# 11-322

#### 1.1 PRICE PROPOSAL

A. Provide a lump sum price proposal to furnish all design, labor, material and equipment required to supply a complete single span, Fabric-Covered Steel Framed Building System. The nominal dimensions shall be: Length 100 feet, Width 72 feet, Clear Height 28-30 feet. The work shall include design and delivery of all components needed for such Fabric-Covered Steel Framed Building.

## 1.2 QUALITY CONTROL

- A. Single-Source Responsibility: Obtain the Fabric-covered Steel Framed Building System components, including structural framing, industrial covering, and accessory components, from one source.
- B. Manufacturer's Qualifications: Bidder should be experienced in manufacturing Fabric-covered Steel Framed Building Systems that are similar to those specified for this project and have a record of successful in-service performance.
- C. Design Criteria: The engineering/architectural Drawings should indicate sizes, profiles, and dimensional requirements of the Fabric-covered Steel Framed Building System.
- D. All materials and fabrication shall be in compliance with the Ohio State Building Code and IBC Chapter 17 Structural Testing and Special Inspections.

# F. Tests and Inspection

- 1. Inspections shall not relieve the Contractor from full responsibility for the accuracy and character of the Work in all details.
  - b. Fabricator Approval: Approval shall be based upon review of the fabricator's written procedural and quality control manuals and periodic auditing of fabrication practices by an approved special inspection agency paid for by the Fabricator or the Contractor.
- All field welds shall be in accordance with AWS Specifications, and highstrength bolt connections, in accordance with AISC Specifications, shall be subject to an inspection by a testing agency approved by the Steel Frame System Design Engineer and paid for by the Manufacturer

## 1.3 SUBMITTALS

# A. Fabric-Covered Steel Framed Building System

- Submit complete information on Fabric-covered Steel Framed Building system.
  - Include sufficient manufacturer information to substantiate that the design is in accordance with this specification.
- 2. Product data consisting of building system manufacturer's product information for building components and accessories.
- 3. Professional Engineer's Certification: Submit certificate prepared and signed by a Professional Engineer, licensed by the State of Ohio, certifying that the complete Fabric-covered Steel Framed Building System structural framing and covering panels meet indicated loading requirements and codes of authorities having jurisdiction.

### Installation Instructions - Shop Drawings

- a. Supply complete, detailed erection and installation instructions
- Shop drawings for building framing system, industrial fabric, fastening system panels, and other building system components and accessories that are not fully detailed or dimensioned in manufacturer's product data.

- c. Structural Framing: Furnish complete calculations, and fabrication and erection drawings prepared by or under the direct supervision of a Professional Engineer licensed by the State of Ohio.
  - Include details showing fabrication and assembly of the building system.
  - ii. Show anchor bolts settings and sidewall, end wall, and roof framing. Include transverse cross-sections.
  - Calculations shall include, at minimum but not limited to, all design loads, member sizing, connection design, lateral design and base plate design.
- 5. Industrial Fabric Cover Finish Warranty

#### 1.4 WARRANTY

A. Industrial Fabric Cover Finish Warranty: Warranty period for industrial fabric cover is 15 years after the date of Substantial Completion. Furnish the Industrial Fabric Cover manufacturer's written warranty, covering failure of the product within the warranty period.

# 1.5 DELIVERY AND HANDLING

- A. Deliver prefabricated components, sheets, panels, and other manufactured items so they will not be damaged or deformed.
  - 1. Package industrial fabric cover for protection against transportation damage.
  - 2. Handling: Exercise care in unloading industrial fabric covering to prevent surface damage.
  - 3. Stack materials on platforms or pallets, covered with tarpaulins or other suitable weather tight ventilated covering.

## 2.1 MANUFACTURERS

- A. Fabric-covered Steel Framed Building System as manufactured by Natural Light Fabric Structures or equal.
- B. Other Fabric-covered Steel Framed Building Systems having equivalent performance characteristics but which may have deviations from indicated dimensions and profiles may be considered, provided the deviations do not change the design concept or the required performance. Owner shall be the sole determiner of the equivalence of all submitted materials.
- C. Industrial Fabric Cover System shall be Heavy Weight Woven polyolefin Fabric as manufactured by ECP, Inc. or equal

## 2.2 INDUSTRIAL FABRIC COVER SYSTEM

- A. Fabric Cover: Woven high density polyethylene tape with double stack weave minimum weight 12.0 oz/yd², finish coated both sides.
  - 1. Color as selected by Owner from Manufacturer's standard offerings. No manufacturer's logo or advertising shall be visible on any exposed surfaces.
- B. Cover Fastening System: Compatible with Heavy Weight Fabric with zero-stretch belting, welded fabric pockets and minimum 10,000 lb capacity lashing winches, locking winch system.

- F. Framed Openings: Provide three (3)- 14ft x 14ft openings on one side of the structure complete with shapes of proper design and size to reinforce said openings and to carry loads and vibrations imposed, including equipment furnished under mechanical and electrical work. Securely attach to building structural frame.
- G. Steel braces, secondary members and purlins may be galvanized tube as manufactured by Allied Tube and Conduit, or equal. There shall be no welding or other damage during fabrication, delivery and erection to galvanized finish of members utilizing this product.

## 2.4 ACCESSORIES:

A. Fabric Screen Mesh: Subject to compliance with requirements, provide style "8207 MFRTLC" as manufactured by Seaman Corporation or equivalent.

#### 3.1 FABRICATION

- A. Structural Framing: Fabricate components in such a manner that once assembled, they may be disassembled, repackaged, and reassembled with a minimum amount of labor.
  - Shop-fabricate framing components to indicated size and section with base plates, bearing plates, and other plates required for erection, welded in place.
  - Clearly and legibly mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams, and instruction manuals.
  - 3. Provide holes for anchoring or connections shop-drilled or punched to template dimensions.
  - Shop Connections: Provide power riveted, bolted, or welded shop connections.
  - 5. Field Connections: Provide bolted field connections.

## 3.2 INDUSTRIAL FABRIC COVER INSTALLATION

- A. General: Arrange and nest lap joints so prevailing winds blow over, not into, lapped joints.
- B. Apply fabric and associated fastening system for neat and weather tight enclosure.
  - Terminate fabric at edges to cover base connector assembly and at back and side walls.
  - Check and Set locking winch system to provide tight and secure closure.

## 3.3 ACCESSORIES

A. Install fabric screen mesh into framed opening provided by Fabric-Covered Steel Frame System Manufacturer using or galvanized steel aluminum channels.

# 3.4 CLEANING AND PROTECTION

- A. Protect factory finishes from damage.
- B. Repair or replace panels displaying any damage to Fabric covering system.