CITY
OF
JOPLIN, MISSOURI

BID PACKAGE

#2015-07

for

Pre-fabricated building
Gene Bassman Softball complex

JOPLIN Athletic Complex Dept.
3301 W. 1st Street
Joplin, MO 64801

NOTICE TO BIDDERS

The City of Joplin, Missouri will accept sealed bid proposals until Tuesday, January 6th, 2015; 2:00pm at the Joplin Athletic Complex Department located at 3301 W. 1st Street**,** Joplin, Missouri, 64801 to PURCHASE the following:

Pre-fabricated building
Gene Bassman Softball Complex

Specifications and bid forms are available from Greg Bertoncino, Joplin Athletic Complex, by calling 417-625-4750 or by writing to the address indicated above. Any bids received after the specified deadline will be returned to the vendor.

The City reserves the right to evaluate all bids, to reject any or all bids and re-bid at a later date. The City may waive any irregularities in the bid or negotiate variances from specifications, and make awards that are in the best interests of the City. The City will have final decision in all matters regarding acceptance of bids and issuance of awards.

The City encourages minority and female owned businesses to submit bids on all City purchases.

Leslie Haase, CPA
Finance Director

Publication Date: ***Tuesday, December 16th, 2014***.

INSTRUCTIONS TO BIDDERS

The City of Joplin, Missouri proposes to PURCHASE the following:

To purchase Pre-fabricated building for Gene Bassman softball complex. All necessary materials and labor, freight/delivery, crane off loading and setting of the building on customer prepared site .

NOTE: INCLUDE BID FORM IF DESIRED

MARK BID ENVELOPES: "***BID #2015-07, Pre-fabricated building Gene Bassman Softball Complex January 6th, 2015; 2:00pm***"

Questions concerning the specifications and bidding procedures should be directed to Greg Bertoncino, Joplin Athletic Complex Department at 3301 W. 1st Street, Joplin, MO, 64801 or by phoning 417-625-4750.

Gene Bassman Softball Complex
Pre-Fabricated Umpire Comfort Station Building

Building must be a prefabricated approximate10.6 foot x 20 foot utility building with three (3) Galvanized Doors, the main room will be approximately 10'-3.5" by 10'-6", the water closet area will be approximately 7'-

2.5” by 6’-3” with a 60” ADA turning circle, the utility room will be approximately 2’-8” by 7’-2.5”. The facility will have a split type room air conditioner single zone mount heat pump. A 30 gallon electric hot water tank will be provided. State of Missouri Engineered sealed drawings are required. Site will be prepared by Joplin Parks and Recreation. Site preparation drawings and directions will be provided by selected vendor. Townsteel DB, Classroom Latches, Cedar Shake Roof, Barnwood Walls, three vinyl sliding windows, mini-split HVAC unit, vitreous china plumbing fixtures (1-Lavatory, 1-Water Closet), hand dryer, office area firred/insulated. Bid will Include; freight/delivery to the Joplin, MO area, crane, off loading and setting of the building on location**.** Facility will aesthetically match the existing concession and restroom facility.

SPECIFICATIONS
FOR
BUILDING

1.0 SCOPE

This specification covers the construction and placing of the building.

2.0 SPECIFICATIONS

ASTM C33 Concrete Aggregates
ASTM C39 Method of Test for Compressive Strength of Cylindrical Concrete Specimens
ASTM C94 Standard Specification for Ready-Mixed Concrete
ASTM C143 Method of Test for Slump of Concrete
ASTM C150 Standard Specification for Portland Cement
ASTM A185 Standard Specification for Steel Welded Wire Reinforcement, Plain, or Concrete
ASTM C192 Method of Making and Curing Test Specimens in the Laboratory
ASTM C231 Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method
ASTM C309 Standard Specifications for Liquid Membrane-Forming Compounds for Curing Concrete
ASTM C494 Standard Specification for Chemical Admixtures for Concrete
ASTM A615 Standard Specification for Deformed and Plain Carbon- Steel Bars for Concrete Reinforcement
ASTM C979 Standard Specification for Pigments for Integrally Colored Concrete
ACI 211.1 Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete
ACI 306 Cold Weather Concreting
ACI 318 Building Code Requirements Structural Concrete and Commentary (includes Errata)
PCI MNL 116 Quality Control for Plants and Production of Precast Prestressed Concrete Products

3.0 MANUFACTURER CRITERIA

The manufacturer supplying the requested precast concrete utility facility must meet the following:

A. Manufacturer must be ISO 9001 certified at the time of bid.

B. Manufacturer must not have defaulted on any contract within the last five years.

C. Manufacturer must provide stamped, engineered drawings prior to acceptance.

D. Manufacturer must be pre-approved prior to bidding.

E. Manufacturer must show four examples of precast concrete flush facilities produced, installed, and in use as an example of their ability to perform on this contract.

