

**SPECIFICATIONS:**

**ITEM S-131  
OPEN HANGAR BUILDING**

**I. Scope of Work**

- A. This Contract shall include all labor, equipment, and materials required to manufacture and deliver one prefabricated open nested steel T-Hangar building. The bidder shall deliver all building materials to South Albany Airport, 6 Old School Road, Selkirk, New York 12158 at a location approved by the Owner.

The minimum building and individual unit dimensions shall be as follows:

- 48'0" wide building
- 40'0" clear height (for 10 interior bays)
- 11'0" clear tail height
- 21'0" clear tail width
- 26'0" clear depth/unit
- 231'0" Approximate Overall Building Length
- 1/2 : 12 Roof Slope

- B. The building shall include the following standard features for the Base Bid:

- 1. Standard color choice for roof panels \*See note below
- 2. Bird proofing of all trusses
- 3. No gutters or downspouts

- C. Installation of an interior roof liner is also included in the bid alternates. The liner shall be suitable to prevent roof condensation from falling on stored aircraft.

- D. The nested T-Hangar will be erected on pier foundations, and a concrete floor is also proposed for the T-Hangar.

- E. The building erection, pier foundations and concrete floor will be constructed by others. The bidder shall supply the required foundation reactions for the owner to design the foundation. Also, the bidder shall furnish the necessary anchor bolt layout plan, drawings and documents to obtain a local building permit and facilitate building erection.

- F. The building shall be designed to meet local and New York State Building Codes with a minimum 40 PSF Roof Snow Load, a 90 MPH fastest wind speed and a 10 PSF Building Dead Load. Assume no collateral loads.

- G. The T-Hangar package shall be supplied as a complete system by a manufacturer who has provided hangar building systems for a minimum of five years.

**II. Material Specifications**

- A. Columns - Columns shall be ASTM A500 Grade B steel tubing or equal with a minimum yield stress of 46,000 lbs. with factory welded brackets and plates of ASTM A36 structural steel plate. No on-site welding shall be required. Columns will be shot blasted, e-coated and powder coated after fabrication.

- B. Trusses - Trusses shall use ASTM A500 steel tubing or equal with a minimum yield stress of 46,000 PSI for the top chord, bottom chord, and all webs. All trusses will be factory welded, and purlin clips shall be welded to the sides of the truss top chord. No on-site welding shall be required. Trusses shall be designed to minimize roosting or nesting of birds. Truss members shall have a full zinc based organic coating applied to the interior surface for corrosion protection. The exterior coating shall be galvanized and/or e-coated and powder coated after fabrication.

- C. Purlins - Purlins shall be ASTM A-500 steel tubing or equal. Purlin sections shall have a full zinc based organic coating applied to the interior surface for corrosion protection. The exterior coating shall be galvanized and/or e-coated and powder coated after fabrication. The finished building system shall include an approved bird proofing system to minimize animal roosting in the trusses.

