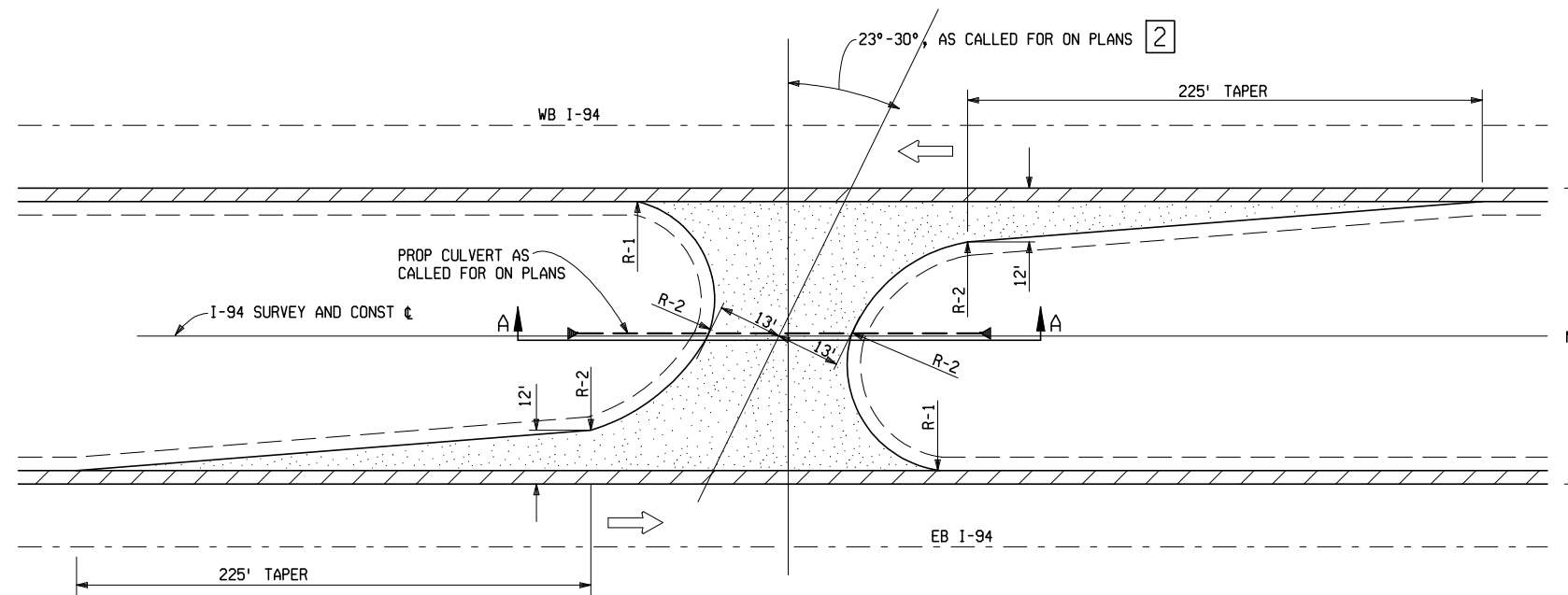
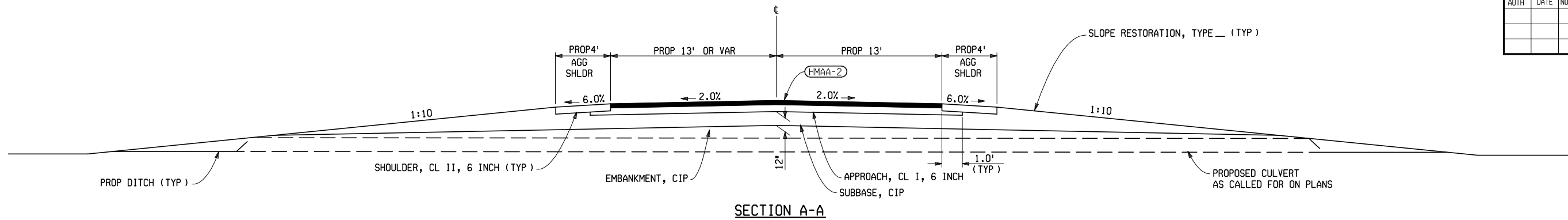


TABLE OF CONTENTS

- 5-1 ) DETAILS SHOWN ARE MAINTENANCE CROSSOVERS, DETAIL M AND L DRIVEWAYS WITH CURB AND GUTTER AND A DRIVEWAY GRADING DETAIL.
- 5-2 ) DETAILS SHOWN ARE DIFFERENT TYPES OF DETAIL III INTERSECTIONS. THESE INTERSECTIONS SHOULD HAVE A TYPICAL CROSS SECTION.
- 5-3 ) DETAILS SHOWN ARE VARIOUS DRIVEWAYS IN RURAL AREAS, LONGITUDINAL HMA SURFACING DETAIL AND SOME DITCHING TYPICAL  $\frac{1}{2}$  CROSS SECTIONS WITH FLUSH SHOULDERS OR WITH CURB AND GUTTER.
- 5-4 ) DETAILS SHOWN ARE FOR A DRIVEWAY CULVERT EXTENSION.
- 5-5 ) DETAILS SHOWN ARE FOR GUARDRAIL LAYOUT DETAILS. DO NOT INCLUDE PAY ITEMS ON THIS SHEET.
- 5-6 ) DETAILS SHOWN ARE FOR MINIMUM DRIVEWAY SURFACING LIMITS FOR 3R & 4R PROJECTS. OTHER DRIVEWAY DETAILS ARE SHOWN. (DESIGNERS SHOULD CONSIDER THE THICKNESS OF THE OVERLAY, SO AS TO EXTEND THE SURFACING LIMITS ON DRIVEWAYS TO MAKE SMOOTH DRIVEWAY TRANSITIONS.)

- ① PUT THE CLEAR ZONE DIMENSION HERE
- ② PLACE ANGLE ON PLANS
- ③ REFER TO DESIGN MANUAL FOR ADDITIONAL CROSSOVER FIGURE OPTIONS & DIMENSIONS. LABEL DIMENSIONS ON THE DETAIL.
- ④ RADIUS MAY BE USED INSTEAD OF TRAPEZOID. WHEN USING TRAPEZOID VERIFY THAT MINIMUM RADIUS IS MET PER THE GUIDELINES SET FORTH IN THE "ADMINISTRATIVE RULES REGULATING DRIVEWAYS, BANNERS, AND PARADES ON OR OVER HIGHWAYS"
- ⑤ ADJUST DISTANCE BEYOND PAVED SHOULDER TO PROVIDE A MINIMUM OF 2' BEYOND THE EDGE OF PAVED SHOULDER AND A MINIMUM OF 10' FROM THE EDGE OF PAVMENT.

