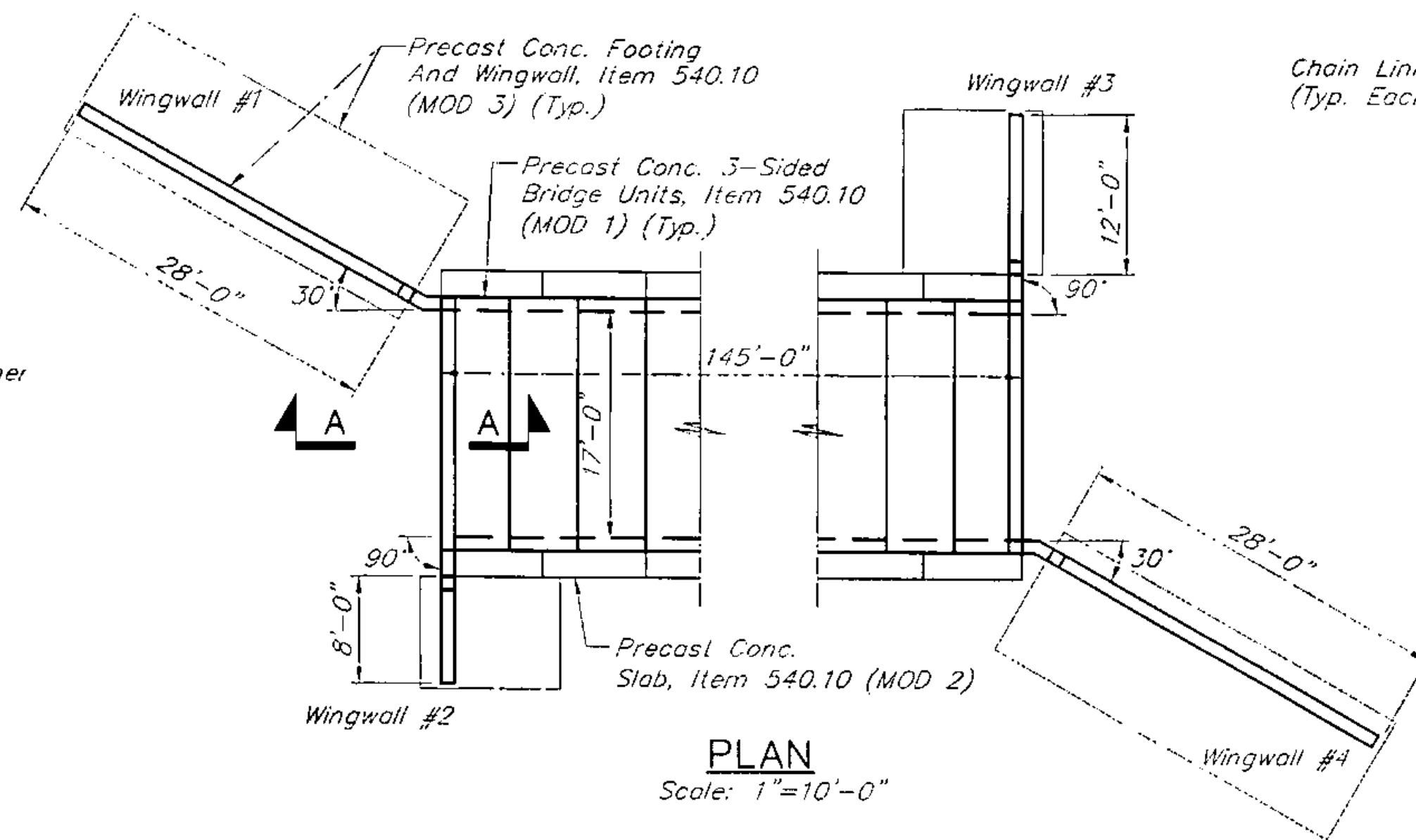