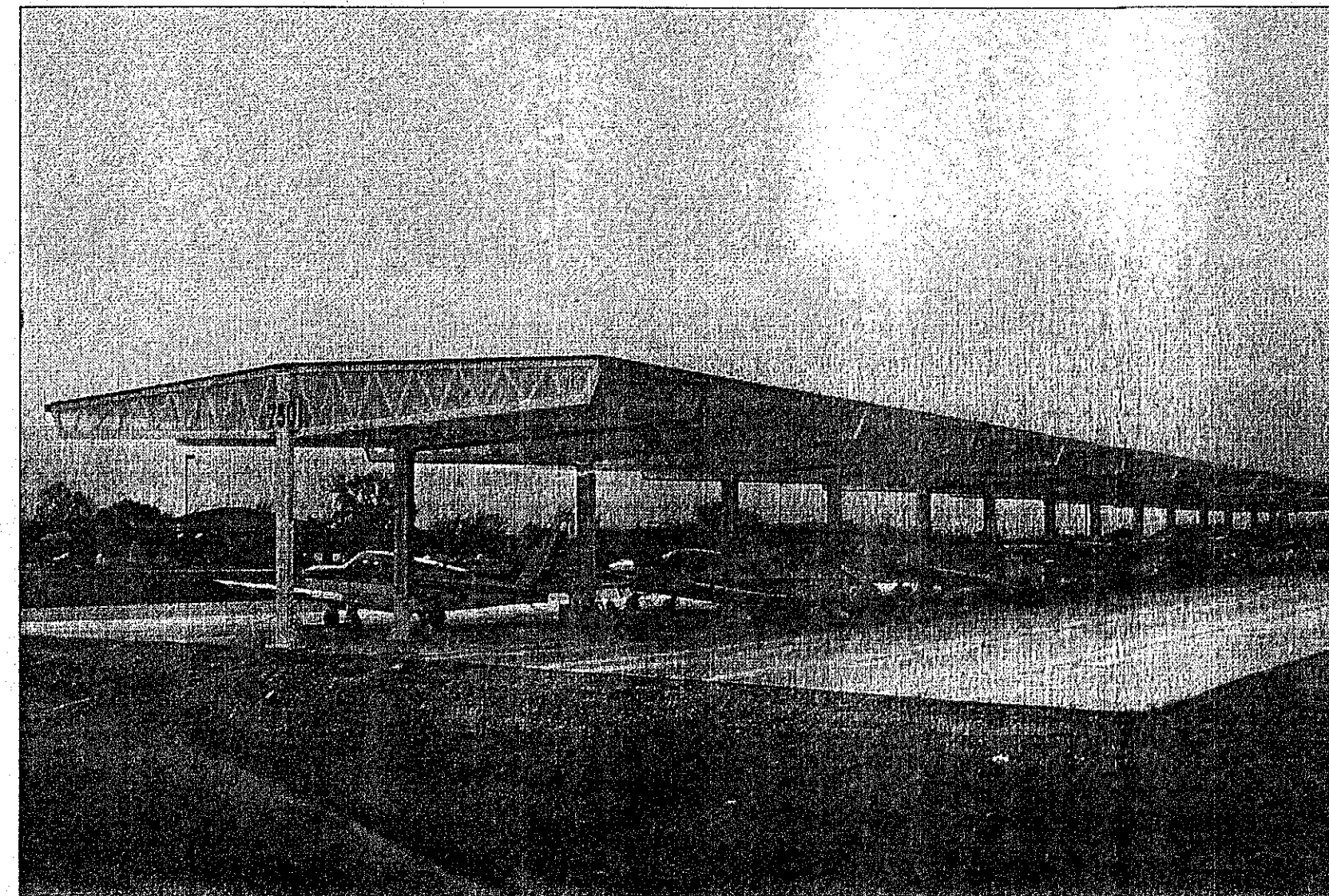
- D. Roof - The roof system shall be 26 gauge (UL 90 rated), 36" wide x 1-1/4" high, with major ribs at 12" on-center and two minor ribs between each major rib with a trapezoidal rib configuration. Field applied sealant is required at all side laps and end laps. The minimum roof slope shall be 1/2 : 12. The substrate shall be galvalume sheet steel with a minimum yield strength of 80,000 PSI. Panels shall be one piece from eave to ridge. No splicing of roof panels will be permitted. The panels shall have a finish side coated with a full coat of premium silicone polyester. The color shall be selected from the metal roof system manufacturer's standard offering. Panels shall have a minimum 20 year manufacturer's finish warranty against cracking, checking and fading.

- E. Fasteners - Roof fasteners shall be self tapping/self drilling type and shall be designed to withstand specified design loads. Fasteners shall be provided with a factory applied coating in a color to match the metal panels. Neoprene washers under the heads will be supplied for all roof fasteners. Fasteners shall be located and spaced in a true vertical and horizontal alignment and in a pattern recommended by panel manufacturer. Proper torque settings shall be applied to obtain controlled uniform compression for a positive seal without rupturing the neoprene washer.

