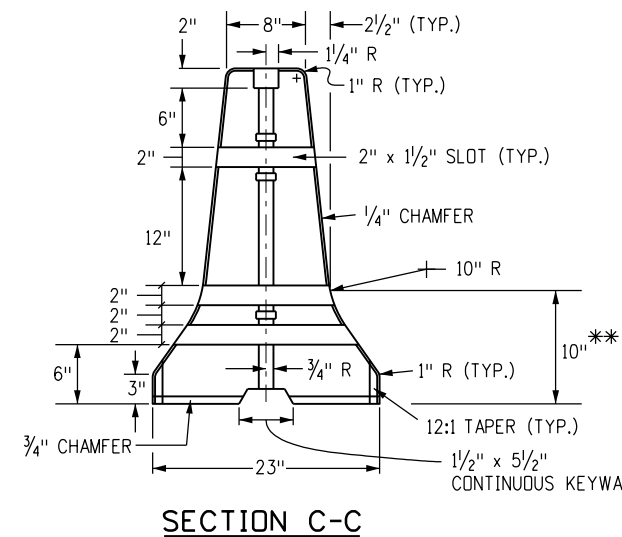
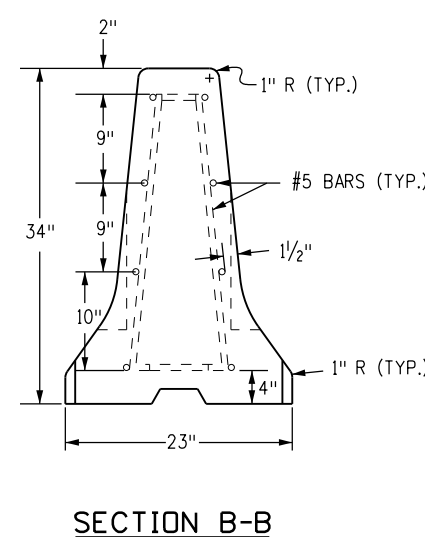
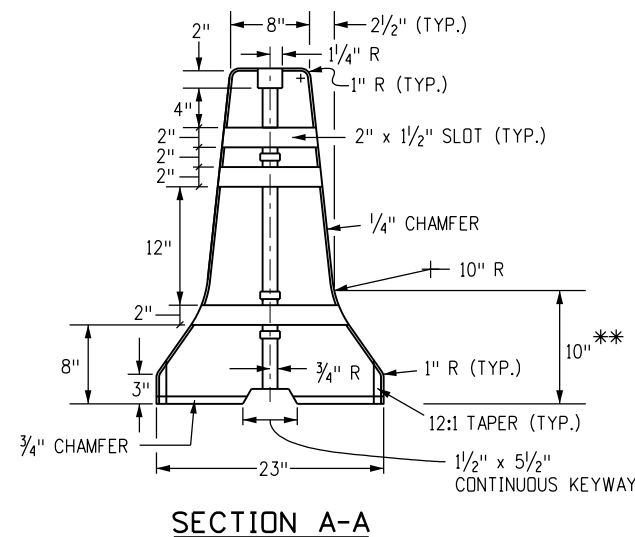
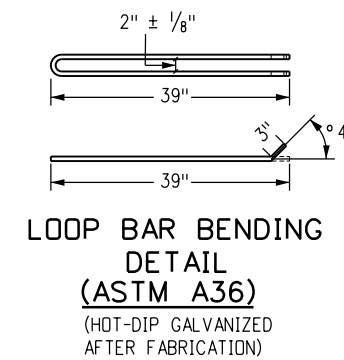
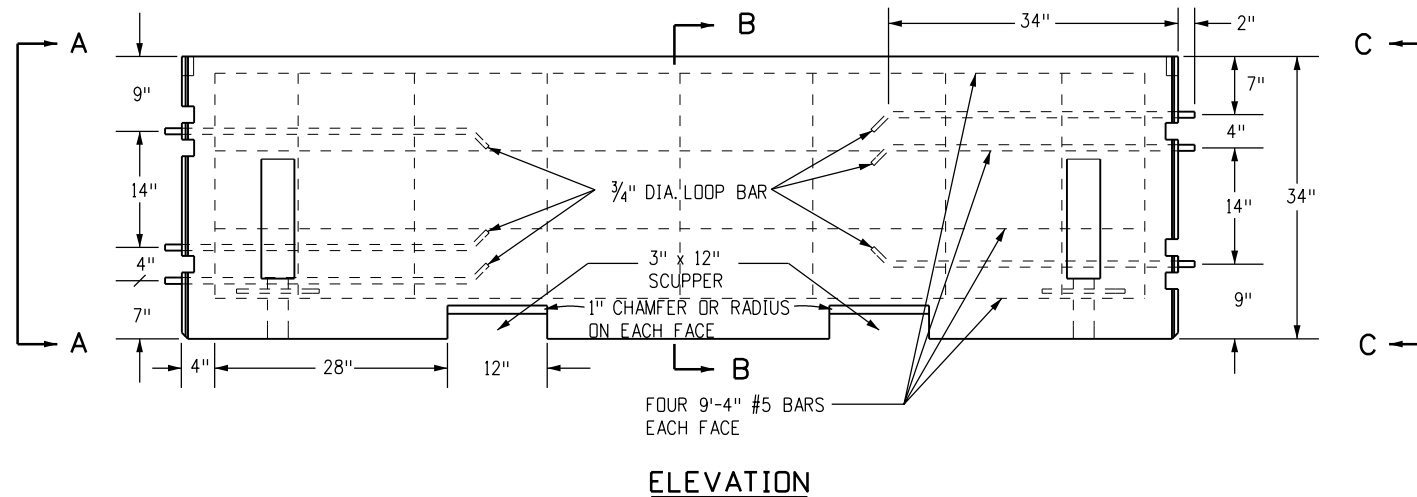
