

# CITY OF BELLEFONTAINE NEIGHBORS, MISSOURI 9641 BELLEFONTAINE ROAD ST. LOUIS, MISSOURI 63137

# **BID FORM**

## DATE: November 4, 2021

## PROJECT TITLE: Gym Roof Structural Design for Repair

CSI FORMAT: None

## **SUBMISSION OF BIDS:**

Sealed Bids for the above project shall be received at City Hall, 9641 Bellefontaine Rd, St. Louis, MO 63137, **Attention: Judy Mantych, City Clerk Pro Tem**, no later than **Noon on Thursday December 9, 2021**. Sealed envelopes shall be identified with the following information:

"Gym Roof Structural Design for Repair / Attn: Ms. Judy Mantych, City Clerk Pro Tem/ From: <Company Name>". General or technical questions should be directed to:

• Mr. Clayton Klein, City Engineer, (e-mail: cklein@cityofbn.com, tel 314-374-1448). Site visits can be scheduled by contacting him.

AND

Patrick Barrett, Planning & Zoning (e-mail: <u>pbar21@charter.net</u>, tel 314-388-2439).

All corrections and/or clarifications will be answered by addendum.

#### BACKGROUND:

The City of Bellefontaine Neighbors operates and maintains its Recreation Center at the above address originally constructed in 1975. In the last year, it has become apparent that wood trusses supporting the roof of the Gym (a.k.a. Multi-Purpose Room) are sagging and failing. The roof itself, especially at its Northeast end, is sagging causing ponding issues on top of it and leaks into the space below.

The City of Bellefontaine Neighbors (hereinafter "the City") is soliciting proposals for engineering services for permanent repairs and renovations to the Gym to extend its usable life and make other improvements at the same time.

All Engineers are advised that, while reasonable efforts will be made by the City to consolidate the work to minimize the number of mobilizations required, it is understood the work may require multiple trips.

### Timing:

• A grant application has been submitted and grant funds obtained for structural design funds and a significant percentage of installation. It is expected design work would be authorized in early 2022.

### SCOPE OF WORK:

#### **Engineering Design**

Our objective is to obtain a proposal for design services associated with practical, cost-effective repair or replacement of our wood Gym roof trusses and exterior roofing. Exposing a portion of the top of the masonry wall on the east side reveals the interior & exterior masonry terminate at the same elevation. There is a vertical gap between masonry and the roof panels. This gap contains blanket insulation tacked on to wood furring. The exterior of the gap is closed with 2x10 or 2x12 lumber which is also the surface upon which the gutters are mounted.

The existing roof structure appears to use a structural insulated panel like Armstrong Tectum. There is a little water damage evident on a small number of panels at the north end but most of the panels appear to be undamaged from the interior side. If truss replacement from above (craned into place) is the most prudent approach, requiring removal of the existing roof, it may be worth considering corrugated steel deck with acoustic sound deadening on the underside. Additionally, replacing the wood trusses with steel trusses (perhaps in tubular cross section) would be a reasonable substitute. At this point, we're anticipating CSI Categories General Conditions, Demolition, Roof Structure, Electrical (for 30 new LED fixtures & PA wiring), Masonry, Thermal & Moisture Protection and Painting to part of the work. If the trusses can be replaced from inside the building, the scope may shrink. The Gymnasium has a hardwood maple floor we want to preserve from damage.

We are seeking a proposal to review the current design, including field visits, to evaluate options. The work would include discussion of those options with us onsite prior to starting detailed design and finally generating drawings in sufficient quantity & detail to allow us to competitively bid the construction work. Concise specifications shown on the drawings are acceptable & preferred. The Proposal may be presented as a flat fee OR on a time & materials, not-to-exceed basis.

Retrofitting one (1) double door to the Gym with an ADA-compliant operator will also be a part of the field work; its design will be by Contractor (not part of Engineer's scope). Note: Detailed electrical design is not a part of this scope. Structural design shall, however, incorporate allowances for concealing wiring runs within the ceiling as the existing structure does now.

#### Site Visits / Field Measurements & Verification of Assumptions/Pre-Start Meeting

 Engineers & their subcontractors shall visit the site and perform field measurements in enough frequency & detail needed to allow design work to take place. Existing field conditions & measurements shall be verified by the Engineer. Representative(s) of the Engineering firm shall attend a meeting with the City Engineer to be held before work begins. The representative(s) must be involved in management of the design work.