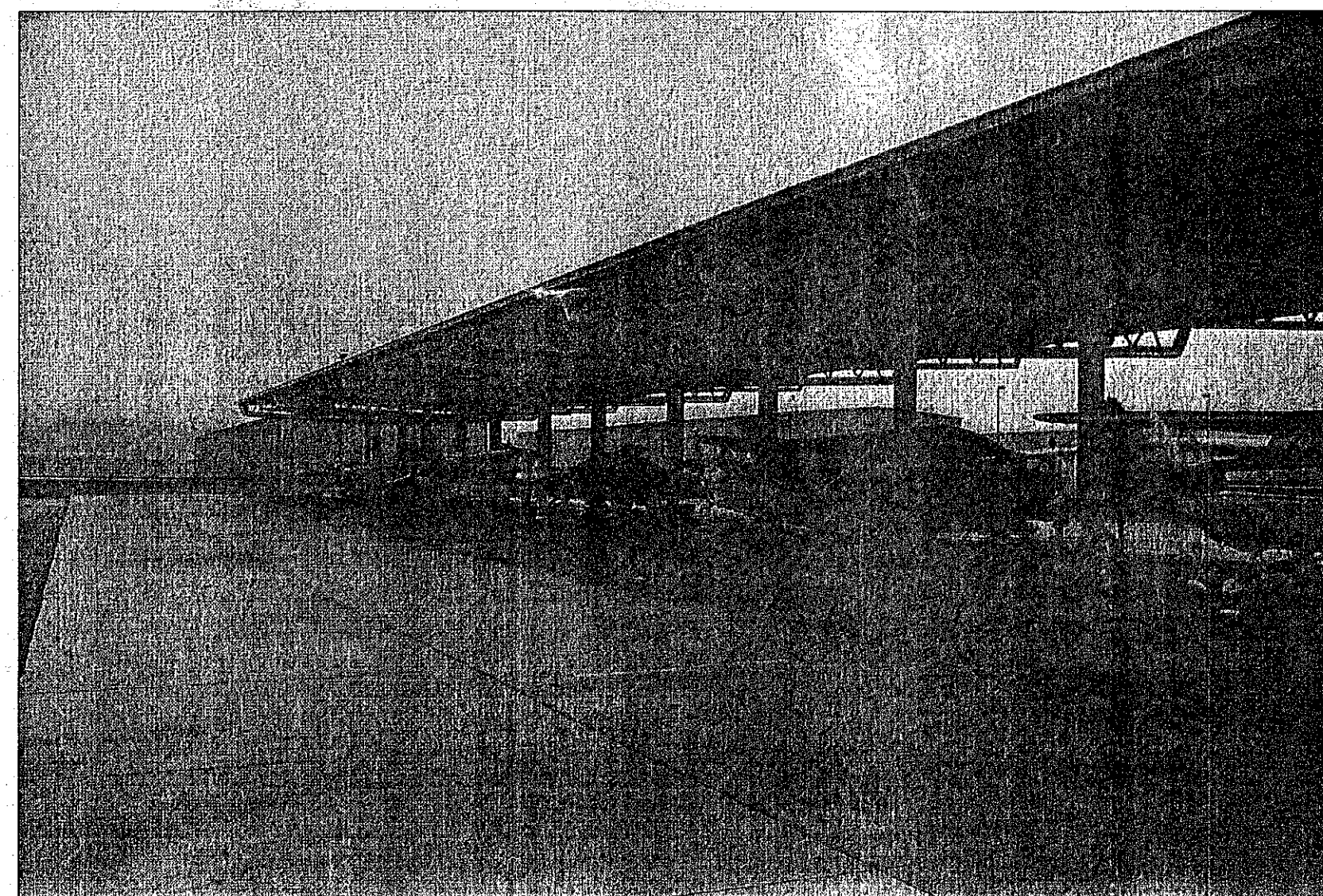
**III. Warranty**

The building manufacturer shall provide a one (1) year warranty on all materials and workmanship from the date of substantial completion.