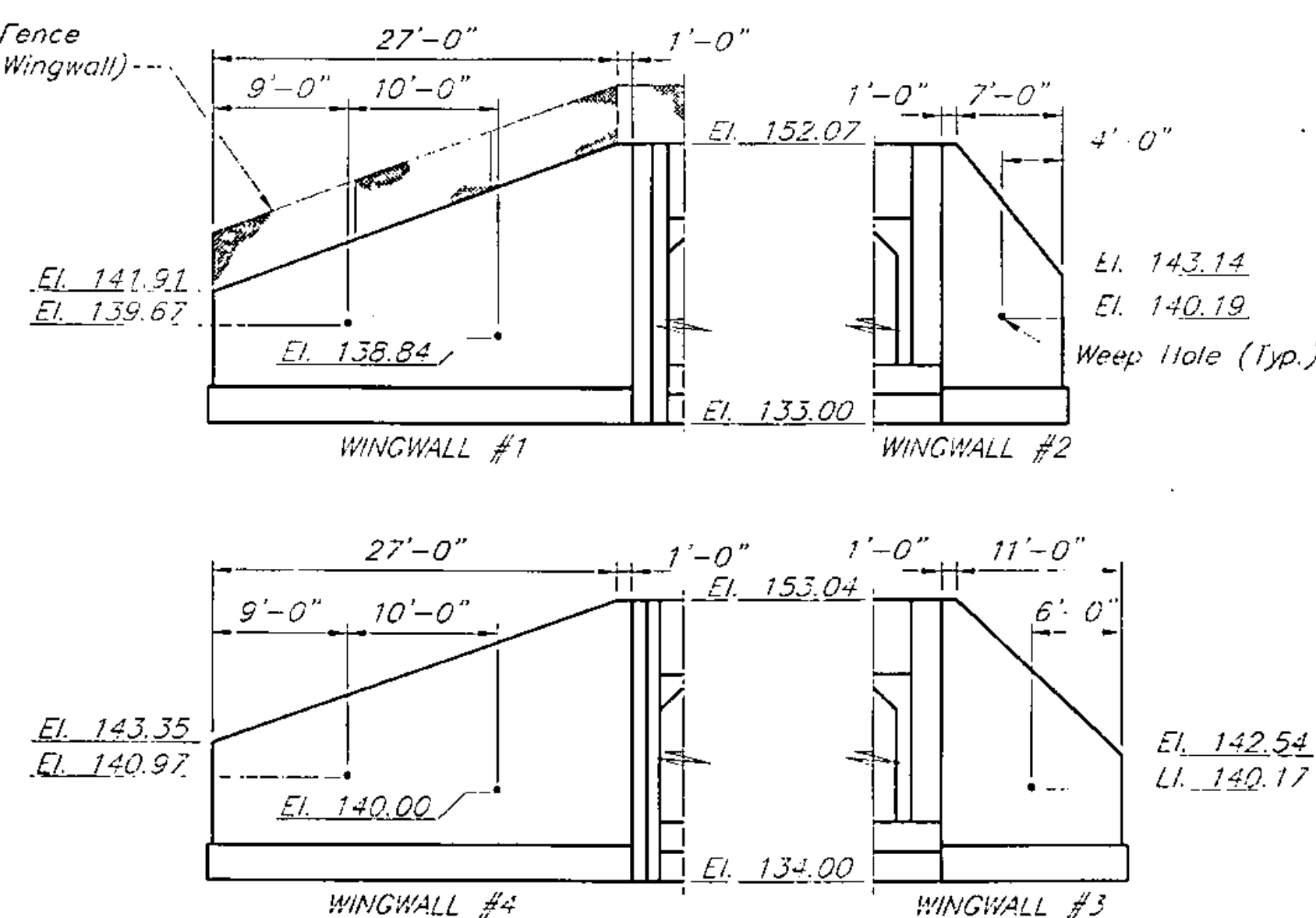