#### **Owner's Preliminary Assumptions of Roof Truss Replacement & Associated Work**

This is presented as a backdrop only of how the Work might be sequenced:

#### 1. Engineering & Design -

- 1.1. Perform field investigation to determine the extent of damage and verify conditions including adherence to supplied drawings.
- 1.2. Determine repair options and advantages & disadvantages of each approach. If only one approach is logical, articulate why in writing to the City Engineer.
- 1.3. Meet with the City Engineer to discuss options. The City Engineer will choose which approach (if more than one is viable) from which detailed design can proceed.
- 2. Design, or direct design of, fabricated steel replacement trusses, roof deck replacement, roof insulation, roof membrane, flashing & trim, acoustical ceiling replacement including electrical raceways for new LED lighting & speakers to be installed and all related appurtenances. Drawings & calculations shall be generated bearing the Structural Engineer's seal and submitted to the City Engineer for review. Generate drawings in sufficient quantity & detail to allow Owner to competitively bid the construction work.
- Details shall be submitted to and checked by the City Engineer for accuracy & completeness prior to start of fabrication. Design shall allow for installation of acoustical ceiling below, or as part of the roof deck, integrating electrical raceways for lighting & sound systems.
  - 3.1. It is anticipated new roof trusses will be constructed of light gage rectangular tube steel, continuously welded together, to bear a visual resemblance to remaining wood roof framing elsewhere in the building. New trusses & hardware shall be commercial-blasted per SSPC-SP6, primed & painted to be visually similar to the existing wood and other roof trusses in the Rec Center.

## 4. Field Installation -

The Contractor shall supply & use Protection (plywood, membrane & appropriate work practices) to prevent damage to the Gym floor during the course of work.

- 5. If roof truss replacement from below is impractical, Contractor shall disconnect lighting in ceiling as prep for removal. Remove & dispose of light fixtures (not to be reused) as preparation for roof removal.
- 6. Weather Protection -

If roof truss replacement from below is impractical, the existing roof deck may have to be opened up in sections in order to allow roof trusses to be removed & replaced. It may be practical to perform truss replacement – opening & closing the roof in two or three stages – to lessen the chance of having the roof open for more than 72 hours at a time, exposing the interior to weather. Protecting the Gym floor with a temporary waterproof membrane during this time will be extremely important and a fundamental requirement for the work. As sections of the roof are opened, the trusses will be replaced, new roof deck shall be installed, anchored, and flat insulation installed & membrane temporarily installed over it until all trusses, roof decking, flat insulation is installed for the entire roof, at which point tapered insulation can be installed & roof membrane permanently installed & flashed in place. Note: This assumes top chords of new roof trusses would be dead flat. The existing wood trusses (WT1) have a slight pitch (1/8" per foot) from center.

- 7. The Contractor shall supply & install new structural insulated panels (SIP's) or corrugated steel decking with acoustical ceilings with built-in raceways for lighting & sound systems similar in appearance to the existing ceiling. The Contractor shall provide manufacturer's documentation & samples for evaluation & acceptance by the City Engineer prior to purchasing them
- 8. Contractors shall include providing & installing a 60 mil EPDM membrane roof system in their scope of work. The membrane roof shall take the place of the existing built-up roof and architectural shingles now in place. The roof system shall be FM-approved, meet or exceed wind ratings for this part of the country and carry a minimum 15-year materials & workmanship (labor) warranty. Roof system manufacturer & type included shall be stated in Contractor's proposal along with the name of the roofing subcontractor.
- **9.** *Non-structural Work:* Electrical Contractor shall include providing, installing & wiring new LED lighting (30 new ceiling fixtures). Level of illumination (lumens) & color of replacement lighting shall match existing as closely as practical. Submittals will be required. Electrical Contractor shall use electrical raceways allowed for in structural design.
- 10. Non-structural Work: Contractor shall clean, prep, spot prime & touch up epoxy-coated interior masonry walls of the Gym in strict accordance with manufacturer's instructions. Wall color to be approved by the City Engineer/Rec Center staff.

# Contractor Inclusions (does not apply to Engineer)

1. Insurance:

Name the City of Bellefontaine Neighbors Missouri as "additional insured" on Contractor's insurance certificate for the duration of this work after authorization to proceed.

- 2. Contractor shall include a **Contract Bond** to guarantee fulfillment and performance of all work promised in the contract.
- 3. Barricading to keep bystanders out of harm's way.
- 4. All labor, expertise, materials and equipment needed for installation.