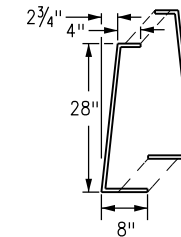
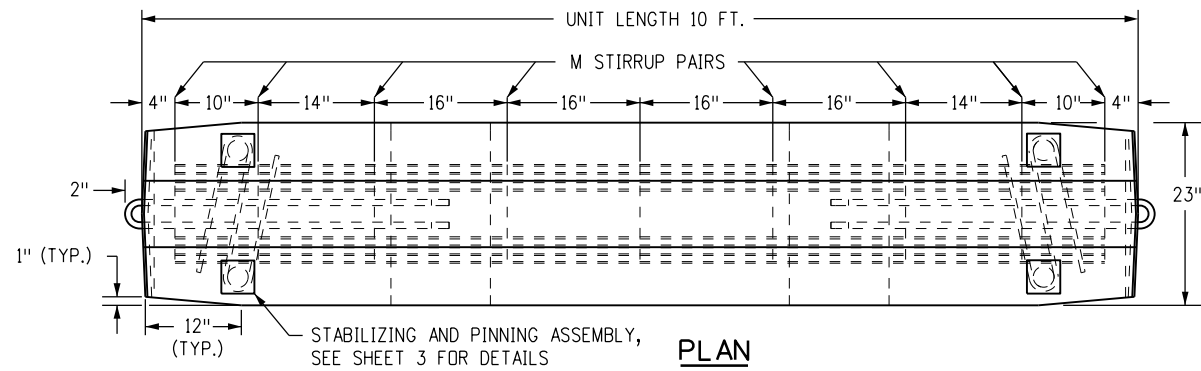
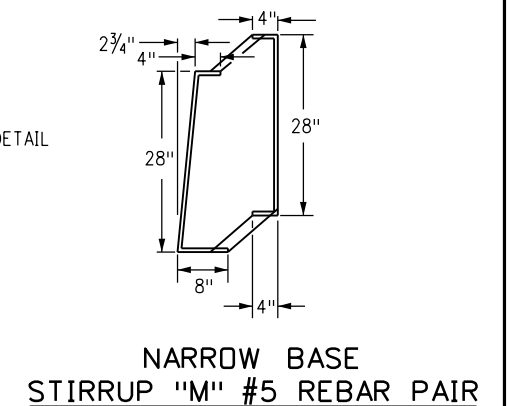
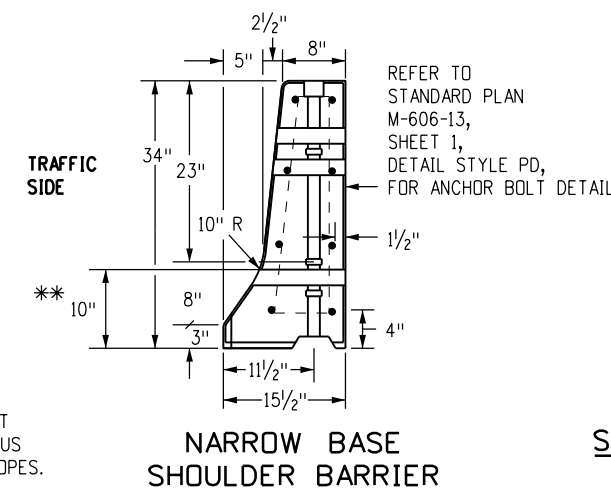


**GENERAL NOTES**

1. PRECAST TYPE 7 CONCRETE BARRIER HAS BEEN CLASSIFIED AS TL-3 MASH COMPLIANT. MANUFACTURING AND UTILIZATION OF PRECAST TYPE 7 CONCRETE BARRIER IS PERMITTED FOR ALL CDDT PROJECTS REQUIRING TL-3 MASH COMPLIANT TEMPORARY CONCRETE BARRIER. REFER TO CDDT'S APPROVED PRODUCT LIST (APL) FOR ADDITIONAL MASH COMPLIANT PROPRIETARY TEMPORARY BARRIER DEVICES. ALL PROPRIETARY PRODUCTS SHALL BE INSTALLED CONFORMING TO THE MANUFACTURER'S RECOMMENDATIONS. GUIDANCE FROM STANDARD M-606-14 IS NOT APPLICABLE.
2. ALL STEEL REINFORCING SHALL BE 2 INCHES CLEAR OF THE NEAREST SURFACE OF CONCRETE, UNLESS OTHERWISE SHOWN. REINFORCING STEEL SHALL BE GRADE 60 MINIMUM.
3. CONCRETE SHALL BE CLASS D.
4. FOR TEMPORARY INSTALLATIONS, INSTALL WITH A 4 FT. MINIMUM DISTANCE FROM THE CENTERLINE OF THE PRECAST TYPE 7 CONCRETE BARRIER TO ANY OBSTRUCTIONS BEHIND IT. FOR TEMPORARY INSTALLATIONS WITH LESS THAN A 4 FT. MINIMUM DISTANCE, STABILIZATION PINS SHALL BE USED ON EACH PRECAST TYPE 7 CONCRETE BARRIER UNIT ADJACENT TO, AND WITHIN 10 FT. OF BOTH SIDES OF THE OBSTRUCTION. SEE SHEET 3 FOR STABILIZATION PINNING DETAILS.
5. THE FLARE RATE FOR TEMPORARY INSTALLATIONS SHALL BE 10:1 OR FLATTER, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
6. STABILIZATION PINS SHALL BE USED TO ANCHOR EACH 10 FT. UNIT IN ALL INSTALLATIONS. SEE SHEET 3 FOR STABILIZATION PINNING DETAILS.
7. THE MONTH AND YEAR THE PRECAST TYPE 7 CONCRETE BARRIER WAS MANUFACTURED SHALL BE MOLDED INTO ONE END OF EACH 10 FT. BARRIER UNIT.
8. APPROVED NON-SHRINK GROUT SHALL BE USED FOR GROUTING OVER ALL PINS AND GROUTING OF SCUPPERS.
9. WHEN HYDRAULIC ANALYSIS ALLOWS, SCUPPERS MAY NOT BE NEEDED ON:
  - A. MEDIAN INSTALLATION WITH INLET DRAINAGE.
  - B. PRECAST TYPE 7 CONCRETE SHOULDER BARRIER ON HIGH EDGE OF A SUPERELEVATED SHOULDER.
  - C. PRECAST TYPE 7 CONCRETE MEDIAN BARRIER ON A CREST VERTICAL CURVE.
10. ALL INCIDENTAL WORK AND MATERIALS SUCH AS CONNECTING PINS, ANCHORS BOLTS, GROUT, AND INSTALLATION FOR END ANCHORAGE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE WORK.
11. ONE INCH DIAMETER THREADED INSERTS MAY BE CAST-IN-PLACE TO FACILITATE LIFTING FOR THE TEMPORARY PRECAST TYPE 7 CONCRETE BARRIER APPLICATIONS ONLY.
12. RETROREFLECTORIZATION IS REQUIRED ON PRECAST TYPE 7 CONCRETE BARRIERS. SEE CONCRETE BARRIER RETROREFLECTOR NOTES ON STANDARD PLAN S-612-1, SHEETS 4 THROUGH 6.



\*\* DIMENSIONS MARKED ARE TO THE INTERSECTION POINT OF THE BARRIER SLOPES. CONSTRUCT THE 10 IN. RADIUS TO PROVIDE A SMOOTH TRANSITION BETWEEN THE SLOPES.



Computer File Information	
Creation Date: 07/31/19	
Designer Initials: JBK	
Last Modification Date: 02/09/23	
Detailer Initials: LTA	
CAD Ver.: MicroStation V8	Scale: Not to Scale Units: English

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Date:	Comments
(R-X) 08/21/20	Added Gen. Note 1 to show these barriers are TL-3 MASH compliant.
(R-X) 02/09/23	Changed reinforcing steel grade to 60 min. Deleted references to this being permanent.

Colorado Department of Transportation

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Denver, CO 80204  
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**Construction Engineering Services JBK**

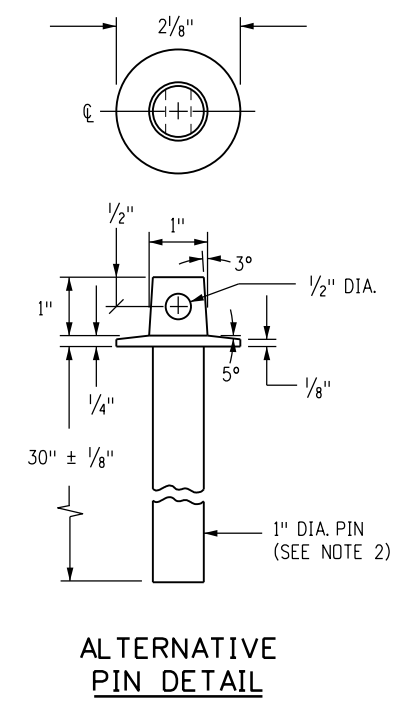
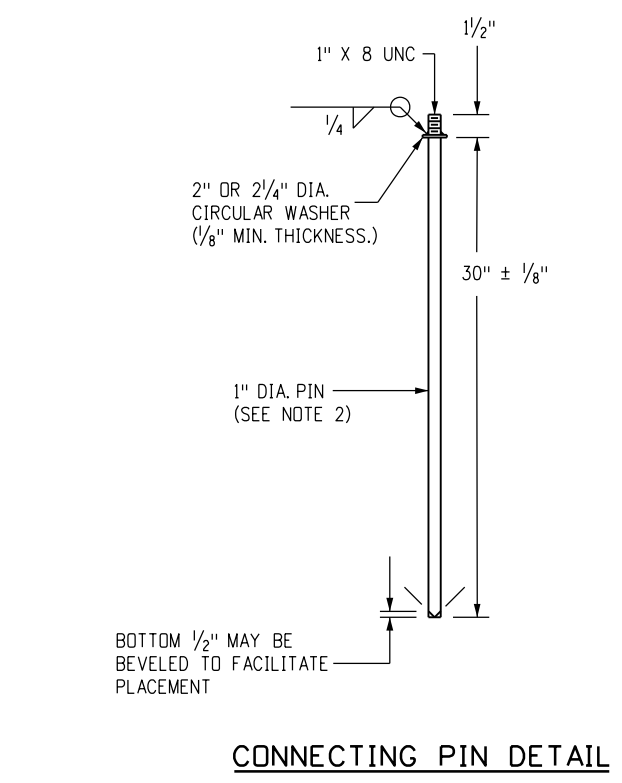
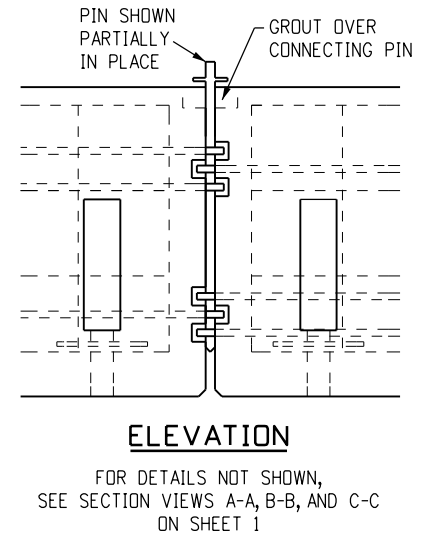
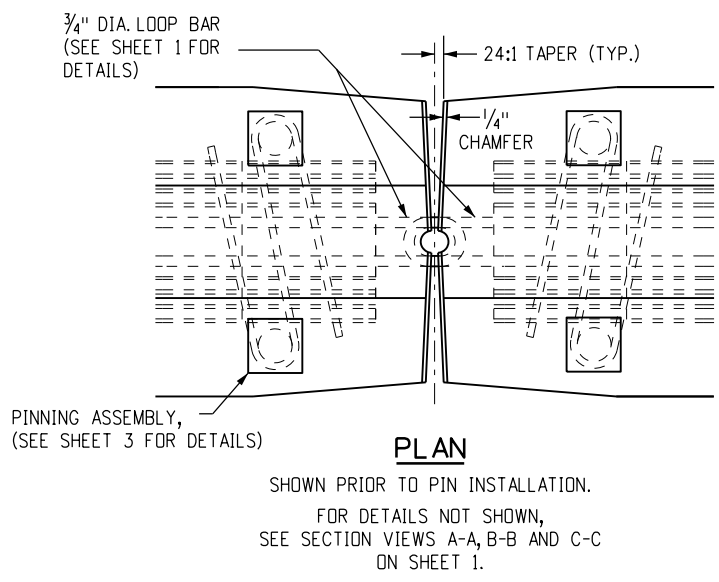
**PRECAST TYPE 7 CONCRETE BARRIER**

Issued by the Project Development Branch: July 31, 2019

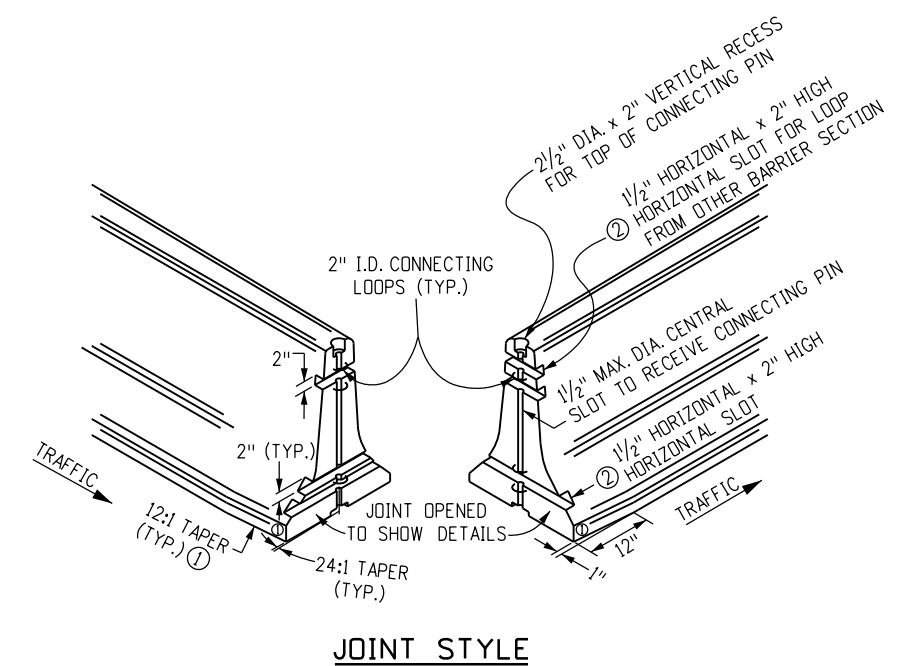
STANDARD PLAN NO. M-606-14

Standard Sheet No. 1 of 4

Project Sheet Number:



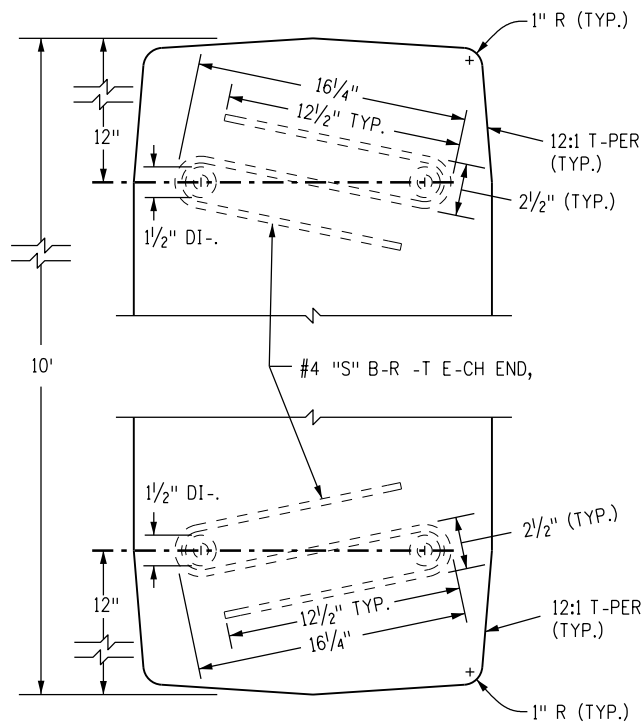
- NOTES**
1. WASHERS SHALL BE FORGED AS AN INTEGRAL PART OF THE PIN OR SHALL BE WELDED AS SHOWN.
  2. PINS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.
  3. IF AN ALTERNATIVE TOP CONFIGURATION IS USED FOR LIFTING, THE LIFTING PIN SHALL BE PROVIDED. PINS SHALL CONFORM TO CRITICAL DIMENSIONS (PIN LENGTH DIAMETER).
  4. PINS SHALL CONFORM TO ASTM A449.
  5. APPROVED NON-SHRINK GROUT SHALL BE USED FOR GROUTING OVER ALL PINS, AND GROUTING OF SCUPPERS.
  6. BOTH ENDS OF THE TYPE 7 CONCRETE BARRIER SHALL HAVE A 24:1 TAPER IN EACH DIRECTION FROM THE CENTER PIN RECESS TO IT'S OUTER EDGE TO FACILITATE PLACEMENT ON CURVES.



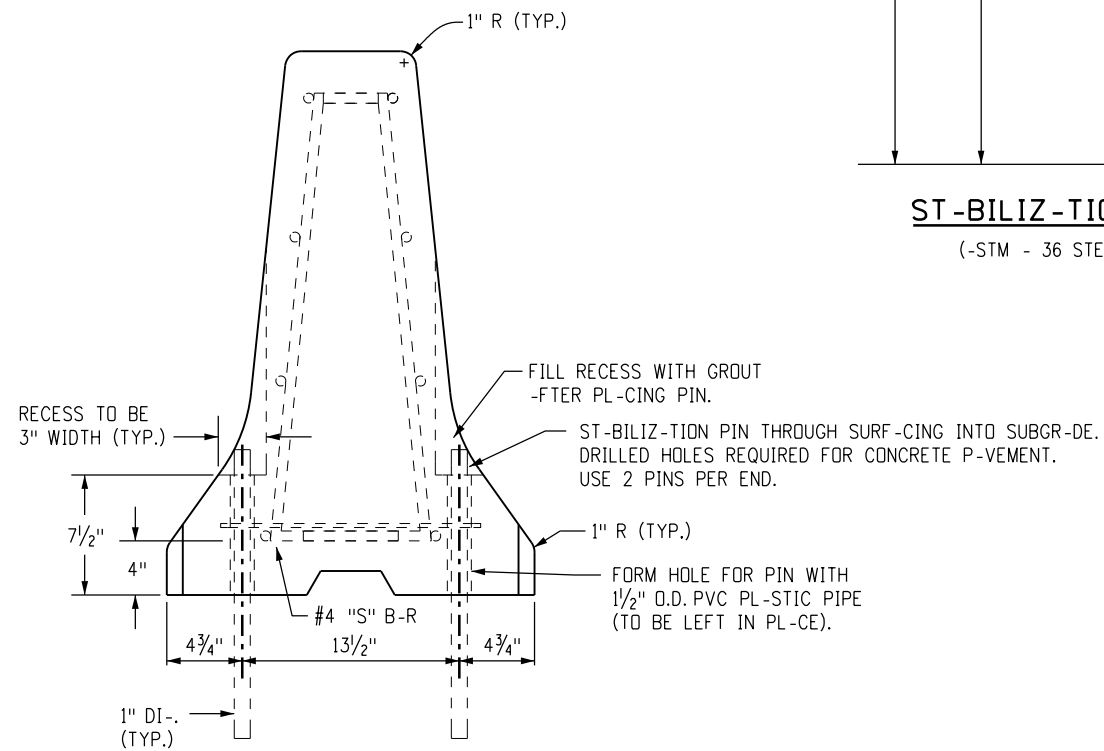
- ① A 1 INCH BY 12 INCH TAPER IS REQUIRED AT THE BOTTOM OF ALL FOUR CORNERS OF THE PRECAST TYPE 7 CONCRETE BARRIER SECTIONS TO ELIMINATE SNAGGING OF SNOW PLOW BLADES.
- ② THE HORIZONTAL SLOTS SHALL BE 1/2 INCH IN DEPTH AT THE CENTER OF THE PRECAST TYPE 7 CONCRETE BARRIER AND MAY DECREASE IN DEPTH AT THE EDGE OF THE BARRIER UNIT DUE TO THE (24:1) TAPER.

**DETAILS FOR PIN AND LOOP CONNECTION**

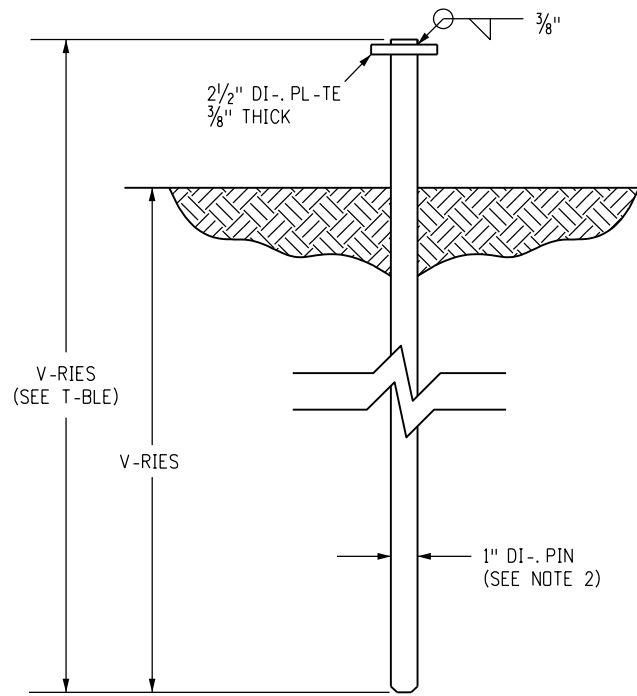
<b>Computer File Information</b>		<b>Sheet Revisions</b>		Colorado Department of Transportation 2829 West Howard Place CDDT HQ, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868 <b>Construction Engineering Services JBK</b>	<b>PRECAST TYPE 7 CONCRETE BARRIER</b> Issued by the Project Development Branch: July 31, 2019	<b>STANDARD PLAN NO.</b>	
Creation Date: 07/31/19		Date:	Comments			M-606-14	
Designer Initials: JBK		(R-X) 08/21/20	Added Gen. Note 1 to show these barriers are TI-3 MASH compliant.			Standard Sheet No. 2 of 4	
Last Modification Date: 02/09/23		(R-X) 02/09/23	Changed reinforcing steel grade to 60 min. Deleted references to this being permanent.			Project Sheet Number:	
Detailer Initials: LTA		(R-X)					
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English		(R-X)					



PL-N VIEW OF S B-R ENDS

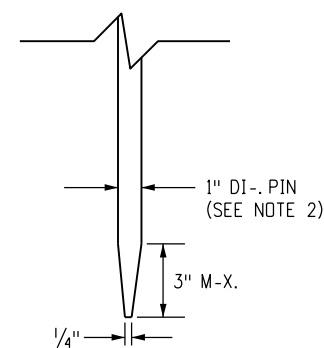


ELEV-TION VIEW WITH PINS



ST-BILIZ-TION PIN

(-STM - 36 STEEL)



OPTION-L T-PERED END PIN

(SEE NOTE 3)

NOTES

- SEE SHEET 1 FOR REINFORCEMENT -ND OTHER DET-ILS NOT SHOWN HERE.
- PINS SH-LL BE HOT-DIPPED G-LV-NIZED -FTER F-BRIC-TION
- N OPTION-L 3 INCHES M-XIMUM T-PERED END POINT M-Y BE PROVIDED ON THE ST-BILIZ-TION PIN TO F-CILIT-TE DRIVING.

RO-D SURF-CE	PIN LENGTH
CONCRETE	2 FT.-6 IN.
HM-	3 FT.
SOIL	3 FT.-6 IN.

