

GENERAL NOTES:
 IN THE EVENT THE NORMAL 16' POST SPACING WOULD PLACE A POST ON A DROP INLET, THE SPACING OF THE TWO POSTS IMMEDIATELY PRECEDING THE INLET SHALL BE REDUCED SUCH THAT THE FOLLOWING POST CLEARS THE INLET. EACH SUBSEQUENT POST SHALL BE SPACED AT 16'. IN NO CASE SHALL THE SPACING EXCEED 16'.
 IN THE EVENT A LONGITUDINAL MEDIAN PIPE IS ENCOUNTERED THE CABLE SHALL BE PLACED PARALLEL TO THE PIPE AT A MINIMUM OFFSET OF 12". THE OFFSET SHALL BE ACHIEVED BY A MINIMUM 16:1 TAPER ON THE UPSTREAM AND DOWNSTREAM END OF THE PIPE.
 FOR SECTION A-A AND DETAIL B, SEE SHEET 4 OF 7.
 FOR GUARD CABLE DELINEATION DETAILS SEE STD PLAN 903.03.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
 105 WEST CAPITOL
 JEFFERSON CITY, MO 65102
 1-888-ASK-MODOT (1-888-275-6636)

STATE OF MISSOURI
 ERIC E. SCHROETER
 NUMBER PE-28411
 PROFESSIONAL ENGINEER

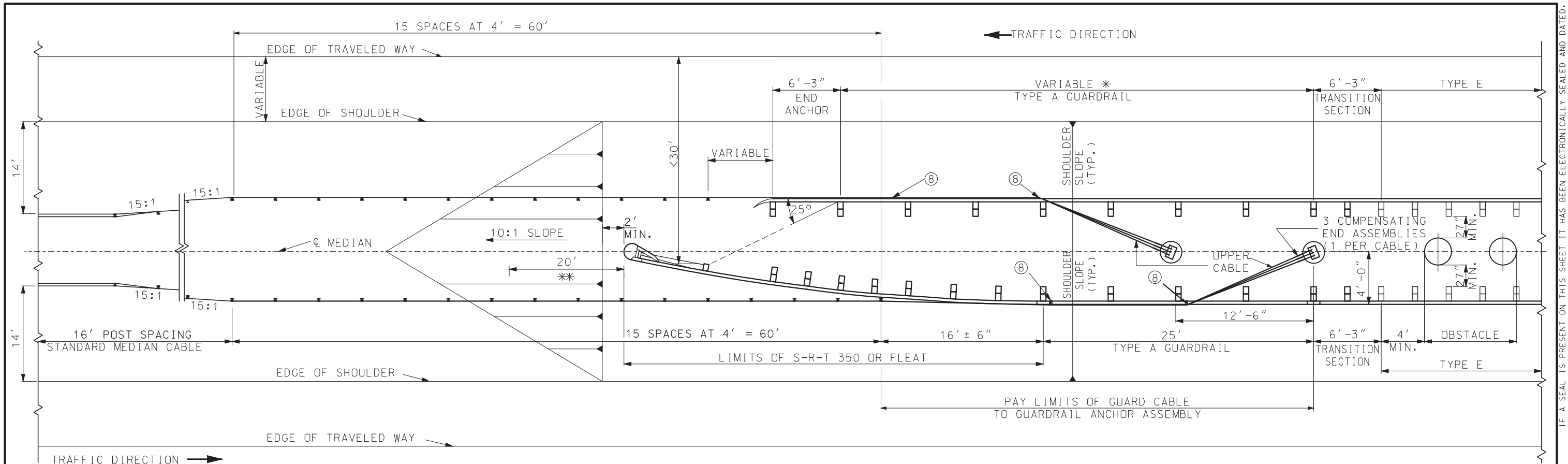
THREE-STRAND GUARD CABLE MEDIAN APPLICATION

DATE EFFECTIVE: 04/01/2019
 DATE PREPARED: 1/16/2019

606.41L

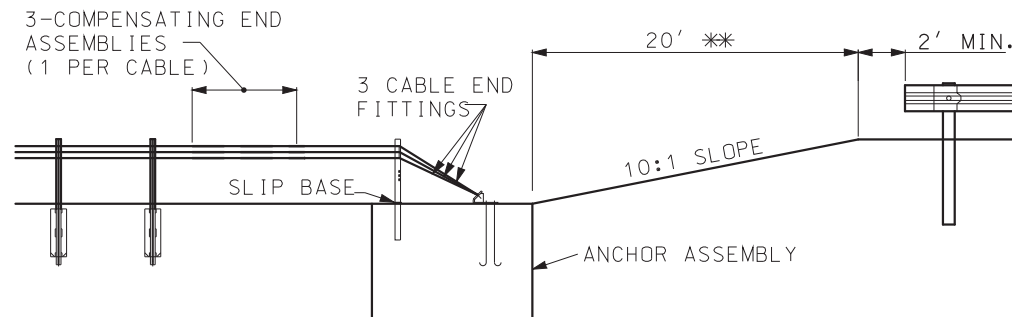
SHEET NO. 1 OF 7

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



GUARD CABLE TO GUARDRAIL TRANSITION AT MEDIAN OBSTACLE

- * VARY LENGTH TO ACHIEVE 25° DEFLECTION TO SECOND POST OF S-R-T 350 OR FLEAT.
- ** IF GUARD CABLE IS USED WITH BULLNOSE GUARDRAIL SYSTEM, OR A CRASHWORTHY END TERMINAL ON A MEDIAN LESS THAN 60' IN WIDTH, THE CABLE ANCHORAGE SHALL BE PLACED ON THE MEDIAN CENTERLINE 20' FROM THE NOSE OF THE CRASHWORTHY END TERMINAL OR BULLNOSE GUARDRAIL SYSTEM.



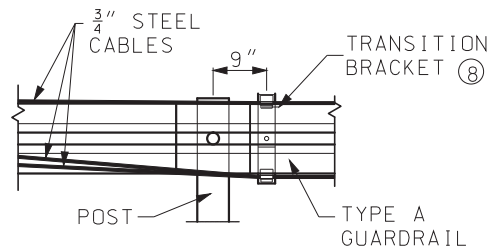
PROFILE OF TRANSITION AT MEDIAN OBSTACLE WITH BULLNOSE OR IN A MEDIAN NARROWER THAN 60'

GENERAL NOTES:

WHEN GUARD CABLE IS LOCATED ALONG THE MEDIAN CENTERLINE NEAR A BRIDGE END OR CONCRETE BARRIER, IT SHALL BE ANCHORED BEHIND THE GUARDRAIL ASSEMBLY WITH THE GUARD CABLE ANCHOR ASSEMBLY. THE GUARD CABLE ANCHOR SHALL BE CONSTRUCTED SO THAT IT IS PROTECTED BY THE GUARDRAIL.