FINAL R.O.W.			
AUTH	DATE	NO.	REVISION

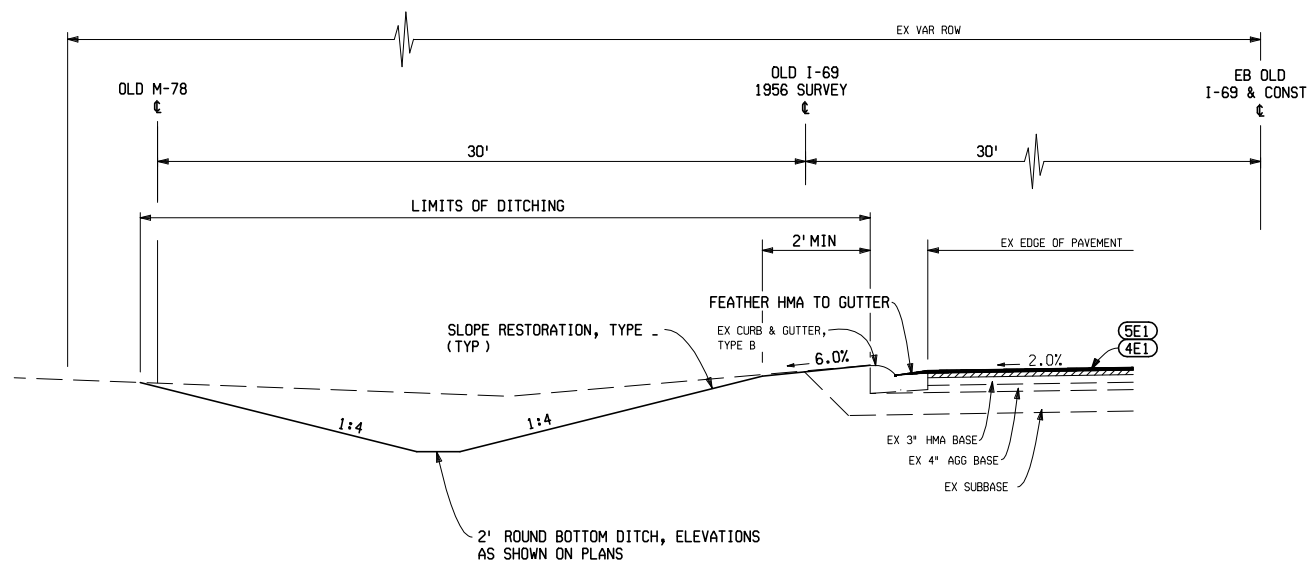


MAINTENANCE CROSSOVER

TO APPLY: STA 1648+00

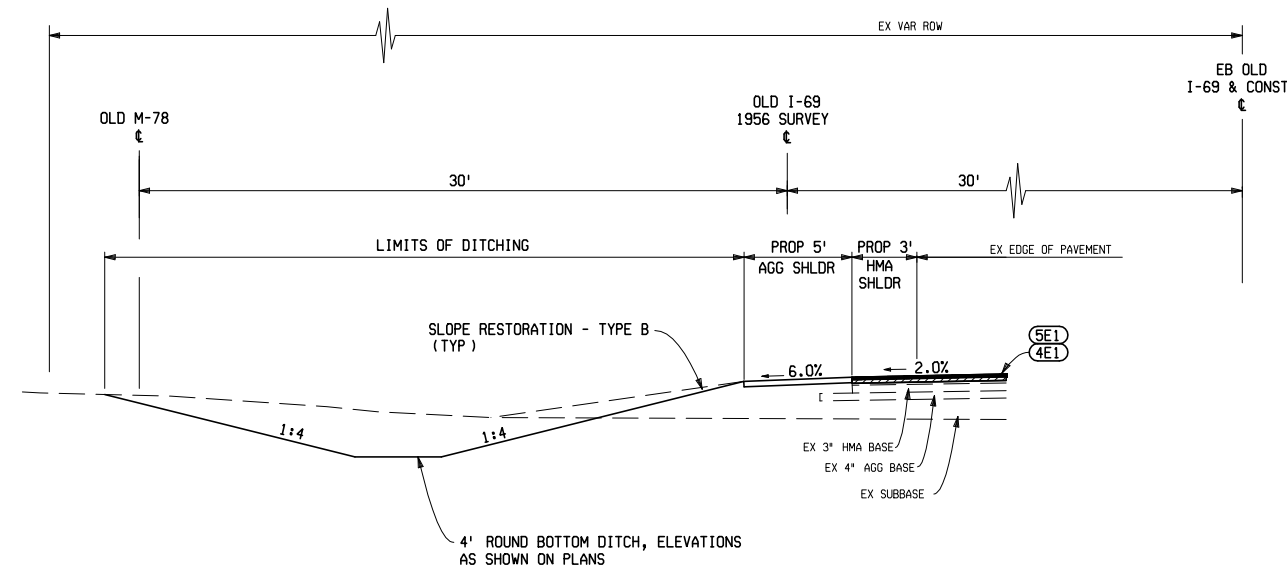
LOCATION	DIMENSIONS APPLICABLE TO VARYING MEDIAN WIDTHS		
	M	R-1	R-2
STA 1698+00	94'	28.48'	63.45'
STA 1832+00	70'	19.89'	43.51'

- HMA APPROACH
- PAVED SHOULDER
- AGGREGATE SHOULDER



PROPOSED OLD I-69 DITCH SECTION

TO APPLY: STA 726+25 (POB) TO STA 731+42 LT



PROPOSED OLD I-69 DITCH SECTION

TO APPLY: STA 731+42 TO STA 757+25 LT



MISCELLANEOUS DETAILS

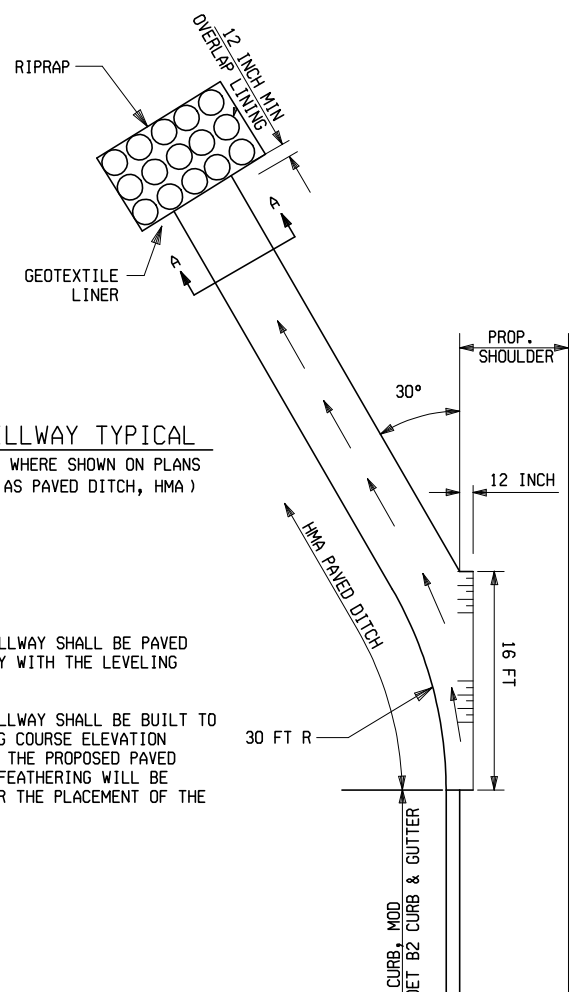
DATE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.
04/05/07				R.O.W CONST.

5-1

DATE: WORKED ON BY: DATE: WORKED ON BY: DATE: WORKED ON BY: CHECKED BY: FILE NAME:



