

REVISIONS							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE
1	7-78		6	1-91	GB	11	12-02
2	6-80		7	12-92	MSM	12	12-04
3	1-82		8	4-94	MSM	13	10-10
4	5-82		9	2-96	MSM	14	10-13
5	7-88	GB	10	5-99	MSM		

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: 612-21_1113.dgn

DRAWING DATE: AUGUST, 1977

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ORIGINAL SIGNED BY: TOM COLE
HIGHWAYS PROGRAM OVERSIGHT ENGINEER

ORIGINAL SIGNED BY: TOM COLE
CHIEF ENGINEER

STANDARD DRAWING

CONCRETE PARAPET TO THRIE BEAM GUARDRAIL CONNECTOR

REQUIRES SHEET 2 OF 2 & STD. DWG. 612-10 OR 612-11

English

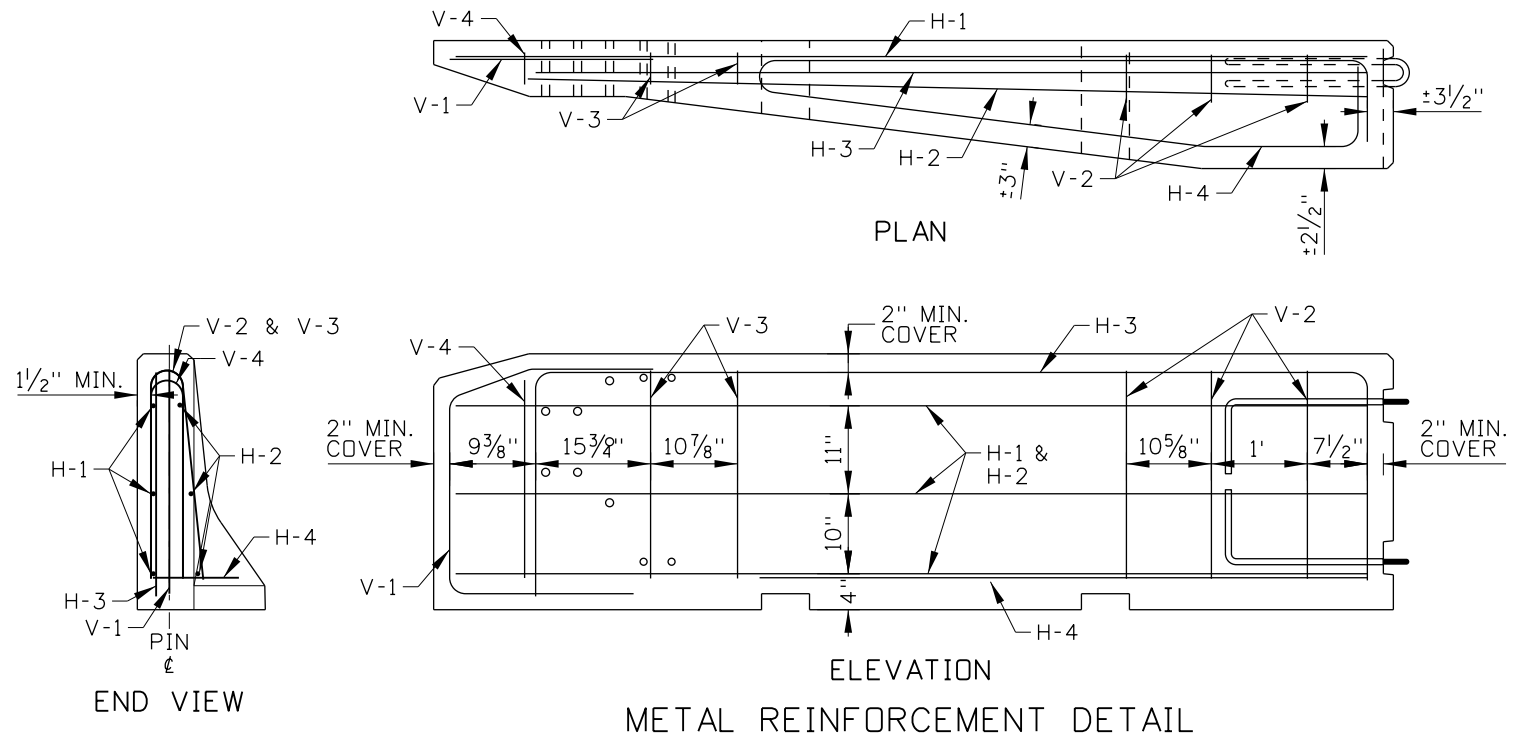
STANDARD DRAWING NO. **612-21**

SHEET 1 OF 2

ORIGINAL STORED AT: ITD, Headquarters 3311 West State Boise, Idaho

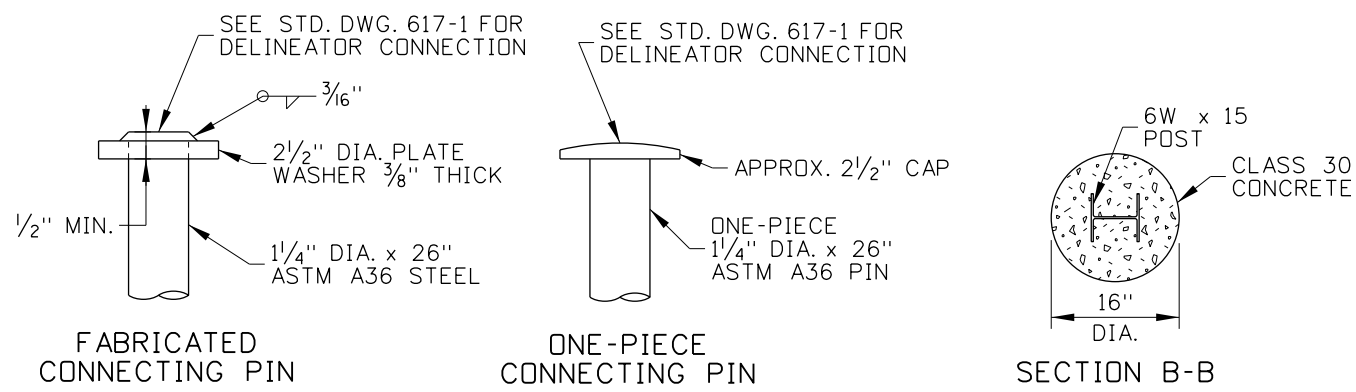
ORIGINAL SIGNED BY: RYAN D. LANCASTER
DATE ORIGINAL SIGNED: NOVEMBER 6, 2013

REINFORCING STEEL TABLE (SEE NOTE NOS. 2 & 3)					
MARK	LOCATION	BAR SIZE	NUMBER OF BARS	BAR LENGTH	SKETCH
H-1	HORIZONTAL IN BARRIER - TIED TO INSIDE BACK OF V-2, V-3, & V-4 BARS	NO. 5	3	9'-6"	
H-2	HORIZONTAL IN BARRIER - TIED TO INSIDE FRONT OF V-2, V-3, & V-4 BARS	NO. 5	3	8'-9"	
H-3	TIED UNDER V-2, V-3 AND V-4 AND SET BETWEEN STEEL LOOP BARS. TOP TIED ON V-1.	NO. 5	1	13'-0"	
H-4	HORIZONTAL IN BARRIER BASE - FRONT END TIED TO V-1 BOTTOM	NO. 5	1	14'-6"	
V-1	VERTICAL IN BARRIER END - TIED TO H-3 AND TOP OF LOOP V-4	NO. 5	1	6'-0"	
V-2	VERTICAL IN BARRIER - AT TRAILING END	NO. 5	3	4'-9"	
V-3	VERTICAL IN BARRIER	NO. 5	2	4'-8"	