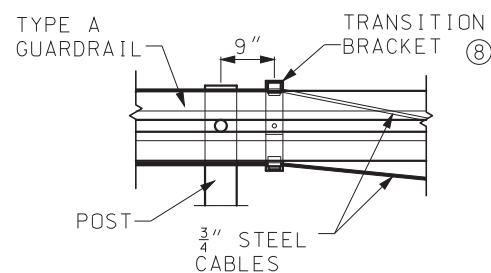
THIS DRAWING DEPICTS OPTIONS FOR THE ATTACHMENT OF GUARD CABLE TO GUARDRAIL. IT DOES NOT INDICATE THAT TWO RUNS OF CABLE ARE REQUIRED.

SUITABLE DRAINAGE MUST BE PROVIDED WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

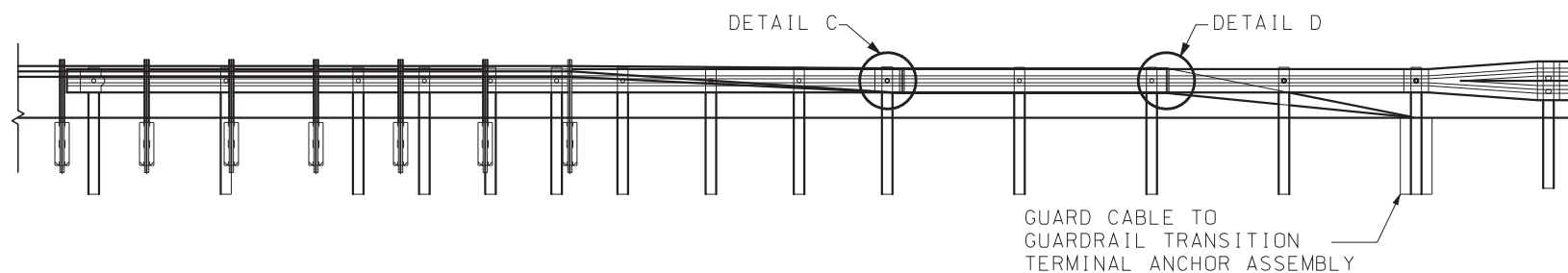


DETAIL C

FOR DETAIL Ⓢ SEE SHEET 6 OF 7.



DETAIL D

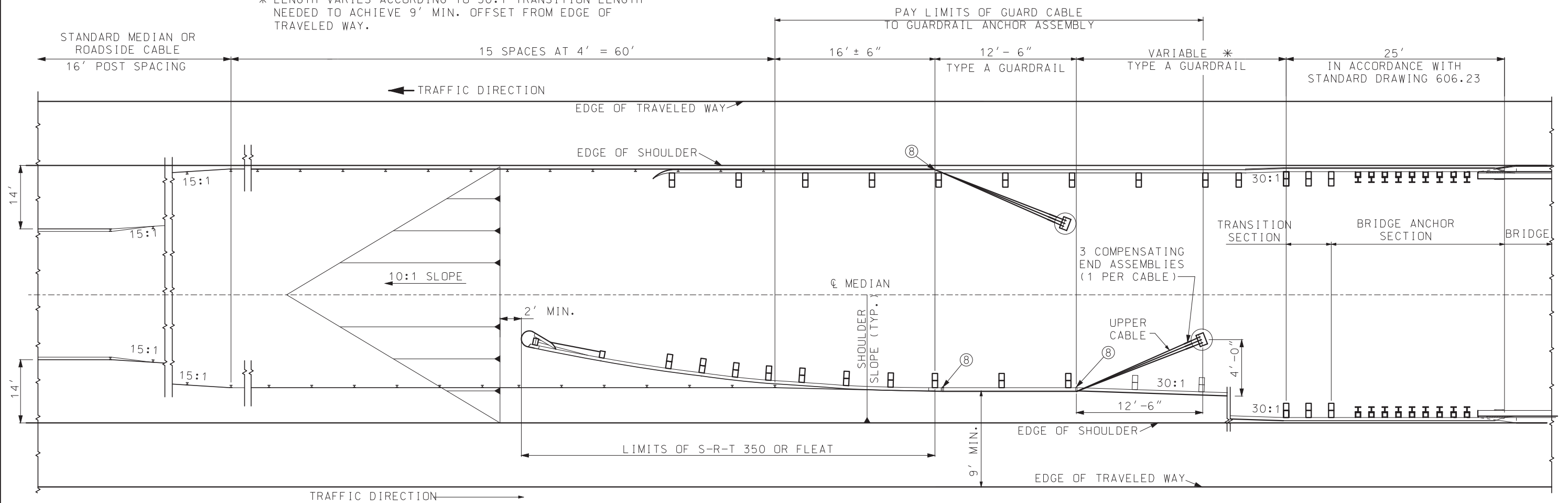


TYPICAL GUARD CABLE TO GUARDRAIL TRANSITION ELEVATION

	MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION	
	105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	THREE-STRAND GUARD CABLE	
	DATE EFFECTIVE: 07/01/2017 DATE PREPARED: 5/1/2017	606.41L

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

* LENGTH VARIES ACCORDING TO 30:1 TRANSITION LENGTH NEEDED TO ACHIEVE 9' MIN. OFFSET FROM EDGE OF TRAVELED WAY.



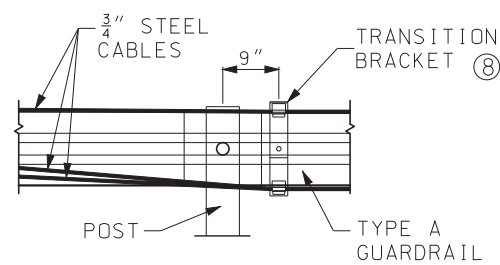
GUARD CABLE TO GUARDRAIL TRANSITION AT MEDIAN BRIDGE END

GENERAL NOTES:

WHEN GUARD CABLE IS LOCATED ALONG THE MEDIAN CENTER-LINE NEAR A BRIDGE END OR CONCRETE BARRIER, IT SHALL BE ANCHORED BEHIND THE GUARDRAIL ASSEMBLY WITH THE GUARD CABLE ANCHOR ASSEMBLY. THE GUARD CABLE ANCHOR SHALL BE CONSTRUCTED SO THAT IT IS PROTECTED BY THE GUARDRAIL.