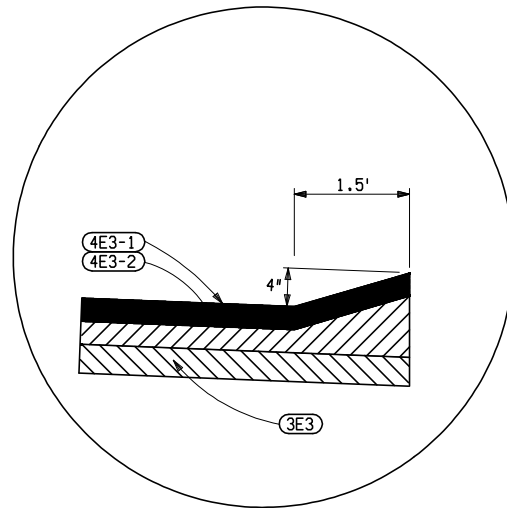
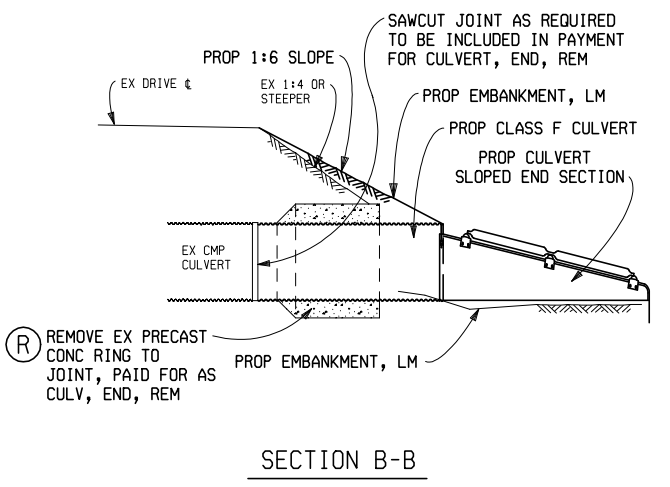
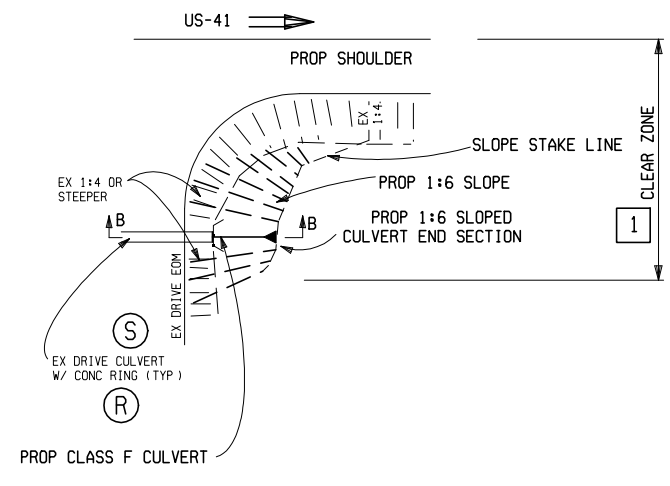
FINAL R.O.W.			
AUTH	DATE	NO.	REVISION



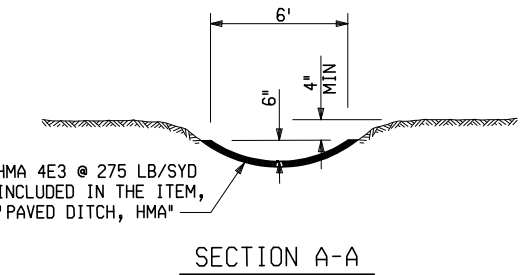
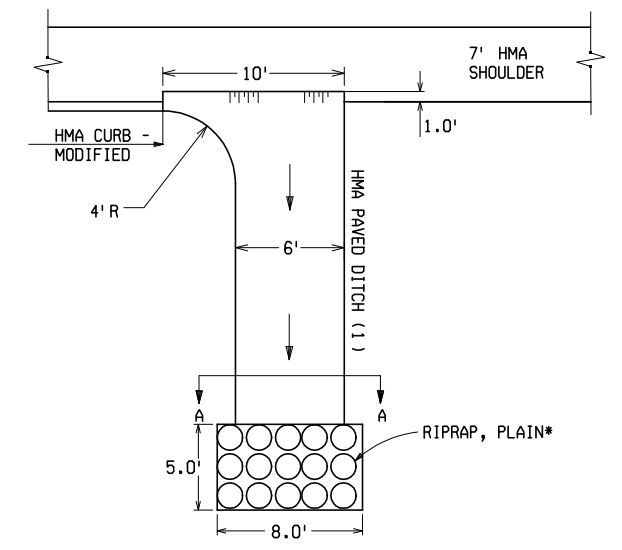
**NOTES:**

1. THE HMA SPILLWAY SHALL BE PAVED CONCURRENTLY WITH THE LEVELING COURSE
2. THE HMA SPILLWAY SHALL BE BUILT TO THE LEVELING COURSE ELEVATION ADJACENT TO THE PROPOSED PAVED SHOULDER. FEATHERING WILL BE REQUIRED FOR THE PLACEMENT OF THE TOP COURSE.

HMA MIXTURE 4E3 @ 275 #/SYD INCLUDED IN THE ITEM, "PAVED DITCH, HMA"

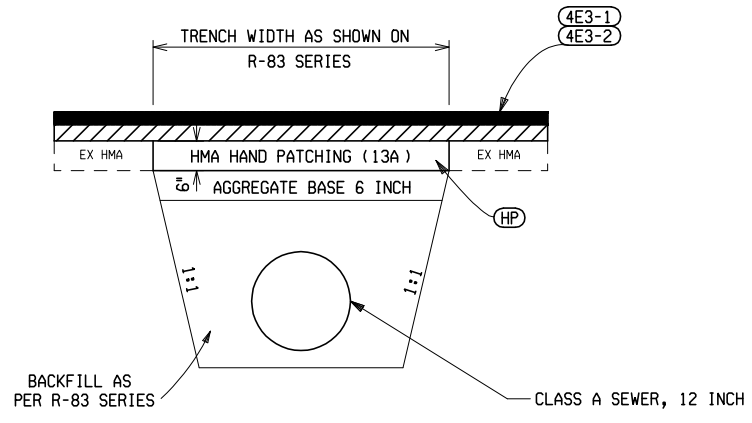
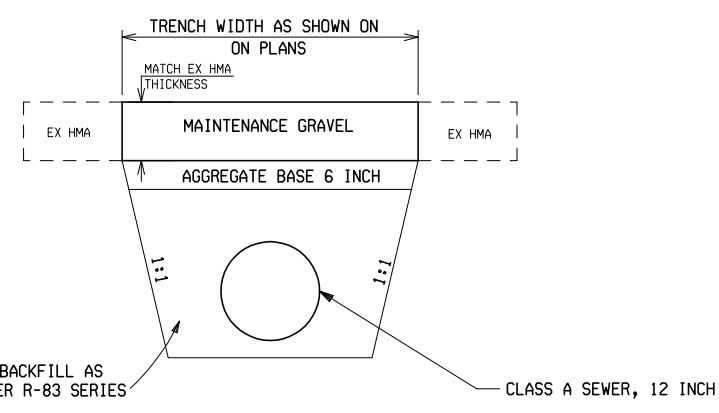


**HMA CURB - MODIFIED**  
TO APPLY:  
STA 17+29.23 TO STA 25+40.62  
CONFIGURATION OF HMA CURB IN LEVELING COURSE MAY BE ADJUSTED AS APPROVED BY THE ENGINEER



**HMA SPILLWAY**  
(PAID FOR AS PAVED DITCH, HMA)  
TO APPLY:  
STA 17+29.23 LT  
STA 25+40.62 LT

**NOTE:**  
(1) PLACE SPILLWAY AND RIPRAP BEFORE PAVING SHOULDER

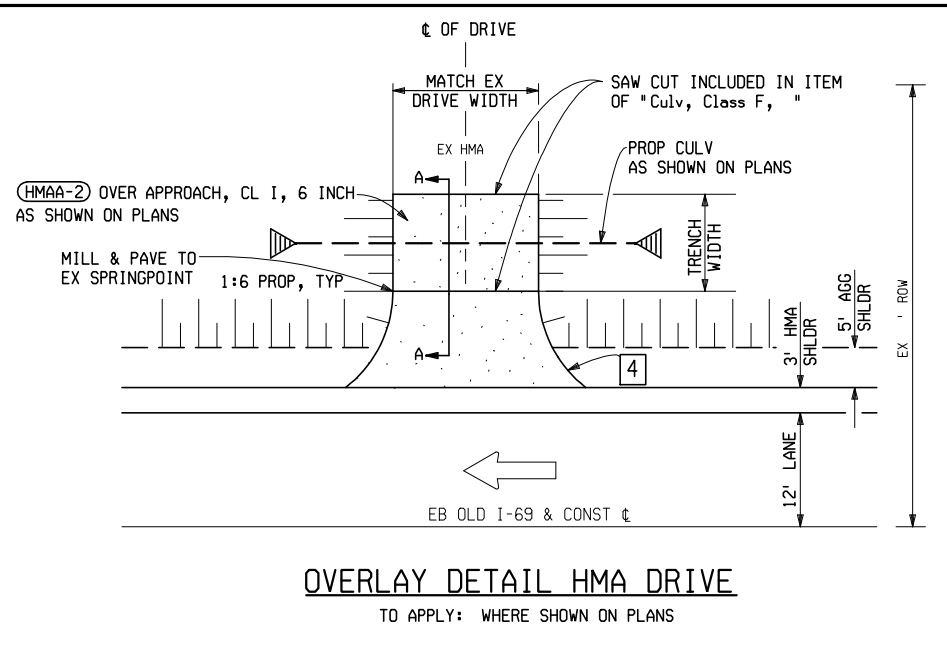


	MISCELLANEOUS DETAILS				
	DATE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.
04/05/07					R.O.W CONST.

