

NOTE: DUE TO STEEP SLOPES, CONTRACTOR SHALL PROVIDE SLOPE PROTECTION ON SLOPES GREATER THAN 2:1.

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WINGWALL NOTES

GENERAL NOTES:

1. The wingwalls have been designed for general site conditions. The project engineer shall be responsible for the structure's suitability to the existing site conditions and for the hydraulic evaluation -- including scour and confirmation of soil conditions.

2. Prior to construction, contractor must verify all elevations shown through the engineer.

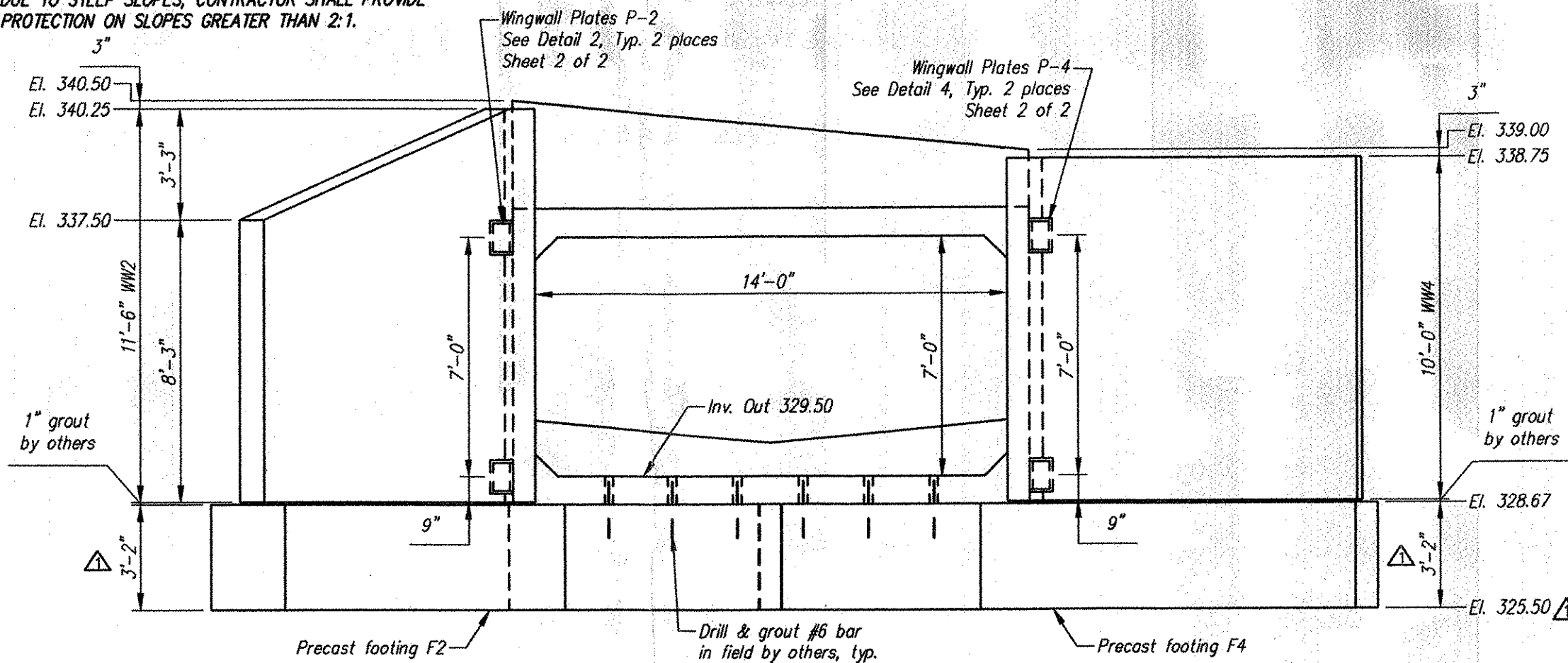
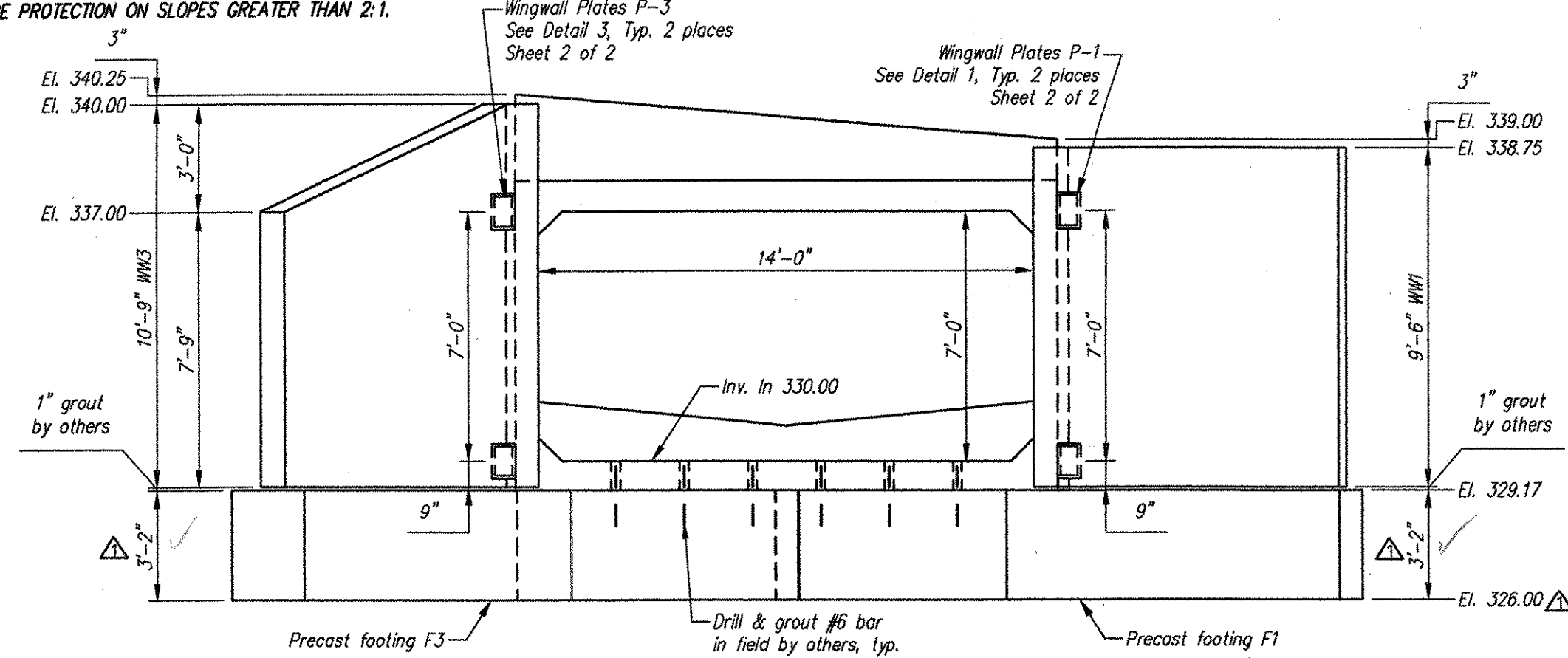
DESIGN DATA

Design Method: Load factor per AASHTO Specification
Assumed Allowable Soil Bearing: 3000 PSF (Verify)
Wingwalls designed for Earth Pressure only

MATERIALS

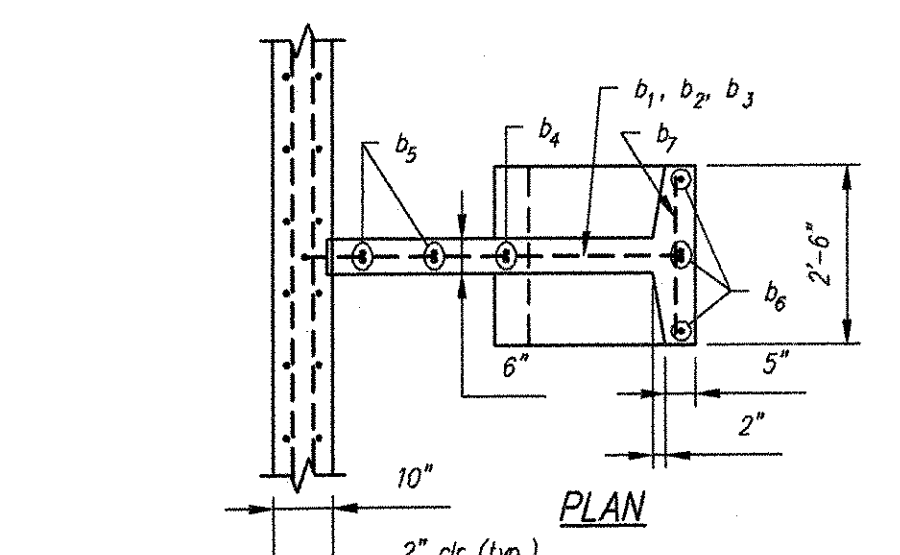
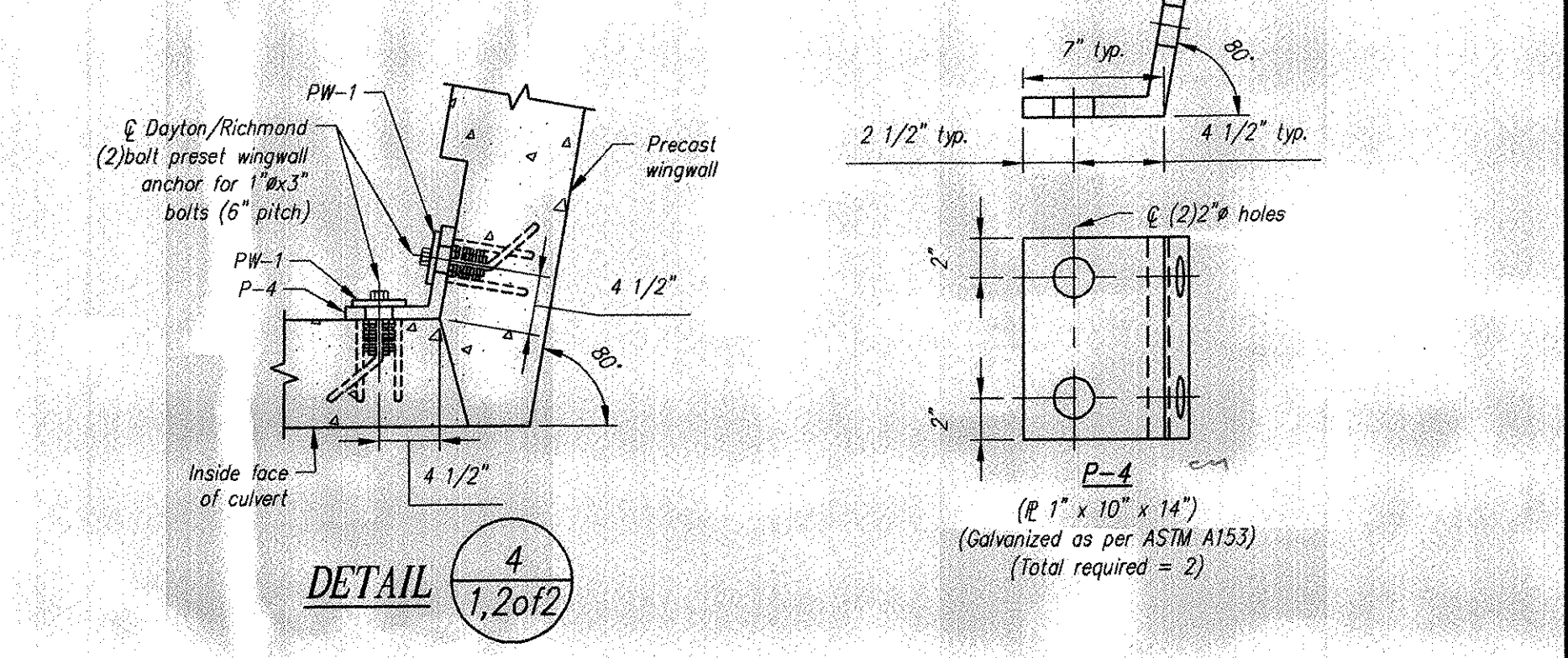
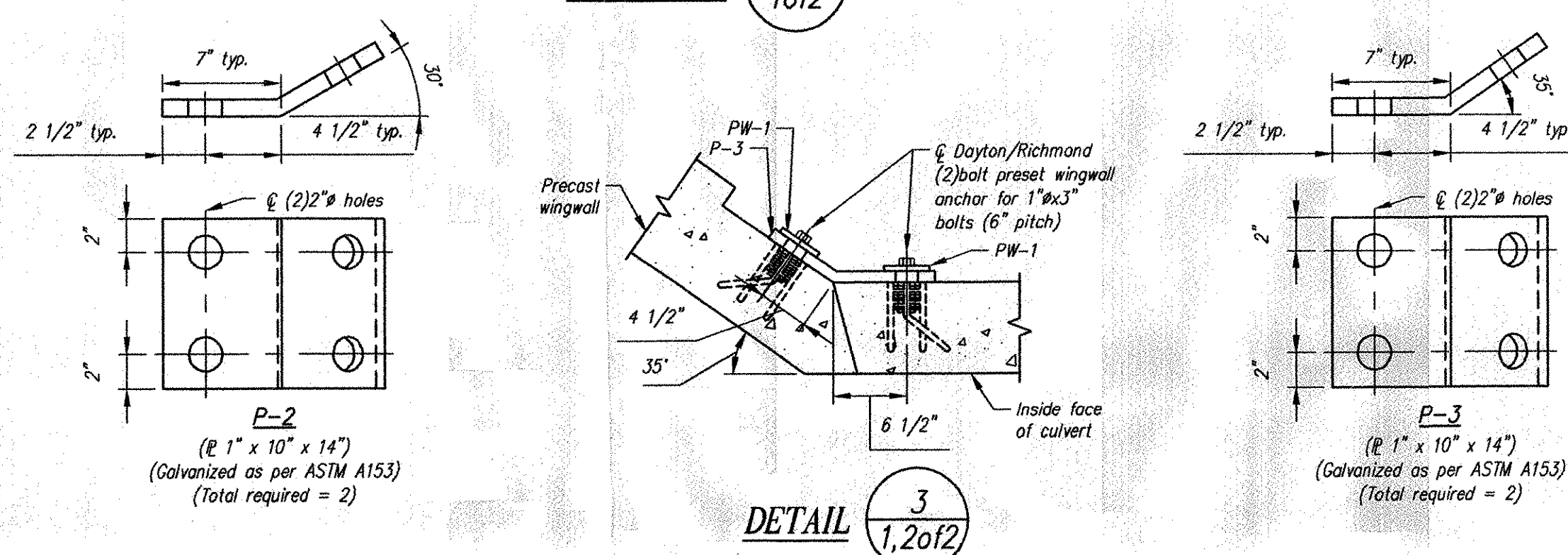
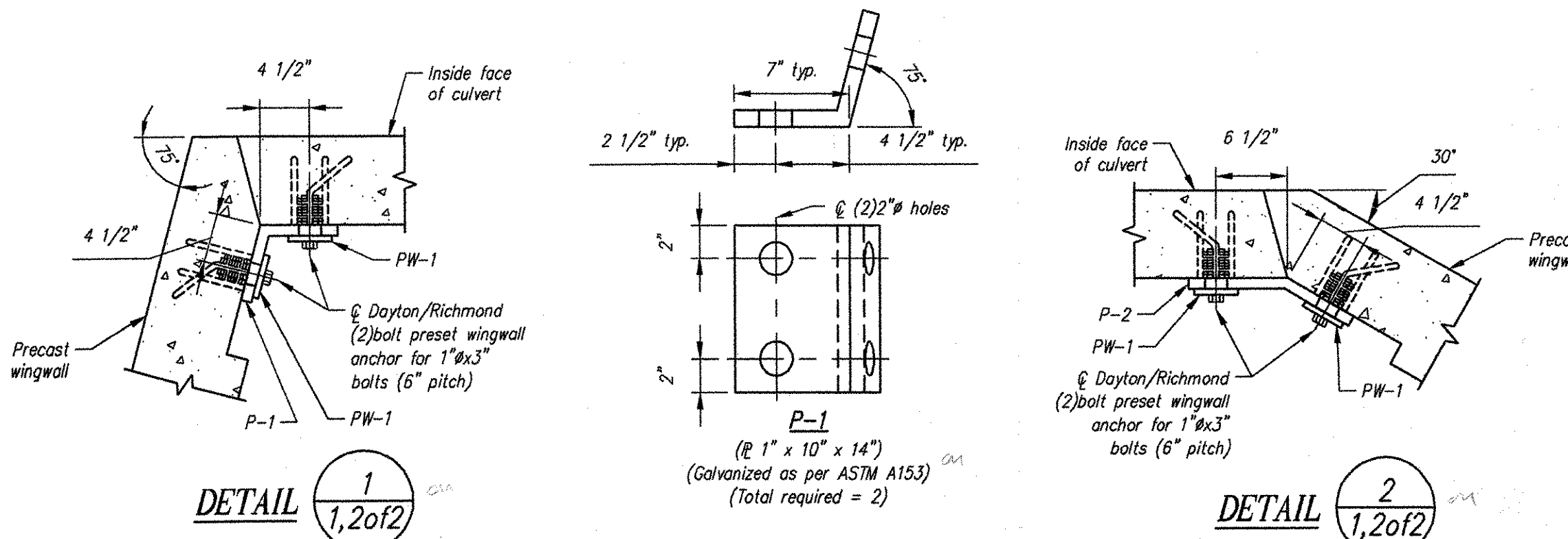
-Precast units shall be constructed and installed in accordance with CON/SPAN Specifications.
-Concrete for Footings and Wingwalls shall have a minimum compressive strength of (5000 psi) Δ
-Reinforcing steel for Footings and Wingwalls shall conform to ASTM A615, A616 or A617-Grade 60.

MARK	QTY	LENGTH (FT)	CUBIC YDS	WEIGHT (TONS)
WW-1	1	9	3.08	6.24
WW-3	1	12.5	4.45	9.01
WW-2	1	16	6.20	12.56
WW-4	1	10.5	4.12	8.34
F-1	1	16.59	4.86	9.85
F-3	1	20.68	6.06	12.28
F-2	1	24.23	7.10	14.39
F-4	1	18.04	5.29	10.71

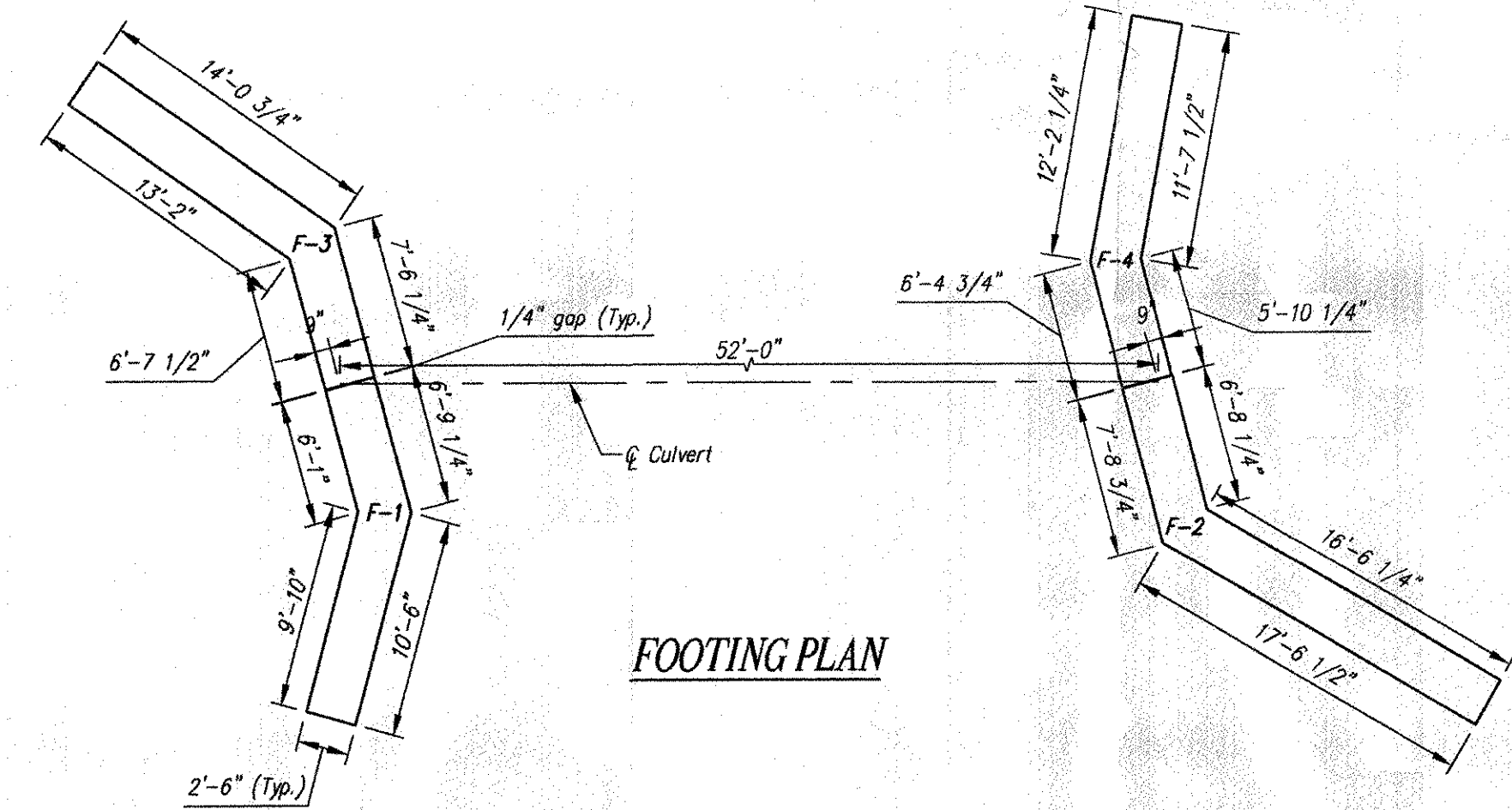
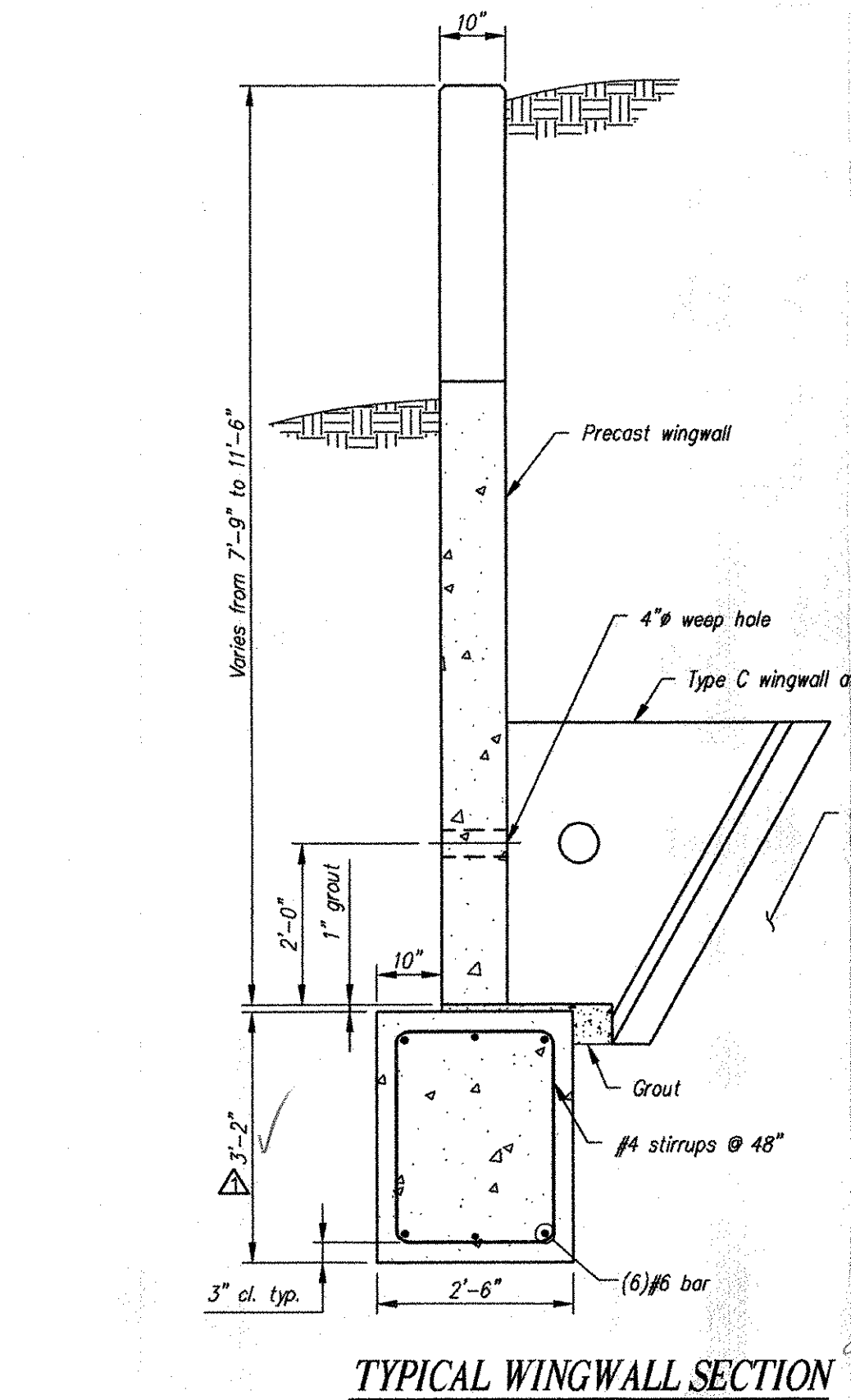
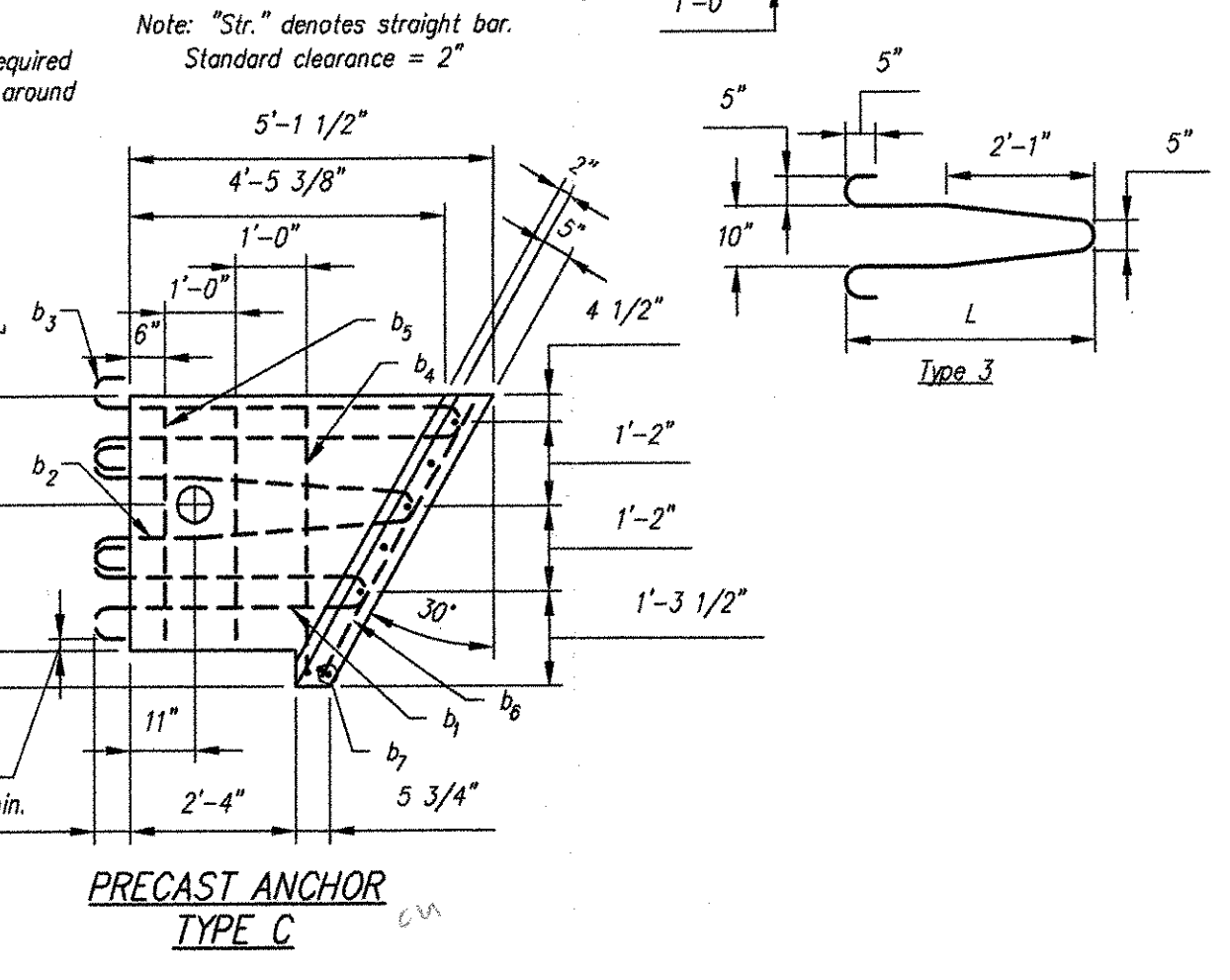
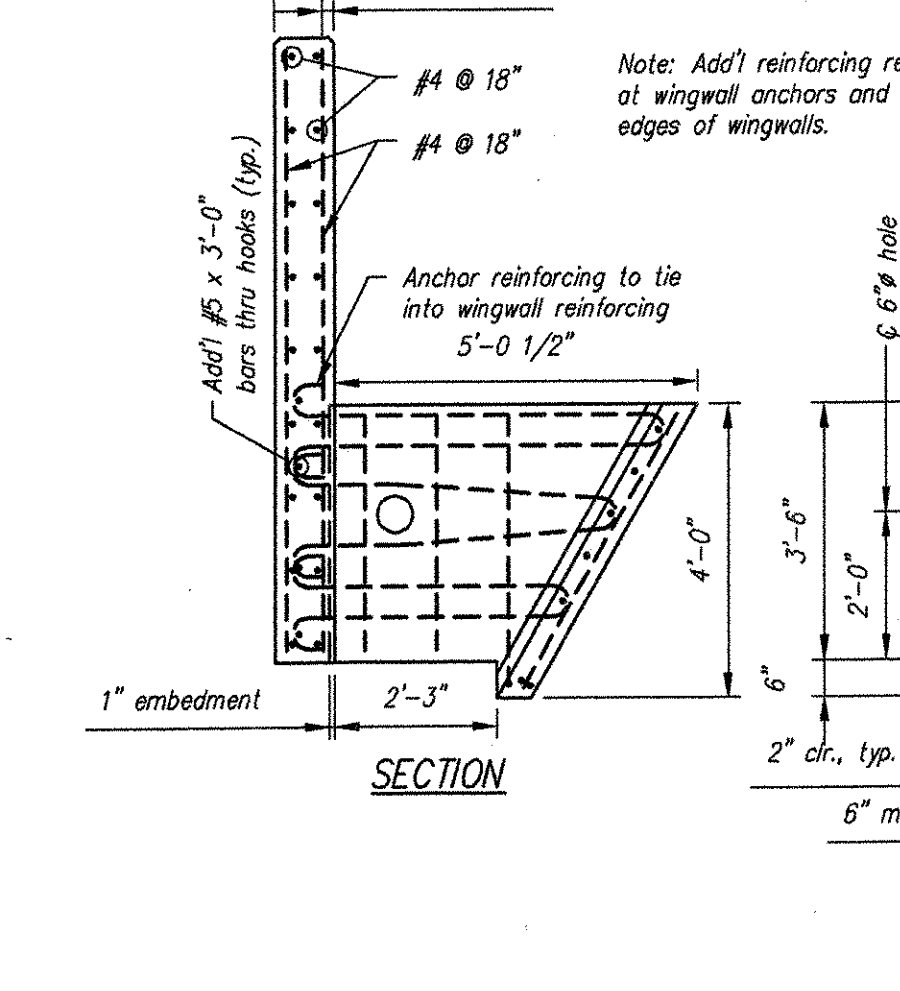
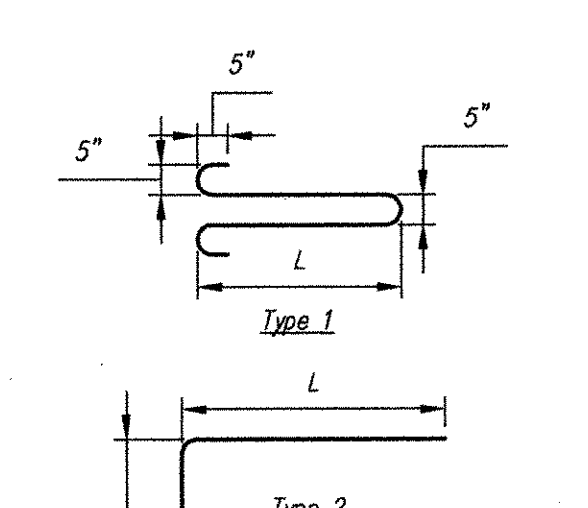


ELEVATION C-C 1 of 2

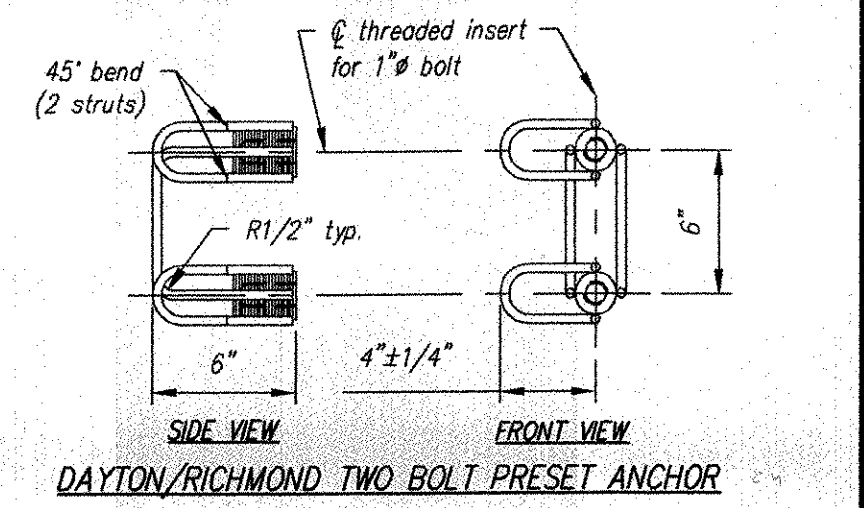
ELEVATION D-D 1 of 2



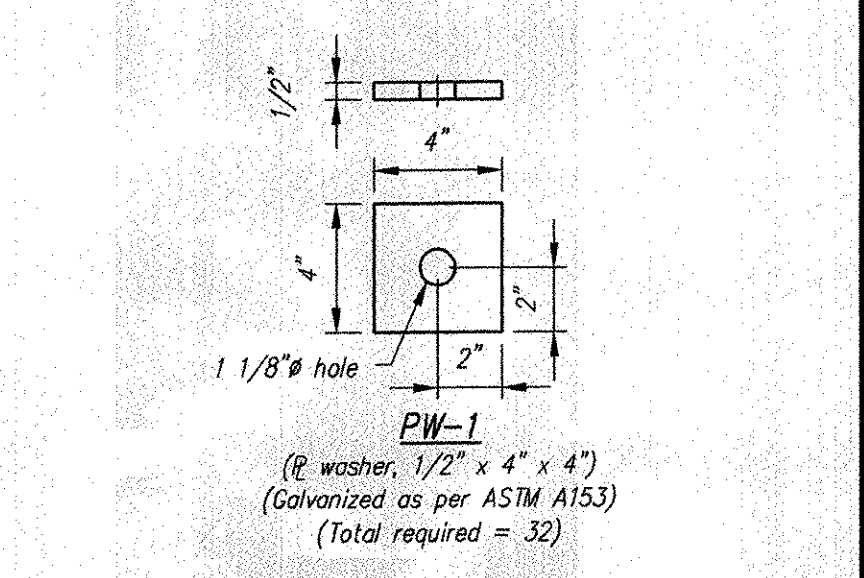
MARK	QTY	SIZE	L	TYPE	LENGTH
b ₁	1	#5	3'-10"	1	---
b ₂	1	#5	4'-6"	3	---
b ₃	1	#5	5'-2"	1	---
b ₄	2	#5	3'-8"	2	---
b ₅	4	#5	---	Str.	3'-2"
b ₆	4	#5	---	Str.	4'-2"
b ₇	7	#5	---	Str.	2'-2"



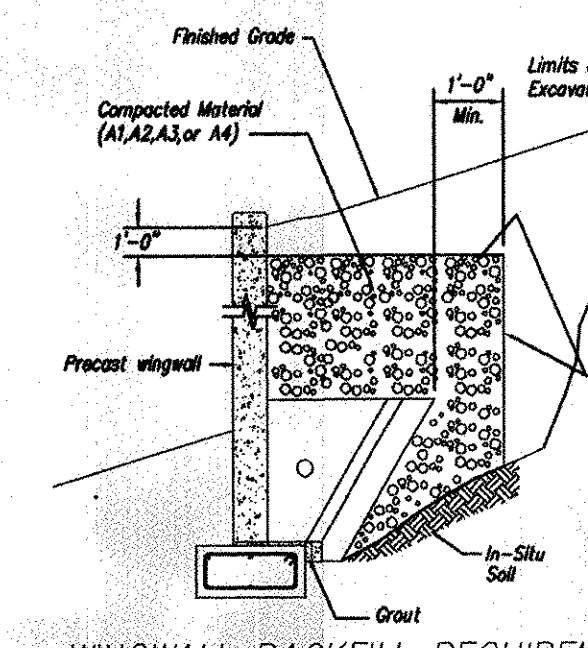
FOOTING PLAN



DAYTON/RICHMOND TWO-BOLT PRE-SET ANCHOR



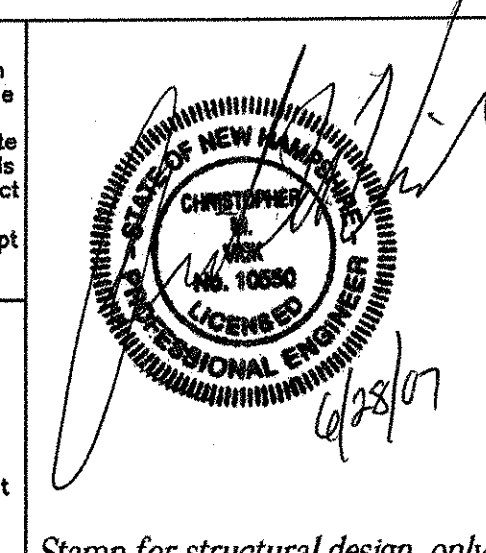
Group Classification	A-1	A-3	A-2	A-4
Sieve Analysis, Percent Passing	A-1-a	A-1-b	A-2-4	A-2-5
No. 10	50 max.	50 max.	35 max.	35 max.
No. 40	30 max.	51 min.	35 max.	35 max.
No. 200	15 max.	10 max.	35 max.	35 max.
Characteristics of Fraction Passing No. 40				
Liquid Limit	6 max.	N.P.	40 max.	41 min.
Plasticity Index	6 max.	N.P.	10 max.	11 min.
Usual Types of Significant Constituent Materials	Stone Fragments, Gravel & Sand	Sand	Silty or Clayey Gravel and Sand	Silty-Sands
General Rating as Subgrade	Excellent to Good	Excellent to Good	Fair to Poor	Fair to Poor



WINGWALL BACKFILL REQUIREMENTS

NOTES:
1. BACKFILLING OPERATIONS WITHIN THE C.B.Z. SHALL BE PERFORMED IN LIFTS OF 8" OR LESS (LOOSE DEPTH).
2. MAXIMUM DRY DENSITY SHALL BE DETERMINED BY AASHTO T-99 OR OTHER APPROVED METHODS.
3. BACKFILL SHALL BE COMPACTED IN LAYERS UNTIL THE DENSITY IS NOT LESS THAN 90% OF THE MAXIMUM DRY DENSITY.

Contractor is to verify that all information shown on drawings has been thoroughly checked, complies with the contract documents and is adequate to meet the field conditions. Some dimensions and details may differ slightly from contract drawings to accommodate the manufacturing or design process. Approval of this drawing indicates that any deviation from the contract documents has been reviewed and found to be acceptable. Production will not commence until receipt of signed, approved shop drawings.



Rev.	Date	DESCRIPTION	By
5			
4			
3			
2			
1	06/28/07	Depth of footings to be 3'-2" & footing weights; Footings & wingwalls to be 5,000 psi	MS

This drawing is based upon information provided from the following documents and/or sources:
Engineer: VAO
Project No: AC ER STP 021-1 (22)
Drawings: Proposed Improvement - Bridge Project - Route No: VT 116, Minor Arterial - Bridge Sheets 1 through 65 of 66 sheets
Specifications: N/P
Other Sources:

STATE AGENCY
VAOT

PIKE INDUSTRIES, INC.
VT 116 - MINOR ARTERIAL - BRIDGE NO. 9
BRISTOL, VT

Box Culvert Wingwall Details
C18643-L01-B
REV 1
SHEET 2 OF 2