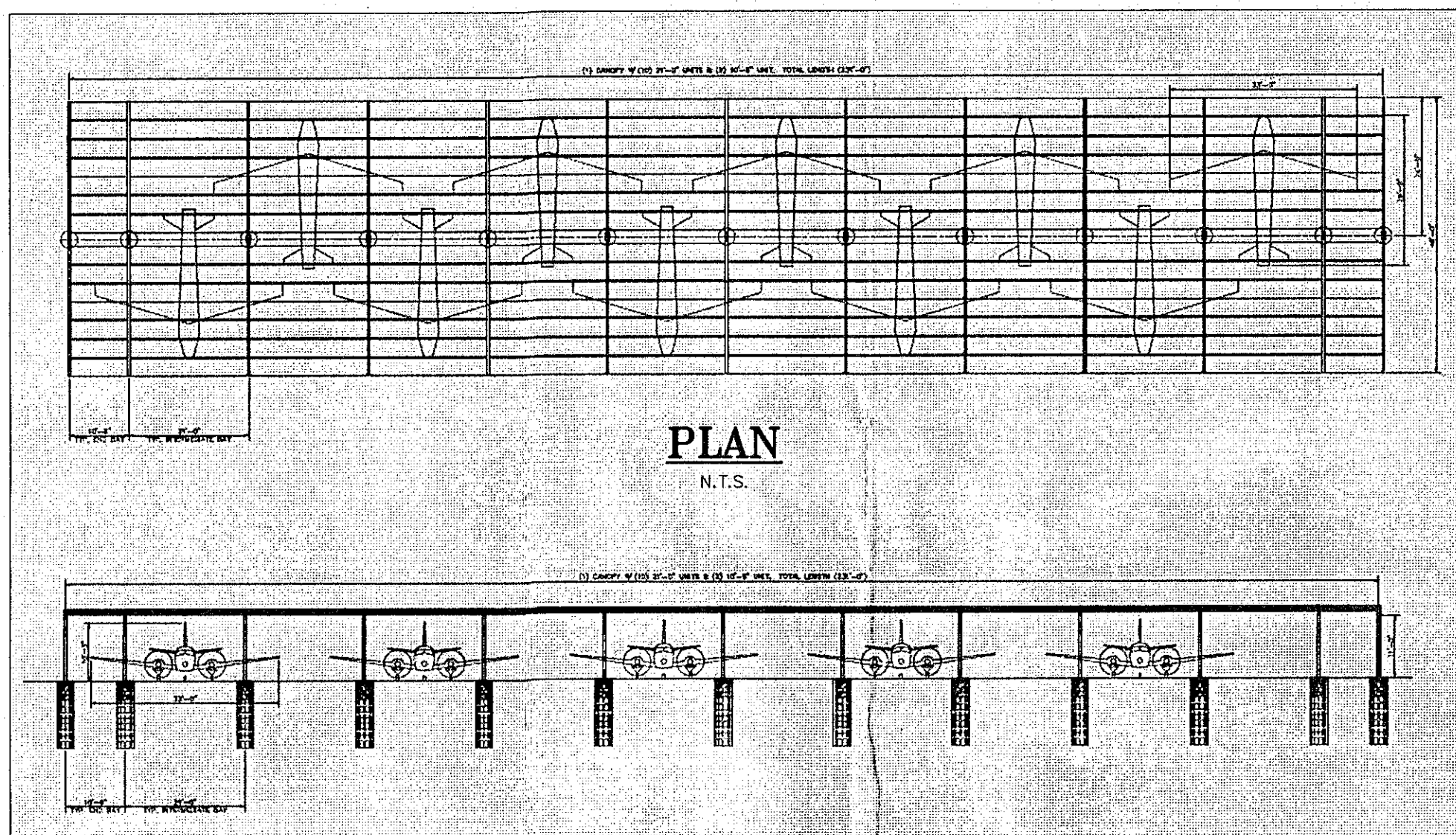
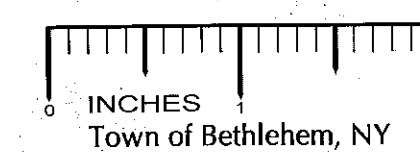
\*Note: Hangar structure to be white or off-white and match existing buildings adjacent to new building.