## **Engineer Exclusions**

5. Other services, materials or equipment not associated with Engineering Design previously described.

BID DOCUMENTS: Sheet Number	Date	<u>Rev.</u>	Title
A4	8/5/74	-	Bellefontaine Neighbors Community Center, (Hastings & Chivetta Architects, Job 1188) "Roof & Lower Level Plans and Details" Note if scaling from drawings: Original size = 30" x 42"
A5	8/5/74	-	Bellefontaine Neighbors Community Center, (Hastings & Chivetta Architects, Job 1188) "Exterior Elevations & Building Sections" Note if scaling from drawings: Original size = 30" x 42"
A10	8/5/74	-	Bellefontaine Neighbors Community Center, (Hastings & Chivetta Architects, Job 1188) "Interior Details & Elevations" Note if scaling from drawings: Original size = 30" x 42"
S2	N/A	-	Bellefontaine Neighbors Community Center, (Hastings & Chivetta Architects, Job N/A) "Roof Framing Plan" Note if scaling from drawings: Original size = 30" x 42"
S5	8/5/74	-	Bellefontaine Neighbors Community Center, (Hastings & Chivetta Architects, Job 1188) "Wood Truss Elevations & Details" Note if scaling from drawings: Original size = 30" x 42"

### **CITY COMPLIANCE REQUIREMENTS:**

It is the law and policy of the City that a wage of no less than the prevailing hourly rate of wages for work of a similar character in the locality in which the work is performed as determined by the Missouri Department of Labor shall be paid to all workmen employed by or on behalf of the City engaged in public works exclusive of maintenance work. All invitations to bid on construction projects for the City must include this requirement.

The City seeks to ensure that the highest quality workmanship will be performed on its projects and to do so, encourages bidders to use employees on the projects who have satisfactorily completed apprenticeship programs developed and operated in accordance with the policy recommendation, dated January 28, 1992, of the Federal Committee on apprenticeship, U.S. Department of Labor, Employment and Training Administration, Office of Workbased Learning, Bureau of Apprenticeship and Training (the "policy recommendation"). All bidders are required to certify in their bids the percentage of their prospective employees for the project which have satisfactorily completed such a program for the type of work they will be performing.

It is the policy of the City that it will affirmatively encourage minority business enterprise and women's business enterprise participation in contracts and programs which it administers with the objective of increasing the participation by businesses owned or controlled by minorities and women and the City will assure that all reasonable efforts are made within the confines of the law which will aid in meeting this objective.

#### **CONTRACT TIME:**

If this Bid is accepted, we will complete the work in (\_\_\_\_\_) calendar weeks from acceptance of this Bid.

#### ADDENDA:

The following Addenda have been received. The modifications to the Bid Documents noted therein have been considered and all costs thereto are included in the Bid Sums.

Addendum #\_\_\_\_\_Dated\_\_\_\_\_

Addendum #\_\_\_\_\_Dated\_\_\_\_

#### **APPLICATIONS FOR PAYMENT:**

Applications for Payment shall be submitted on AIA documents "G702 Application and Certificate for Payment" and "G703 Continuation Sheet".

#### ACCEPTANCE:

This offer is open to acceptance and is irrevocable for ninety (90) days from the bid date. If this bid is accepted by the City of Bellefontaine Neighbors Missouri, we will authorize the work within 90 days and commence on-site work as scheduled with the Project Management Staff.

# **OFFERS:**

Having examined the Place of Work and all matters referred to in the Instruction to Bidders and the Contract Documents prepared by the City of Bellefontaine Neighbors Missouri for the above-mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform the Work for the Sum of:

Gym Roof Structural Design for Repair			\$		dollars
The Above Amount is a flat fee (circle one)				Yes / No	
The Above Amount is time & materials, not-to-exceed (circ	Yes / No				
These amounts are all in lawful money of the United State	es of America.				
Attach a labor rate sheet showing each discipline.					
Contractor Exclusions or Substitutions from Bid Specificat	itions (put on se	eparate letterhead if i	nsufficient space below	w):	
					-
					-
BID FORM SIGNATURE(S): Submitted by:					-
Company Name					
Address					
City, State & Zip					
Phone Number	F	Fax Number			
E-mail Address					
We are a (Proprietorship, Partnership or Corpo	oration)				
If Incorporated, State Incorporated in					
We (are/are not) licensed for work in St. Louis	s County. L	icense or Feder	al ID Number:		
Authorized Signing Officer (If Corporation, SEAL here)	Title			Date	
Authorized Signing Officer	Title			Date	
If the Bid is a joint venture or partnership, add form or forms as above.	additional fo	orms of execution	n for each membe	er in the approp	priate

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