.

Rolla City Clerk:
Carol Daniels
City of Rolla
901 North Elm Street 3rd Floor
(P.O. Box 979) Rolla, MO 65402
Email: cdaniels@rollacity.org

Phone: 573-426-6948
Fax: 573-426-6947

Engineer:
Darin Pryor
City of Rolla
901 North Elm Street 3rd Floor
(P.O. Box 979) Rolla, MO 65402
Email: dpryor@rollacity.org

Contractual Requirements

The contractor shall provide Kingshighway Roadway Lighting purchased and delivered for the City of Rolla Missouri (hereinafter referred to as "City") in accordance with the requirements and provisions stated herein. Unless otherwise stated, the contractor shall not deviate from the requirements. Unless otherwise specified herein, the contractor shall furnish all material, labor, facilities, equipment, and supplies necessary to provide the deliverables/services required herein.

Specific Requirements

Accent lighting supplier shall furnish the following materials and associated support for installation by the Owner's contractor via separate contract:

- (19) King Luminaire KA210-A-1-6 TXT BK bracket arms or owner approved equal.
- (19) Stresscrete KSH25-G-E11-DB-GFI poles or owner approved equal. Poles must have a GFI outlet with a weather proof "While in Use" cover.

Poles and bracket arms specified above shall be delivered to the City within 60 days of award. Proposed equivalent lighting components will be evaluated and approved or rejected at the sole discretion of the Owner.

Bid Submission

All bids must be received in a sealed envelope clearly marked **359 - Kingshighway Lighting Materials**. All bids must be received at the above address no later than September 23, 2020, 11:00 AM, CDST.

Open Competition / Request For Bid Document:

- a. It shall be the bidder's responsibility to ask questions, request changes or clarification, or otherwise advise City if any language, specifications or requirements of an RFB appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFB to a single source. Any and all communication from bidders regarding specifications, requirements, competitive bid process, etc., must be directed to the buyer from City, unless the RFB specifically refers the bidder to another contact. Such communication should be received at least three (3) working days prior to the official bid opening date.
- b. Every attempt shall be made to ensure that the bidder receives an adequate and prompt response. However, in order to maintain a fair and equitable bid process, all bidders will be advised, via the issuance of an amendment to the RFB, of any relevant or pertinent information related to the procurement. Therefore, bidders are advised that unless specified elsewhere in the RFB, any questions received less than three (3) working days prior to the RFB opening date may not be answered.
- c. Bidders are cautioned that the only official position of the City is that which is issued by City in the RFB or an amendment thereto. No other means of communication, whether oral or written, shall be construed as a formal or official response or statement.
- d. City monitors all procurement activities to detect any possibility of deliberate restraint of competition, collusion among bidders, price-fixing by bidders, or any other anticompetitive conduct by bidders which appears to violate state and federal antitrust laws. Any suspected violation shall be referred to the Missouri Attorney General's Office for appropriate action.

Bids will be reviewed to determine if the bid complies with the mandatory requirements, and to determine the lowest and best bid. Any bidder supplying pricing on any brand other than the requested item must supply specification sheets at the time of bid. All bid items submitted will be reviewed prior to award for equality.

It is the sole responsibility of the bidder to check for any addendum during the time this project is out for bid and to ensure their bid price reflects any addendum.

Invoicing and Payment Requirements

The contractor shall submit an itemized invoice on Company Letterhead. The contractor shall be paid in accordance with the firm, fixed prices stated on the pricing page of this document. Other than the payment specified on the pricing page, no additional charges, including fuel surcharges shall be made to the contractor for any reason.

Payment

Payment will be made only after the final inspection of each unit, meeting all listed specifications and free of defects.

Contacts

If you have any questions regarding bid requirements, please call Darin Pryor at (573) 364-8659.

PRICING PAGE

Pricing/Award

The bidder shall provide a firm, fixed price in the table below for the contract period for providing the deliverables in accordance with the provisions and requirements of this RFB. All costs associated with providing the required deliverables/services shall be included in the prices stated below.