F. Manufacture shall provide a 20 year warranty.

4.0 DESIGN CRITERIA

The facility must be designed to meet the following criteria. Calculations and Engineer's stamped drawings are available, for standard buildings, upon request by the customer and are for their sole and specific use only. The design criteria are to ensure that the facility not only will withstand the forces of nature listed below but will provide protection from vandalism and other unforeseen hazards. Design criteria include provisions of the 2006 IBC Code.

A. Roof Snow Load

1. The building must be designed to withstand 350 pounds per square foot snow load

B. Floor Load

1. The building must be designed to withstand 400 pounds per square foot floor load

C. Wind Load

1. The building must withstand the effects of 150 mile per hour (3-second gust) wind exposure C

D. Earthquake

1. The building must withstand the effects of a seismic group 1 seismic design category E earthquake.

5.0 MATERIALS

A. Concrete - General

The concrete mix design will be designed to ACI 211.1 to produce concrete of good workability.

1. Concrete will contain a minimum of 505 pounds of cementitious material per yard cubic yard. Cement will be a low alkali type III conforming to ASTM C-150.

2. Coarse aggregates used in the concrete mix design will conform to ASTM C33 with the designated size of coarse aggregate #67.

3. Minimum water/cement ratio will not exceed .45. Slump will not exceed 5".

4. Air-entraining admixtures will conform to ASTM C260. Water reducing admixtures will conform to ASTM C494, Type A. Other admixtures will not be used without customer approval.

B. Colored Concrete
1. Color additives will conform to ASTM C979. A 12”x12”x1”
color sample will be available for customer approval.
2. The following will contain colored concrete:
a. Building walls
b. The same brand and type of color additive will be used throughout the manufacturing process.
c. All ingredients will be weighed and the mixing
operation will be adequate to ensure uniform dispersion of the color.
C. Cold Weather Concrete
1. Cold weather concrete placement will be in accordance
with ACI 306.
2. Concrete will not be placed if ambient temperature is expected to be below 35 degrees F. during the curing period unless heat is readily available to maintain the surface temperature of the concrete at least 45 degrees F.
3. Materials containing frost or lumps of frozen materials will not be used.
D. Hot Weather Concrete
The temperature of the concrete will not exceed 95 degrees F. at the time of placement and when the ambient reaches 90 degrees F. the concrete will be protected with moist covering.
E. Concrete Reinforcement
1. All reinforcing steel will conform to ASTM A615. All
welded wire fabric will conform to ASTM A185.
2. All reinforcement will be new, free of dirt, oil, paint,
grease, loose mill scale and loose or thick rust when placed.
3. Details not shown of drawings or specified will be to ACI 318.
4. Steel reinforcement will be centered in the cross-sectional
area of the walls and will have at least 1” of cover on the under surface of the floor and roof.
5. The maximum allowable variation for center-center spacing of
reinforcing steel will be ½”.
6. Full lengths of reinforcing steel will be used when possible. When splices are necessary on long runs; splices will be alternated from opposite sides of the components for adjacent steel bars. Lap bars #4 or smaller a minimum of 12”. Lap bars larger than #4 a minimum of 24 bar diameters.
7. Reinforcing bars will be bent cold. No bars partially embedded in concrete will be field bent unless approved by the customer.

F. Sealers and Curing Compounds
1. Curing compounds, if used, will be colorless, complying with
ASTM C309, type I or 1-D.
2. Weatherproofing sealer for exterior of building will be clear, pure acrylic water repellant penetrating sealer.

G. Caulking, Grout, Adhesive and Sealer
1. All caulking will remain flexible and non-sag at temperatures from
-50 to +194 degrees Fahrenheit.
2. Interior joints will be caulked with a paintable silicone based caulk.
3. Exterior joints will be caulked with a tripolymer sealant caulk which compliments the exterior color.
4. Grout will be a non-shrink type and will be painted to match the

color of surrounding concrete as nearly as possible.
5. Epoxy concrete adhesive will be two component, rigid, non-sag gel adhesive for bonding to dry or damp surfaces, moisture insensitive.
6. Portland cement mortar will consist of one part Portland cement, three parts sand and enough water to make workable mixture.