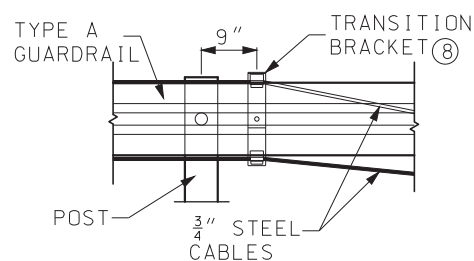
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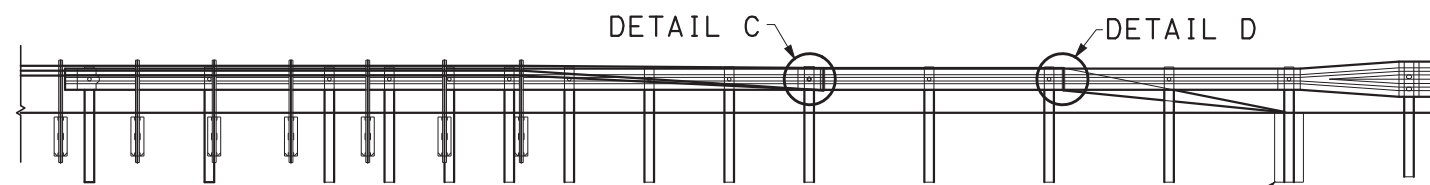


DETAIL C

FOR DETAIL ⑧ SEE SHEET 6 OF 7.



DETAIL D



GUARD CABLE TO GUARDRAIL TRANSITION TERMINAL ANCHOR ASSEMBLY

TYPICAL GUARD CABLE TO GUARDRAIL TRANSITION ELEVATION

MoDOT MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
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STATE OF MISSOURI
 ERIC E. SCHROETER
 NUMBER PE-28411
 PROFESSIONAL ENGINEER
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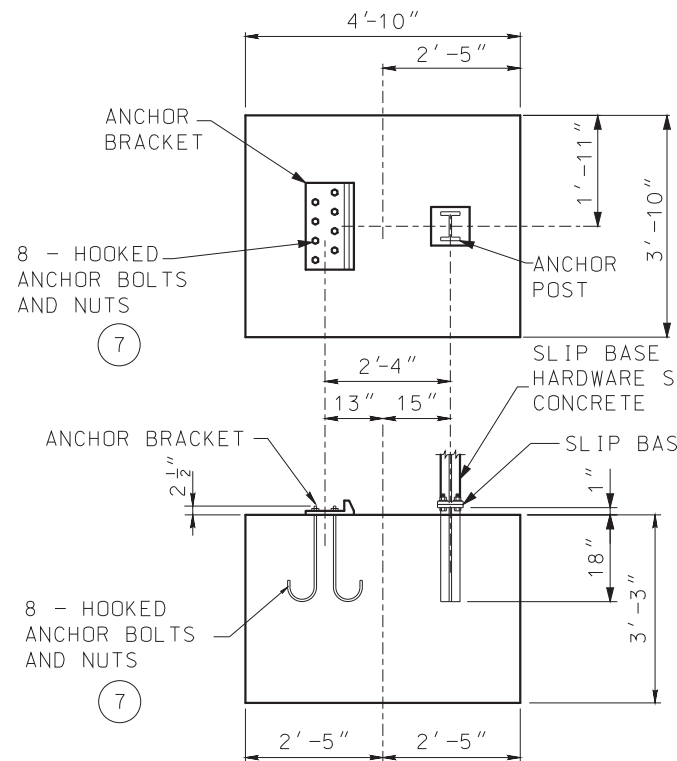
THREE-STRAND GUARD CABLE

DATE EFFECTIVE: 07/01/2017	606.41L	SHEET NO. 3 OF 7
DATE PREPARED: 5/1/2017		

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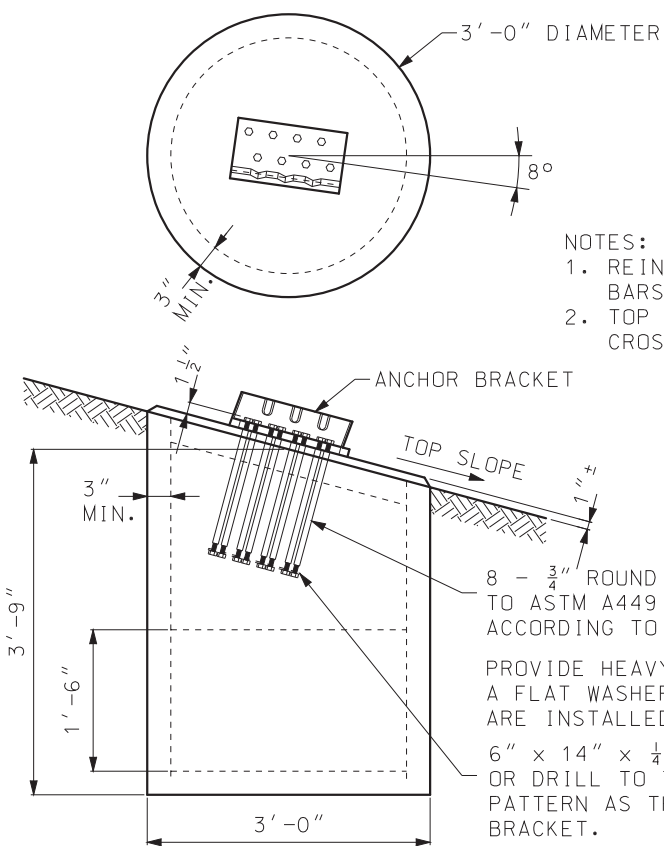
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STANDARDIZED HARDWARE	
①	WIRE ROPE
②	CABLE END FITTING
③	COMPENSATING CABLE END ASSEMBLY
④	ANCHOR BRACKET
⑤	U-BOLT CABLE CLIPS
⑥	CABLE HOOK BOLT AND NUT
⑦	HOOKED ANCHOR BOLT AND NUTS
⑧	CABLE TRANSITION BRACKET



MEDIAN AND ROADSIDE CABLE

- NOTES:
1. PLACE ANCHORS SO THE TOPS ARE LEVEL; WARP SLOPE TO FIT.
 2. THE CONCRETE ANCHOR BLOCK DOES NOT REQUIRE REINFORCEMENT.



GUARD CABLE TO GUARDRAIL TRANSITION

- NOTES:
1. REINFORCEMENT CONSISTS OF NO. 3 BARS PLACED AS SHOWN.
 2. TOP SLOPE TO MATCH ADJACENT CROSS SLOPE.