Qty		Delivery Location	Unit Price	Extended Unit Price
19	Poles	City of Rolla		
19	Bracket Arms	City of Rolla		
		TOTAL		

Award/Cancellation

Award will be to each of the lowest bid as listed on the Pricing Page. Failure to comply with the requirements published in this bid may result in the bid being subject to rejection.

Delivery Requirements

Delivery must be made by the end of business **60 calendar days** from notice of award.

ENDORSEMENT PAGE

SEALED BIDS TO BE MAILED TO:

City of Rolla Missouri

Rolla City Clerk

P.O. Box 979

Rolla, MO 65402

Clearly Marked: **359 - Kingshighway Lighting Materials**

Firm: _____

Street: _____

City: _____

State: _____ Zip: _____

Phone: _____

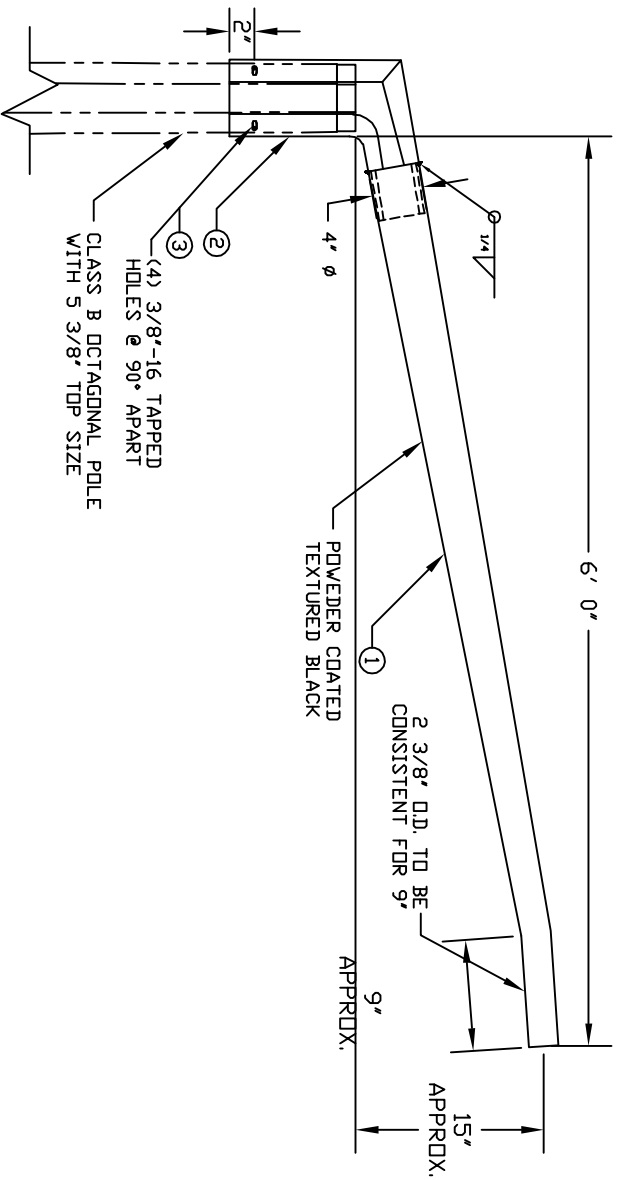
Fax: _____

Name: _____

Signature: _____

Email: _____

REV.	ALTERATION	E.C.N.	DATE	BY
A	DWG. REVIEWED & UPDATED		01/19/16	AA.



ENGINEERING APPROVED: _____



KING LUMINAIRE

COMPANY INC.

