



Hallandale Beach
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**INVITATION TO BID (ITB)
BID # FY 2017-2018-003**

INGALLS PARK CONSTRUCTION

**EXHIBIT F – PAVILIONS PLANS AND DRAWINGS
PAGES 1-5**

**PREPARED BY:
CITY OF HALLANDALE BEACH
OFFICE OF CAPITAL IMPROVEMENTS
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PAVILLIONS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Pre-fabricated, pre-engineered pavilions on permanent foundation.

1.2 REFERENCES

- A. American Society of /Civil Engineers (ASCE).
- B. American Society for Testing and Materials (ASTM):
 - 1. A36-Carbon Structural Steel.
 - 2. C39-Compressive Strength of Cylindrical Concrete Specimens.
 - 3. C309-Liquid Membrane-Forming Compounds for Curing Concrete.
- C. American Welding Society (AWS).
- D. Building Code Inspector (BCI).
- E. Florida Building Code (FBC).
- F. NFPA 70: National Electric Code

1.3 DESIGN REQUIREMENTS

- A. Ensure the Design of the structure is by a Florida Professional Engineer with the following criteria:
 - 1. Design Live Load:
 - (a) 20 pounds per square foot for slopes greater than 1-1/2:12.
 - (b) 30 pounds per square foot for all other slopes.
 - 2. Wind Load Design: Per FBC and ASCE 7.
 - 3. Florida Building Code.
 - 4. Provide bonding and grounding per NFPA 70.
 - 5. Provide lightning protection per Section 13100-Lightning Protection.

1.4 SUBMITTALS

- A. Five sets of drawings sealed by a Florida Professional Engineer that minimally includes plans (site, floor, and roof) elevations, building and wall sections, details, schedules, etc. Provide signed and sealed calculations.
- B. Shop Drawings:
 - 1. Detailed and include, but not limited to, the following: beams, columns, anchorage, connections, connection of decking, roofing and foundations. Shop Drawings shall show relationship to adjacent components (sidewalks, buildings, play courts, etc.).

2. Foundations: Designed based on an allowable design bearing capacity of 2,000 psf. Prior to commencement of construction, the Owner will retain a Testing Laboratory to perform service to verify soil bearing capacity.
3. Shop drawings shall specify all loads used and engineering assumptions made regarding soil and support conditions.

1.5 QUALITY ASSURANCE

- A. Pavilion: Designed, engineered and fabricated by a building manufacturer who has been continuously engaged for at least 5 years in the design, engineering and fabrication of the type and quality specified.
- B. Welded Components: Comply with the AWS "Standard Code for Arc and Gas Welding in Building Construction" for welding procedures.
- C. Materials: New and unused prior to fabrication.
- D. Design Requirements: Conform to the Florida Building Code.
- E. Contractor
 1. Florida Certified Contractor with an active license.
 2. Provide equipment and ladders.
 3. Review shop drawings for compliance with these specifications and drawings. Shop Drawings: Marked and noted that they have been reviewed by the Contractor prior to submission to the Owner.

1.6 DELIVERY, STORAGE and HANDLING

- A. Do not deliver materials until area designated for storage has been established.
- B. Store materials on raised skids or pallets under provisions of manufacturer's directions.

1.7 WARRANTY

- A. Ten year warranty on materials.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturers: Subject to compliance with the specified requirements, provide pavilions by one of the following manufacturers:
 1. Litchfield.
 2. Poligon.
 3. RCP Shelters.
- B. Substitutions:
 1. Will be considered by the Project Consultant and Owner.

2.2 COMPONENTS

- A. Beams and Columns:

1. Steel, sized as required with necessary cap and base plates for connections welded to column and pre-drilled at factory.
 - (a) Pre-finished with 1 coat of rust inhibitor primer and 2 coats of Rustoleum paint, color to be selected by Owner.
 - (b) Packaged for protection during transit.
- B. Roof Decking:
1. Hardcover Shelter:
 - (a) Noncombustible roof.
 - (b) 24 gage galvalume factory finished with Kynar 500 paint system. Ribs shall be 1-3/16 inch high and 12 inches on center. Panels shall be 3 feet wide, all angles to be factory cut. Ribs shall run with the pitch of the roof for proper drainage. Includes all fasteners, and matching 26 gage metal roofing trim.
 2. Color to be selected by Owner.
- C. Hardware:
1. All required connecting plates to be a minimum 1/4 inch plate, shop fabricated, factory pre-drilled for required fastenings. Plates: ASTM A36 steel.
 2. Ensure all plates, cables, and miscellaneous components are hot-dipped galvanized, or primed and painted, after fabrication. Finish must match adjacent components.
 3. Provide galvanized nails, bolts, nuts, washers, and connectors for complete assembly.
- D. Finish:
1. Color to be selected by Owner.
 2. Provide to owner 1 quart of paint or cold-galvanizing paint as applicable for touch-up for the different components.
- E. Provide isolation protection at interfaces of dissimilar materials to prevent galvanic action.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Concrete:
1. Achieve minimum compression strength of 3,000 PSI at 28-day age. Maximum water/cement ratio of 0.6.
 2. Take concrete test for each day pour. Perform test under provisions of ASTM C39, with 1 specimens tested at 7 days, 2 at 28 days, and 1 cylinder retained in reserve for later testing if required.
 3. Forms: Straight and true.
 4. Exposed Concrete Finish: Broom Finish.
 5. Edges: Tooled 3/4-inch radius.
 6. Voids or Honeycomb: Patched to the satisfaction of Owner.
 7. Slab (When required by Owner):
 - (a) Sloped 1/8 inch per foot from center of slab.
 - (b) Saw cut control joints with 3/16 inch thick blade, cutting 1/4 inch depth of slab thickness at 20 feet intervals, both ways, or as shown on shop drawings, which is closer. Saw cut joint as soon as possible after finishing without tearing or ripping concrete.

- (c) Ensure slab is a minimum 4 inches thick with 1 layer of 6 x 6-W1.4 x W1.4 WWF 3 inches from bottom of slab.
 - (d) Perimeter Edges: Thickened to 8 inches x 8 inches with one #5 grade 60 rebars along the perimeter. Edge of slab shall be one foot past roof eave line.
 - (e) Maximum Variation in Surface: 1/4 inch in 10 feet.
 - (f) Coat surface with an approved liquid-membrane-forming membrane immediately after placing and finishing. Curing compound shall meet ASTM C309, minimum 30 percent solids.
- B. Pavilion
- 1. In accordance with approved shop drawings, including bonding and grounding.
- C. Contractor shall coordinate pavilion, foundations, slab installation/construction, and bonding and grounding.

3.2 CLEANING

- A. Remove construction debris, unused earth and sod from site weekly to prevent the accumulation of waste material or rubbish at no additional cost to the Owner.
- B. Remove temporary fence, and enclosures upon Substantial Completion or as directed by the Owner.
- C. At completion of Work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all exposed surfaces. Leave the site clean and ready to occupy.

3.3 PROTECTION

- A. Provide a temporary fence around construction and storage area until project is complete.
- B. Contractor: Responsible for material shortages, breakage and loss until said materials are permanently installed, inspected by the Owner, and approved for occupancy, any areas or existing items damaged by reason of construction (i.e. sod, fencing, concrete walks, etc.) Are to be restored to their original conditions upon completion of project.

END SECTION