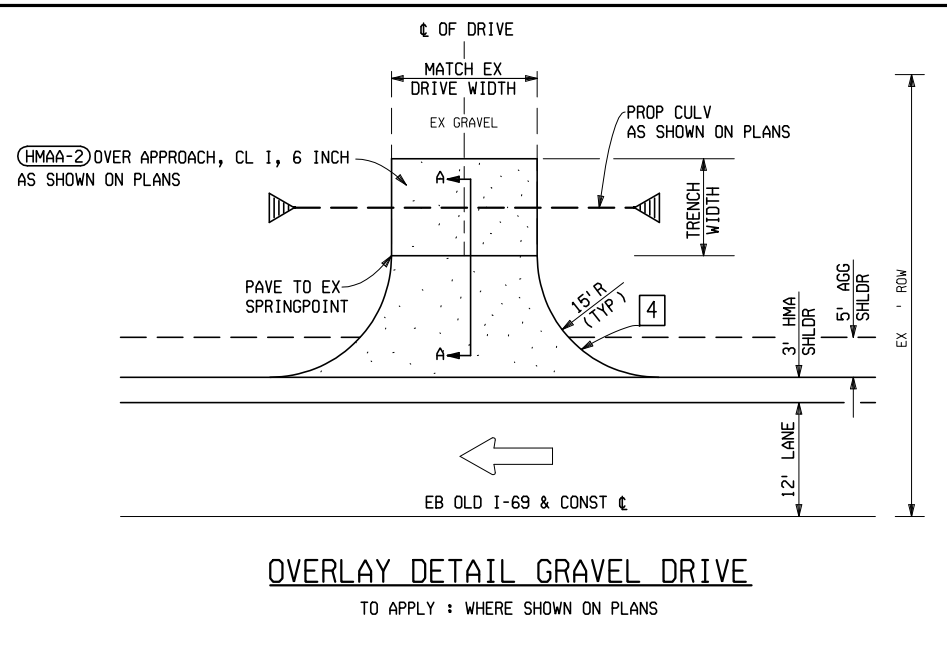
5-3

DATE: WORKED ON BY: DATE: WORKED ON BY: DATE: WORKED ON BY: CHECKED BY: FILE NAME:

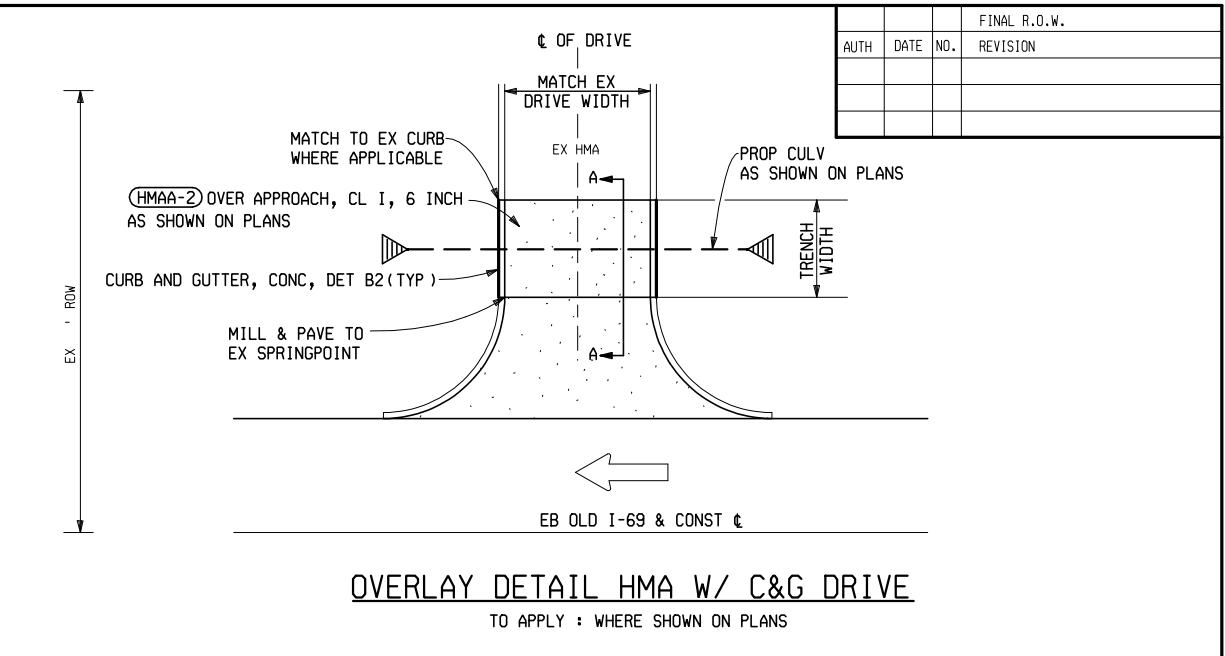
FINAL R.O.W.		
AUTH	DATE	NO.
REVISION		



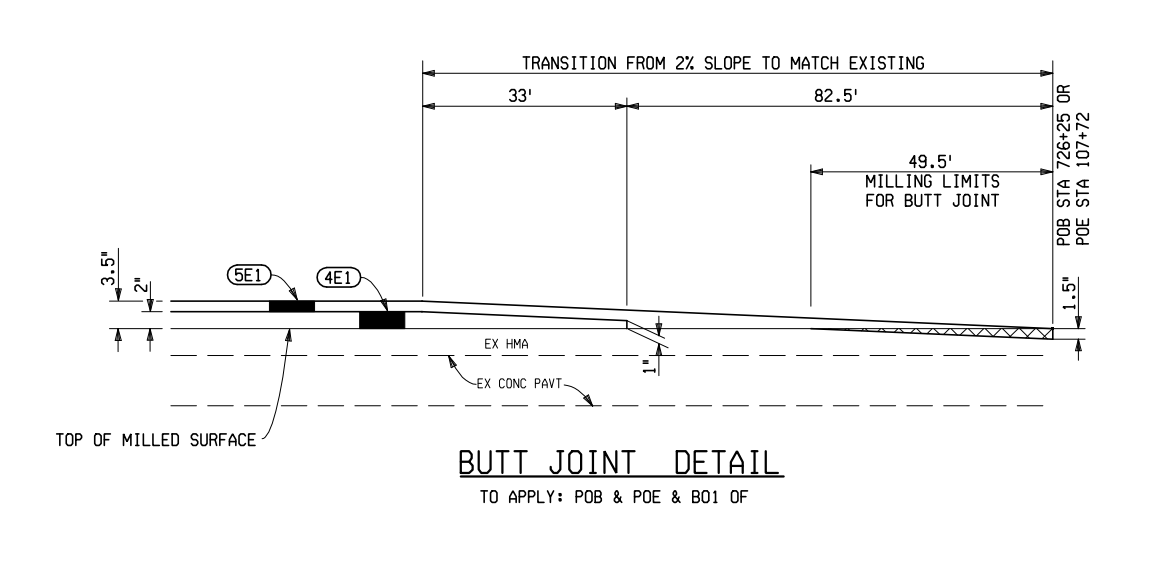
**OVERLAY DETAIL HMA DRIVE**  
TO APPLY: WHERE SHOWN ON PLANS