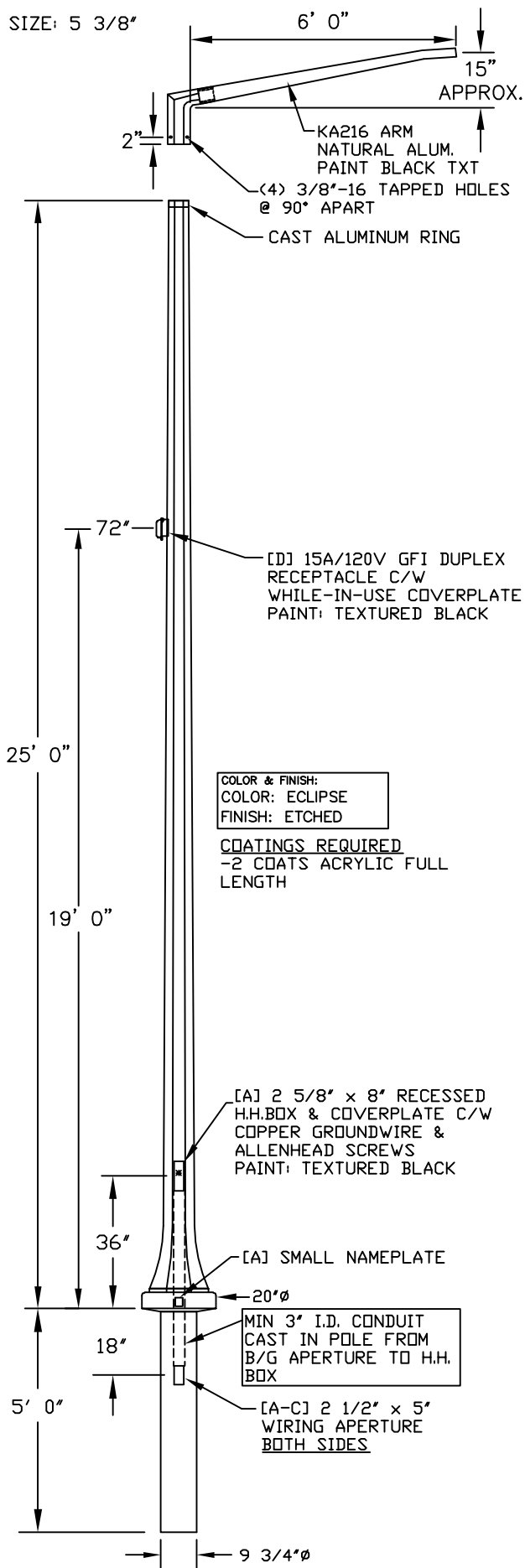
840 WALKER'S LINE, P.O. BOX 7,
 BURLINGTON, ONTARIO, CANADA L7R 3X9
 P.O. BOX 266 JEFFERSON, OHIO
 1153 STATE ROUTE 46N
 U.S.A. 44047

DRAWN BY: ARNOLD ALVELLA	DATE: 08/13/01	DWG. SIZE	REV. A
CHECKED BY:	DWG. SCALE: 1:1	CAD. NO.: \\DWG\501B0074	
QUANTITY:	COLOUR:		

PROJECT: KA216 LDW RISE TAPERED ALUMINUM DAVIT

DRAWING NAME: FABRICATION DRAWING	DRAWING NO.: 501B0074	STOCK CODE NO.: KA-01456	SHEET OF
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TOP SIZE: 5 3/8"



COLOR & FINISH:
 COLOR: ECLIPSE
 FINISH: ETCHED

COATINGS REQUIRED
 -2 COATS ACRYLIC FULL LENGTH

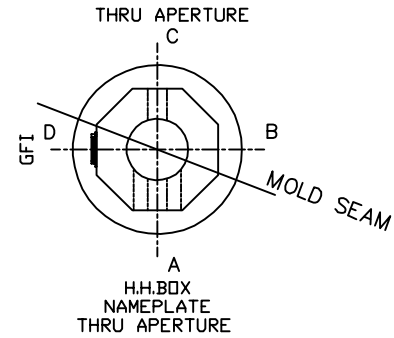
REV.	ALTERATION	DATE	BY
A	REVISED PER MARK UPS	12-9-19	RF