H. Paint
1. All paints and materials will conform to all Federal specifications or be similar "top-of-the-line-components". Paints will not contain more than .06 percent by weight of lead.
2. Type of paints for buildings.
a. Inside concrete surfaces
I Interior floors will be a 1-part water based epoxy with a silica sand suspension to provide uniform texture. The color will be gray.
II Interior walls and ceilings will be a modified acrylic penetrating pigment. The color will be white.
b. Metal surfaces both inside and out
I DTM enamel
c. Exterior concrete surfaces
I Exterior walls and roof will be a pure acrylic water repellent penetrating stain in the same color as the walls or roof followed by a clear acrylic anti-graffiti sealer.

I. Steel Doors
1. Doors will be flush panel type 1-3/4" thick, minimum 16 gauge prime coated steel panels with minimum 12 gauge internal bracing channels with polystyrene core. Door size to be standard exterior single door.
2. Door frames will be knockdown or welded type, single rabbet, minimum 16-gauge prime coated steel, width to suit wall thickness. Three (3) rubber door silencers will be provided on latch side of frame.
J. Door Hinges
Door hinges will be 3 per door with dull chrome plating 4-1/2"x4-1/2", adjustable tension, automatic-closing for each door.

K. Lockset
1. Lockset will be a deadbolt with US 26D chrome finish. Lockset will be Schlage D70PD PLY 626 or equivalent.
2. Upper surface bolt will be a Stanley 1088 with bright zinc finish and 6 ½" bolt strike, pad lockable.1
3. Lower surface bolt will be a Stanley 1088 with bright zinc finish and 6 ½" bolt strike, pad lockable.1
4. Dead bolt will be a Lori Lock standard model with a double cylinder 2 ¾" backset, and US26D finish. The cylinder will be a standard 1 1/8" – 1 ¾" Schlage Mortise cylinder with compression ring and 626 finish.

L. Threshold
An extruded aluminum threshold, Pemco #170 or equal.
M. Door Sweep/Seal
Door sweep/seal will be Pemco #420ASL.

N. Wall Vents

Wall vent will be crank operated allowing the unit to be opened or closed. Crank will be removable. Vent cover will be 14 gauge 304 stainless steel painted with DTM and anchored into the concrete wall with high strength anti-rust tap con fasteners. Vent to come with insect screen. Cover to be recessed a minimum ¾" on exterior walls with a 45 degree bevel. Interior to be flush mounted. Wall vent will not protrude from the wall.

O. Windows

1. Window frames will be constructed from steel.

2. Window glazing will be 3/16" thick translucent pebble finished mar-resistant Lexan.

3. Windows to have ¾" recess with 45 degree bevel.

4. Window frames to have vandal resistant fasteners.

6.0 MANUFACTURE

A. Mixing and Delivery of Concrete

Mixing and delivery of concrete will be in accordance with ASTM C94, section 10.6 through 10.9 with the following additions. Aggregate and water will be adjusted to compensate for differences in the saturated surface-dry condition.

2. Concrete will be discharged as soon as possible after mixing is complete. This time will not exceed 30 minutes.

B. Placing and Consolidating Concrete

Concrete will be consolidated by the use of mechanical vibrators. Vibration will be sufficient to accomplish compaction but not to the point that segregation occurs.

C. Finishing Concrete

1. Interior floor and exterior slabs will be floated and troweled until all marks are removed. A light broom finish will be applied to the exterior slabs.

2. All exterior building walls and exterior screen walls will be any one of available textures

3. All exterior surfaces of the roof panels will be any one of available textures. The underside of the overhang will have a smooth finish.

D. Cracks and Patching

1. Cracks in concrete components which are judged to affect the structural integrity of the building will be rejected.

2. Small holes, depressions and air voids will be patched with a suitable material. The patch will match the color, finish and texture or the surrounding surface.