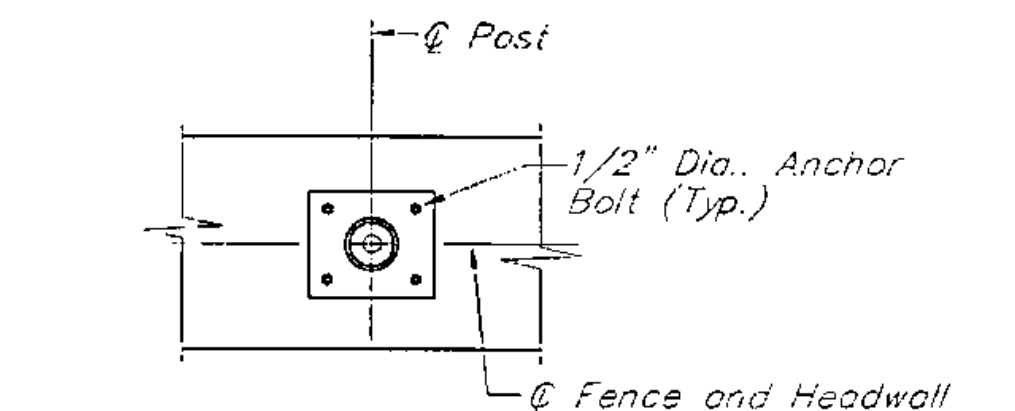
**SECTION THRU CUT-OFF WALL AND WINGWALL FOOTINGS**  
Scale: 1"=10'-0"