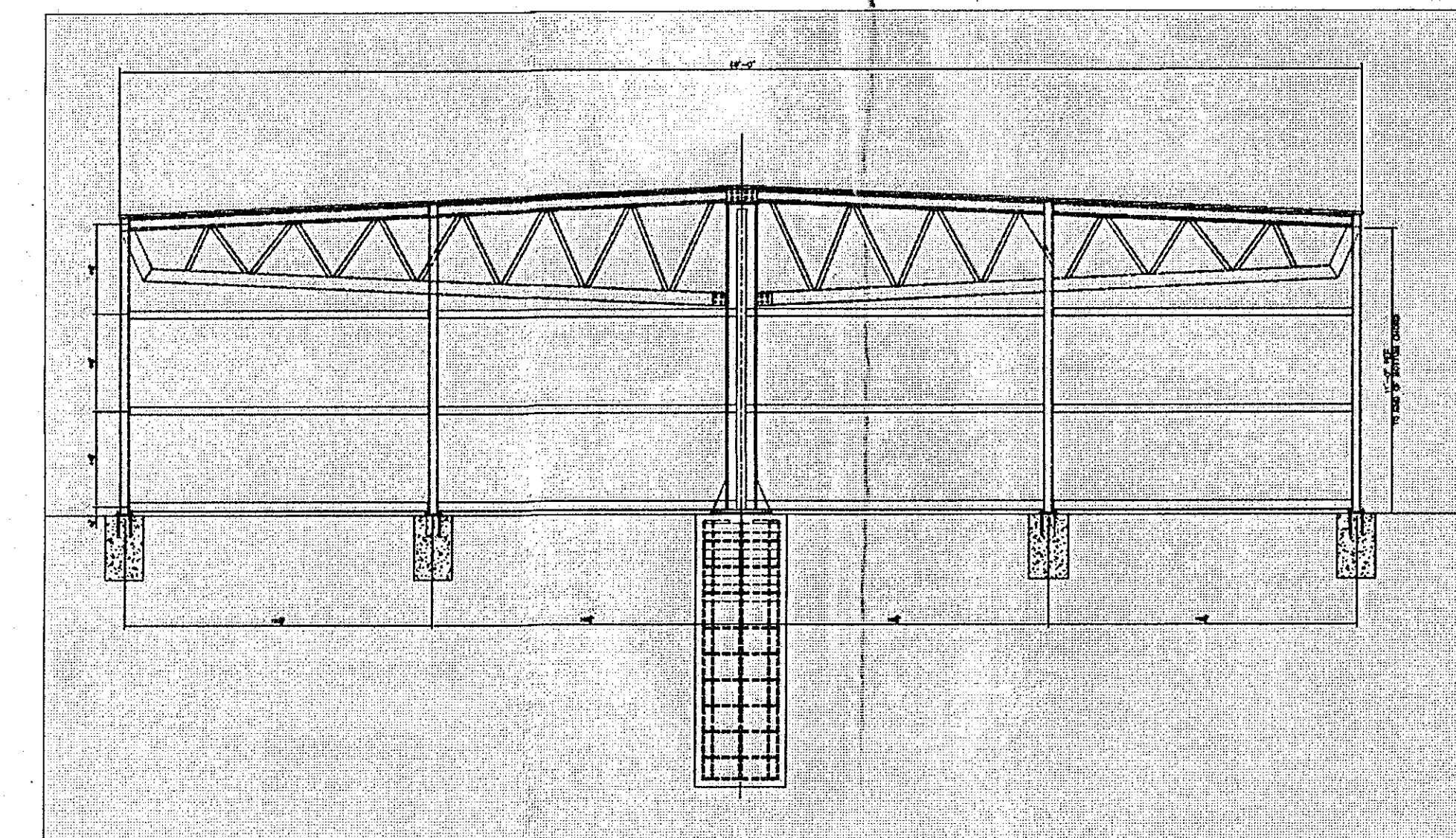
**PHOTOGRAPH #1 - EXAMPLE OF SIMILAR STRUCTURE**



**PHOTOGRAPH #2 - EXAMPLE OF SIMILAR STRUCTURE**

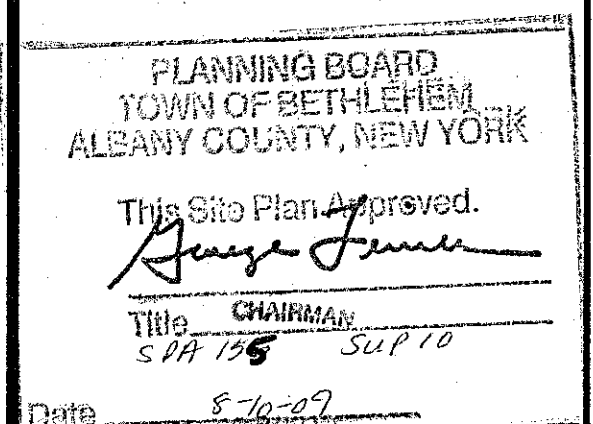


**PLAN**  
N.T.S.



**END ELEVATION**  
N.T.S.

**TOWN OF BETHLEHEM  
PLANNING BOARD APPROVAL**



Client:  
**South Albany  
Airport Corporation**  
6 Old School Road  
Selkirk, New York 12158  
(518) 767-9189

**Passero Associates**  
100 Liberty Pole Way  
Rochester, New York 14604  
(585) 325-1000  
Fax: (585) 325-1591  
Principal-in-Charge Wayne F. Wegman, P.E.  
Project Manager Shawn R. Bray P.E.  
Designed by SRB, MAS



Revisions			
No.	Date	By	Description

**Building Details**

Transient Aircraft  
Parking Apron & T-Hangar  
South Albany  
Airport

Town/City: Bethlehem  
County: Albany State: New York

Project No.  
**25247.05**

Drawing No.  
**10**

Scale:  
**N.T.S.**

Date  
**July, 2009**