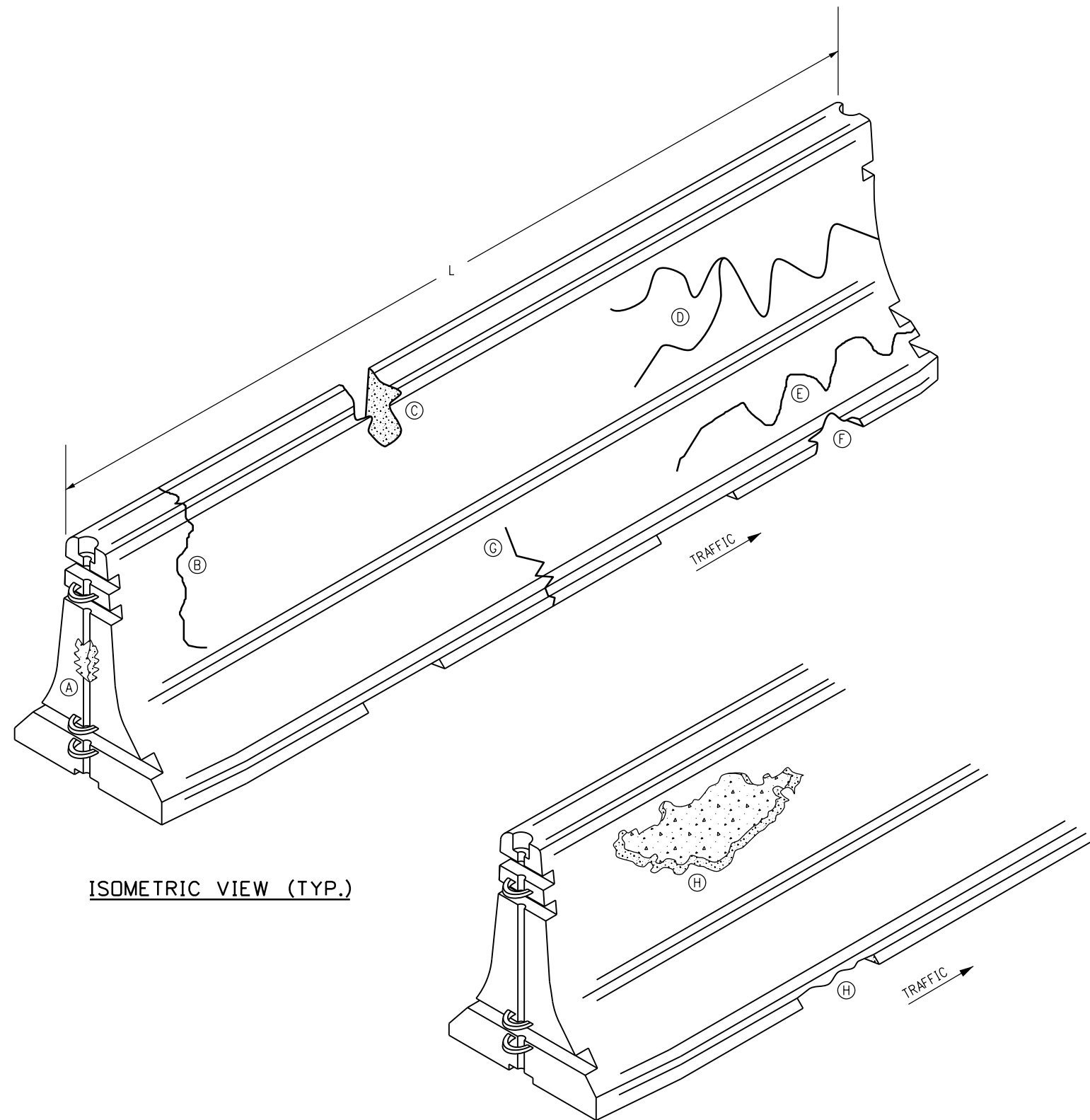
T-BLE OF ST-BILIZ-TION PIN LENGTHS

DETAILS FOR STABILIZATION OF TEMPORARY PINNED PRECAST TYPE 7 CONCRETE BARRIER

Computer File Information		Sheet Revisions		Colorado Department of Transportation 2829 West Howard Place CDOT HQ, 3rd Floor Denver, CO 80204 Phone: 303-757-9021 FAX: 303-757-9868	PRECAST TYPE 7 CONCRETE BARRIER	STANDARD PLAN NO.	
Creation Date: 07/31/19		Date:	Comments				
Designer Initials: JBK	(R-X)	08/21/20	-dded Gen.Note 1 to show these barriers are TI-3 M-SH compliant.	Construction Engineering Services JBK	Issued by the Project Development Branch: July 31, 2019	Standard Sheet No. 3 of 4	
Last Modification Date: 02/09/23	(R-X)	02/09/23	Changed reinforcing steel grade to 60 min. Deleted references to this being permanent.				
Detailer Initials: LTA	(R-X)					Project Sheet Number:	
C-D Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)						

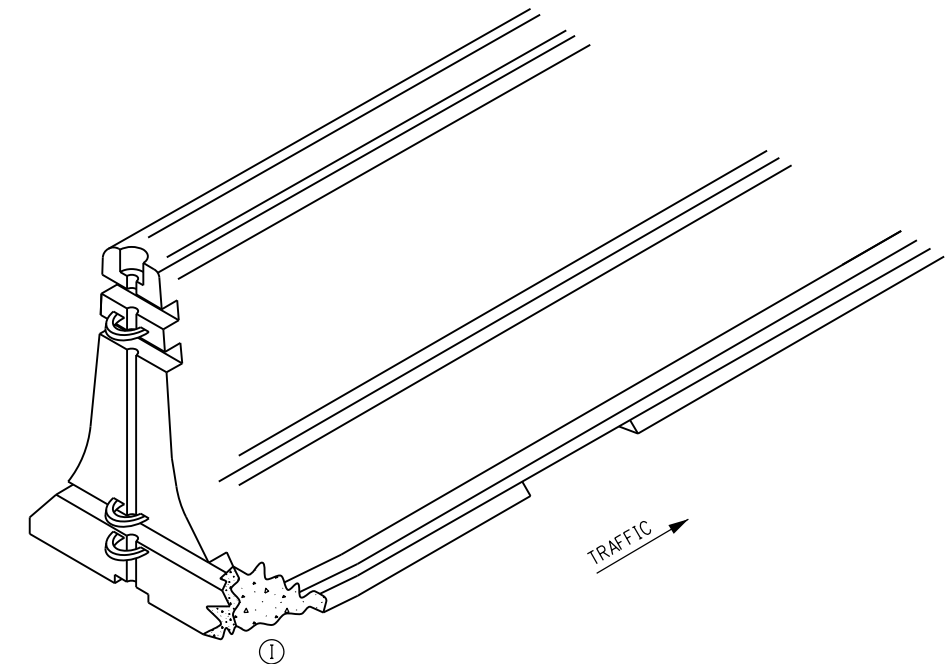
**NOTES**

1. PRECAST TYPE 7 CONCRETE BARRIERS SHALL BE USED ONLY IN TEMPORARY CONFIGURATIONS AND MUST BE INSPECTED PRIOR TO REUSE AND PLACEMENT IN WORK ZONES. CONTINUED USE IN WORK ZONES IS ALSO SUBJECT TO PERIODIC INSPECTIONS. INSPECTIONS AND MEASUREMENTS WILL BE PERFORMED BY CDDT. ANY PRECAST TYPE 7 CONCRETE BARRIER SHOWING ANY ONE OF THE FOLLOWING DISCREPANCIES WILL NOT BE INSTALLED OR ALLOWED TO REMAIN IN USE:
  - (A) A SLOT CONNECTION WHERE MORE THAN 25% IS EITHER CRACKED OR MISSING.
  - (B) A CRACK ON TOP OF A BARRIER UNIT WHICH RUNS DOWN THE VERTICAL FACE ON EITHER SIDE FOR MORE THAN 16 INCHES.
  - (C) A CHIP ON THE TOP OR VERTICAL FACE WHICH IS MORE THAN 1 SQ. FT. IN AREA AND MORE THAN 2 INCHES DEEP. SMALLER AREAS AND DEPTHS SHALL BE FIELD PATCHED. CHIPS LESS THAN 2 INCHES DEEP AND WITHIN A REASONABLE AREA SHALL NOT REQUIRE ATTENTION.
  - (D) A HORIZONTAL CRACK ON EITHER SIDE WHICH IS GREATER THAN L/2, OR THAT SPLITS INTO A "Y" SHAPE WITH ARMS GREATER THAN 12 INCHES.
  - (E) A HORIZONTAL CRACK IN THE SLOPING AREA THAT IS GREATER THAN L/2 AND INTERSECTS A VERTICAL CRACK.
  - (F) A CHIP ON A VERTICAL CURB GREATER THAN 1 SQ. FT. AND/OR 3 INCHES DEEP. SMALLER AREAS AND DEPTHS SHALL BE FIELD PATCHED. CHIPS LESS THAN 1 INCH DEEP AND WITHIN A REASONABLE AREA SHALL NOT REQUIRE ATTENTION.
  - (G) A VERTICAL CRACK ACROSS THE BOTTOM AND UP THE CURB FACE INTO THE SLOPING FACE.
  - (H) SPALLING CONCRETE THAT IS PITTED, FLAKED, OR BROKEN OFF MORE THAN 5 SQUARE FEET COMBINED (EXPOSED REBAR MAY OR MAY NOT BE VISIBLE).
  - (I) ANY CORNERS THAT ARE CHIPPED MORE THAN 1 SQ. FT. IN AREA AND MORE THAN 2 INCHES DEEP. SMALLER AREAS AND DEPTHS SHALL BE FIELD PATCHED. CHIPS LESS THAN 2 INCHES DEEP AND WITHIN A REASONABLE AREA SHALL NOT REQUIRE ATTENTION.
2. A "CRACK" IS DEFINED AS AN OPENING OF AT LEAST 1/8 INCH IN WIDTH WHEN MEASURED WITH A FEELER GAUGE.
3. ALL PRECAST TYPE 7 CONCRETE BARRIERS SHALL BE IN ACCORDANCE WITH SUBSECTION 606.04(b).



ISOMETRIC VIEW (TYP.)

**NON-REUSE OF PRECAST TYPE 7 CONCRETE BARRIER**



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Creation Date: 07/31/19		Date:	Comments			M-606-14	
Designer Initials: JBK		(R-X) 08/21/20	Added Gen. Note 1 to show these barriers are TI-3 MASH compliant.			Standard Sheet No. 4 of 4	
Last Modification Date: 02/09/23		(R-X) 02/09/23	Changed reinforcing steel grade to 60 min. Deleted references to this being permanent.				
Detailer Initials: LTA		(R-X)				Project Sheet Number:	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English		(R-X)		Issued by the Project Development Branch: July 31, 2019			