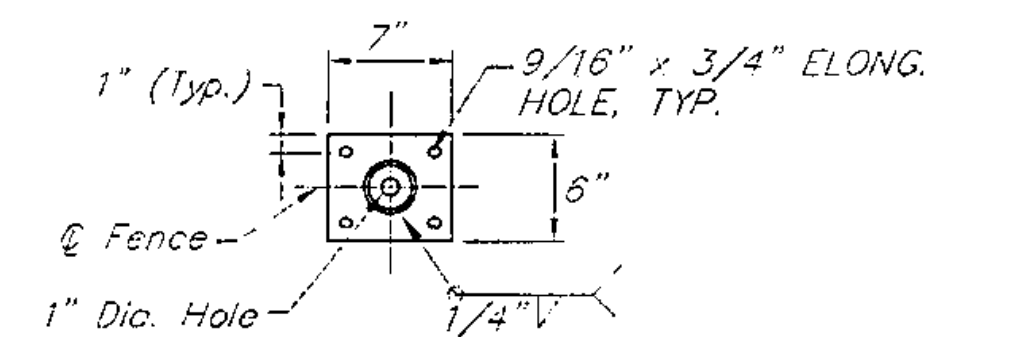
**PLAN**  
Scale: 1"=10'-0"



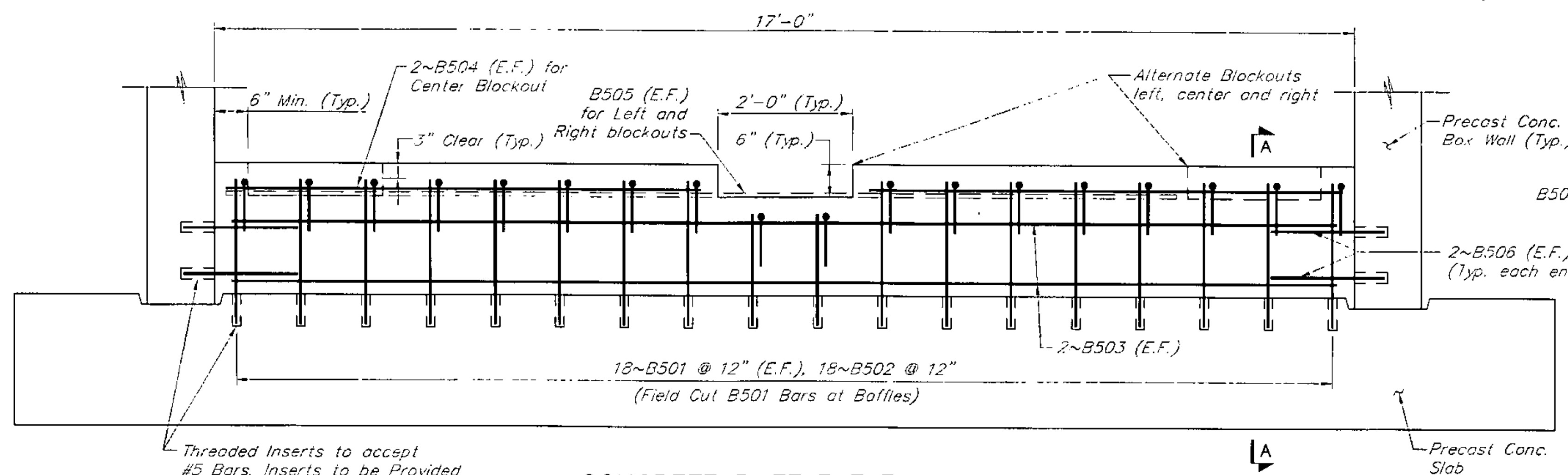
**WINGWALL ELEVATIONS**  
Scale: 1"=10'-0"