CUSTOMER ORDER No:	-
STRESSCRETE ORDER No:	-

POLE SPECIFICATIONS

CATALOG NO.: KSH25-G-E11-DB-GFI
 S/F KA216
 QUANTITY: -
 COLOR: ECLIPSE
 FINISH: ETCHED
 POLE TOP: 5 3/8" FL/FL
 POLE BUTT: ø9 3/4"
 POLE LENGTH: 30' 0"
 APPROX. WEIGHT: 1,930 lbs.
 MIN. RACEWAY: ø1 1/8"

"CONTRACTOR TO INSTALL BURNDY KSU22 6-25 UNIVERSAL SERVIT SPLIT BOLT CONNECTORS (OR EQUIVALENT). CONNECTING THE #6 COPPER WIRE FROM THE POLE TO THE LUMINAIRE GROUND & A SEPARATE CONNECTOR BONDING POLE TO SUPPLY GROUNDING CONDUCTOR."



SECTIONAL VIEW

CUSTOMER APPROVAL & DATE: _____



King Luminaire • Stresscrete • Est. 1953

STRESSCRETE GROUP

Manufacturing Locations:
 Burlington, Ontario 1-800-268-7809
 Northport, Alabama 1-800-435-6563
 Atchison, Kansas 1-800-837-1024
 Jefferson, Ohio 1-800-268-7809

PROJECT/CUSTOMER:
 ROLLA, KINGS HIGHWAY IMPROVEMENTS

DRAWN BY: MJ	AT: SC3	CHECKED BY:	DATE: 11-18-19	REVISION: A
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DRAWING TYPE: CONCEPT DRAWING
 DRAWING NUMBER: ROLLA KINGSHWY IMPRV - 1

NOTE:
 STRESSCRETE MAKES NO CLAIMS THAT THE REFERENCE EMBEDMENT DEPTH SHOWN IS SUITABLE FOR SUPPORTING THIS STRUCTURE. IT IS RECOMMENDED THAT A COMPETENT PROFESSIONAL EVALUATE THE SOILS PRESENT ON SITE, CONFIRMING REQUIRED EMBEDMENT DEPTH, HOLE DIAMETER AND BACKFILL MATERIAL TO BE USED.

KINGSHIGHWAY LIGHTING MATERIALS SPECIFICATIONS

These specifications apply to the manufacturing of centrifugally cast, prestressed ornamental Sheridan style reinforced concrete pole ("spun concrete"). Catalog # KSH25-E11-DB-GFI by StressCrete and/or approved equal. Dimensions shall be as per reference drawing # ROLLA KINGSHWY IMPRV -1. All spun concrete pole designs and wind loading calculations shall be prepared by an experienced licensed engineer. The manufacturer shall have a minimum of 60 years' experience in the design and production of spun concrete poles.

CERTIFICATION, DESIGN AND MANUFACTURING SPECIFICATIONS

The design and manufacturing of spun concrete poles shall meet the following standards and specifications:

- The manufacturing company shall be certified by Canadian Standards Association (CSA) to CSA-A14 (latest revision);
- Poles shall be designed to AASHTO-LTS (latest revision) to withstand a 3 second gust wind speed that is determined by geographical area utilizing the AASHTO wind map;
- Poles shall be designed/manufactured in accordance to:
 - CSA-A14: Concrete Poles (latest revision);
 - ANSI-C136.36B: Roadway and Area Lighting Equipment - Concrete Lighting Poles (latest revision);
 - ASTM-C1089: Standard Specification for Spun Cast Prestressed Concrete Poles (latest revision);
 - The Guide Specification for Prestressed Concrete Poles, issue of the Journal of the Prestressed Concrete Institute.

RAW MATERIALS

Coarse Aggregate

Shall be clean washed limestone or granite with a maximum size of 1/2", graded as to achieve optimum quality in the finished product and shall conform to ASTM-C33.

Fine Aggregate

Shall be clean washed concrete grade sand, free of clay and other deleterious matter and shall conform to ASTM-C33.

Cement

Shall be equal to ASTM C-150, Type I/II and CSA Type 10 or Type 30.

Admixtures

Water reducers, retarders or accelerating admixtures shall conform to ASTM-C494. Air entrainment and efflorescence control shall also be used.