3. Patching will not be allowed on defective areas if the structural integrity of the building is affected.

E. Curing and Hardening Concrete

1. Concrete surfaces will not be allowed to dry out from exposure to hot, dry weather during initial curing period.

7.0 FINISHING AND FABRICATION

A. Structural Joints

1. Wall components will be joined together with two welded plate

pairs at each joint. Each weld plate will be 6" long and located one pair in the top quarter and one pair in the bottom quarter or the seam. Weld plates will be anchored into the concrete panel and welded together with a continuous weld. The inside seams will be paintable caulk. The outside seams will use a caulk in a coordinating building color or clear.
2. Walls and roof will be joined with weld plates, 3"x6", at each building corner.
3. The joint between the floor slab and walls will be joined with a grout mixture on the inside, a matched colored caulk on the outside and two weld plates 6" long per wall.

B. Painting/Staining
1. An appropriate curing time will be allowed before paint is applied to concrete.
2. Some applications may require acid etching. A 30% solution of hydrochloric acid will be used, flushed with water and allowed to thoroughly air dry.
3. Painting will not be done outside in cold, frosty or damp weather.
4. Painting will not be done outside in winter unless the temperature is 50 degrees F. or higher.
5. Painting will not be done in dusty areas.
6. Schedule of finishes
a. Inside concrete surfaces
I Inside floors will be 1 coat of 1-part water based epoxy with a silica sand suspension to provide uniform texture.
II Interior walls and ceilings will be 2 coats of a modified acrylic penetrating pigment, followed by 1 coat of clear sealer.
b. Metal surfaces both inside and out
I 2 coats of DTM enamel
c. Exterior concrete surfaces
I Exterior walls will be 2 coats of pure acrylic water repellent penetrating stain in the same color as the walls or roof followed by 1 coat of clear acrylic anti-graffiti sealer.

8.0 TESTING
A. The following tests will be performed on concrete used in the manufacture of buildings. All testing will be performed in PCI certified laboratories. Testing will only be performed by qualified individuals who have been certified ACI Technician Grade 1. Sampling will be in accordance with ASTM C172.
1. The air content of the concrete will be checked per ASTM C231 on the first batch of concrete. The air content will be in the range of 4.5% +/- 1.75%.
2. The compressive strength of the cylinders will be tested to ASTM C39. We will make one (1) cylinder for release, one (1) for 7 days and one (1) for 28 days. The release must be a minimum strength of 2500 psi, the 7-day must be a minimum of 4000 psi and the 28-day must be a minimum of 5000 psi.
3. A copy of all test reports will be available to the customer as soon as 28-day test results are available.

9.0 INSTALLATION

A. Scope of Work

Work specified under this Section includes excavation, backfill and placement of precast concrete building.

B. Placement

The floor of the building should be the high spot in the site chosen. The floor should be above the surrounding ground level with the pathway sloped up to meet the entryway. This will help prevent water drainage in the building.

C. Excavation

The hole dug to accommodate the fill for the base must be large enough to be workable and allow the floor of the building to fit on the fill for the base when placed.

D. Compacting

The bottom of the area must be compacted after it has been dug out. After the base has been placed, it must be compacted as well. The bearing of the soil and base should be a minimum of 1,500 pounds per square foot.

E. Base

After compacting the bottom of the area, a minimum of 6" of a compacted, ¾" minus material base of gravel (i.e. road base) should be placed for support, leveling and drainage purposes. The base also limits frost action. The base must be confined so as to prevent washout, erosion or any other undermining.

F. Access to Site

Delivery to site made on normal highway trucks and trailers.

10.0 WARRANTY—PRECAST DIVISION

A warranty against defects in material or workmanship for a period of twenty (20) years on all concrete components is mandatory. All other non-concrete components will carry a one (1) year warranty.

Unauthorized Aliens Workers Act

The successful bidder will have to sign an agreement that they are enrolled and participating a Federal Work Authorization Program ("FWAP") that ensures that all of its employees or agents or subcontractors have the legal right to work in the United States, as defined in 8 U.S.C. 1324a(h)(3) and RSMo § 285.525-285.555, and that it will maintain this compliance for the entire duration of its contract with the City of Joplin, and will provide an Affidavit of Compliance to the City stating the same.

AFFIDAVIT OF COMPLIANCE
(Missouri Unauthorized Alien Workers Act)

My name is _____ (name) _____ and I am the _____ (Title) _____ of _____ (Company Name) _____. I hereby represent, affirm and certify to the City of Joplin that my company does not knowingly employ any person who is an unauthorized alien in connection with contracted services with the City. I further affirm that my company is actively enrolled and participating in a federal work authorization program with respect to all employees working in connection with the contract services provided to the City.

_____

_____

Affiant