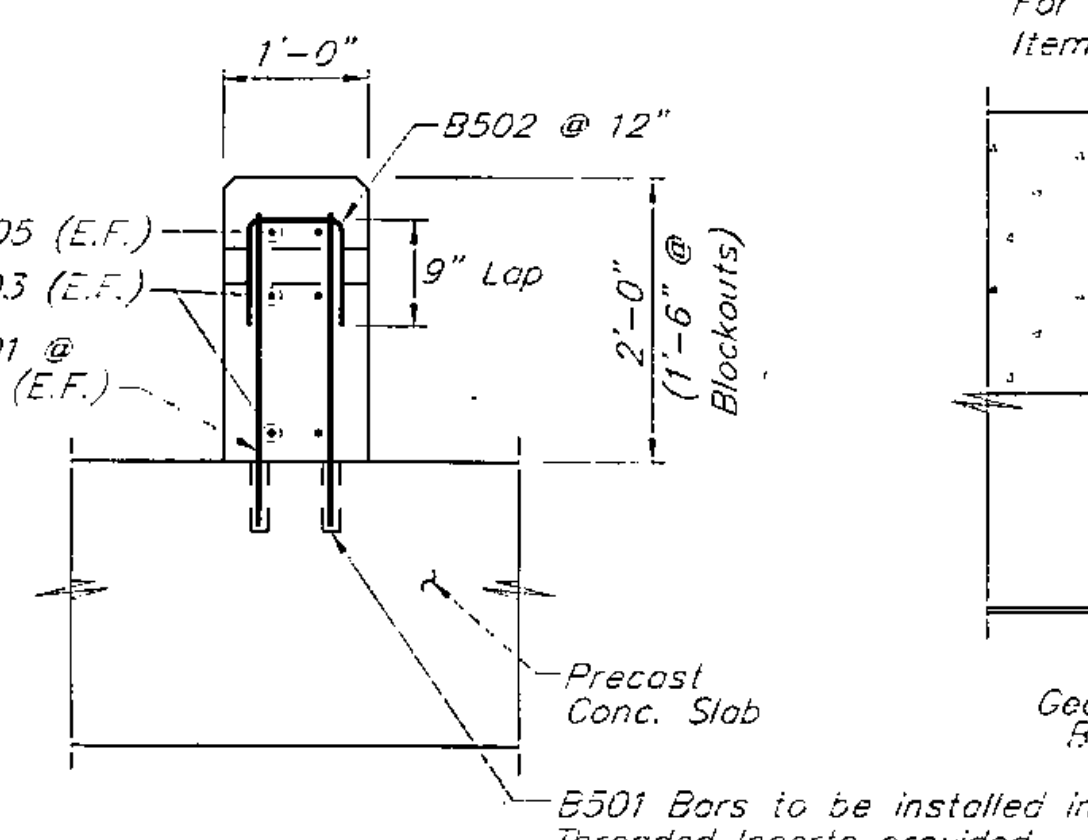
**SECTION B-B**  
NOT TO SCALE



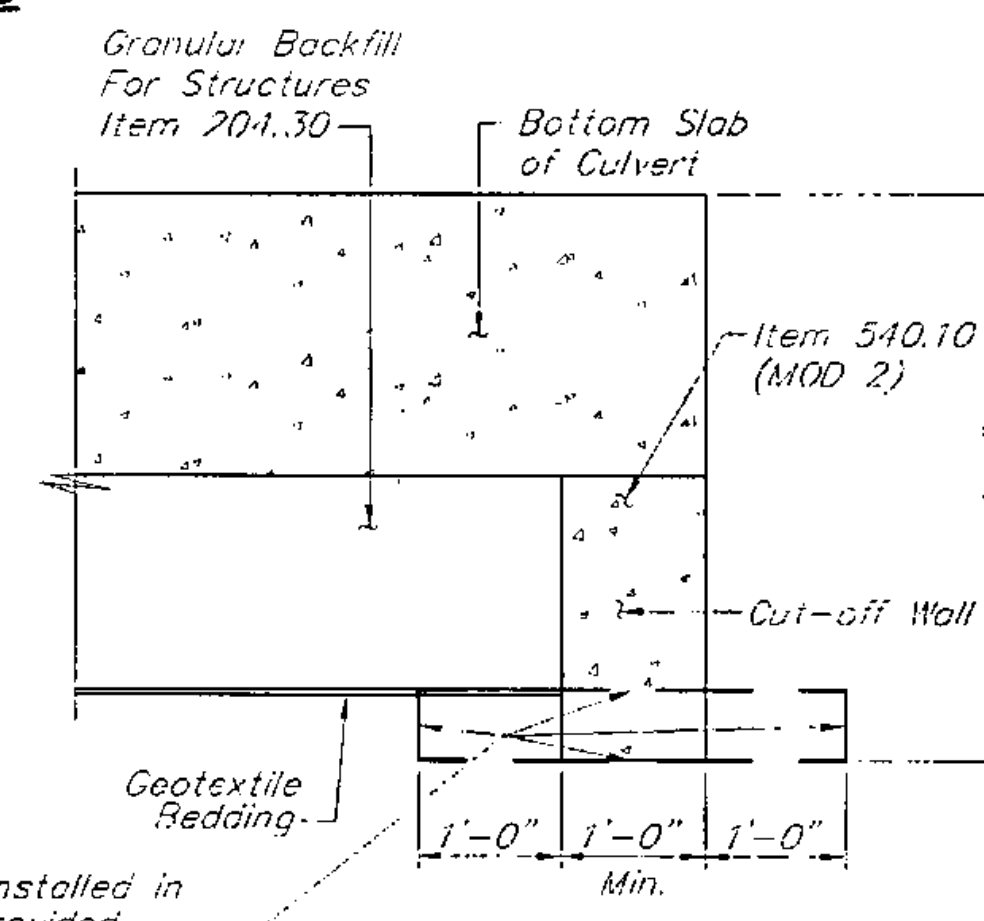
**POST BASE PLATE DETAIL**  
NOT TO SCALE