GENERAL NOTES:

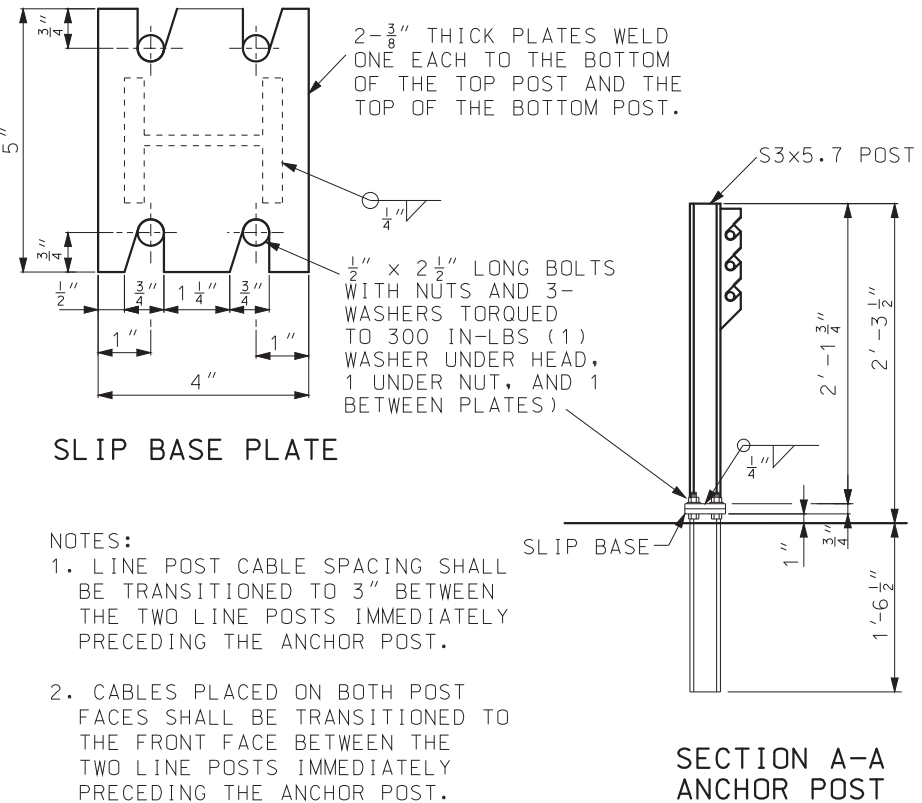
FOR ARRANGEMENT OF SPRING AND COMPENSATING CABLE END ASSEMBLIES AND TURNBUCKLE CABLE END ASSEMBLIES, THE FOLLOWING CRITERIA SHALL APPLY: LENGTH OF CABLE RUNS TO 1000' - USE COMPENSATING CABLE END ASSEMBLY ON ONE END AND THE TURNBUCKLE CABLE END ASSEMBLY ON THE OTHER END OF EACH INDIVIDUAL CABLE. FOR LENGTHS LONGER THAN 1000' AND UP TO AND INCLUDING 2000' - USE COMPENSATING CABLE END ASSEMBLY ON EACH END OF THE INDIVIDUAL CABLE.

PRIOR TO FINAL ACCEPTANCE BY THE ENGINEER, THE FOLLOWING PROCEDURES SHALL BE USED TO TIGHTEN THE TURNBUCKLES. DEPENDING ON THE TEMPERATURE AT THE TIME OF THE ADJUSTMENT IN ACCORDANCE WITH THE FOLLOWING TABLE:

TEMPERATURE (°F)	SPRING COMPRESSION FROM UNLOADED POSITION IN EACH SPRING
120 TO 100	1"
99 TO 80	1 1/2"
79 TO 60	2"
59 TO 40	2 1/2"
39 TO 20	3"
19 TO 0	3 1/2"
-1 TO -20	4"

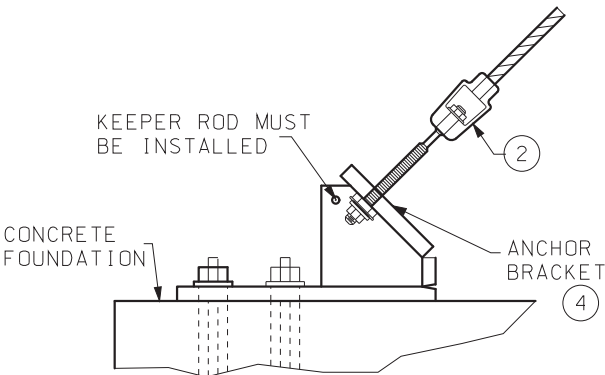
THE SPECIFICATIONS AND DIMENSIONS OF ALL HARDWARE AND FITTINGS SHALL COMPLY WITH AASHTO-AGC-ARTBA JOINT COMMITTEE TASK FORCE 13 REPORT, A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE.

TERMINAL ANCHOR ASSEMBLY

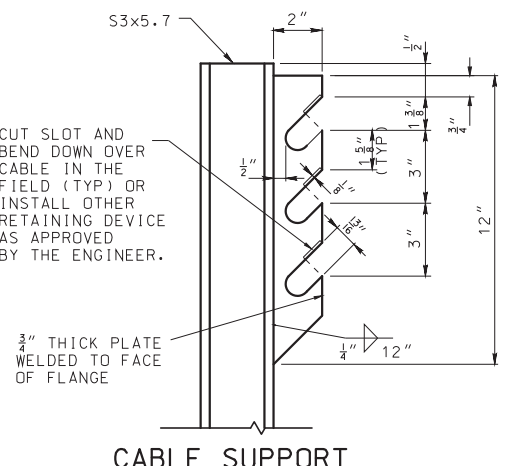


SLIP BASE PLATE

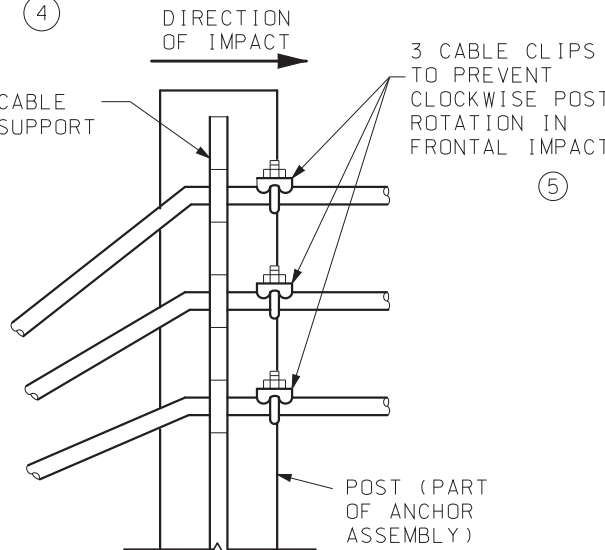
- NOTES:
1. LINE POST CABLE SPACING SHALL BE TRANSITIONED TO 3" BETWEEN THE TWO LINE POSTS IMMEDIATELY PRECEDING THE ANCHOR POST.
 2. CABLES PLACED ON BOTH POST FACES SHALL BE TRANSITIONED TO THE FRONT FACE BETWEEN THE TWO LINE POSTS IMMEDIATELY PRECEDING THE ANCHOR POST.



DETAIL A ANCHOR BRACKET
DETAIL FROM SHEET 1.



CABLE SUPPORT



DETAIL B CABLE CLIPS

DETAIL FROM SHEET 1.