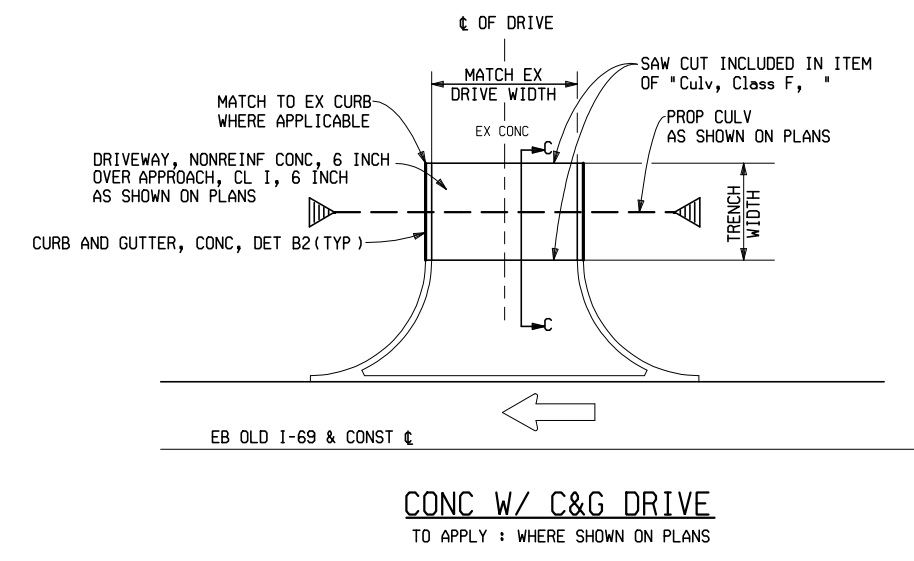
**OVERLAY DETAIL GRAVEL DRIVE**  
TO APPLY: WHERE SHOWN ON PLANS



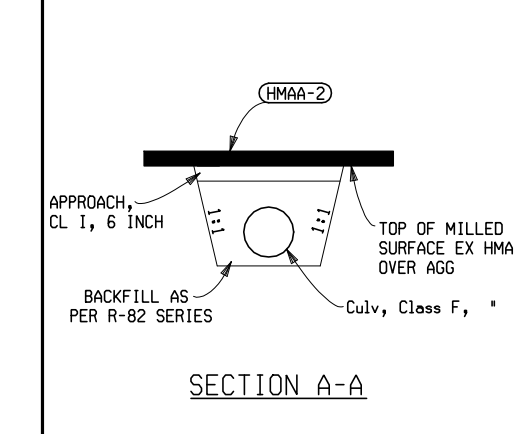
**OVERLAY DETAIL HMA W/ C&G DRIVE**  
TO APPLY: WHERE SHOWN ON PLANS



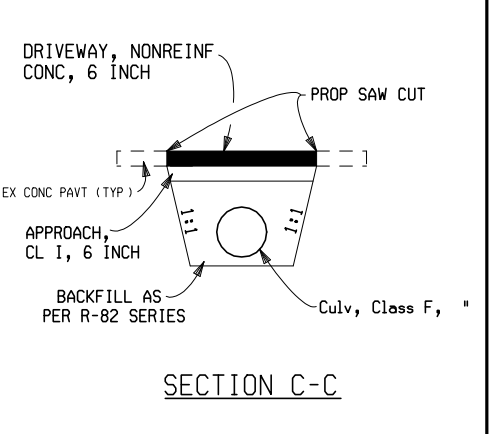
**BUTT JOINT DETAIL**  
TO APPLY: POB & POE & B01 OF



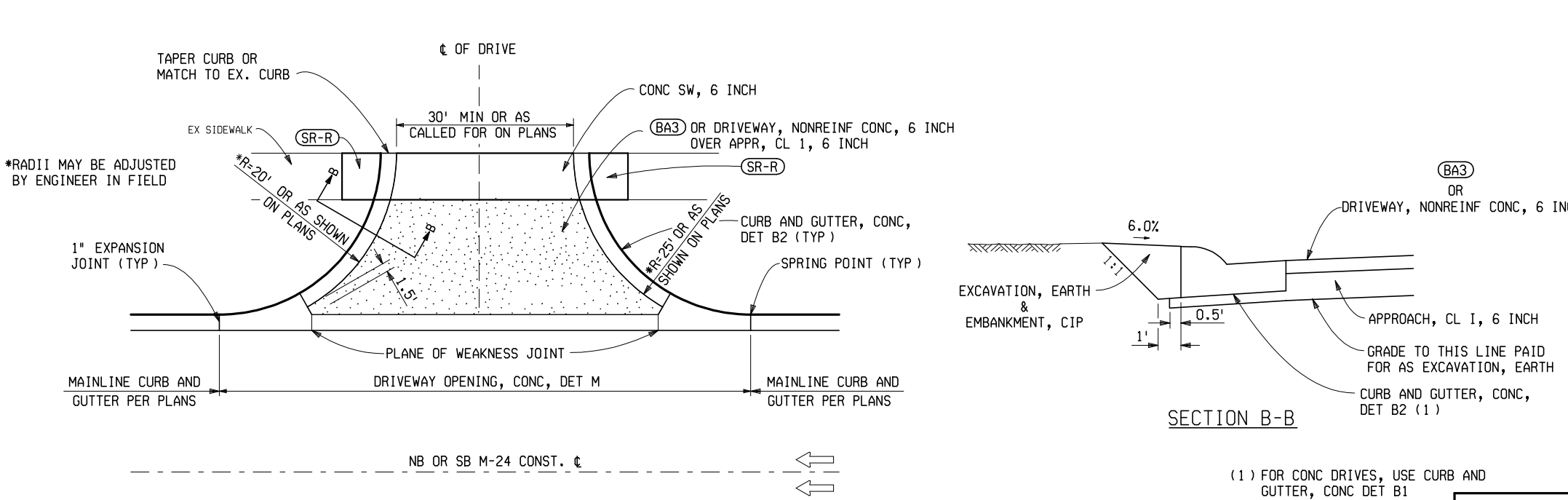
**CONC W/ C&G DRIVE**  
TO APPLY: WHERE SHOWN ON PLANS