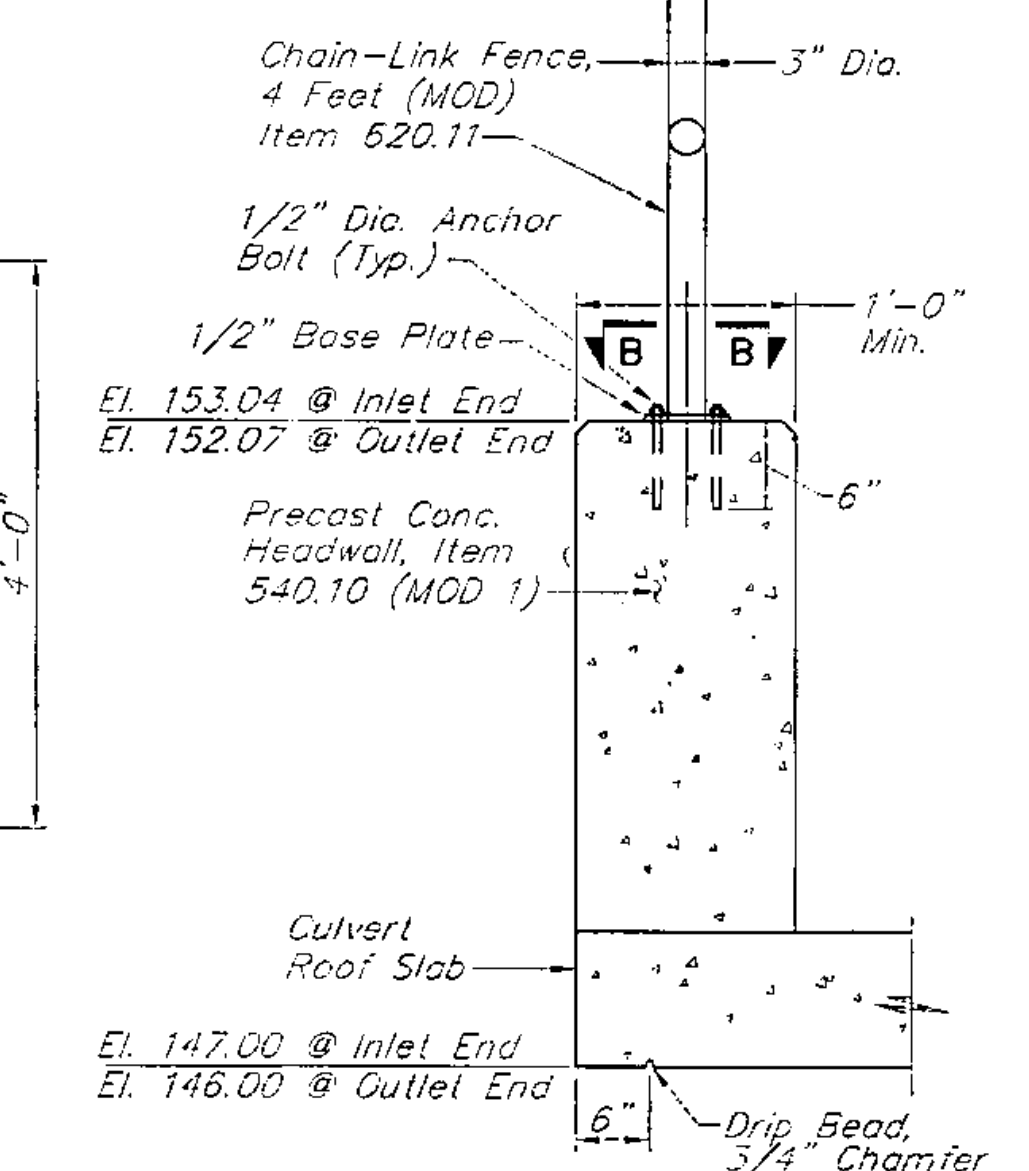
**CONCRETE BAFFLE ELEVATION**  
Scale: 3/4"=1'-0"