FOR DETAILS ② AND ④, SEE SHEET 5 OF 7.

FOR DETAIL ⑤ AND ⑦, SEE SHEET 6 OF 7.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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THREE-STRAND GUARD CABLE

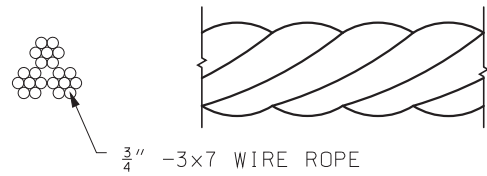
STATE OF MISSOURI
ERIC E. SCHROETER
NUMBER PE-28411
PROFESSIONAL ENGINEER

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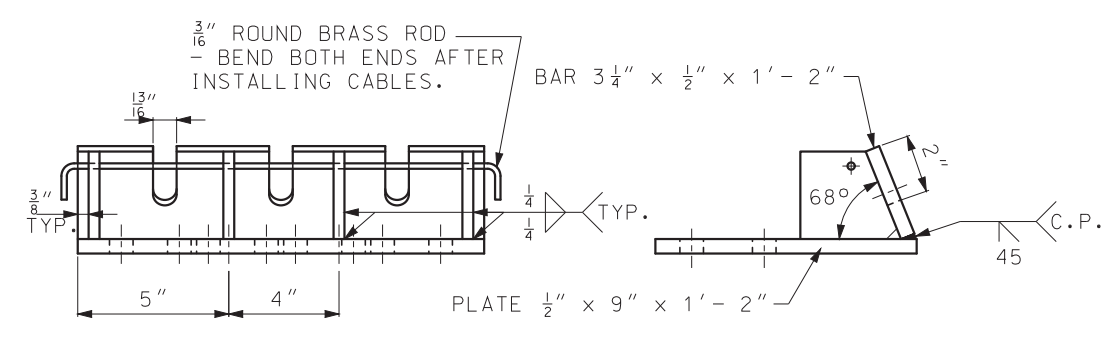
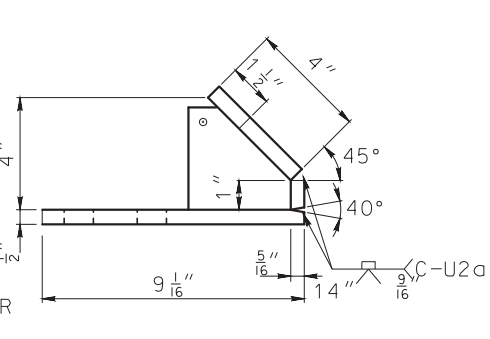
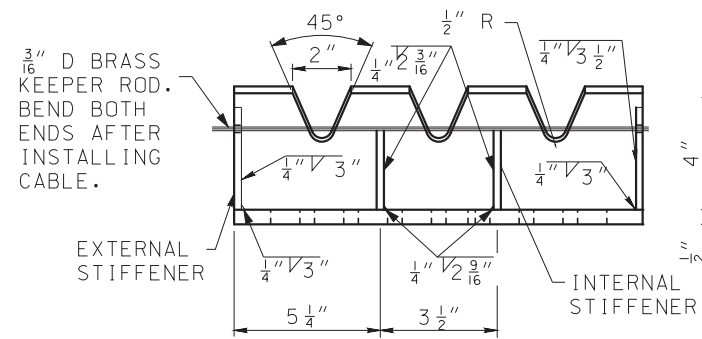
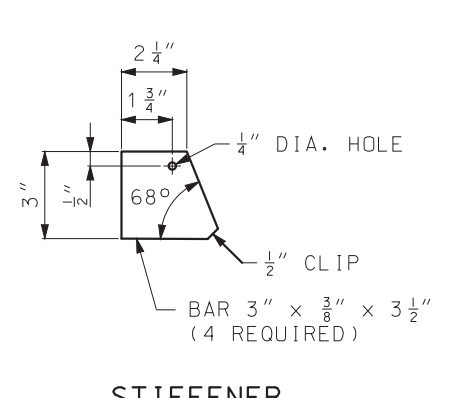
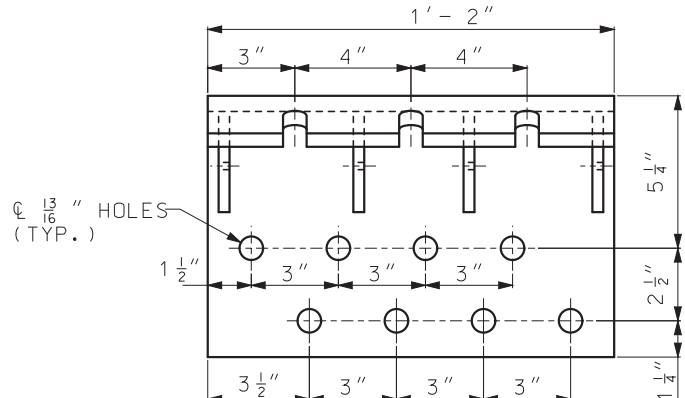
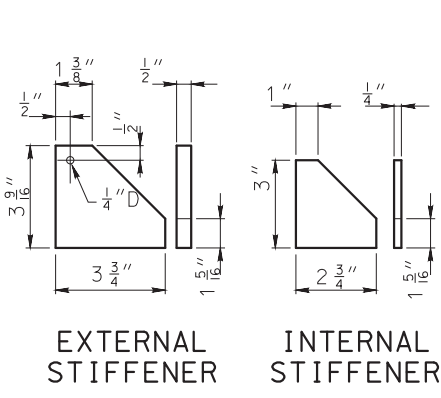
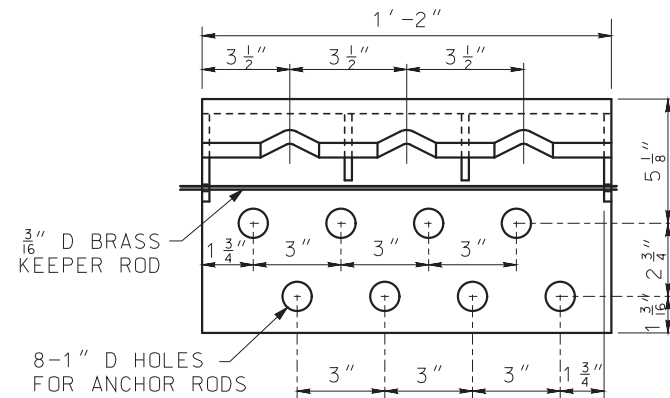
SHEET NO.
4 OF 7

DATE EFFECTIVE: 07/01/2017
DATE PREPARED: 5/1/2017

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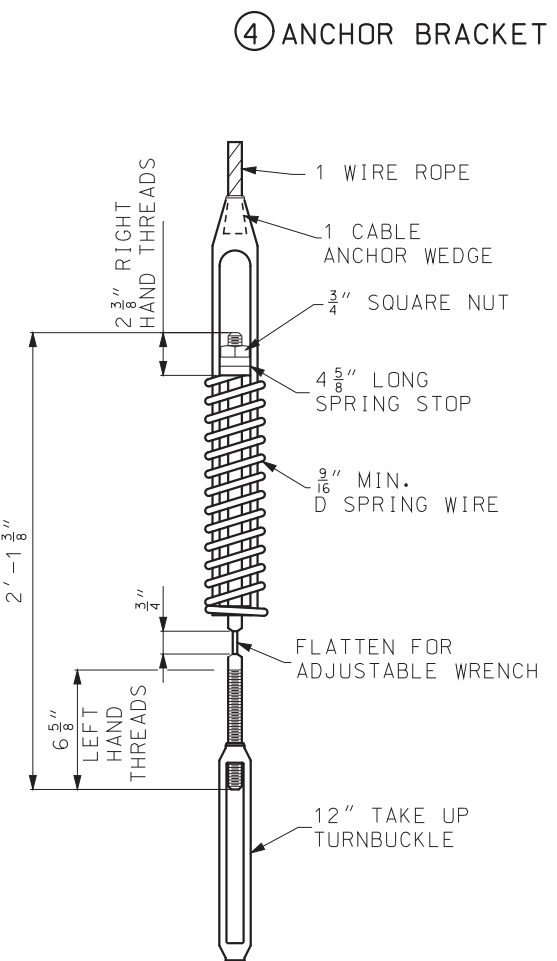
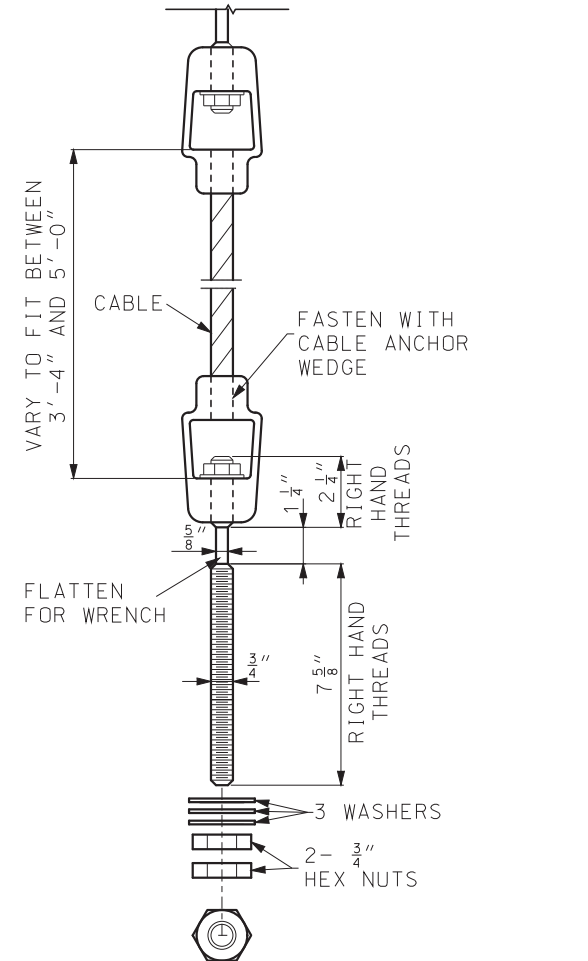
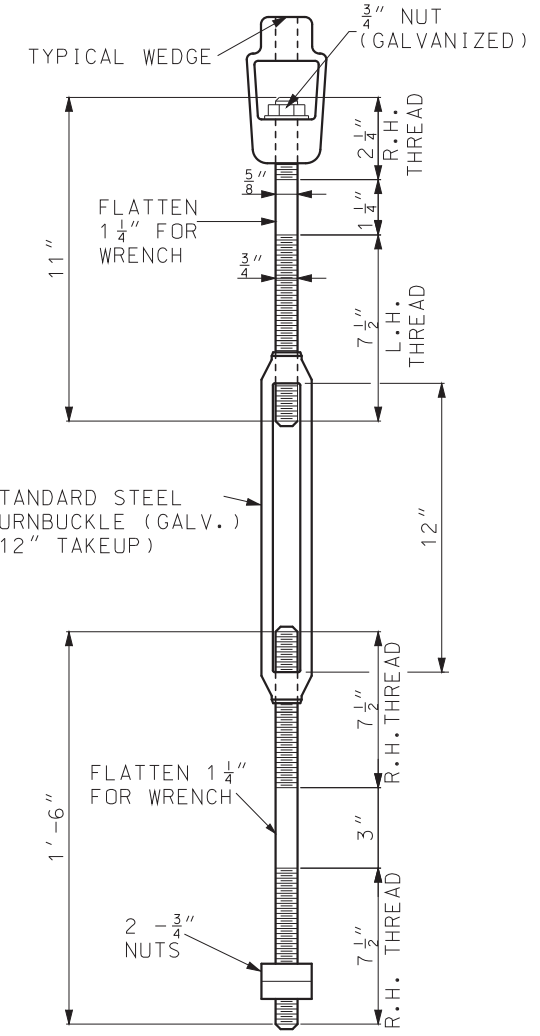


① WIRE ROPE



MEDIAN AND ROADSIDE CABLE

GUARD CABLE TO GUARDRAIL TRANSITION



④ ANCHOR BRACKET

TURNBUCKLE CABLE END ASSEMBLY

CABLE END FITTING

③ COMPENSATING CABLE END ASSEMBLY

② CABLE END FITTINGS

GENERAL NOTES:

AT ALL LOCATIONS WHERE THE CABLE IS CONNECTED TO A CABLE SOCKET WITH A WEDGE TYPE CONNECTION, ONE WIRE OF THE WIRE ROPE SHALL BE CRIMPED OVER THE BASE OF THE WEDGE TO HOLD IT FIRMLY IN PLACE.

THE SPECIFICATIONS AND DIMENSIONS OF ALL HARDWARE AND FITTINGS SHALL COMPLY WITH AASHTO-AGC-ARTBA JOINT TASK FORCE 13 REPORT, A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE.