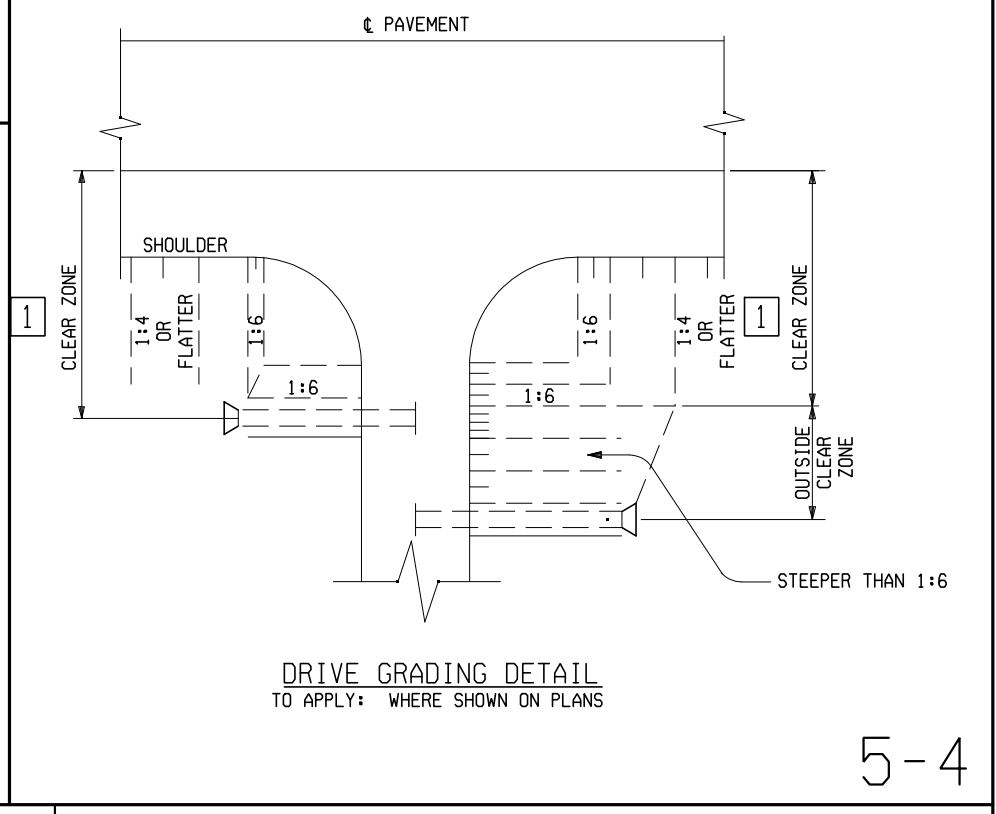
SECTION A-A



SECTION C-C



**DRIVEWAY OPENING, DETAIL M**  
TO APPLY: WHERE SHOWN ON PLANS



**DRIVE GRADING DETAIL**  
TO APPLY: WHERE SHOWN ON PLANS



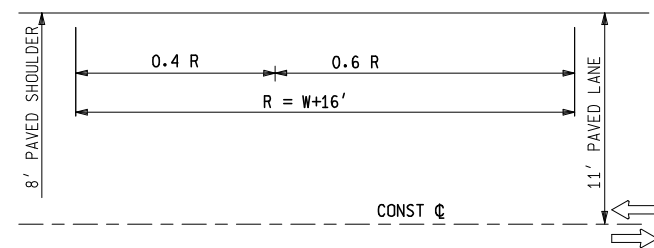
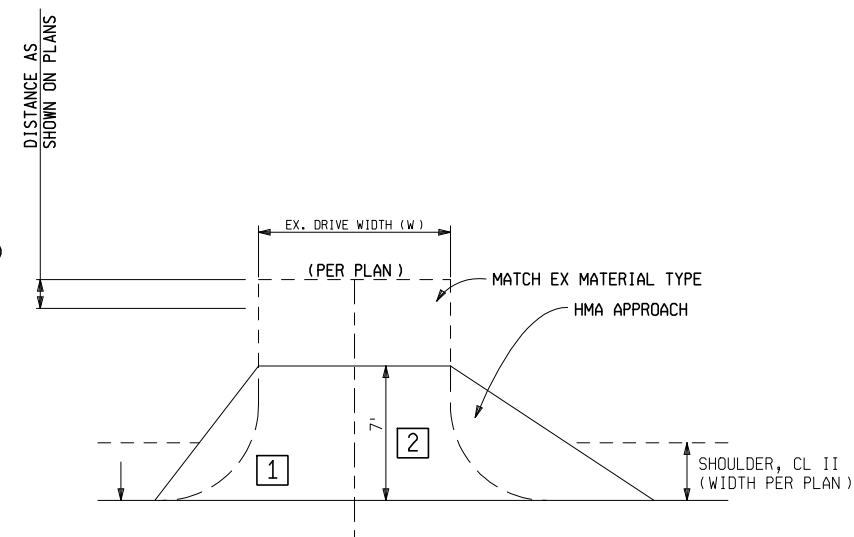
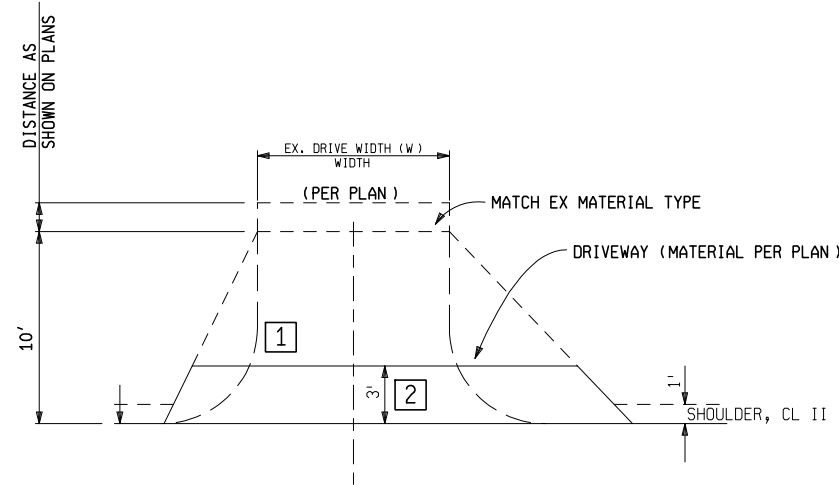
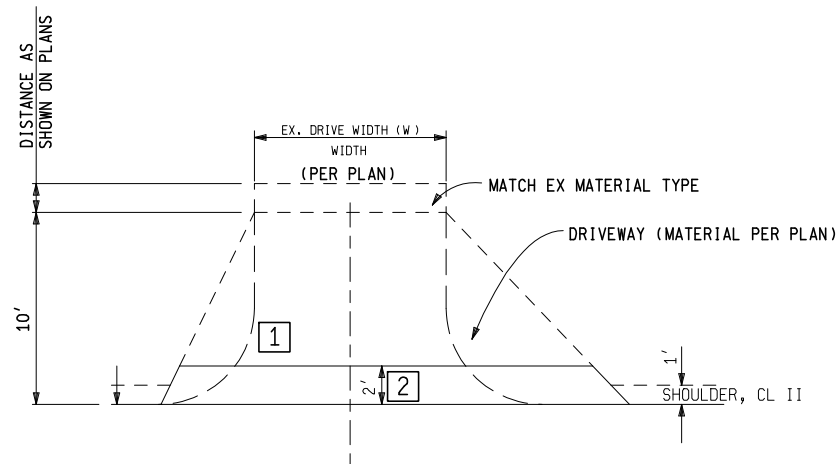
MISC DETAILS				
DATE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO. R.O.W/CONST.
04/05/07				

5-4

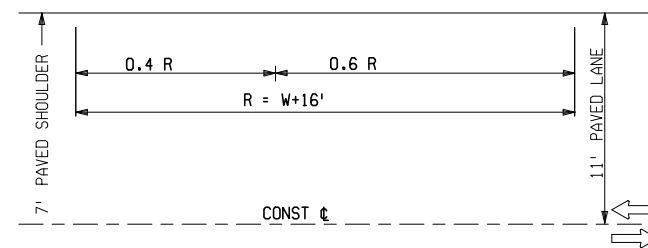
DATE: WORKED ON BY: CHECKED BY: FILE NAME:

FINAL R.O.W.			
AUTH	DATE	NO.	REVISION

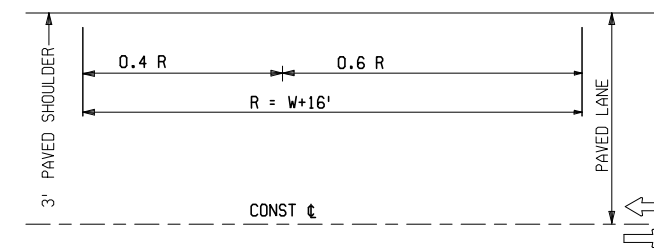
## RESIDENTIAL DRIVEWAY OPENING



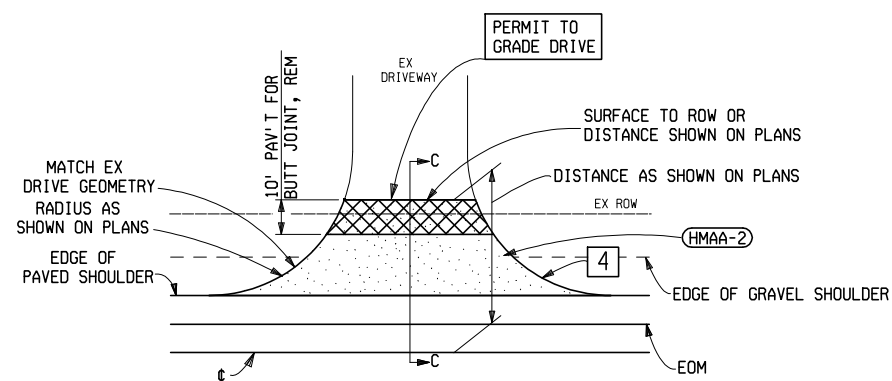
**NEW CONST**  
9' SHOULDER (8' PAVED)