**SECTION A-A**  
Scale: 3/4"=1'-0"



**CUT-OFF WALL SECTION**  
Scale: 3/4"=1'-0"



**HEADWALL SECTION**  
Scale: 3/4"=1'-0"

**PRECAST NOTES:**

- Design Criteria:
  - Minimum Waterway = 119 SF
  - Soil Data: Unit Weight = 140 PCF, Earth Cover 0'-0" (MIN); 8'-0" (MAX)±, K<sub>a</sub> - Active Soil Pressure Coefficient = 0.266
  - Materials: Steel Reinforcement AASHTO M 31, Grade 60 (ASTM A-615-S1), Concrete f'<sub>c</sub> = 5000 PSI
  - Design: Service Load or Load Factor Design (Refer to AASHTO Section 3.23 and 6.1-6.6), Impact - Refer to AASHTO Section 3.8 and 6.4
  - Miscellaneous: Design Live Load AASHTO HS 25-44
- The Precast Box Section shown is approximate. The actual shape will be dependent upon the Fabricator. Minor differences from the shape shown are acceptable. All of the units shall have the same shape. The Contractor shall construct the culvert segments to such a length as to expedite construction. Thickness of Wingwall and size of the Footing shall be determined by the Fabricator.
- The wingwalls, footings, headwalls and cutoff walls shall be Precast. The Fabrication Drawings shall detail all connections between precast components as shown.
- The Exterior (Top and Sides) and Interior (Sides and Bottom) of all Concrete Box Joints along with all Lifting Holes shall be filled with Mortar, Type IV after being set in their final position. All Mortar shall be Wet Cured a minimum of 24 hours prior to placing the Sheet Membrane Waterproofing. Cost for all Mortar, Type IV used shall be considered subsidiary to Item 540.10, Precast Concrete Box (MOD 1-US 7 Box). Type IV Mortar shall conform to Standard Specification Section 707.03.
- Precast Concrete Headwalls shall be Considered Subsidiary to Item 540.10 Precast Concrete Box (MOD 1-US 7 Box).
- Precast Concrete Cut-off Walls shall be Considered Subsidiary to Item 540.10 Precast Concrete Box (MOD 2-US 7 Slab).
- Omit Weep Holes in all Precast Box Sections. On all Precast Wingwalls, 4" diameter Weep Holes shall be located as shown in the Wingwall Elevations detail. Weep hole spacing shall be limited to 10' Maximum.
- The Inlet and Outlet Precast End Box Section shall be provided with inserts for the installation of reinforcing steel. These inserts shall be provided by the Fabricator of the Precast Units.
- All Cover on Reinforcement shall be 2", unless otherwise noted.
- See Drawing BC103 for reinforcing bar notes.
- See Special Provisions for Additional Specifications on the Precast Units.
- ASTM A307 Anchor Bolts shall be drilled and grouted in place in Accordance with the Requirements of Section 507.06. Grouting Materials shall be in Accordance with Materials Section 707.03, Mortar, Type IV. The cost of Anchors including drilling and grouting shall be included in the unit price bid for the Fence Item.

**BAR SCHEDULE**

NO.	PIECES	SIZE	LENGTH	MARK	TYPE	B	C	D
<b>BAFFLE WITH RIGHT OR LEFT BLOCKOUT*</b>								
Δ	36	5	2-0	B501	STR			
Δ	18	5	2-0	B502	STR	0-9	0-6	0-9
Δ	4	5	16-6	B503	STR			
Δ	2	5	14-0	B504	STR			
Δ	8	5	1-6	B506	STR			
<b>BAFFLE WITH CENTER BLOCKOUT*</b>								
Δ	36	5	2-0	B501	STR			
Δ	18	5	2-0	B502	STR	0-9	0-6	0-9
Δ	4	5	16-6	B503	STR			
Δ	4	5	7-0	B505	STR			
Δ	8	5	1-6	B506	STR			

\*Bars shown above are the number needed for one baffle.

**STATE OF VERMONT**  
**AGENCY OF TRANSPORTATION**

Town Of	SHELBURNE	Bridge No.	145
Highway No.	U.S. ROUTE 7	Loc. Sta.	196+79
		Surv. Sta.	319+30

**U.S. ROUTE 7 OVER MUNROE BROOK**

**WINGWALL PLAN, ELEVATION AND DETAILS**

Designed By	L.Jank	Drawn By	S.Schaffer
Checked By	Date	Bridge Design Supervisor	
	J.Corliss	W.Windus	Date April 2003
PROJECT	SHELBURNE	PROJECT NO.	NHEGC FECC 019-4(27)
I.G.C. Info.			
Bridge Sheet No.	BC108	Sheet	448 of 537

**ERDMAN ANTHONY**  
CONSULTING ENGINEERS  
Rochester, New York    Camp Hill, Pennsylvania  
Boston, Massachusetts