Water

Shall be free of acids, alkalis and organic materials.

Color Pigments

Where used shall be non-fade iron or chromium oxides.

Steel

- Prestressing steel reinforcement shall be uncoated 7-wire strand and shall conform to ASTM A416 and CSA G279.
- Deformed reinforcing bars shall conform to ASTM A615, and CSA G30.12.
- Helical reinforcing wire shall conform to ASTM A82 and when applicable have a hot dipped galvanized coating as per ASTM A641, Class 3.

MANUFACTURING

Internal Steel Reinforcement

- Skeleton: Rings increasing in diameter are welded to a continuous longitudinal steel bar. A bare copper wire is bonded to the continuous longitudinal steel bar and exiting the hand hole box. The taper of the skeleton is equal to the taper of the pole to ensure proper concrete coverage.
- The required stress wires and/or rebar are tied to the skeleton. Size and quantity will vary based upon pole length and class.
- Plastic spacers are used to ensure a minimum concrete cover of $\frac{3}{4}$ " on all longitudinal reinforcing steel.
- The skeleton and longitudinal reinforcing steel cage shall be wrapped in both directions with galvanized steel helical reinforcement. The pitch shall not be greater than 3.5" or the radius of the pole, whichever is less. Diameter of helical reinforcement is determined by pole class.
- Ornamental poles shall have additional reinforcing rings at large bell locations for added durability.

Mold Set Up

The mold is set up to include all through holes, hand hole boxes, apertures, etc. per customer specifications. The steel cage is placed into the mold and centered with precision drilled end plates and spools. To further center the cage within the mold, the bottom cables are pre-stressed to remove any slack in the cable.

Concrete Batching:

- A fully automated batching system is to be used for all concrete batches. These batches are to be recorded and kept for a minimum of 7 years.
- A concrete cylinder test shall be performed for each 52 cubic yards (40 cubic meters) of concrete poured. Air entrainment and slump tests are performed at the same time.
- The concrete used shall achieve a minimum 28-day compressive strength of 8,000 psi (55 Mpa).
- Air entrainment admixture shall be used to produce 5-8% air content in the static cast cylinder.

Stressing

- Prestressing steel reinforcement shall be stressed to a maximum of 70% of their ultimate capacity.
- Elongation is to be measured on all strands.

Spinning

Molds are to be spun at 300 – 350 rpm for a duration of 6-15 minutes.

Curing

- Steam is not to be introduced for a minimum of 45 minutes after the spinning process is complete.
- Concrete temperature not to exceed 140 degrees Fahrenheit (60 degrees Celsius).

Demolding

- Prestressing strand shall not be released until a minimum concrete compressive strength of 3,500 psi (25 Mpa) is achieved.

Finishing

- Per customer specification, poles are to be finished in:
 1. Etched Eclipse
 2. Acrylic coating.

QUALITY CONTROL

- A production drawing shall be provided for each type of pole manufactured.
- A quality control technician shall approve each stage of manufacturing before proceeding to the next.
- All quality control procedures shall be mandated in a written manual and be available for review.

STANDARD ACCESSORIES

- All lighting poles shall be provided with a fish wire to facilitate cable installation.
- A #6 copper ground wire shall be supplied inside the hand hole, bonded to the pole's internal steel cage.
- Hand holes shall be box type, rugged high density cast zinc and shall be supplied with a close fitting inset cover of the same material. Cover plate shall be mounted to the hand hole box with stainless steel screws. Metallic hand hole boxes shall be electrically grounded.
- Wiring apertures, giving access to the raceway of the pole, shall be free from any sharp edges or debris.

ACCESSORIES

- Cast aluminum ring at tip of pole for arm mounting.
- KA216 Low Rise Tapered Aluminum Davit Arm painted textured black
- GFI electrical receptacles with while-in-use cover painted textured black.

WARRANTY

Manufacturer shall provide a limited lifetime warranty for its spun concrete pole products to be free from defects in materials and workmanship for the intended lifetime of the product.