SECTION 11155 - VEHICLE INSPECTION BOOTHS

PART 1 GENERAL

1.01 DESCRIPTION

A. Section includes provision and installation of five prefabricated booths with accessories, HVAC, electrical systems, and other apparatus necessary for a complete installation.

B. Related Sections:

1. Concrete foundation pad:
2. Electrical: Applicable sections of Division 16

1.02 QUALITY ASSURANCE

A. Manufacturer: A firm with no less than seven years of successful experience in the design and production of units similar to the ones required for this project.
B. Units: Integrated design, completely assembled and prewired.

1.03 PERFORMANCE REQUIREMENTS

A. Fire Resistance:

1. Shell: Manufactured with Class I fire retardant resin.
2. Structural Panels: Provide Class I fire resistant rating with flame spread not over 25, ASTM E-84.

B. Material Properties: Construct panels of fiberglas reinforced polyester (FRP) having the following properties:

1. Flexural Strength	27,000 psi
2. Tensile Strength	12,000 psi
3. Compressive Strength	20,000 psi
4. Flexural Modulus	800,000 psi
5. Tensile Modulus	1,000,000 psi
6. Elongation Before Failure	1.1 %

1.04 COORDINATION

A. Verify dimensions by field measurements and coordinate with approved shop drawings; proper fit and attachment of all items is required.
B. Coordinate concrete flat work and electrical rough-in to conform to prefabricated unit.

1.05 SUBMITTALS

A. Shop Drawings: Indicate components, sizes, installation procedures, wiring diagrams, sizes and types of fastening devices, accessories requiring field installation or connection, and interface with other equipment or work.
B. Samples: Submit color samples of materials having a choice of color for selection by the Architect.
C. Maintenance and Installation Instructions: Submit suggested procedures for installation, care, and maintenance of the materials comprising the unit and of the heating and cooling units.

PART 2 PRODUCTS

2.01 MATERIALS AND COMPONENTS

A. Design unit to withstand:

1. Wind pressure 35 psf
2. Live Load 35 psf
3. Wind Uplift 35 psf

B. If requested by Owner, submit substantiation of compliance with above criteria by means of performance calculations and supporting test data certified by a professional engineer licensed in the State of manufacture.

2.02 UNIT DESCRIPTION

A. Booth: Modular shelter system equal to Model S4, Hy-Tech Series, manufactured by Northern Plastics Corporation, 6733 Myers Road, East Syracuse, New York 13057, Telephone (315) 463-1431, 4'-6" wide by 8'-0" long, rectangular ends, including the following requirements:

1. Provide roof panels with drain scuppers at each end of the unit.

B. Structural Panels: Fiberglass reinforced polyester, glazed to provide 360 degree visibility. Steel 1-1/4" X 1-1/4" X .040" tubes encapsulated into each panel for structural reinforcement.

   1. Hardware: Aluminum or stainless steel.
   2. Exterior Finish: Smooth gel coat, color to be selected.
   3. Interior Finishes: Manufacturer's standard gray or tan carpet on walls, rippled gel coat on ceiling.
   4. Insulation: Insulate wall panels with 3/8" balsa wood core to provide a K factor of 0.11 BTUH per square foot per degree F per inch, for a total 5/8" composite wall. Insulate roof panels for a composite thickness of 1-1/4".

C. Glazing: Bullet-resistant clear, abrasion resistant, glass sheet set into molded heavy duty neoprene gaskets with integral locking strips.
D. Doors: Sliding, with locks keyed alike, panels matching exterior color and finish, extruded aluminum frames with clear anodized finish.
E. Flooring: 3/4" thick APA A-C Exterior Grade plywood with edges and bottom weather protected. Finish flooring vinyl tile in color to be selected from manufacturer's standard. Vinyl bases.

2.03 ELECTRICAL SYSTEMS

A. Pre-wire unit with interior grade plastic coated wire run through concealed conduit except at ceiling where conduit may be exposed. Provide a 100 amp 8 circuit distribution box, two breakers, and "quick-connect" type junction for connection to electrical roughing-in.
B. Provide one wall switch for lights and one duplex outlet, located as shown on approved shop drawings.
C. Lighting: Ceiling mounted 12" X 48" two lamp fluorescent fixture with acrylic diffuser and rapid start ballast.
D. Comply with NEC requirements as applicable to entire installation.

2.04 ACCESSORIES

A. Counters: Type and location shown on the drawings, constructed of hardwood and plywood understructure, exposed surfaces covered with off-white plastic laminate. Bolt to reinforced rib sections of wall panels.

   1. Provide single drawer unit under each counter, fitted with manufacturer's standard hardware.

B. Telephone Mounting Panel: Locate as directed on approved shop drawings.
C. Windows: Front: fixed; Rear: fixed; North: Sliding Alum/Glass Door; South: Sliding Alum/Glass Window; Clear anodized aluminum frames.

D. Provide speaker tube.

PART 3 EXECUTION

3.01 INSPECTION

A. Examine condition of concrete base pad and roughing-in for electrical and traffic control equipment. Do not proceed with erection of booths until work by other trades has been completed and unsatisfactory conditions are corrected. Assembly and erection of the units shall constitute acceptance of conditions and assumption of responsibility for disassembly, removal or reinstallation due to defective work.

3.02 INSTALLATION

A. Install units complete in accordance with approved shop and erction drawings and instructions of the manufacturer. Make necessary corrections and adjustments to insure a rigid, secure, and safe installation.
B. Coordinate installation with the installation and connection of traffic control equipment.

3.03 CLEANING AND ADJUSTMENT

A. Before final acceptance, clean, adjust, and test the unit and accessories.

END OF SECTION