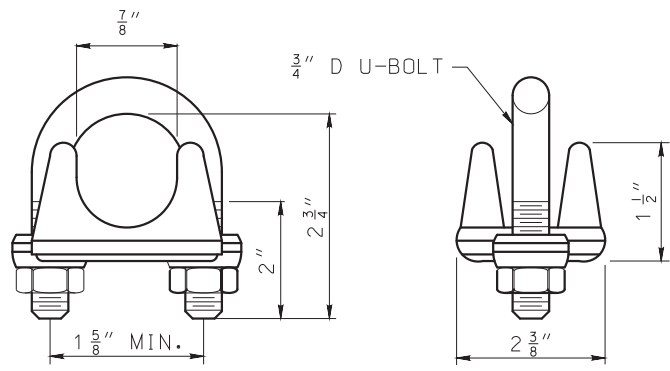
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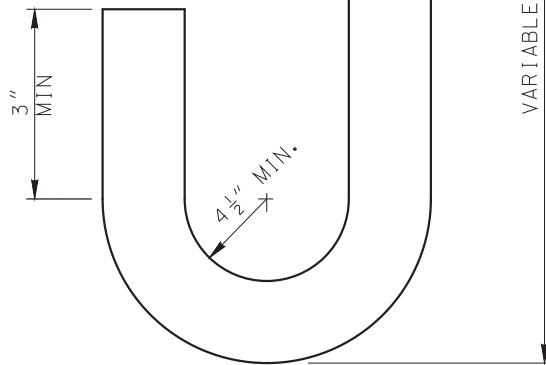
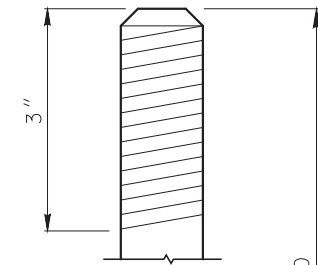
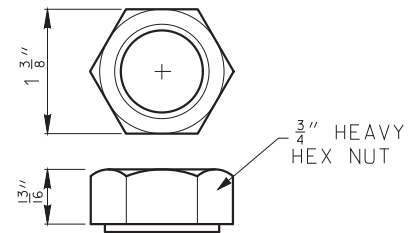
THREE-STRAND GUARD CABLE

DATE EFFECTIVE: 07/01/2017	606.41L	SHEET NO. 5 OF 7
DATE PREPARED: 5/1/2017		

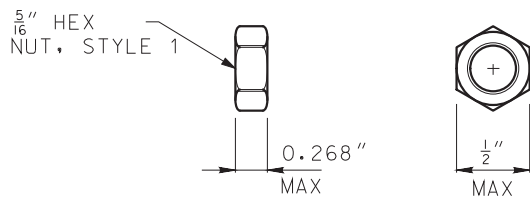
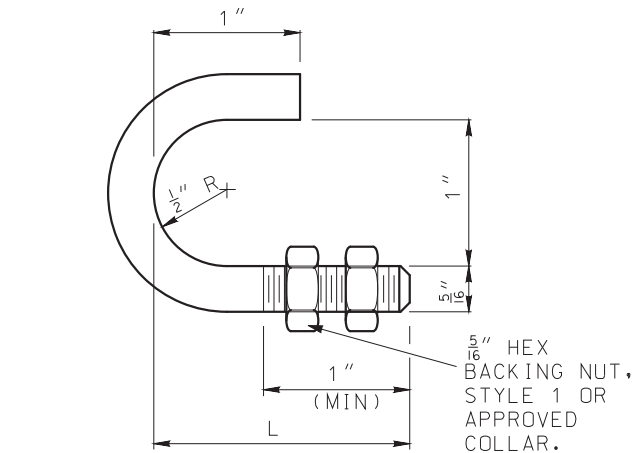
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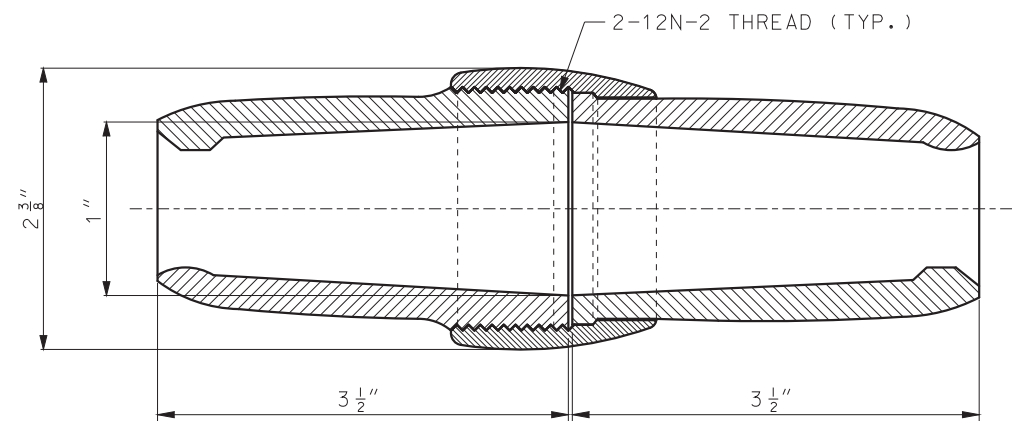
⑤ U-BOLT CABLE CLIPS



⑦ 25" HOOKED ANCHOR BOLT AND NUT

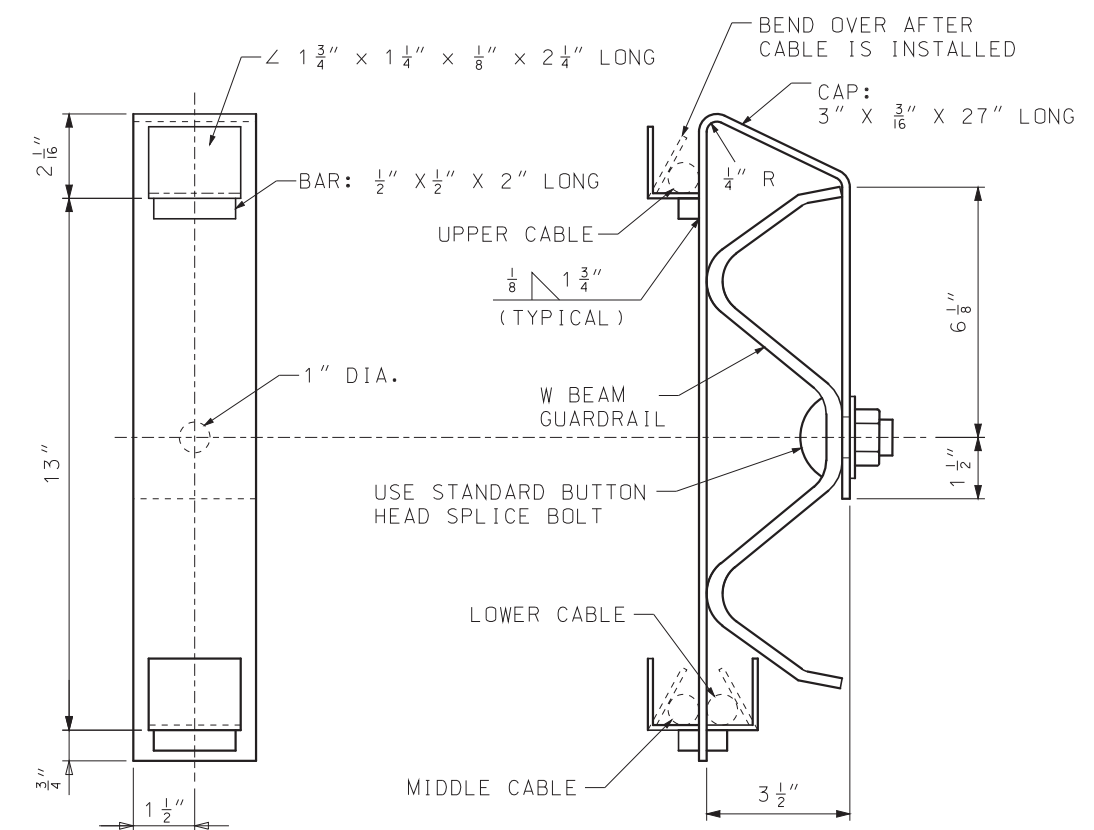


⑥ CABLE HOOK BOLT AND NUT

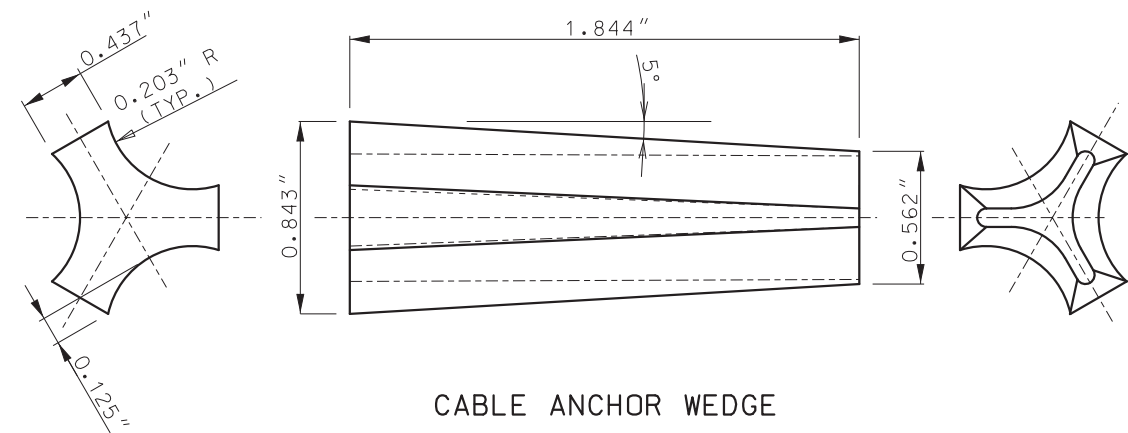


NOTE:
FITTING SPLICE SHALL DEVELOP THE FULL
STRENGTH OF THE CABLE (25,000 LB.).



CABLE SPLICE



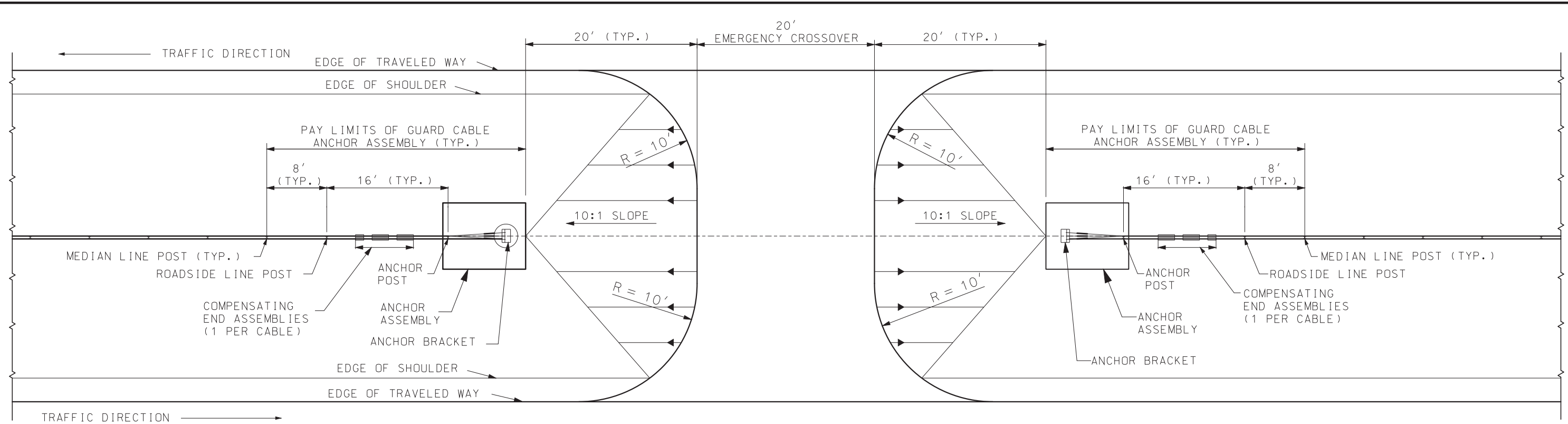
⑧ CABLE TRANSITION BRACKET



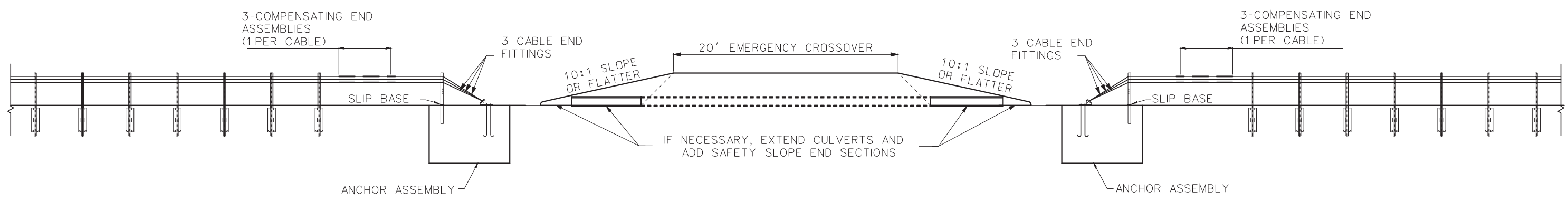
CABLE ANCHOR WEDGE

 MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
	THREE-STRAND GUARD CABLE
DATE EFFECTIVE: 07/01/2017 DATE PREPARED: 5/1/2017	SHEET NO. 606.41L 6 OF 7

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PLAN



PROFILE

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 PROFESSIONAL ENGINEER
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**THREE-STRAND
 GUARD CABLE
 TRANSITION AT MEDIAN OPENING**

DATE EFFECTIVE: 10/01/2017	606.41L	SHEET NO. 7 OF 7
DATE PREPARED: 8/8/2017		

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