V-4	VERTICAL IN BARRIER AT APPROACHING END OF BARRIER	NO. 5	1	4'-6"	

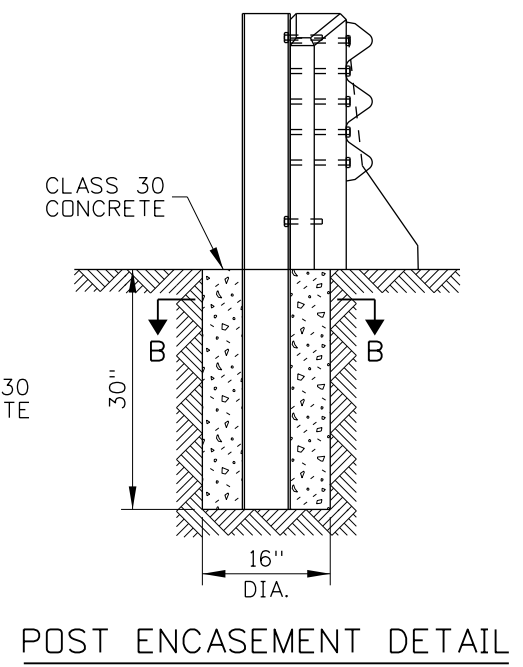


NOTES

- CONNECTOR MAY BE PRECAST AS SHOWN OR AS A MIRROR IMAGE FOR USE WITH TRAFFIC TRAVELING IN THE OPPOSITE DIRECTION.
- PRECAST USING CONCRETE CLASS 40A. ENSURE THAT REINFORCING STEEL IS IN ACCORDANCE WITH SECTION 708 - METALS OF THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. PROVIDE 2" MINIMUM CONCRETE COVER OVER REINFORCING STEEL UNLESS OTHERWISE NOTED.
- ENSURE THAT REINFORCING STEEL BENDS ARE MADE IN ACCORDANCE WITH THE LATEST A.C.I. STANDARD PRACTICES AND AASHTO SPECIFICATIONS.
- THE DIMENSIONS SHOWN IN THE REINFORCING STEEL TABLE ARE MEASURED FROM OUTSIDE-TO-OUTSIDE (O. TO O.) OF BENDS OR BAR ENDS. THE DIMENSIONS SHOWN ON THE METAL REINFORCEMENT DETAIL ARE MEASURED FROM CENTER OF BAR TO CENTER OF BAR.
- ANCHOR THE CONNECTOR WITH THE ATTACHMENT POST AND CONNECT TO A BRIDGE PARAPET USING A CONNECTING PIN.
- WHEN CONNECTING TO AN EXISTING BRIDGE PARAPET, THE EXPOSED STEEL LOOP BARS MAY NEED TO BE BENT (MECHANICALLY, NOT WITH HEAT) TO FIT.
- PROVIDE CAP SCREWS IN ACCORDANCE WITH ASTM A325. ENSURE THAT INSERTS AND CAP SCREWS ARE GALVANIZED.
- PROVIDE THRIE BEAM GUARDRAIL IN ACCORDANCE WITH STANDARD DRAWING 612-2 AND GUARDRAIL TRANSITION IN ACCORDANCE WITH STANDARD DRAWING 612-10 OR 612-11.
- NOT TO SCALE.



CONNECTING PIN DETAIL
(SEE NOTE NO. 5)



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SHEET 2 OF 2

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