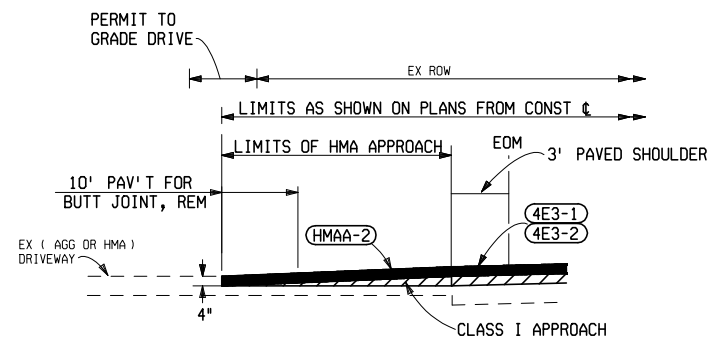
**NHS 3R**  
8' SHOULDER (7' PAVED)



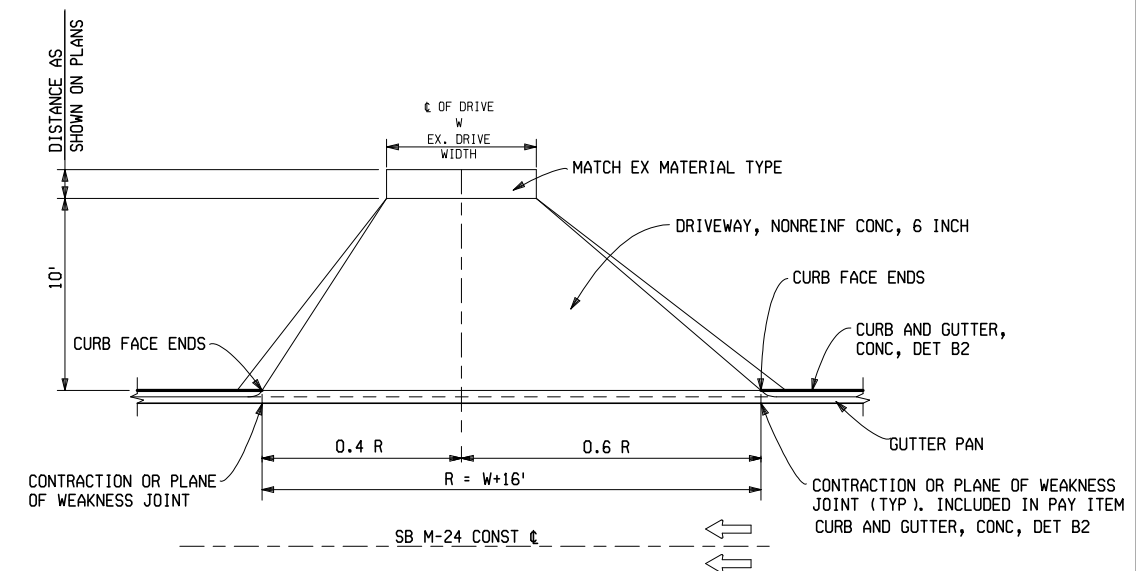
**NON-NHS 3R**  
6' SHOULDER (3' PAVED)



**HMA DRIVEWAY DETAIL**  
TO APPLY : WHERE SHOWN ON PLANS



**SECTION C-C**



**DRIVEWAY OPENING, DETAIL L**  
TO APPLY: WHERE SHOWN ON PLANS

DATE: WORKED ON BY: CHECKED BY: FILE NAME:



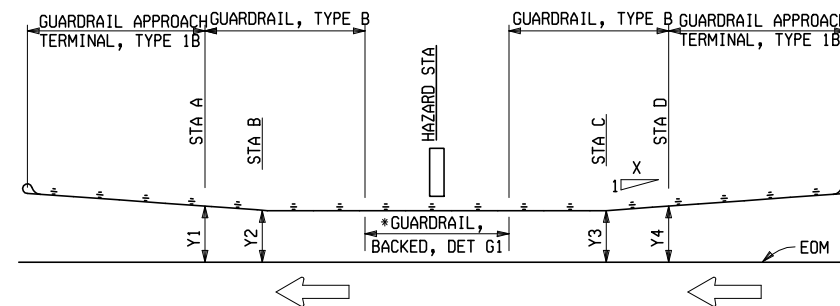
### MISCELLANEOUS DETAILS

DATE	CONT. SEC.	JOB NO.	DESIGN UNIT	SHEET NO.
02/07/08				R.O.W CONST.

GUARDRAIL LAYOUT DETAIL 1

DIRECTION	HAZARD STA	STA A	STA B	STA C	STA D	Y1	Y2	Y3	Y4	X
LEFT	337+31.24	336+62.49	336+87.49	337+74.99	338+12.49	13.79'	12.00'	12.00'	14.68'	14
RIGHT	337+65.26	338+09.01	338+09.01	337+21.51	336+84.01	12.00'	12.00'	12.00'	14.68'	14
LEFT	359+95.56	358+89.31	359+51.81	360+39.31	361+26.81	16.46'	12.00'	12.00'	18.25'	14
RIGHT	391+54.52	391+98.17	391+85.67	391+10.67	391+10.67	12.00'	12.00'	12.00'	12.89'	14
LEFT	391+82.77	391+26.52	391+39.02	392+26.52	392+51.52	12.89'	12.00'	12.00'	13.79'	14
RIGHT	480+53.42	480+97.17	480+97.17	480+09.67	479+97.17	12.00'	12.00'	12.00'	12.89'	14
LEFT	530+38.25	529+94.50	529+94.50	530+82.00	530+94.50	12.00'	12.00'	12.00'	12.89'	14
RIGHT	530+88.87	531+32.62	531+32.62	530+45.12	530+45.12	12.00'	12.00'	12.00'	12.00'	14
*LEFT	554+72.96	554+10.46	554+47.96	554+97.96	555+35.46	13.79'	12.00'	12.00'	14.68'	14
*RIGHT	585+22.27	585+72.27	585+47.27	584+97.27	584+47.27	13.79'	12.00'	12.00'	15.57'	14
*LEFT	585+22.27	584+97.27	584+97.27	585+47.27	585+47.27	12.00'	12.00'	12.00'	12.00'	14
*LEFT	610+82.04	610+44.54	610+57.04	611+07.04	611+32.04	12.89'	12.00'	12.00'	13.79'	14
*RIGHT	611+08.12	612+08.12	611+33.12	610+83.12	610+33.12	17.36'	12.00'	12.00'	15.57'	14
LEFT	636+86.73	636+42.98	636+42.98	637+30.48	637+67.98	3.50'	3.50'	3.50'	6.10'	11
RIGHT	636+89.60	636+14.60	636+52.10	636+89.60	636+89.60	6.89'	3.60'	3.60'	3.60'	11
RIGHT	658+31.42	659+00.17	658+75.17	657+87.67	657+25.17	5.87'	3.50'	3.50'	5.08'	11
LEFT	658+70.29	658+14.04	658+26.54	659+14.04	659+89.04	4.72'	3.50'	3.50'	10.31'	11

\*DOES NOT APPLY

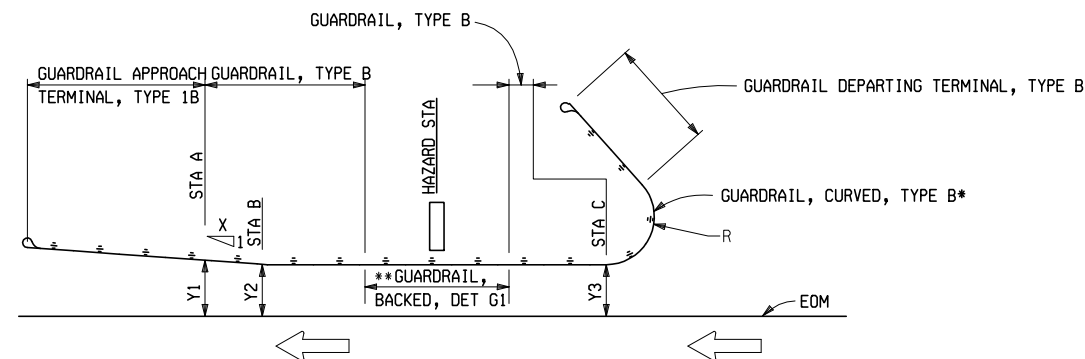


GUARDRAIL LAYOUT DETAIL 1

GUARDRAIL LAYOUT DETAIL 2

DIRECTION	HAZARD STA	STA A	STA B	STA C	Y1	Y2	Y3	R	X	CURVED RAIL LENGTH
RIGHT	359+95.56	361+01.81	360+39.31	359+76.81	16.46'	12.00'	12.00'	25.00'	14	37.5'
**LEFT	480+53.42	480+03.42	480+28.42	480+53.42	17.29'	15.50'	15.50'	12.50'	14	25.0'

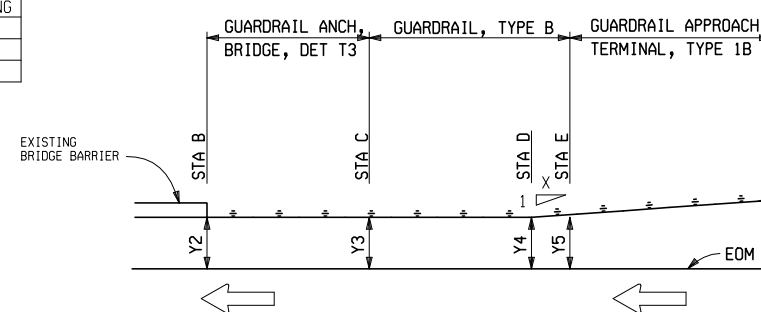
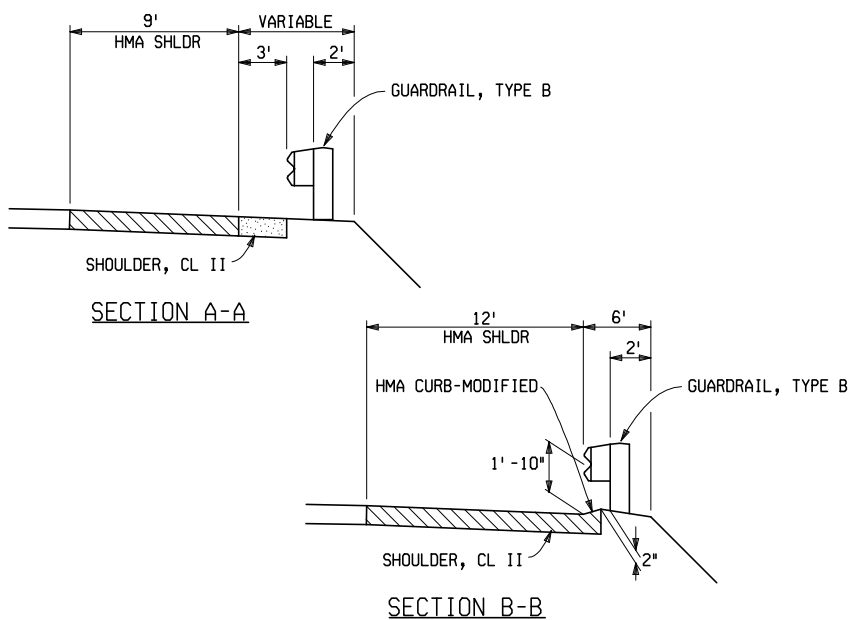
\*\*DOES NOT APPLY



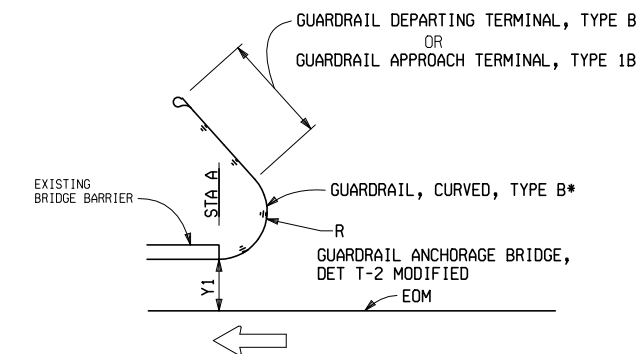
GUARDRAIL LAYOUT DETAIL 2  
\*LAYOUT AND CRT POSTS AS PER SPECIAL DETAIL 21

GUARDRAIL LAYOUT DETAIL 3 & 4

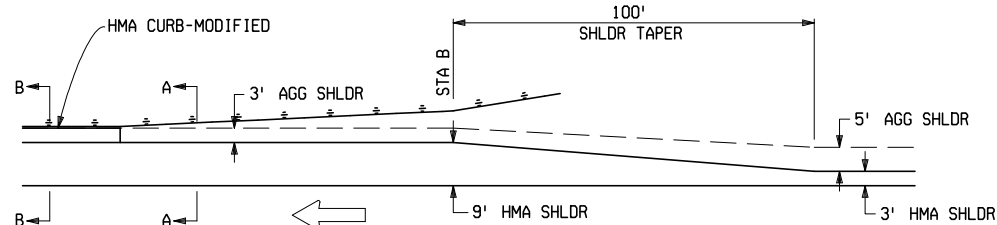
DIRECTION	STA A	STA B	STA C	STA D	STA E	Y1	Y2	Y3	Y4	Y5	R	X	CURVED RAIL LENGTH	TERMINAL
RIGHT		539+34.72	539+34.72	539+09.72	539+09.72									
LEFT	539+35.00					6.90'	13.80'	13.80'	13.80'	13.80'	25.00		37.5'	APPROACH
RIGHT	540+40.98					12.60'					10.00		12.5'	DEPARTING
LEFT		540+41.53	540+41.53	540+66.53	540+66.53		8.50'	8.50'	8.50'	8.50'		11		
RIGHT		727+69.56	727+32.06	727+32.06	726+82.06		9.40'	9.40'	9.40'	13.98'				
LEFT		728+57.44	728+57.44	728+82.44	728+82.44		10.30'	10.30'	10.30'	10.30'				



GUARDRAIL LAYOUT DETAIL 3



GUARDRAIL LAYOUT DETAIL 4  
\*LAYOUT AND CRT POSTS AS PER SPECIAL DETAIL 21



TYPICAL GUARDRAIL DETAIL

FINAL R.O.W.			
AUTH	DATE	NO.	REVISION

CONSTRUCTION SHEET 5-6

<b>MDOT</b> Michigan Department of Transportation		<b>GUARDRAIL LAYOUT SHEET</b>	
DATE	CONT. SEC.	JOB NO.	DESIGN UNIT
04/06/07			
SHEET NO.	R.O.W	CONST.	FILE NAME

DATE: WORKED ON BY: CHECKED BY: FILE NAME: