

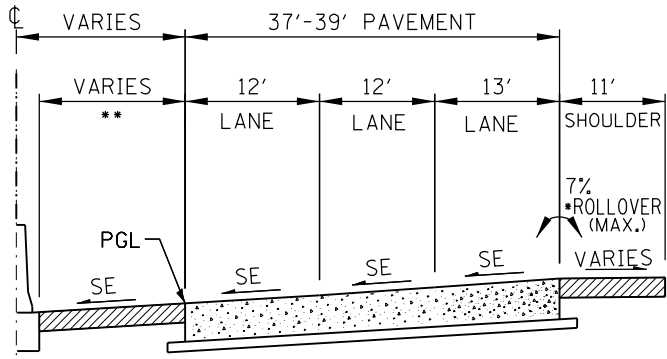
Illinois Tollway Base Sheet Revisions

Section M	Base Sheet Drawings	
	Drawing	Modification Summary Effective: 03-01-2018
	Roadway (RDY)-Series 400	
M-RDY-400	ROADWAY TYPICAL SECTIONS GROUP A	
	Change outside shoulder cross slope of 1% on SE left to "VARIES".	
	Inside shoulder width to "Varies" (Typ).	
	Inside shoulder cross slope to be 2% OR 4%. Outside shoulder cross slope to be 3% or 4%.	
	Lane 1 to be 12' (typ).	
	Added note for cross slope.	
	Removed % related to rollover max, added note to refer to RDC.	
	added max rollover note to SE right.	
M-RDY-401	ROADWAY TYPICAL SECTIONS GROUP B	
	Removed rollover in normal crown section.	
M-RDY-402	ROADWAY TYPICAL SECTIONS GROUP C	
	Delete sheet	
M-RDY-403	ROADWAY TYPICAL SECTIONS GROUP D	
	Added ground line to typical	
	Added "AGGREGATE SHOULDER" and "BREAKPOINT" callouts	
	Removed shoulder box	
	Added "SHELF"	
M-RDY-404	ROADWAY TYPICAL SECTIONS GROUP E	
	Added drainage criteria to min depth	
	Used same table shown in RDC Figure 2.6.8	
	Inserted note 7 refering to drainage manual.	
M-RDY-405	ROADWAY TYPICAL SECTIONS GROUP F	
	Removed snow storage details	
	Added new snow storage details with retaining wall	
M-RDY-406	ROADWAY TYPICAL SECTIONS GROUP G	
	Removed snow storage width behind G-2 and G-3 gutters.	
	Removed "Single face reinforced barrier w/non-crashworthy noise abatement wall.	
M-RDY-407	EARTHWORK SCHEDULE	
	Changed title to EARTHWORK AND GUARDRAIL SCHEDULE	
	Added sameple guardrail schedule	
M-RDY-408	APPROACH SLAB, MAINLINE SHEET 1	
	Updated general note 2.	
	Added note to desinger	
M-RDY-408	APPROACH SLAB, MAINLINE SHEET 3	
	Revised note to "CORK JOINT FILLER, PER LATEST IDOT BRIDGE BASE SHEET"	
	Revised note to "1/8" ALUMINUM JOINT (FULL HEIGHT)	
	Added note 7. "THE 1/8" ALUMINUM SHEET SHALL BE ASTM B 209 ALLOY 3003-H14 AND COATED TO MINIMIZE REATION WITH WET CONCRETE"	
M-RDY-408	APPROACH SLAB, MAINLINE SHEET 5	
	Added detail from Tollway base sheets M-BRG-500 AND 501	
M-RDY-409	APPROACH SLAB, MAINLINE SHEET 1	
	Updated general note 2.	
	Added note to desinger	
M-RDY-409	APPROACH SLAB, MAINLINE SHEET 3	
	Revised note to "CORK JOINT FILLER, PER LATEST IDOT BRIDGE BASE SHEET"	
	Revised note to "1/8" ALUMINUM JOINT (FULL HEIGHT)	
	Added note 7. "THE 1/8" ALUMINUM SHEET SHALL BE ASTM B 209 ALLOY 3003-H14 AND COATED TO MINIMIZE REATION WITH WET CONCRETE"	
M-RDY-409	APPROACH SLAB, MAINLINE SHEET 5	
	Added detail from Tollway base sheets M-BRG-500 AND 501	
M-RDY-412	ROADWAY SUBGRADE SLOPES MEDIAN BARRIER	
	Add 3.5% max. rollover for flex lane section	
	Should be S.E. instead of 2% for subgrade slope on the low side	
	Should be 1.5% min. instead of 2% for subgrade slope on the high side (to match note 9 of standard B24-05)	
	Add 4.0% as the inside shoulder cross slope for non-flex lane in tangent section.	
M-RDY-414	ROADWAY PROFILE & SUPERELEVATION	
	Added new profile and super sheet.	

New Sheet

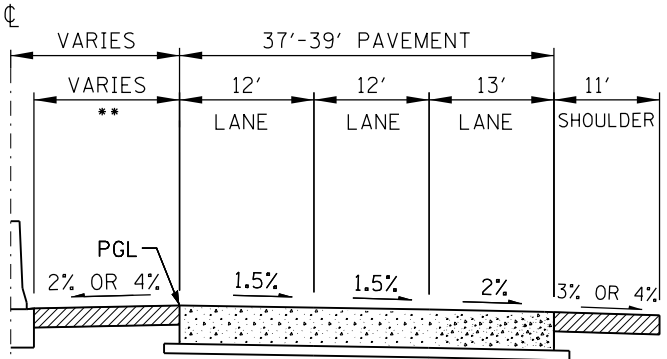
Retired Standard

ILLINOIS TOLLWAY



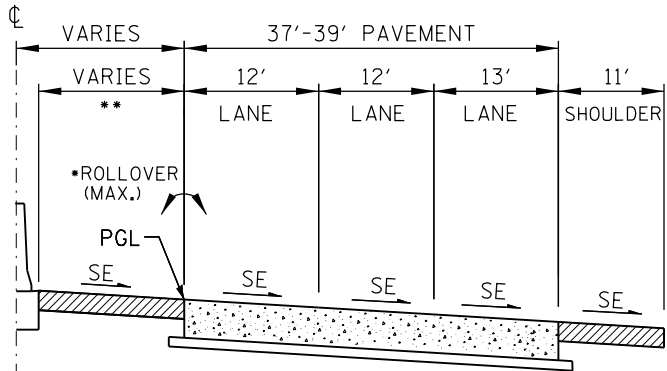
MAINLINE-3 LANES
SUPERELEVATION, LEFT

ILLINOIS TOLLWAY



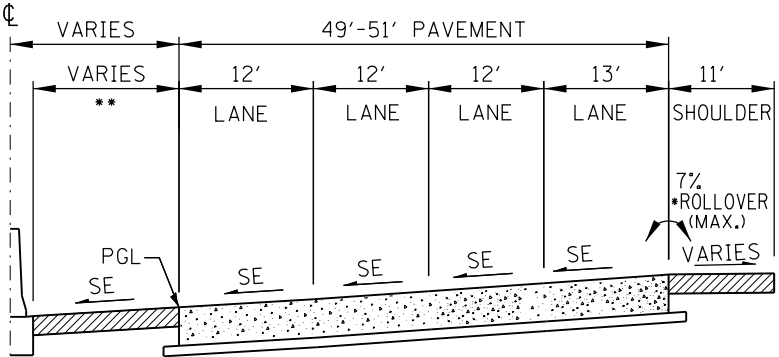
MAINLINE-3 LANES
NORMAL CROWN

ILLINOIS TOLLWAY



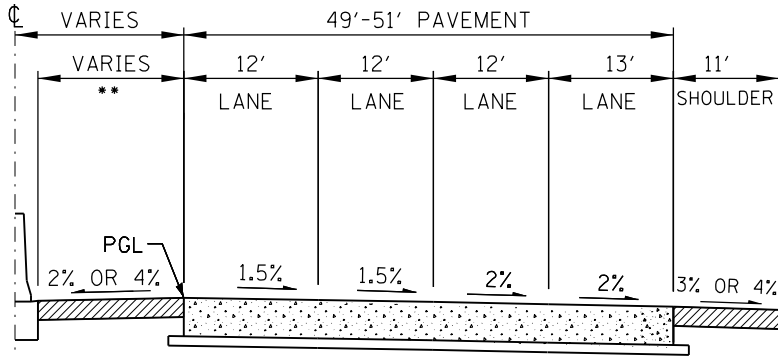
MAINLINE-3 LANES
SUPERELEVATION, RIGHT

ILLINOIS TOLLWAY



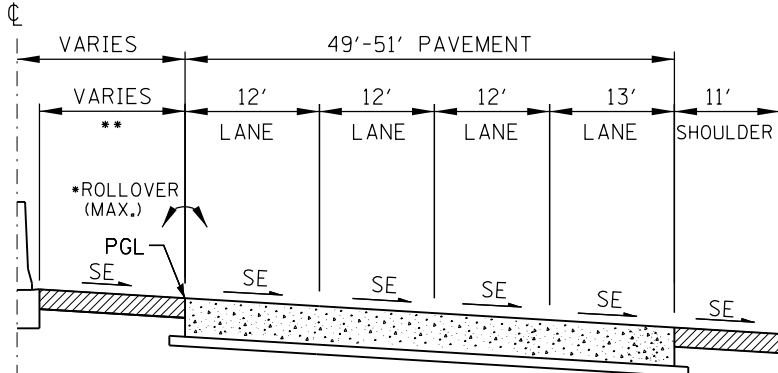
MAINLINE-4 LANES
SUPERELEVATION, LEFT

ILLINOIS TOLLWAY



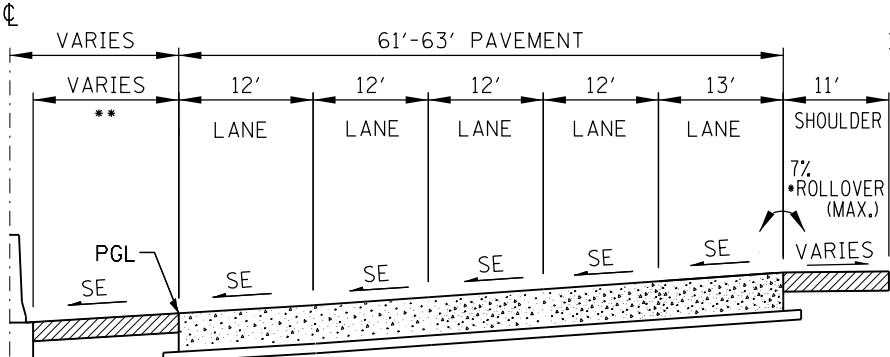
MAINLINE-4 LANES
NORMAL CROWN

ILLINOIS TOLLWAY



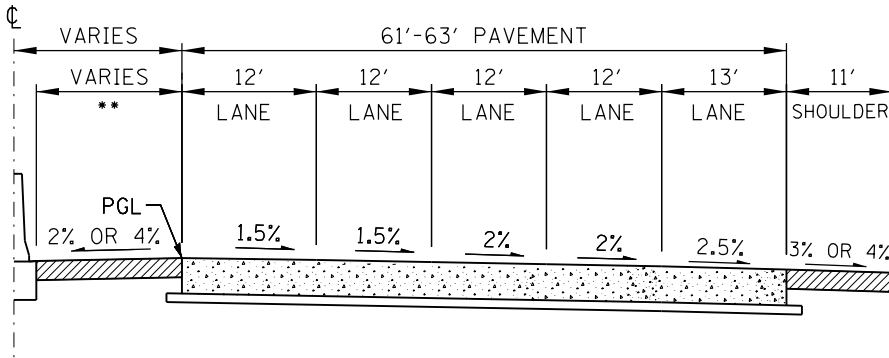
MAINLINE-4 LANES
SUPERELEVATION, RIGHT

ILLINOIS TOLLWAY



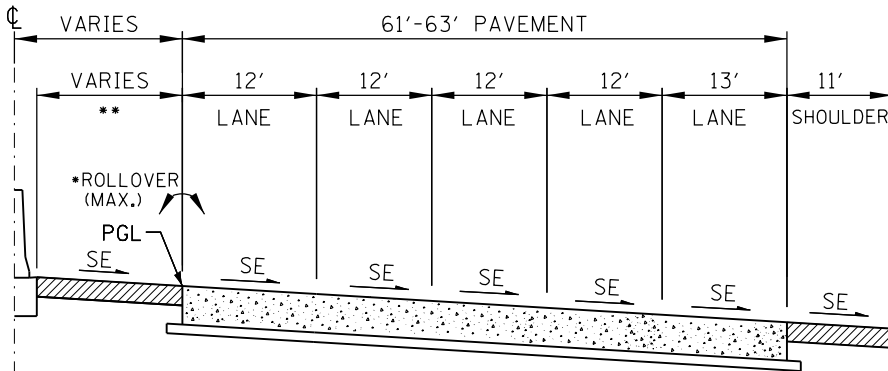
MAINLINE-5 LANES
SUPERELEVATION, LEFT

ILLINOIS TOLLWAY



MAINLINE-5 LANES
NORMAL CROWN

ILLINOIS TOLLWAY



MAINLINE-5 LANES
SUPERELEVATION, RIGHT

NOTES

REFERENCE ILLINOIS TOLLWAY STANDARD DRAWING B24,
PIPE UNDERDRAIN, FOR PLACEMENT LOCATION.

- *REFER TO ROADWAY DESIGN CRITERIA FOR MAX ROLLOVER VALUES.
- **REFER TO ROADWAY DESIGN CRITERIA FOR CROSS SLOPE CONDITIONS

NOTE TO DESIGNER

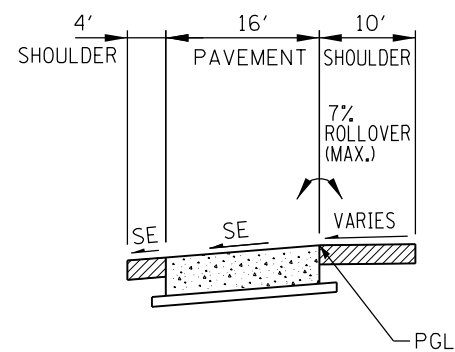
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M-RDY-400

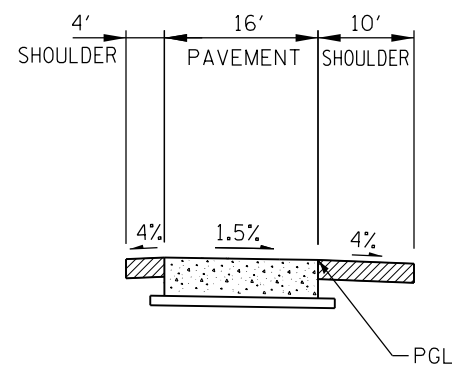


ROADWAY TYPICAL SECTIONS
GROUP A

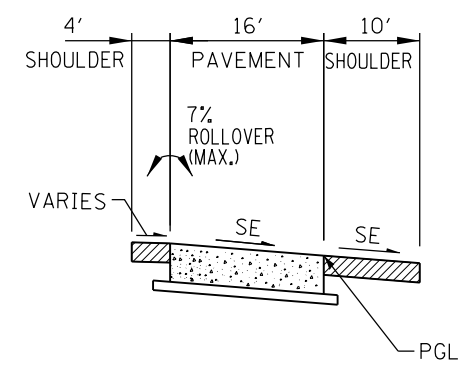
DATE
3-01-2018



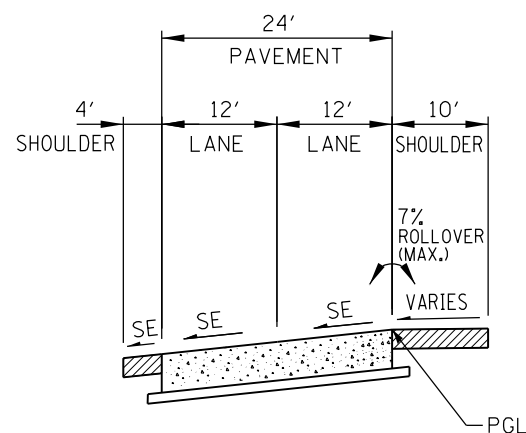
RAMP-1 LANE
SUPERELEVATION LEFT



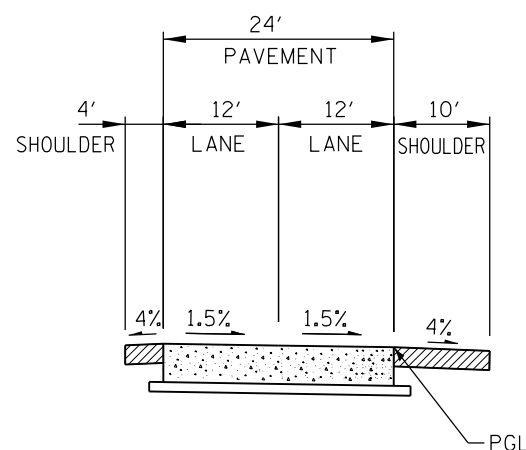
RAMP-1 LANE
NORMAL CROWN



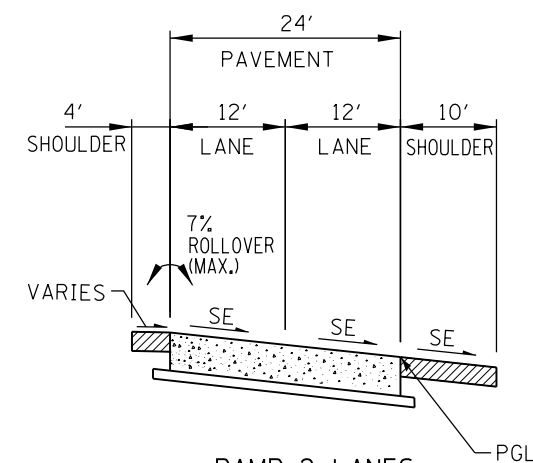
RAMP-1 LANE
SUPERELEVATION RIGHT



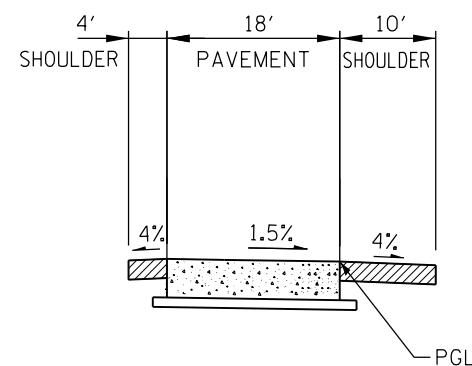
RAMP-2 LANES
SUPERELEVATION LEFT



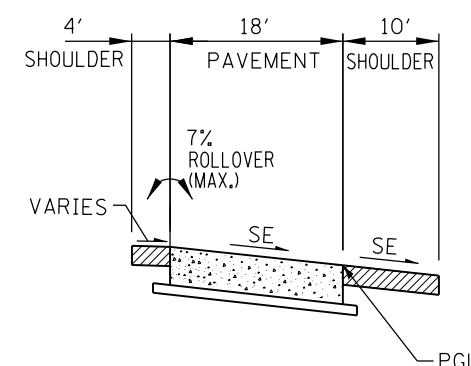
RAMP-2 LANES
NORMAL CROWN



RAMP-2 LANES
SUPERELEVATION RIGHT



LOOP RAMP
NORMAL CROWN



LOOP RAMP
SUPERELEVATION RIGHT

NOTES

REFERENCE ILLINOIS TOLLWAY STANDARD DRAWING B24,
PIPE UNDERDRAIN, FOR PLACEMENT LOCATION.

NOTE TO DESIGNER

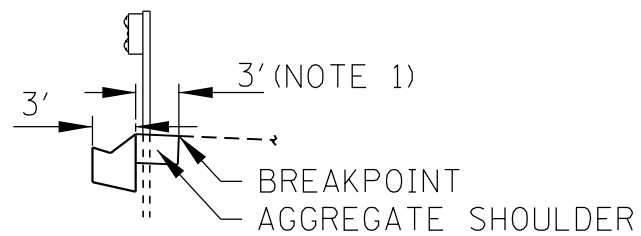
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M-RDY-401

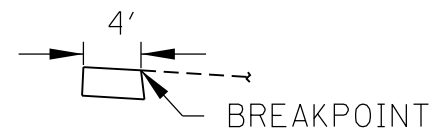


ROADWAY TYPICAL SECTIONS
GROUP B

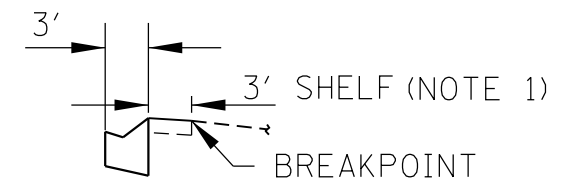
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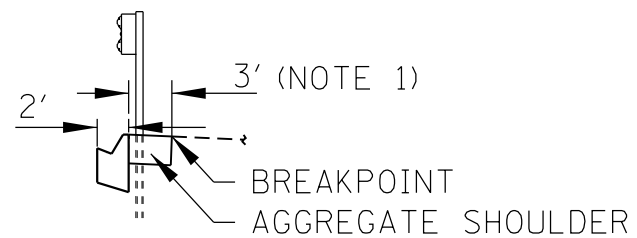
GUTTER, TYPE G-3
WITH GUARDRAIL



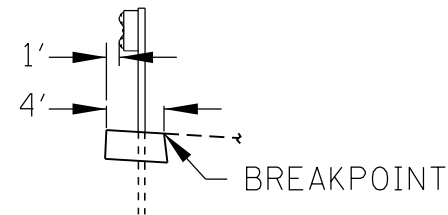
AGGREGATE
SHOULDER
(NOTE 2)



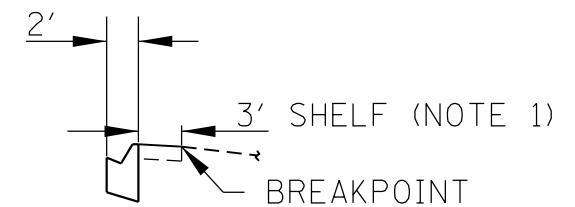
GUTTER, TYPE G-3



GUTTER, TYPE G-2
WITH GUARDRAIL



AGGREGATE SHOULDER
WITH GUARDRAIL
(NOTE 2)



GUTTER, TYPE G-2

NOTES

1. SLOPE TOWARD GUTTER AT 6% WHEN IN CUT SECTION AND SLOPE AWAY FROM GUTTER AT 6% WHEN IN FILL SECTION.
2. AGGREGATE SHOULDER SLOPE SHALL NOT BE FLATTER THAN ADJACENT PAVED SHOULDER.

NOTE TO DESIGNER

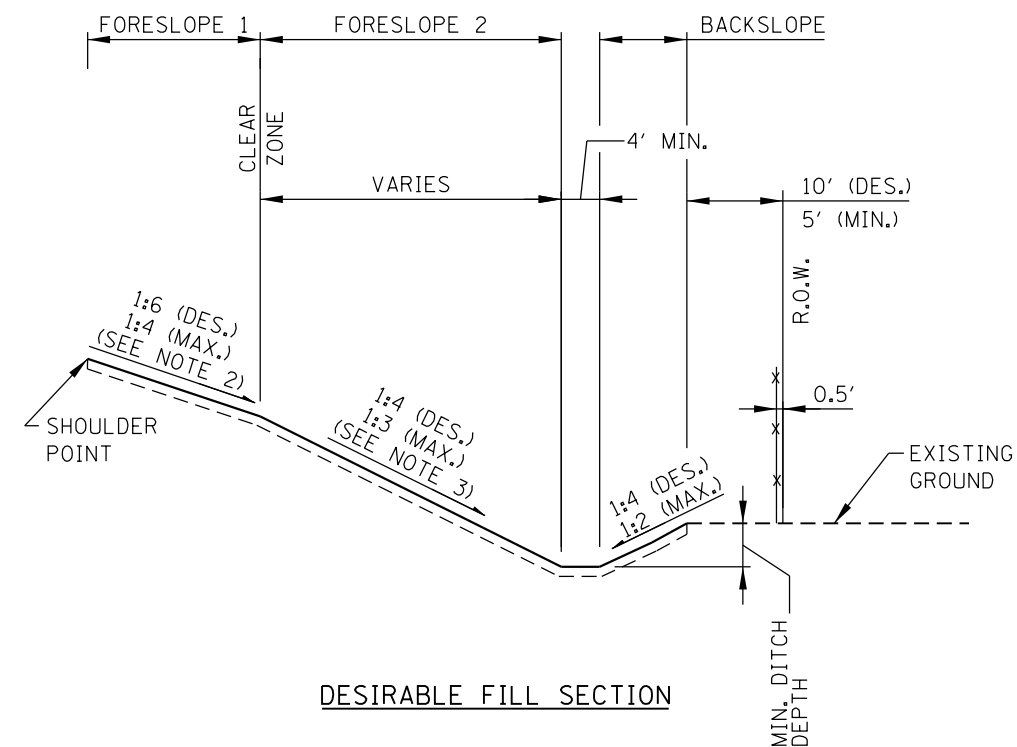
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M-RDY-403



ROADWAY TYPICAL SECTIONS
GROUP D

DATE
3-01-2018

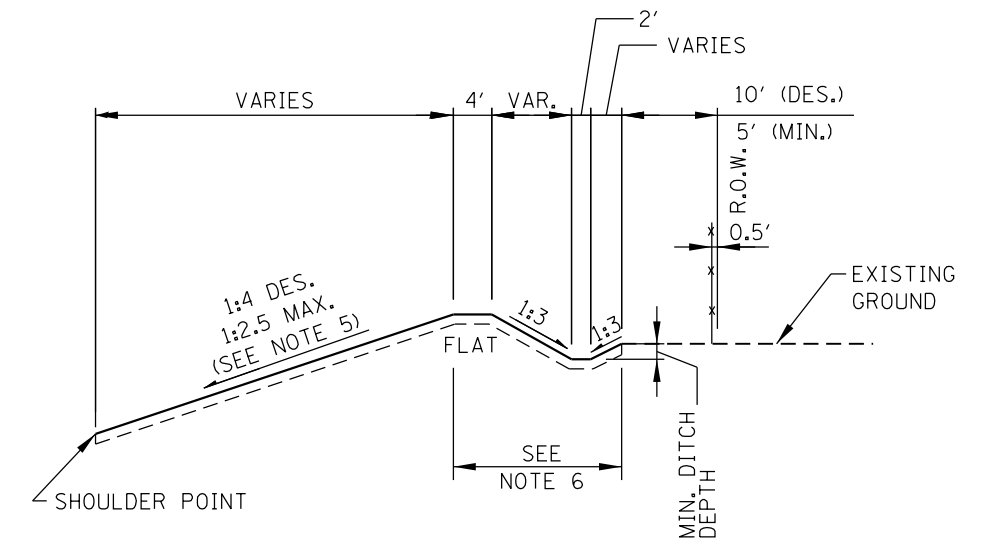


DESIRABLE FILL SECTION

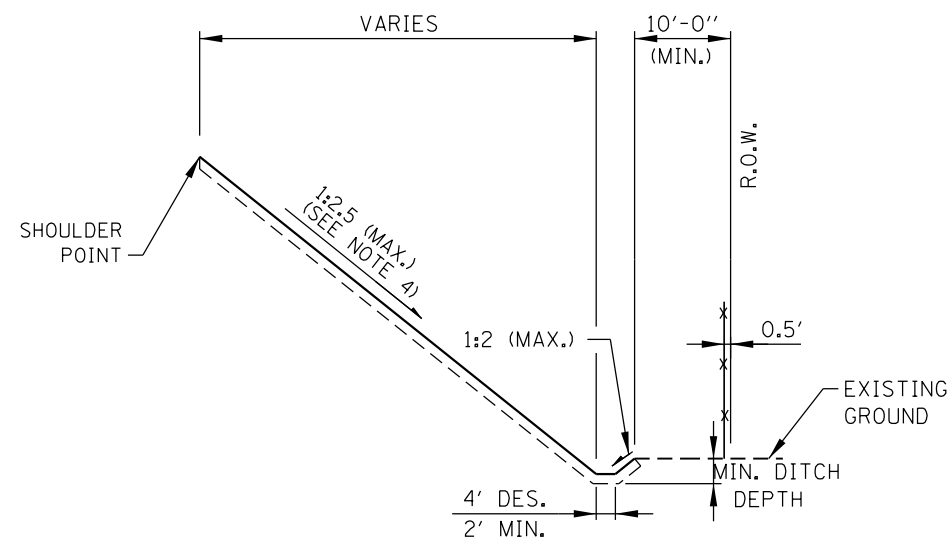
SIDESLOPES HIERARCHY (IN ORDER OF PREFERENCE FOR FILL SECTION)			
FORESLOPE		DITCH	BACKSLOPE
1	2		
1:6 OR FLATTER	-	4' MIN.	1:4 OR FLATTER
1:6	1:4	4'	1:4
1:6	1:4	4'	1:3
1:6	1:3	4'	1:3
1:4	-	4'	1:3
1:4	-	4'	1:2
1:4	1:3	4'	1:3
1:6	1:3	4'	1:2
1:4	1:3	4'	1:2
1:6	1:2.5 **	4'	1:2
1:2.5 *	-	4'	1:3
1:2.5 *	-	4'	1:2
1:2.5 *	-	2'	1:2

* DESIGN DEVIATION IF FILL HEIGHT IS LESS THAN 9'

** DESIGN DEVIATION IN ALL CASES



ACCEPTABLE CUT SECTION



ACCEPTABLE FILL SECTION

FILL ≥ 9'
(CLEAR ZONE UNDEFINED)

NOTES:

- ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENTS TO UNITS OF HORIZONTAL DISPLACEMENTS (V:H).
- SLOPE SHALL BE 1:6 OR FLATTER BEHIND GUTTER WITHOUT GUARDRAIL; IN ALL OTHER CASES THE MAXIMUM SLOPE SHALL BE 1:4. IF 1:4 SLOPE IS USED, INCREASE WIDTH BASED ON CLEAR ZONE REQUIREMENTS.
- FORESLOPE 2 STEEPER THAN 1:3 USED FOR THE LOWER SLOPE ON A BARN-ROOF SECTION REQUIRES A DESIGN DEVIATION.
- FORESLOPES STEEPER THAN 1:4 USED WHEN BARN-ROOF SECTION IS NOT USED AND WHEN FILL HEIGHT IS LESS THAN 9' REQUIRE A DESIGN DEVIATION.
- BACKSLOPES STEEPER THAN 1:2.5 FROM THE SHOULDER POINT IN A CUT SECTION REQUIRE A DESIGN DEVIATION.
- CAN BE OMITTED WHEN EXISTING GROUND SLOPES AWAY FROM R.O.W. LINE
- MINIMUM DITCH DEPTH SHALL FOLLOW DRAINAGE DESIGN MANUAL. DESIGNER SHALL MEET CRITERIA FOR DESIGN WATER SURFACE ON TABLE 6.1 AND ADEQUATELY DRAIN SUBBASE.

NOTE TO DESIGNER

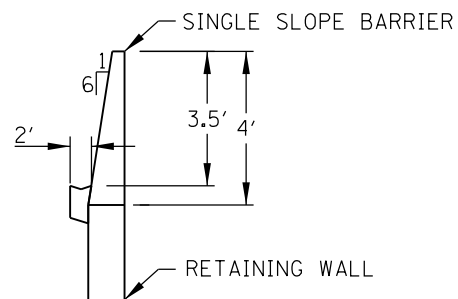
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M-RDY-404

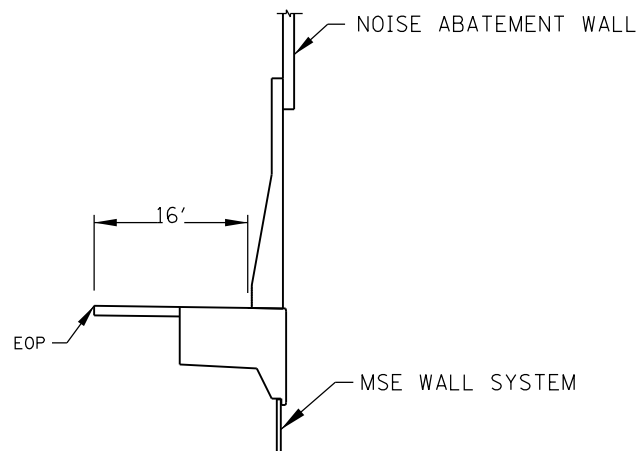


ROADWAY TYPICAL SECTIONS
GROUP E

DATE
3-01-2018



MODIFIED GUTTER
W/RETAINING WALL AND SINGLE SLOPE BARRIER



SINGLE
FACE BARRIER, MOMENT SLAB, RETAINING WALL
AND NOISE ABATEMENT WALL

NOTE TO DESIGNER

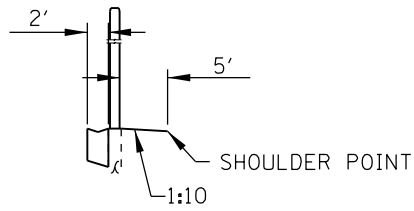
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M-RDY-405

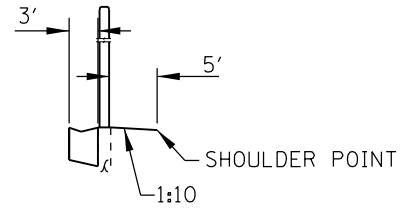


ROADWAY TYPICAL SECTIONS
GROUP F

DATE
3-01-2018



GUTTER, TYPE G-2, MODIFIED
W/CRASHWORTHY NOISE ABATEMENT WALL



GUTTER, TYPE G-3, MODIFIED
W/CRASHWORTHY NOISE ABATEMENT WALL

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M-RDY-406



ROADWAY TYPICAL SECTION
GROUP G

DATE
3-01-2018

NOTE:

ALL SLOPES ARE EXPRESSED AS UNITS OF
VERTICAL DISPLACEMENT TO UNITS OF
HORIZONTAL DISPLACEMENT (V:H).

EARTHWORK SCHEDULE OF QUANTITIES

LOCATION (STATION)	LENGTH	EARTHWORK VOLUMES (CY)																					EARTHWORK BALANCE [EXCESS (+) /		
		TOPSOIL STRIPPING			CUT			ROCK EXCAVATION			UNSUITABLE MATERIAL			ADJUST FOR SHRINKAGE (••%)			FILL			TOPSOIL PLACEMENT			SHORTAGE (-)]		
		A			B			C			D			E			F			G			E-F		
		STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3	STAGE 1	STAGE 2	STAGE 3
400+00																									
401+00	100.0	244.4	60.0	0.0	6100.0	1200.0	0.0	0.0	0.0	0.0	1100.0	500.0	0.0	4250.0	595.0	0.0	4300.0	900.0	0.0	200.0	85.0	0.0	-50.0	-305.0	0.0
402+00	100.0	318.5	52.0	0.0	7000.0	1150.0	0.0	0.0	0.0	0.0	1000.0	200.0	0.0	5100.0	807.5	0.0	4550.0	1250.0	0.0	225.0	65.0	0.0	550.0	-442.5	0.0
403+00	100.0	490.7	43.0	0.0	7150.0	2100.0	0.0	100.0	50.0	0.0	400.0	100.0	0.0	5652.5	1657.5	0.0	5150.0	1800.0	0.0	250.0	58.0	0.0	502.5	-142.5	0.0
404+00	100.0	388.9	64.0	0.0	6950.0	1650.0	120.0	150.0	64.0	0.0	50.0	350.0	0.0	5737.5	1050.6	102.0	5900.0	1475.0	100.0	225.0	50.0	0.0	-162.5	-424.4	2.0
405+00	100.0	213.0	72.0	0.0	5850.0	1400.0	154.0	0.0	0.0	0.0	150.0	100.0	0.0	4845.0	1105.0	130.9	5500.0	1500.0	220.0	225.0	46.0	0.0	-655.0	-395.0	-89.1
406+00	100.0	269.0	18.0	0.0	5200.0	1402.0	0.0	0.0	0.0	0.0	600.0	120.0	0.0	3910.0	1089.7	0.0	4800.0	1480.0	80.0	189.0	52.0	0.0	-890.0	-390.3	-80.0
407+00	100.0	375.0	93.0	0.0	5100.0	1305.0	0.0	0.0	0.0	0.0	500.0	115.0	0.0	3910.0	1011.5	0.0	4950.0	1520.0	0.0	220.0	65.0	0.0	-1040.0	-508.5	0.0
TOTAL		2,299.6	402.0	0.0	43,350.0	10,207.0	274.0	250.0	114.0	0.0	3,800.0	1,485.0	0.0	33,405.0	7,316.8	232.9	35,150.0	9,925.0	400.0	1,534.0	421.0	0.0	-1,745.0	-2,608.2	-167.1

EARTHWORK BILL OF MATERIAL

PAY ITEM NO.	DESIGNATION	STAGE 1	STAGE 2	STAGE 3	TOTAL	CALCULATION NOTES:
JI211110	TOPSOIL EXCAVATION AND PLACEMENT	1534.0	402.0	0.0	1936.0	WHEN G<A, THEN G OR WHEN G>A, THEN A
JI211112	TOPSOIL EXCAVATION AND DISPOSAL	765.6	0.0	0.0	765.6	A-G
JI211124	TOPSOIL FURNISH AND PLACE, 4"	0.0	171.0	0.0	171.0	WHEN G>A, THEN (G-A)/THICKNESS IN YARDS
20200100	EARTH EXCAVATION	43350.0	10207.0	274.0	53831.0	B
20200200	ROCK EXCAVATION	1745.0	2608.2	167.1	4520.3	C
20400800	FURNISHED EXCAVATION	3800.0	1485.0	0.0	5285.0	WHEN F>E, THEN F-E
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERAIL	250.0	114.0	0.0	364.0	D

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GUARDRAIL SCHEDULE

GUARDRAIL SCHEDULE																
STATION FROM	STATION TO	OFFSET	APPROACH TERMINAL			GUARDRAIL TYPE						DEPARTURE TERMINAL			REFLECTORS/MARKERS	
			TRAFFIC BARRIER TERMINAL TYPE T1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL TYPE T1-A (SPECIAL)	TRAFFIC BARRIER TERMINAL TYPE T10	GALVANIZED STEEL PLATE BEAM GUARDRAIL TYPE A, 6 FOOT POSTS	GALVANIZED STEEL PLATE BEAM GUARDRAIL TYPE A, 9 FOOT POSTS	GALVANIZED STEEL PLATE BEAM GUARDRAIL TYPE B, 6 FOOT POSTS	GALVANIZED STEEL PLATE BEAM GUARDRAIL TYPE B, 9 FOOT POSTS	GALVANIZED STEEL PLATE BEAM GUARDRAIL TYPE C, 6 FOOT POSTS	GALVANIZED STEEL PLATE BEAM GUARDRAIL TYPE C, 9 FOOT POSTS	TRAFFIC BARRIER TERMINAL TYPE T2	TRAFFIC BARRIER TERMINAL TYPE T6	TRAFFIC BARRIER TERMINAL TYPE T6B	GUARDRAIL BARRIER REFLECTORS, TYPE B	TERMINAL MARKER - DIRECT APPLIED
			JI631110	JI631112	JI631140	JI630002	JI630004	JI630007	JI630009	JI630012	JI630014	JI631120	JI631130	JI631135	JI782014	JI782110
			EACH	EACH	EACH	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	EACH	EACH	EACH	EACH	EACH
1000+00.00	1002+00.00	RT	1			200.0						1				
1005+00.00	1008+37.50	RT	1			300.0		12.5		25.0			1			
1010+00.00	1011+50.00	RT		1			150.0						1			
1012+00.00	1017+00.00	RT			1	350.0		62.5		87.5			1			
1020+00.00	1022+87.50	RT		1			187.5		75.0		25.0			1		
TOTAL			2	2	1	850.0	337.5	75.0	75.0	112.5	25.0	1	3	1		

NOTE TO DESIGNER

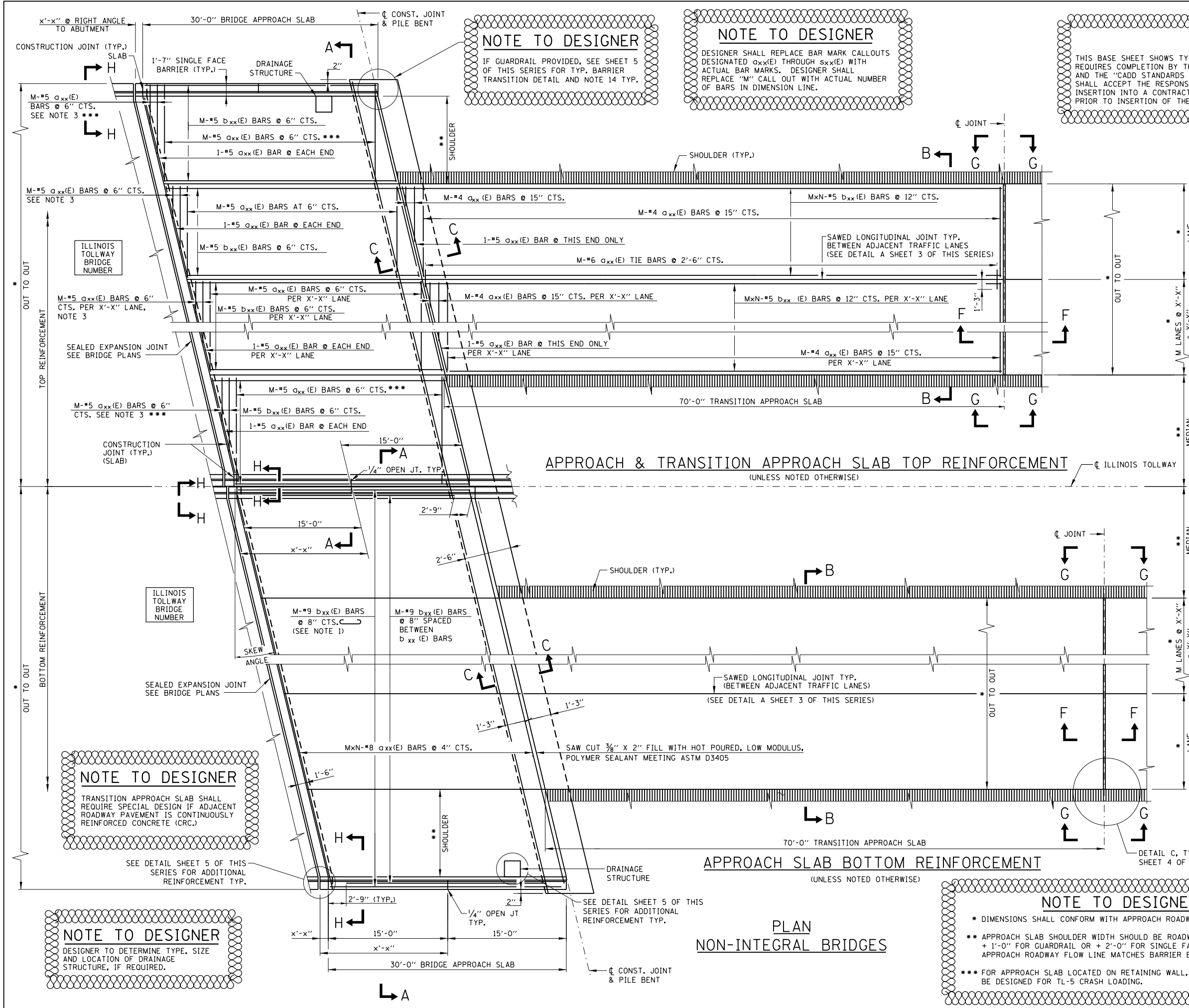
***ADJUSTMENT FOR SHRINKAGE SHALL BE DETERMINED BY
DESIGNER THROUGH INVESTIGATION.

M-RDY-407



EARTHWORK & GUARDRAIL SCHEDULE

DATE
3-01-2018

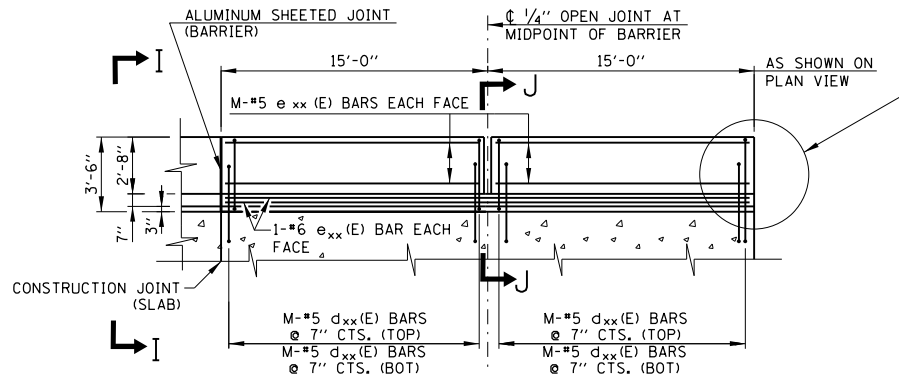


SHEET 1 OF 5
BASE SHEET M-RDY-408

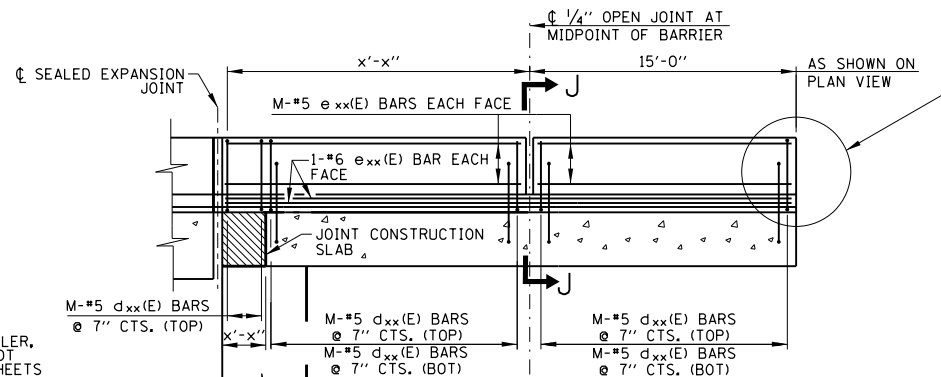


APPROACH SLAB,
MAINLINE

DATE
3-01-2018



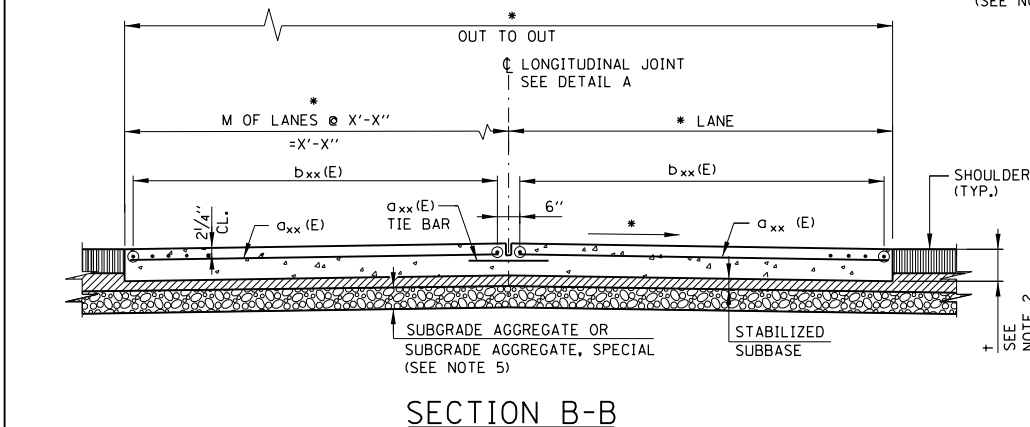
APPROACH SLAB BARRIER ELEVATION
(INTEGRAL OR SEMI-INTEGRAL)



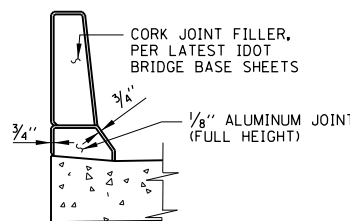
APPROACH SLAB BARRIER ELEVATION
(NON-INTEGRAL)

- NOTES:

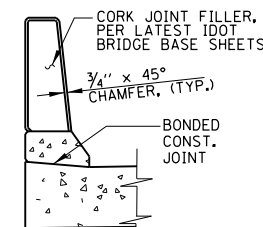
1. SEE SHEET 1 OF THIS SERIES FOR GENERAL NOTES.
2. THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
3. INTEGRAL ABUTMENT JOINT SHOWN NON-INTERGRAL ABUTMENT JOINT SIMILAR. SEE SHEET 4 OF THIS SERIES.
4. COORDINATE NEED FOR 2" PVC CONDUIT WITH ELECTRICAL AND ITS PLANS. CONDUIT SHALL BE PLACED TO MISS REINFORCEMENT. DO NOT CUT REINFORCEMENT BARS.
5. THE THICKNESS OF THE STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.
6. IF THE CONTRACTOR ELECTS TO SLIPFORM THE PARAPET THEN THE PARAPET CROSS-SECTIONAL AREA, PARAPET REINFORCEMENT BARS CLEARANCES AND THE APPROACH SLAB REINFORCEMENT BARS SHALL BE REVISED ACCORDINGLY TO ACCOUNT FOR THE ADDITIONAL SLAB WIDTH TO ALLOW SLIPFORM.
7. THE 1/8" ALUMINUM SHEET SHALL BE ASTM B 209 ALLOY 3003-H14 AND COATED TO MINIMIZE REACTION WITH WET CONCRETE.



SECTION B-B



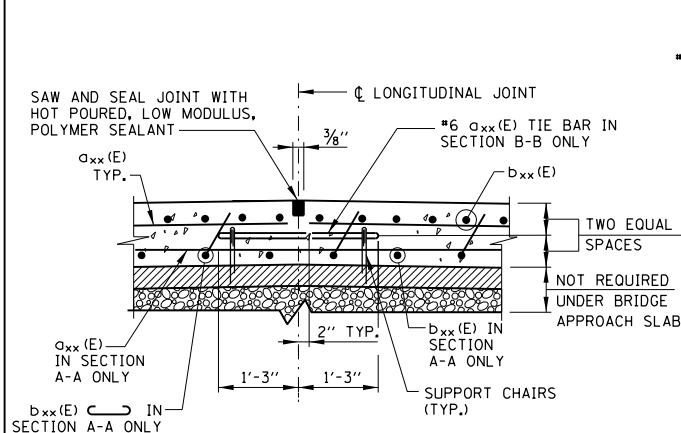
SECTION I-I



SECTION J-J

DETAIL E

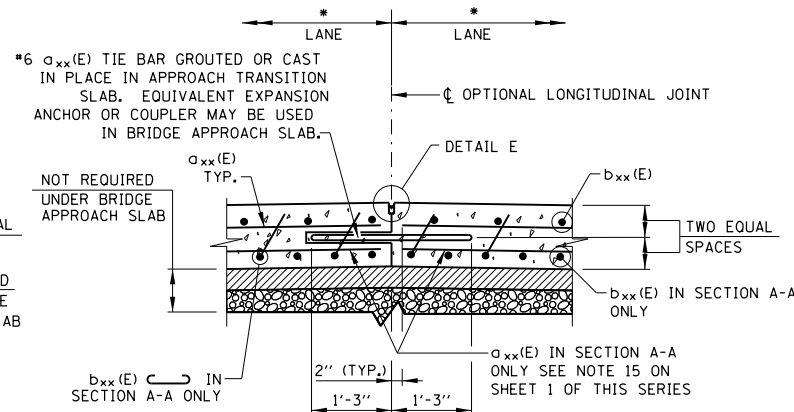
NOTE:
DIMENSIONS D, R & S ARE AS
RECOMMENDED BY THE SEALANT
MANUFACTURER.



SECTION A-A ONLY

DETAIL A

TYPICAL LONGITUDINAL JOINT



DETAIL A
OPTIONAL LONGITUDINAL JOINT
(SEE NOTE 17 ON SHEET 1 OF THIS SERIES)

NOTE TO DESIGNER

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED BY THE DESIGNER PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

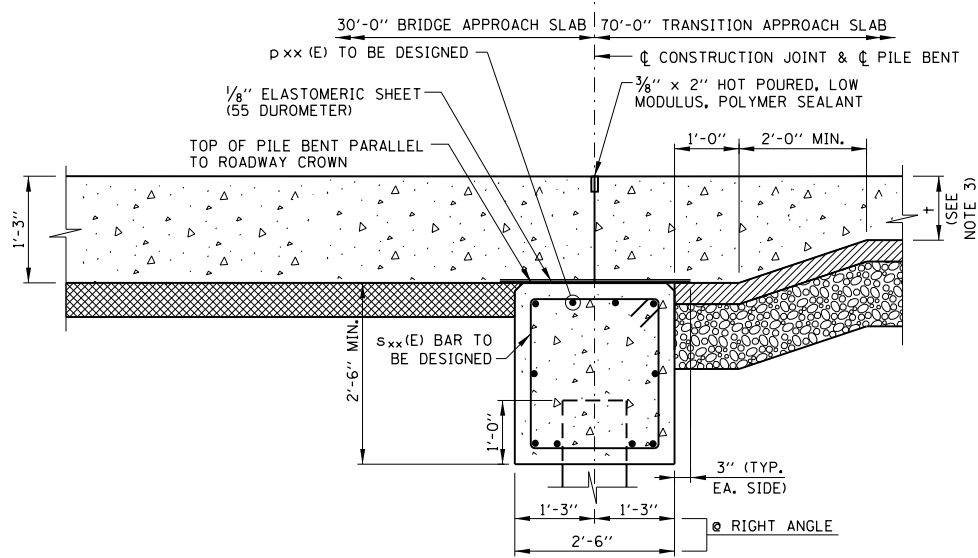
- * DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.
- ** APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.
- *** FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED $a_{xx}(E)$ THROUGH $s_{xx}(E)$ WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER IN DIMENSION LINE.

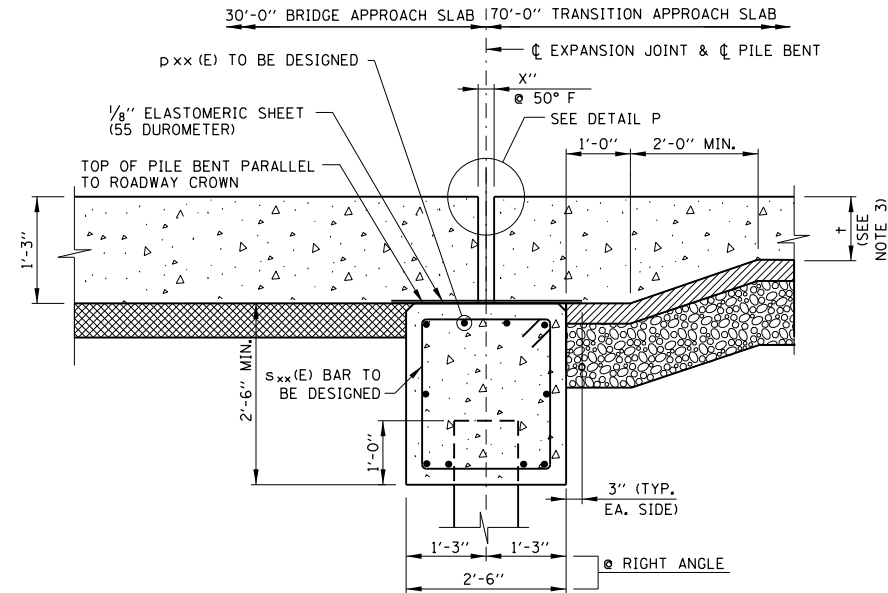


APPROACH SLAB,
MAINLINE

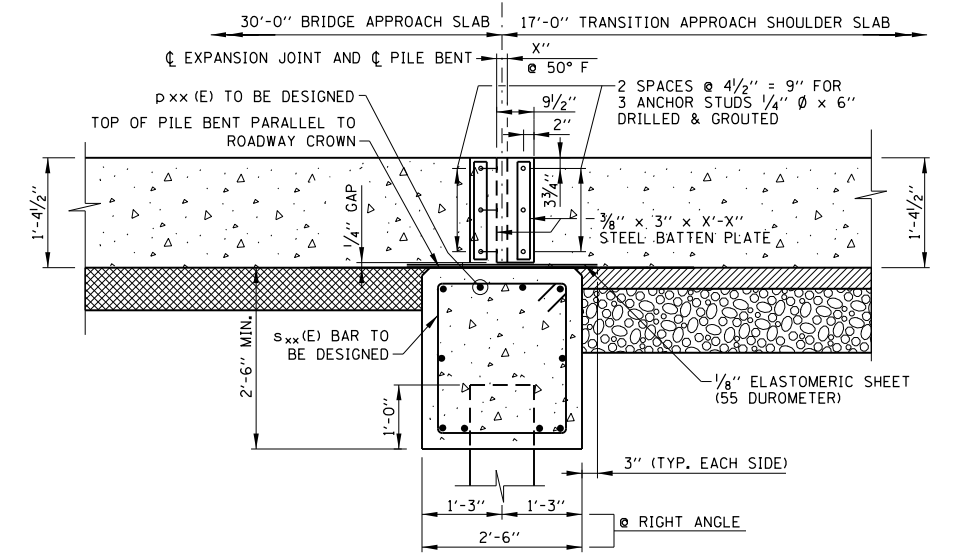
DATE
3-01-2018



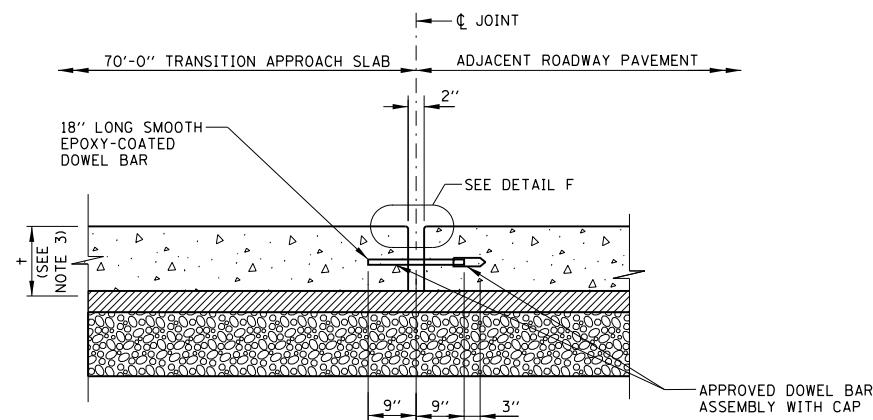
SECTION C-C
FOR NON-INTEGRAL ABUTMENT



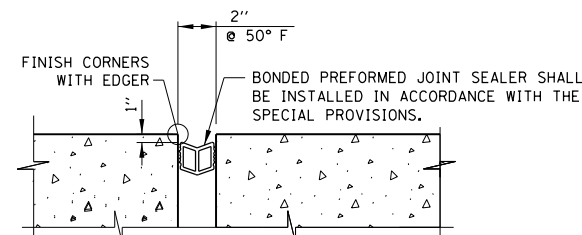
SECTION D-D
FOR INTEGRAL & SEMI-INTEGRAL ABUTMENT



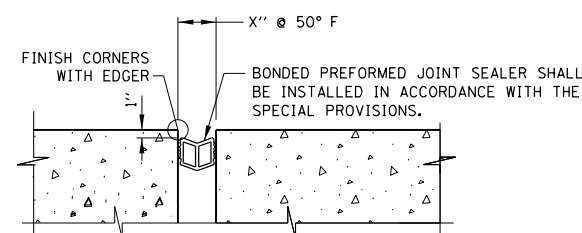
VIEW E'-E'
END ELEVATION OF EXPANSION JOINT



SECTION F-F

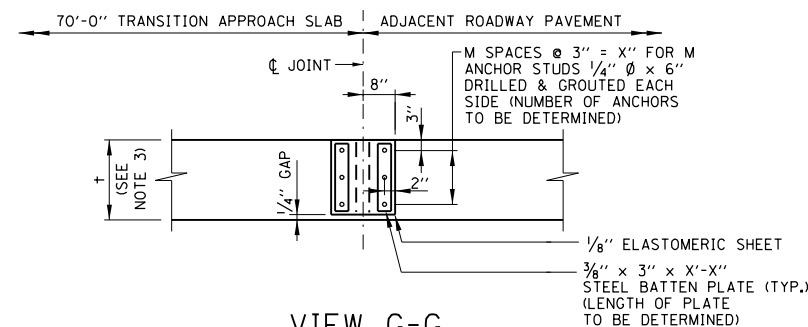


DETAIL F
TRANSITION JOINT

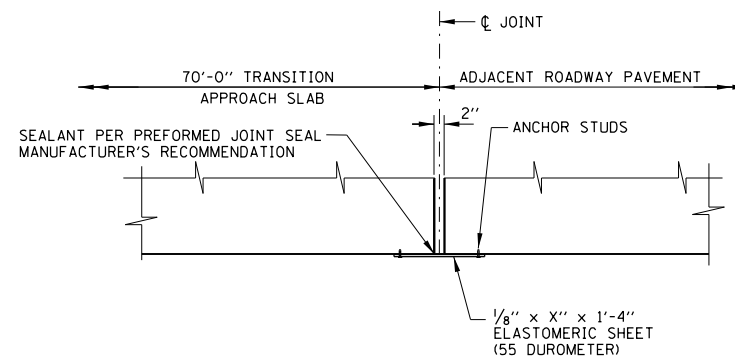


DETAIL P
APPROACH & TRANSITION JOINT

NOTE TO DESIGNER
DESIGNER TO PROVIDE JOINT SIZE AND OPENING CONSISTENT WITH BRIDGE AND APPROACH CONTRIBUTING LENGTH. DESIGNER TO DETERMINE NUMBER OF ANCHORS AND SIZE OF BATTEN PLATE.



VIEW G-G
END ELEVATION OF JOINT



DETAIL C
END PLAN OF JOINT

LEGEND

	CONCRETE
	STABILIZED SUBBASE
	SUBGRADE AGGREGATE OR SUBGRADE AGGREGATE, SPECIAL
	GRANULAR SUBBASE

NOTE TO DESIGNER

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED pxx(E) THROUGH sxx(E) WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE 'M' CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

NOTE TO DESIGNER

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED BY THE DESIGNER PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

NOTES:

- IN SECTION E'-E' AND VIEW G-G, ANCHOR STUDS SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS. STEEL PLATES, ANCHOR STUDS, NUTS AND WASHERS SHALL BE GALVANIZED.
- THE THICKNESSES OF STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.
- THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
- FOR PILE BENT DETAILS AND QUANTITIES SEE SHEET XX.
- FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.

SHEET 4 OF 5
BASE SHEET M-RDY-408

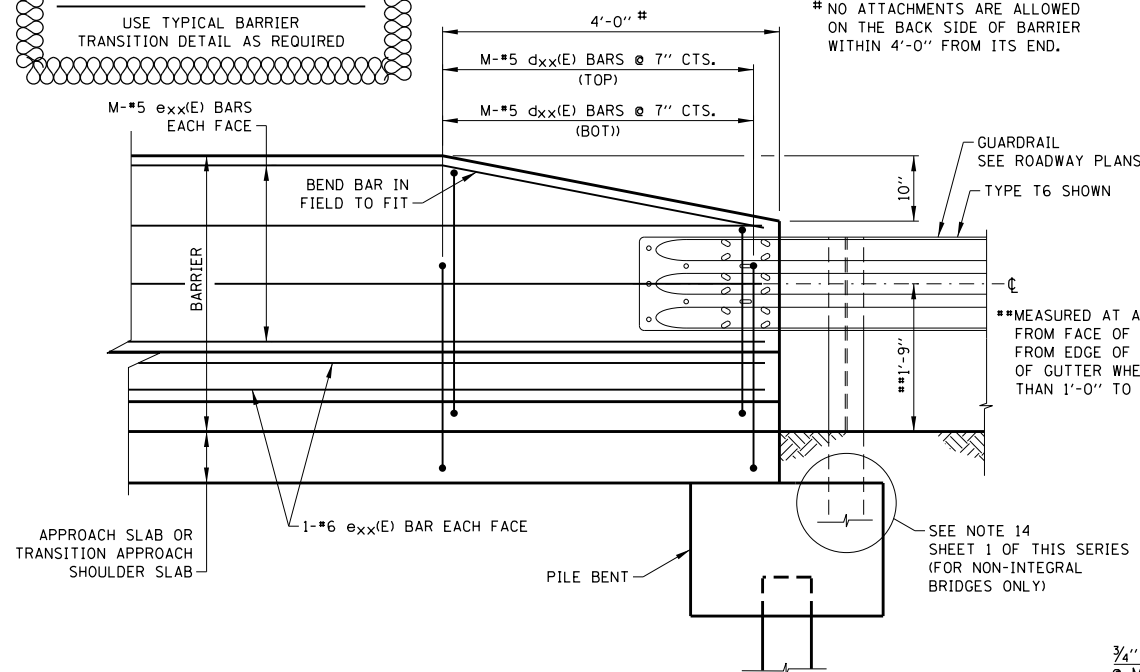
Illinois Tollway

APPROACH SLAB,
MAINLINE

DATE
3-31-2017

NOTE TO DESIGNER

USE TYPICAL BARRIER
TRANSITION DETAIL AS REQUIRED



TYPICAL BARRIER TRANSITION DETAIL

(CURB AND GUTTER NOT SHOWN FOR CLARITY)

NOTE TO DESIGNER

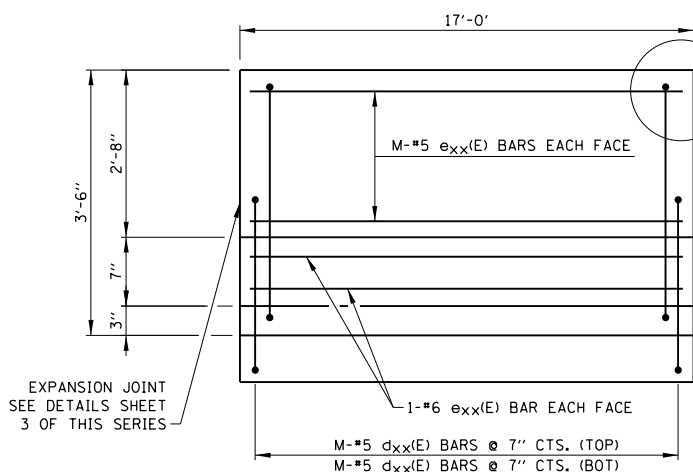
* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.

** APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.

*** FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.

NOTE TO DESIGNER

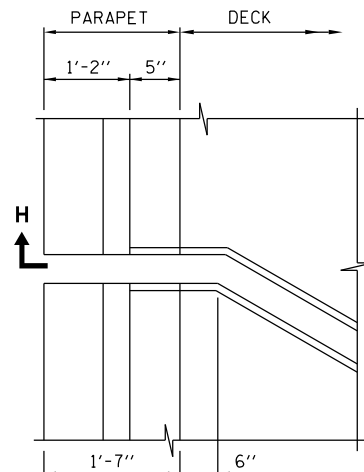
DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED $d_{xx}(E)$ THROUGH $s_{xx}(E)$ WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.



TRANSITION APPROACH SHOULDER SLAB BARRIER ELEVATION

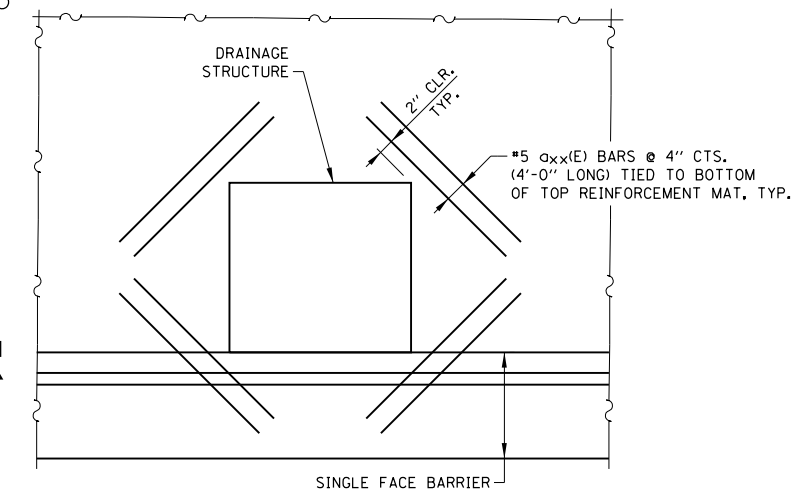
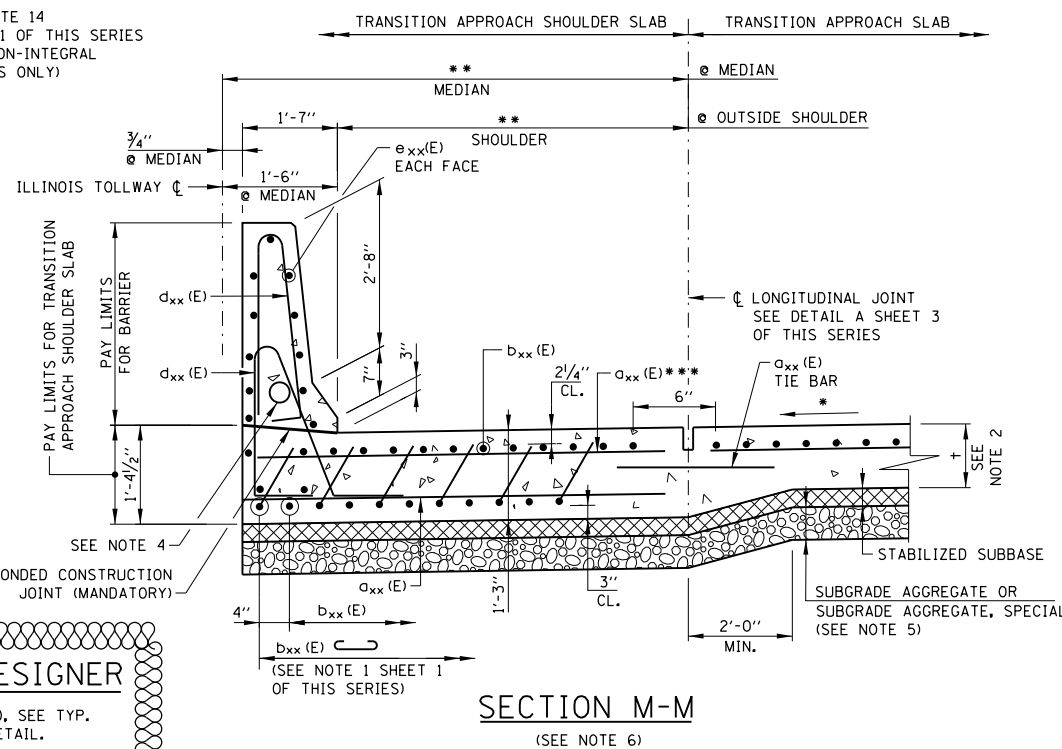
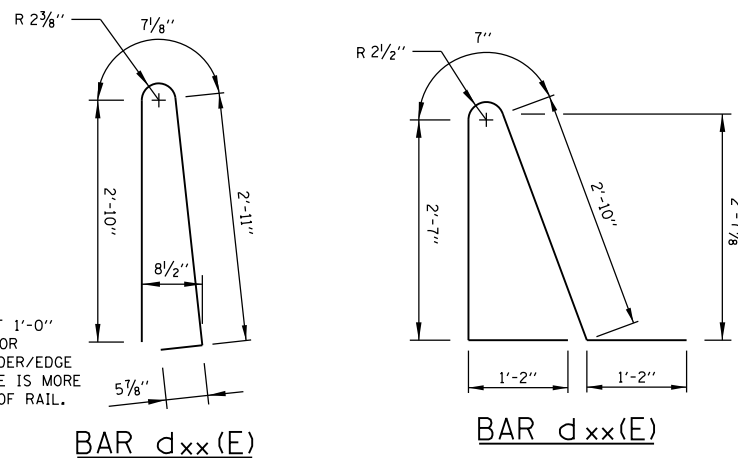
NOTE TO DESIGNER

IF GUARDRAIL PROVIDED, SEE TYP.
BARRIER TRANSITION DETAIL.



PLAN OF JOINT AT BARRIER

(FOR SKEWS GREATER THAN OR
EQUAL TO 10 DEGREES)

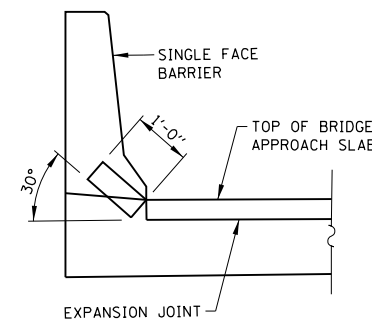
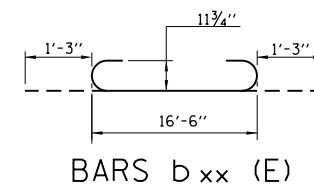
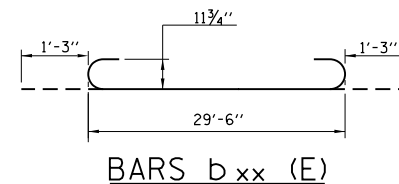


ADDITIONAL REINFORCEMENT AT DRAINAGE STRUCTURES

CUT TRANSVERSE $d_{xx}(E)$ BARS AND LONGITUDINAL $b_{xx}(E)$ BARS IN SLAB TO CLEAR
DRAINAGE STRUCTURE. RESPACE $d_{xx}(E)$ BARS TO MISS DRAINAGE STRUCTURE.

NOTE TO DESIGNER

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT
REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES
AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER
SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND
INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED BY THE DESIGNER
PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.



SECTION H-H

NOTES:

1. THE AREA OF EACH BRIDGE APPROACH SLAB, TRANSITION APPROACH SLAB AND TRANSITION APPROACH SHOULDER SLAB WILL BE MEASURED IN PLACE AND COMPUTED IN SQUARE YARDS. SEE SPECIAL PROVISIONS FOR OTHER WORK THAT IS INCLUDED IN THE COST OF THIS ITEM.
2. THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
3. FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.
4. COORDINATE NEED FOR 2" PVC CONDUIT WITH ELECTRICAL AND ITS PLANS. CONDUIT SHALL BE PLACED TO MISS REINFORCEMENT. DO NOT CUT REINFORCEMENT BARS.
5. THE THICKNESS OF THE STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.
6. IF THE CONTRACTOR ELECTS TO SLIPFORM THE PARAPET THEN THE PARAPET CROSS-SECTIONAL AREA, PARAPET REINFORCEMENT BARS CLEARANCES AND THE APPROACH SLAB REINFORCEMENT BARS SHALL BE REVISED ACCORDINGLY TO ACCOUNT FOR THE ADDITIONAL SLAB WIDTH TO ALLOW SLIPFORM.

BILL OF MATERIAL FOR APPROACH AND TRANSITION SLABS

BAR	NO.	SIZE	LENGTH	SHAPE
$d_{xx}(E)$				
$b_{xx}(E)$		#9	32'-0"	
$b_{xx}(E)$		#9	19'-0"	
$d_{xx}(E)$		#5	8'-4"	
PAY ITEM NO.	DESCRIPTION		UNIT	QUANTITY
J1420040	BRIDGE APPROACH SLAB		SO. YD.	
J1420041	TRANSITION APPROACH SLAB		SO. YD.	
J1420046	TRANSITION APPROACH SHOULDER SLAB		SO. YD.	
JT525135	BONDED PREFORMED JOINT SEAL		FT.	
*	REINFORCEMENT BARS, EPOXY COATED		LBS.	
*	PROTECTIVE COAT		SO. YD.	
*	BRIDGE DECK GROOVING		SO. FT.	

* FOR INFORMATION ONLY

BILL OF MATERIAL FOR BARRIERS

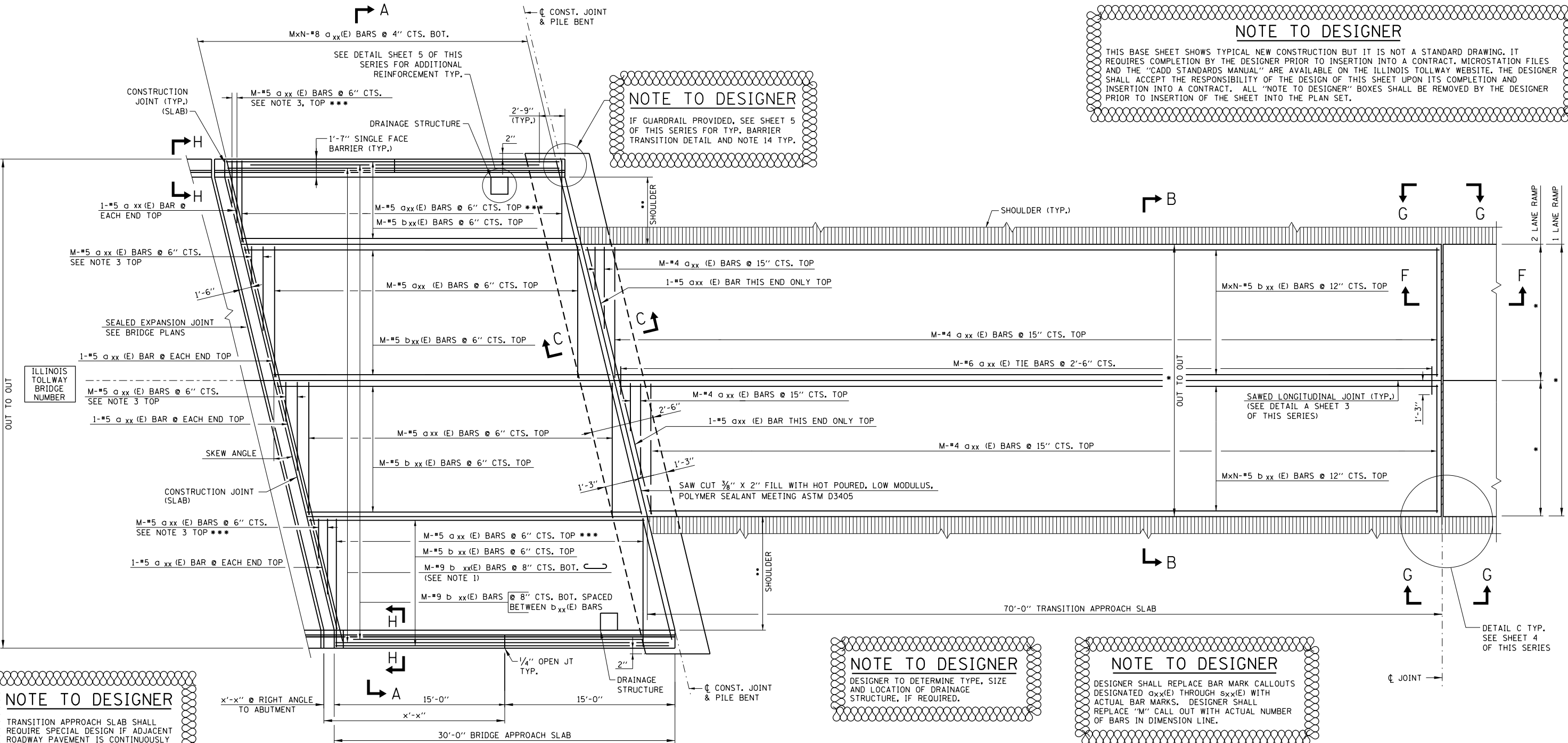
BAR	NO.	SIZE	LENGTH	SHAPE
$d_{xx}(E)$		#5	6'-10"	
$e_{xx}(E)$				
PAY ITEM NO.	DESCRIPTION		UNIT	QUANTITY
50300255	CONCRETE SUPERSTRUCTURE		CU. YD.	
50800205	REINFORCEMENT BARS, EPOXY COATED		LBS.	
50300300	PROTECTIVE COAT		SO. YD.	

SHEET 5 OF 5
BASE SHEET M-RDY-408



APPROACH SLAB,
MAINLINE

DATE
3-01-2018



PLAN NON-INTEGRAL BRIDGES

GENERAL NOTES:

- TILT HOOK OF #9 BARS FOR MINIMUM $2\frac{1}{4}$ " CLEARANCE.
- USE 2'-8" MIN. LAP FOR #4 BARS, USE 4'-0" MIN. LAP FOR #5 BARS, USE 5'-6" MIN. LAP FOR #6 BARS, USE 7'-10" MIN. LAP FOR #8 BARS.
- CUT REINFORCEMENT IN THE FIELD TO FIT THE SKEW AND USE REMAINDER IN OPPOSITE END, OR DISCARD OFF SITE. PAINT EXPOSED ENDS WITH EPOXY PAINT.
- FOR SECTIONS A-A AND B-B SEE SHEET 3 OF 5; FOR SECTIONS C-C, D-D, E-E, F-F AND VIEWS E'-E' AND G-G SEE SHEET 4; AND FOR SECTIONS H-H AND M-M SEE SHEET 5.
- PROTECTIVE COAT SHALL BE APPLIED TO TOP AND TRAFFIC FACES OF BARRIERS.
- TOOL EDGES OF EXPANSION JOINTS TO $\frac{1}{4}$ " RADIUS.
- REINFORCEMENT BARS SHALL MEET THE REQUIREMENTS OF AASHTO M31 (ASTM A615), GRADE 60, AND SHALL CONFORM TO SECTION 508 OF THE STANDARD SPECIFICATIONS.
- REINFORCEMENT BARS DESIGNATED "(E)" SHALL BE EPOXY COATED.
- REINFORCEMENT BENDING DETAILS SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 315, LATEST EDITION.
- REINFORCEMENT BAR BENDING DIMENSIONS ARE OUT TO OUT.
- EXPOSED CONCRETE EDGES SHALL HAVE $\frac{3}{4}$ " x 45° CHAMFERS. CHAMFERS ON VERTICAL EDGES SHALL BE CONTINUED A MINIMUM OF ONE FOOT BELOW GROUND LEVEL.
- CONCRETE BARRIERS SHALL BE CONSTRUCTED & PAID FOR IN ACCORDANCE WITH SECTIONS 503 AND 508 OF THE STANDARD SPECIFICATIONS.
- THE NOTATION MxN FOR REINFORCEMENT BARS IS DEFINED AS M LINES OF BARS WITH N LENGTHS PER LINE.
- IN THE CORNERS OF THE APPROACH SLAB BENT WHEN APPROACH GUARDRAIL IS PROVIDED, THE BENT CORNER SHALL BE BLOCKED OUT AND THE REINFORCEMENT STEEL SHALL BE RESPALED (OR CUT) FOR GUARDRAIL POSTS, DRAINAGE STRUCTURES, NOISE ABATEMENT WALLS, ETC. AS NECESSARY AND AS APPROVED BY THE ENGINEER.
- IN REFERENCE TO LONGITUDINAL CONSTRUCTION JOINTS ON SHEET 3 OF THIS SERIES; THESE BARS SHALL BE CUT TO FIT FROM LENGTHS SHOWN IN THE REINFORCEMENT BAR SCHEDULE FOR THE CONSTRUCTION JOINT. THESE BARS MAY BE REPLACED BY ALTERNATIVE BARS AND LENGTHS AS SHOWN IN THE DESIGN PLANS. PAINT EXPOSED ENDS WITH EPOXY PAINT.
- EXPANSION ANCHORS AND DRILLED AND GROUTED DOWELS SHALL CONFORM TO SECTION 1006 OF THE STANDARD SPECIFICATIONS.
- AS APPROVED BY THE ENGINEER, THE CONTRACTOR MAY ELECT TO REDUCE THE WIDTHS OF THE POUR BY USE OF THE OPTIONAL LONGITUDINAL CONSTRUCTION JOINT SHOWN. JOINTS SHALL BE LOCATED AT THE EDGE OF A TRAFFIC LANE.
- SEE SPECIAL PROVISIONS, BRIDGE APPROACH SLAB, TRANSITION APPROACH SLAB, AND BONDED PREFORMED JOINT SEAL.

SHEET 1 OF 5
BASE SHEET M-RDY-409



APPROACH SLAB, RAMP

DATE
3-01-2018

NOTE TO DESIGNER

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NOTE TO DESIGNER

IF GUARDRAIL PROVIDED, SEE SHEET 5 OF THIS SERIES FOR TYP. BARRIER TRANSITION DETAIL TYP.

NOTE TO DESIGNER

DESIGNER TO DETERMINE TYPE, SIZE AND LOCATION OF DRAINAGE STRUCTURE, IF REQUIRED.

NOTE TO DESIGNER

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED $\alpha_{xx}(E)$ THROUGH $s_{xx}(E)$ WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

NOTE TO DESIGNER

- * DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.
- ** APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.
- *** FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.

NOTE TO DESIGNER

TRANSITION APPROACH SLAB SHALL REQUIRE SPECIAL DESIGN IF ADJACENT ROADWAY PAVEMENT IS CONTINUOUSLY REINFORCED CONCRETE (CRC.)

PLAN (INTEGRAL OR SEMI-INTEGRAL ABUTMENTS)

NOTES:

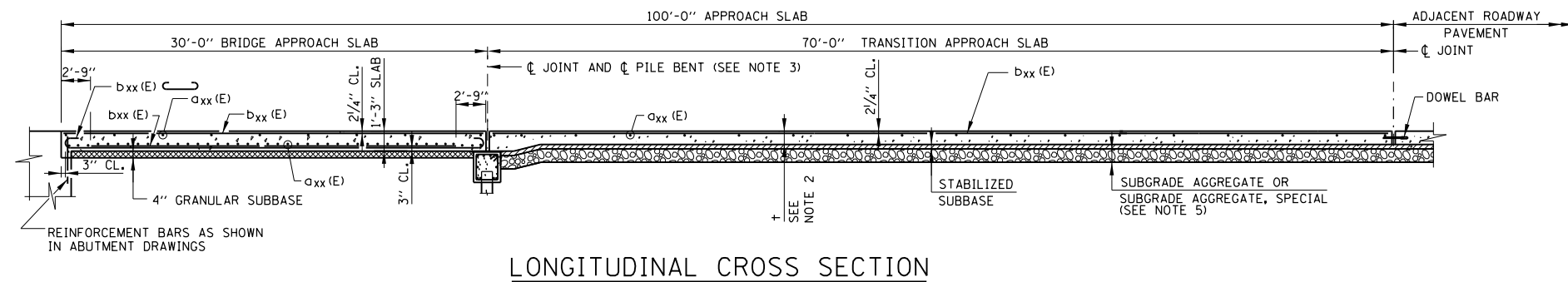
1. FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.

SHEET 2 OF 5
BASE SHEET M-RDY-409



APPROACH SLAB, RAMP

DATE
3-31-2017

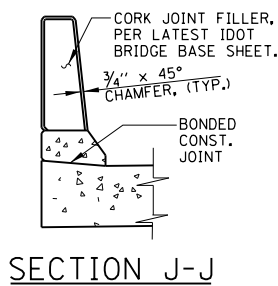
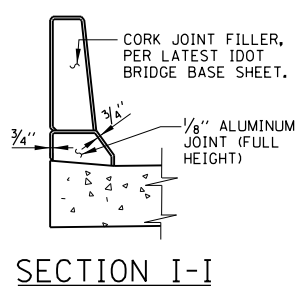
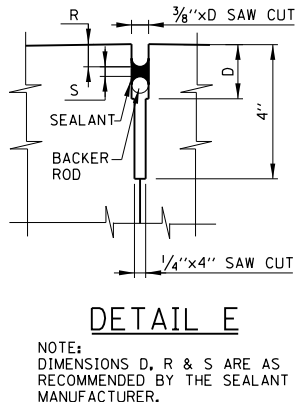
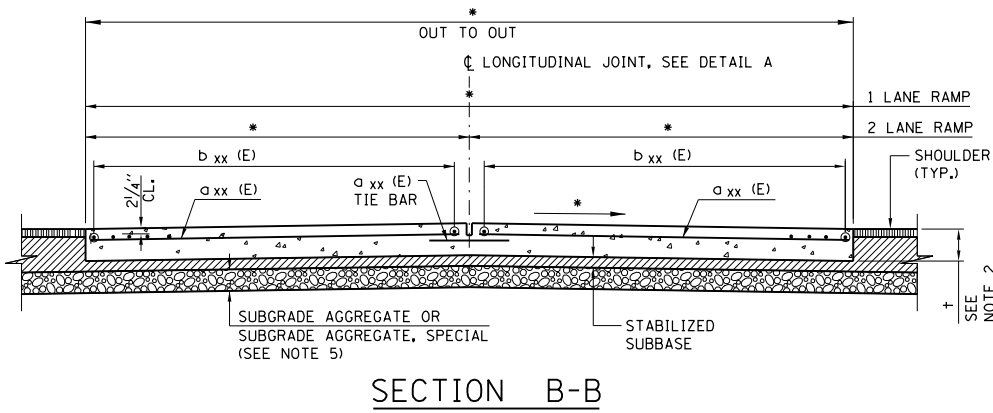
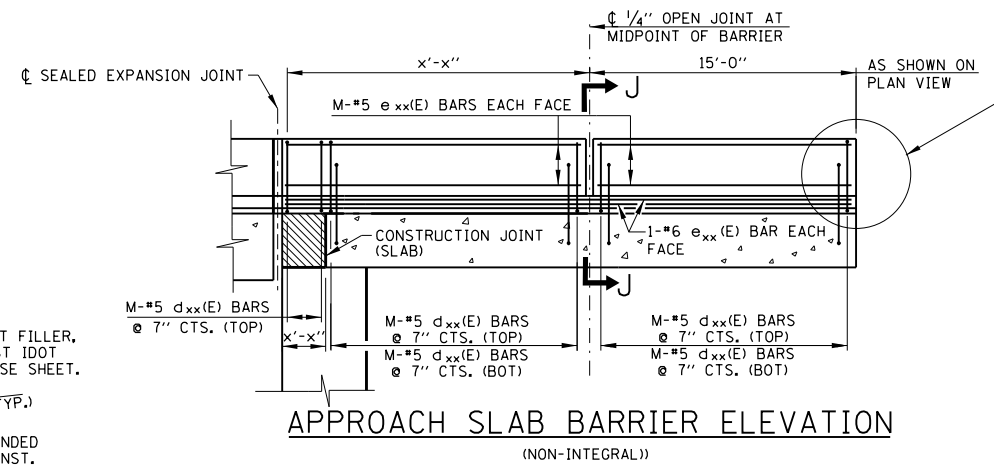
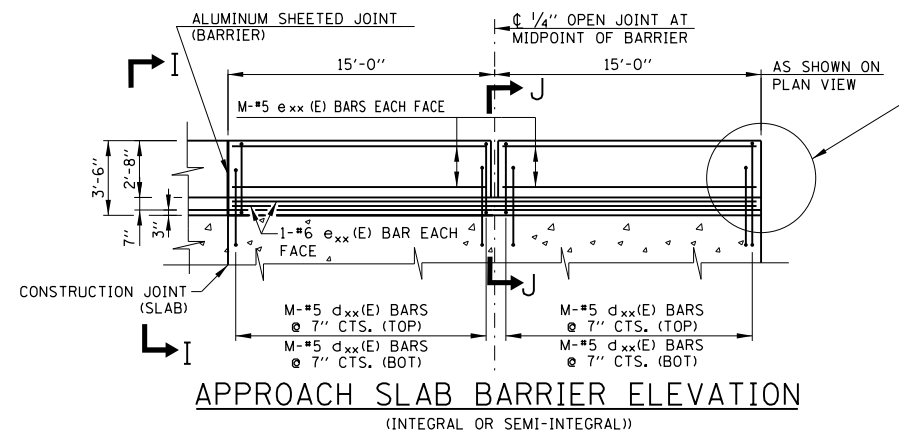
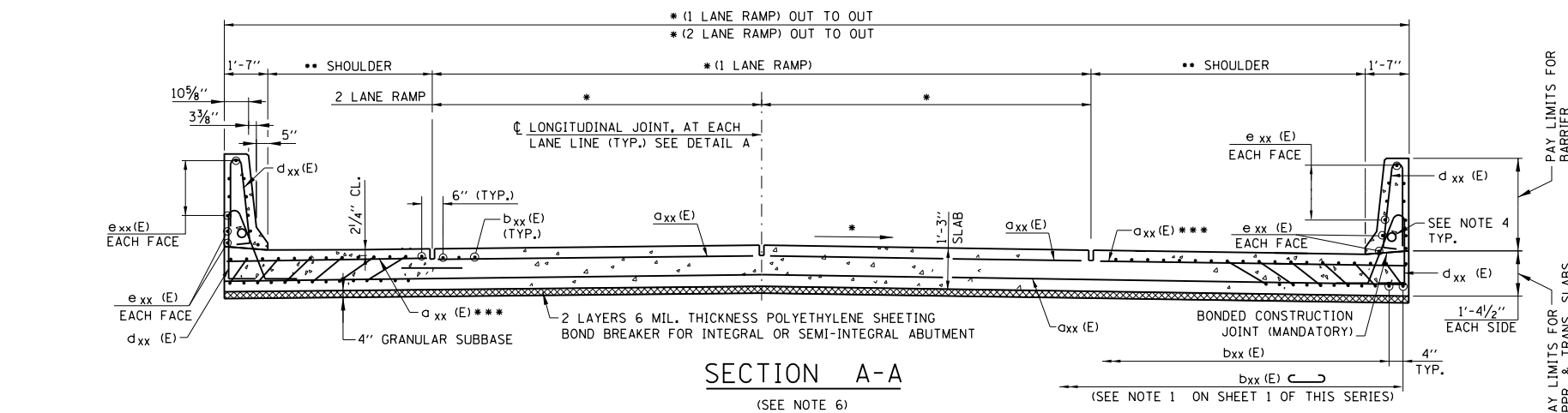


NOTE TO DESIGNER

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED $a_{xx}(E)$ THROUGH $s_{xx}(E)$ WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

NOTE TO DESIGNER

IF GUARDRAIL PROVIDED, SEE SHEET 5 OF THIS SERIES FOR TYP. BARRIER TRANSITION DETAIL



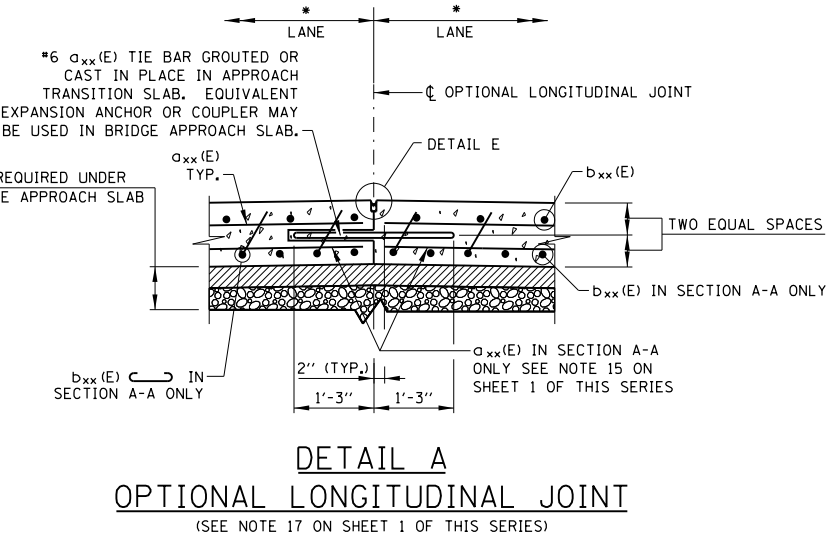
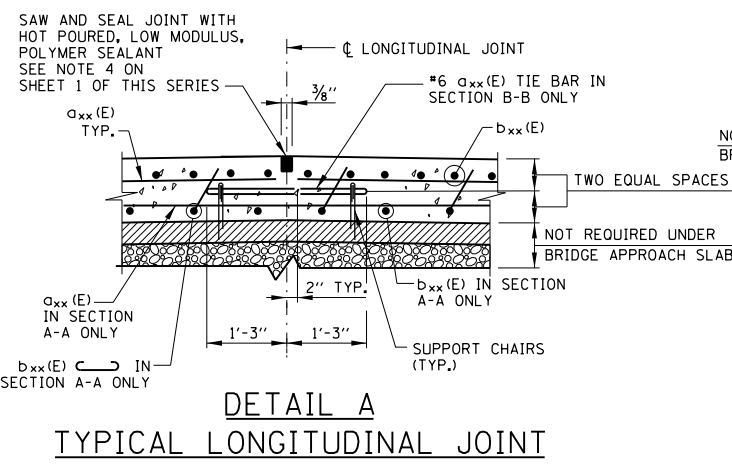
NOTE TO DESIGNER

* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.

** APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.

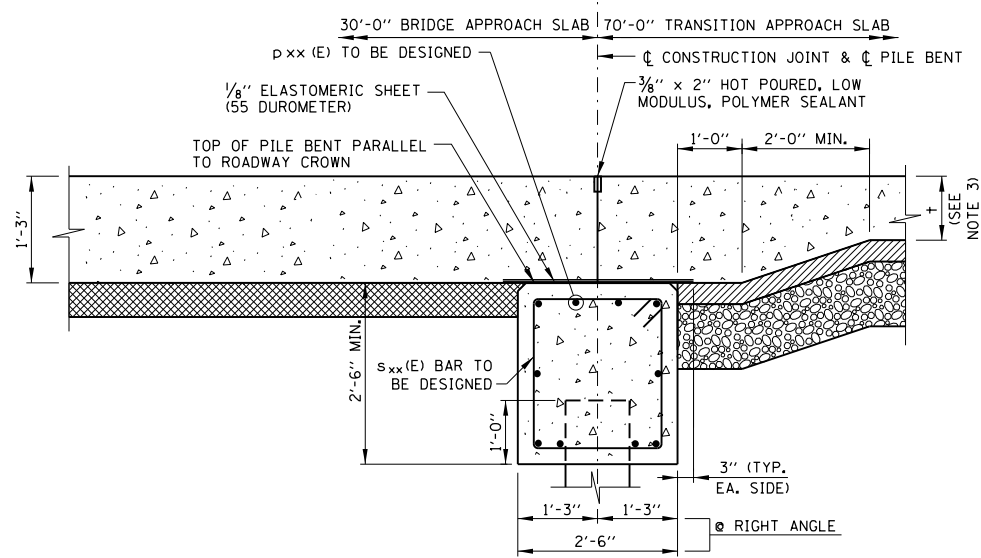
*** FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" ARE AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED BY THE DESIGNER PRIOR TO INSERTION OF THE SHEET INTO THE PLAN SET.

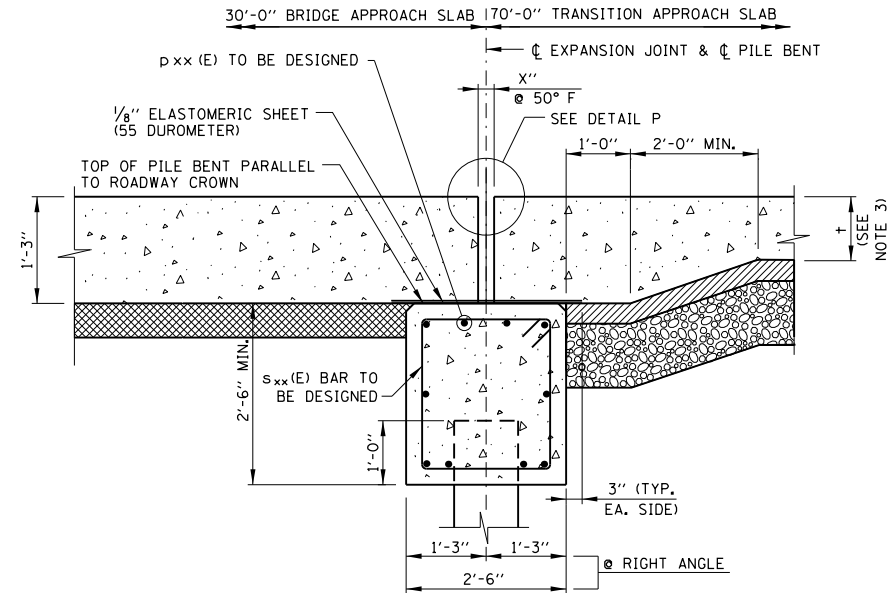


- NOTES:**
- SEE SHEET 1 OF THIS SERIES FOR GENERAL NOTES.
 - THE DIMENSION T IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
 - INTEGRAL ABUTMENT JOINT SHOWN NON-INTEGRAL ABUTMENT JOINT SIMILAR. SEE SHEET 4 OF THIS SERIES.
 - COORDINATE NEED FOR 2" PVC CONDUIT WITH ELECTRICAL AND ITS PLANS. CONDUIT SHALL BE PLACED TO MISS REINFORCEMENT. DO NOT CUT REINFORCEMENT BARS.
 - THE THICKNESS OF THE STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.
 - IF THE CONTRACTOR ELECTS TO SLIPFORM THE PARAPET THEN THE PARAPET CROSS-SECTIONAL AREA, PARAPET REINFORCEMENT BARS CLEARANCES AND THE APPROACH SLAB REINFORCEMENT BARS SHALL BE REVISED ACCORDINGLY TO ACCOUNT FOR THE ADDITIONAL SLAB WIDTH TO ALLOW SLIPFORM.
 - THE 1/8" ALUMINUM SHEET SHALL BE ASTM B 209 ALLOY 3003-H14 AND COATED TO MINIMIZE REACTION WITH WET CONCRETE.

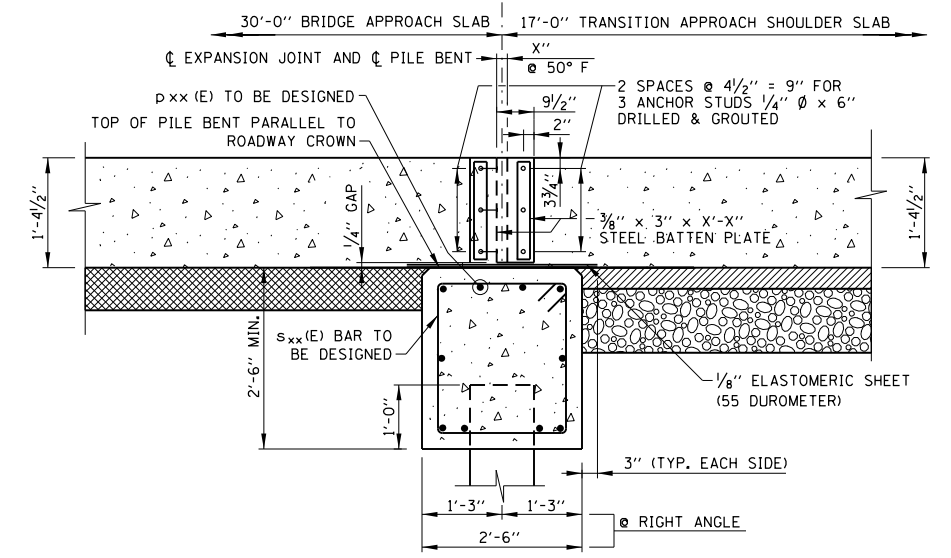




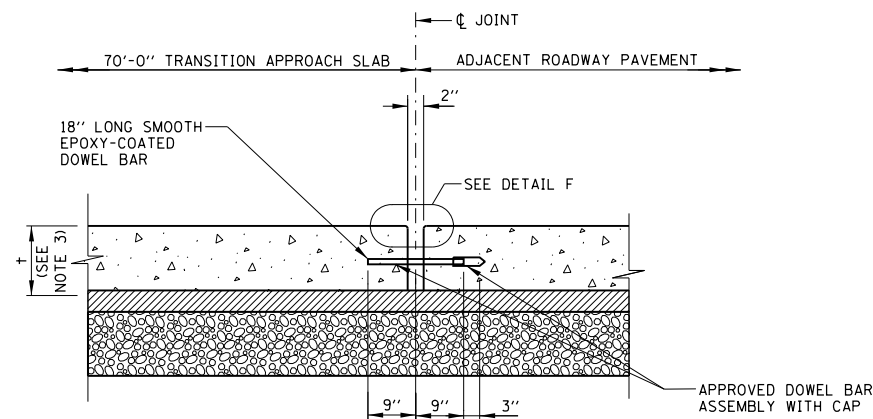
SECTION C-C
FOR NON-INTEGRAL ABUTMENT



SECTION D-D
FOR INTEGRAL & SEMI-INTEGRAL ABUTMENT

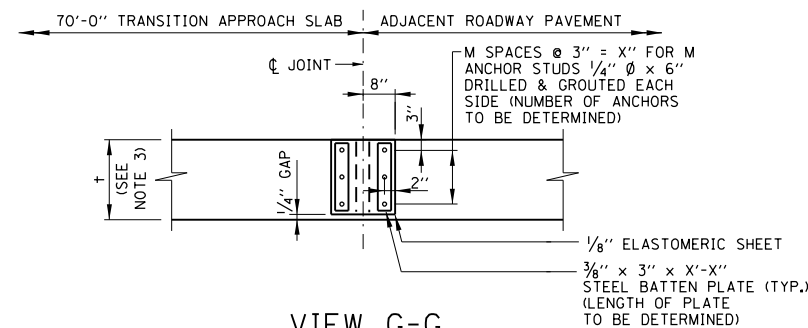


VIEW E'-E'
END ELEVATION OF EXPANSION JOINT

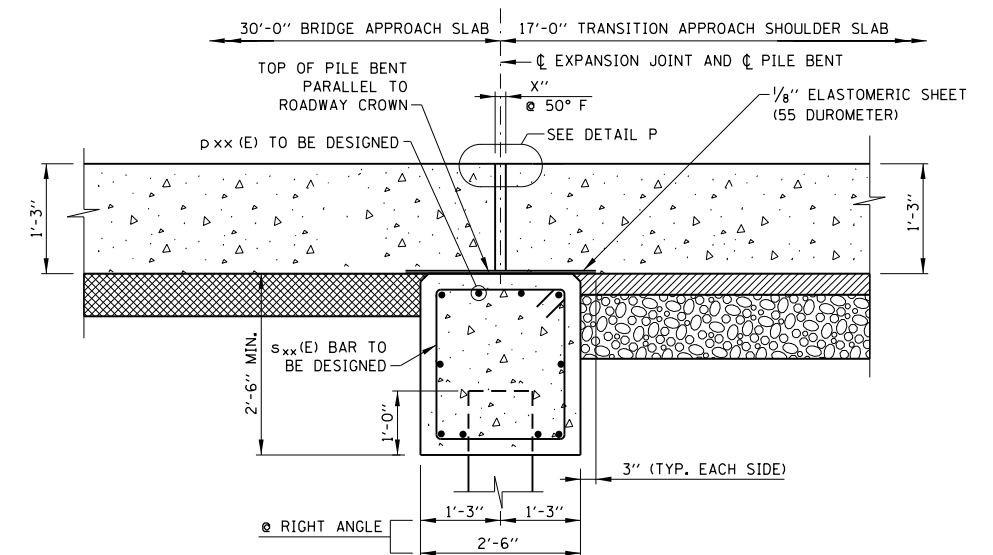


SECTION F-F

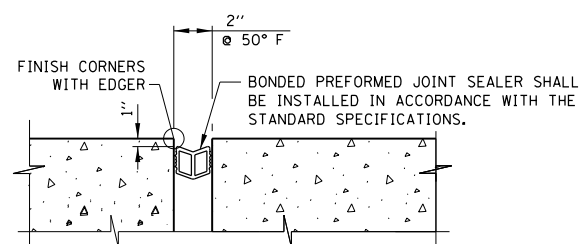
NOTE TO DESIGNER
DESIGNER TO PROVIDE JOINT SIZE AND OPENING CONSISTENT WITH BRIDGE AND APPROACH CONTRIBUTING LENGTH. DESIGNER TO DETERMINE NUMBER OF ANCHORS AND SIZE OF BATTEN PLATE.



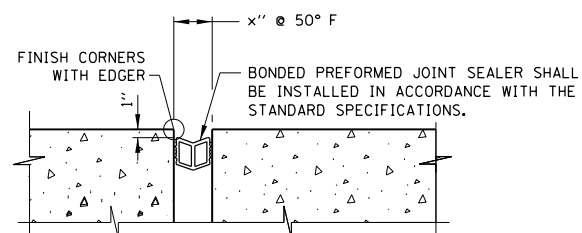
VIEW G-G
END ELEVATION OF JOINT



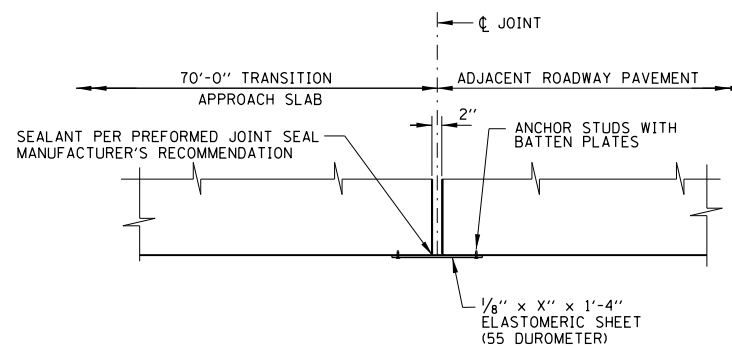
SECTION E-E



DETAIL F
TRANSITION JOINT



DETAIL P
APPROACH & TRANSITION JOINT



DETAIL C
END PLAN OF JOINT

LEGEND

	CONCRETE
	STABILIZED SUBBASE
	SUBGRADE AGGREGATE OR SUBGRADE AGGREGATE, SPECIAL
	GRANULAR SUBBASE

NOTE TO DESIGNER

DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED sxx(E) THROUGH sxx(E) WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

NOTE TO DESIGNER

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NOTES:

- IN SECTION E'-E' AND VIEW G-G, ANCHOR STUDS SHALL BE INSTALLED IN ACCORDANCE WITH ARTICLE 1006.09 OF THE STANDARD SPECIFICATIONS. STEEL PLATES, ANCHOR STUDS, NUTS AND WASHERS SHALL BE GALVANIZED.
- THE THICKNESSES OF STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.
- THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
- FOR PILE BENT DETAILS AND QUANTITIES SEE SHEET XX.
- FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.

SHEET 4 OF 5
BASE SHEET M-RDY-409

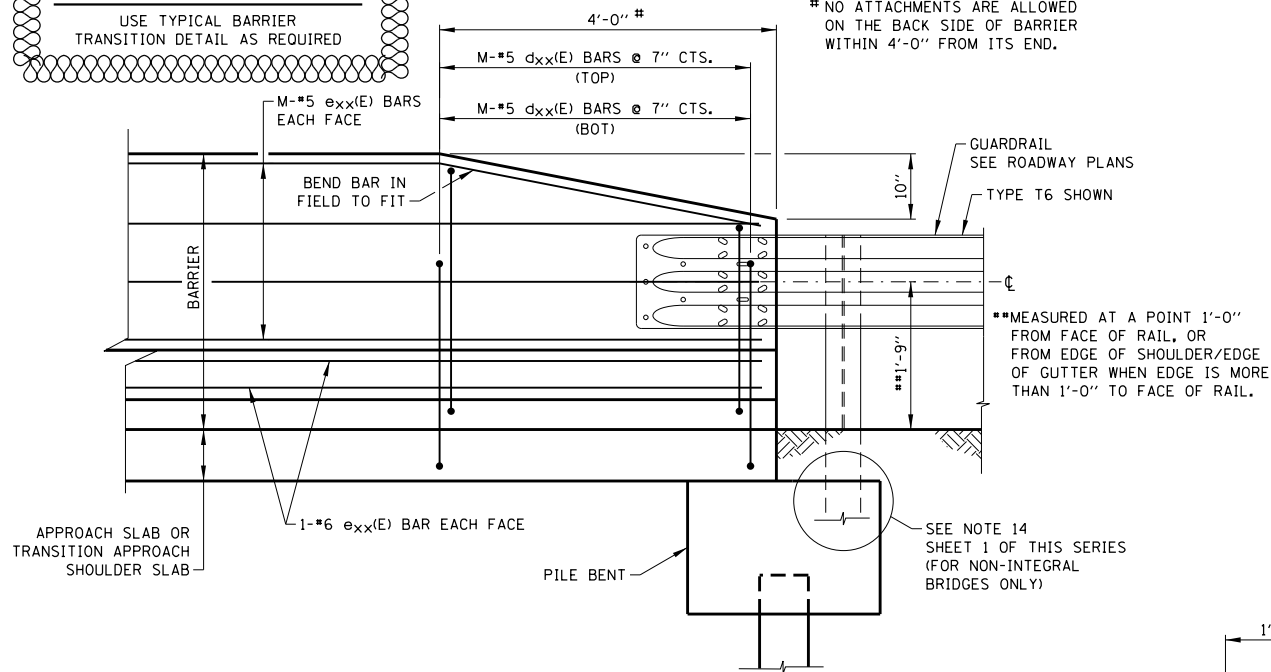


APPROACH SLAB, RAMP

DATE
3-31-2017

NOTE TO DESIGNER

USE TYPICAL BARRIER
TRANSITION DETAIL AS REQUIRED



TYPICAL BARRIER TRANSITION DETAIL

(CURB AND GUTTER NOT SHOWN FOR CLARITY)

NOTE TO DESIGNER

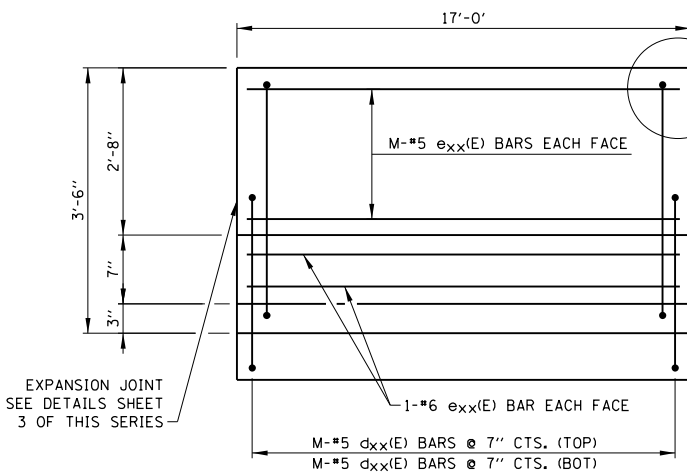
DESIGNER SHALL REPLACE BAR MARK CALLOUTS DESIGNATED $d_{xx}(E)$ THROUGH $s_{xx}(E)$ WITH ACTUAL BAR MARKS. DESIGNER SHALL REPLACE "M" CALL OUT WITH ACTUAL NUMBER OF BARS IN DIMENSION LINE.

NOTE TO DESIGNER

* DIMENSIONS SHALL CONFORM WITH APPROACH ROADWAY.

** APPROACH SLAB SHOULDER WIDTH SHOULD BE ROADWAY SHOULDER WIDTH + 1'-0" FOR GUARDRAIL OR + 2'-0" FOR SINGLE FACE BARRIER SO APPROACH ROADWAY FLOW LINE MATCHES BARRIER BASE.

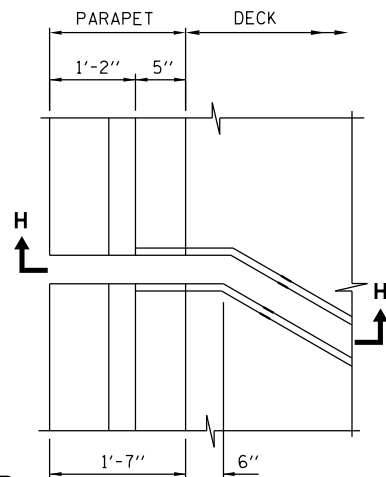
*** FOR APPROACH SLAB LOCATED ON RETAINING WALL, REINFORCEMENT SHALL BE DESIGNED FOR TL-5 CRASH LOADING.



TRANSITION APPROACH SHOULDER SLAB BARRIER ELEVATION

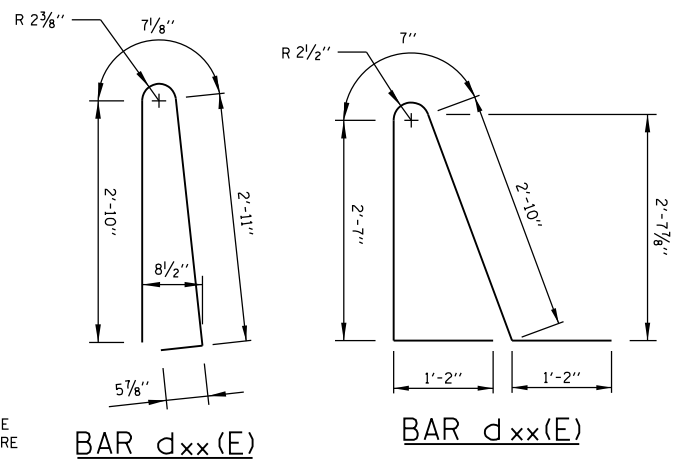
NOTE TO DESIGNER

IF GUARDRAIL PROVIDED, SEE TYP.
BARRIER TRANSITION DETAIL.



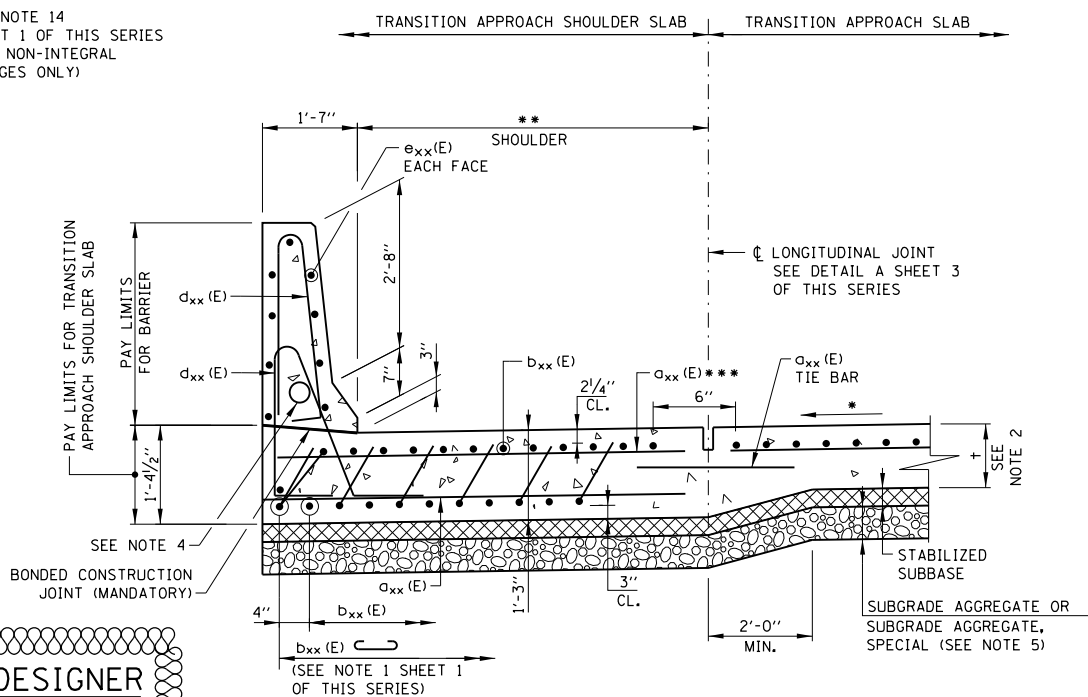
PLAN OF JOINT AT BARRIER

(FOR SKEWS GREATER THAN OR
EQUAL TO 10 DEGREES)



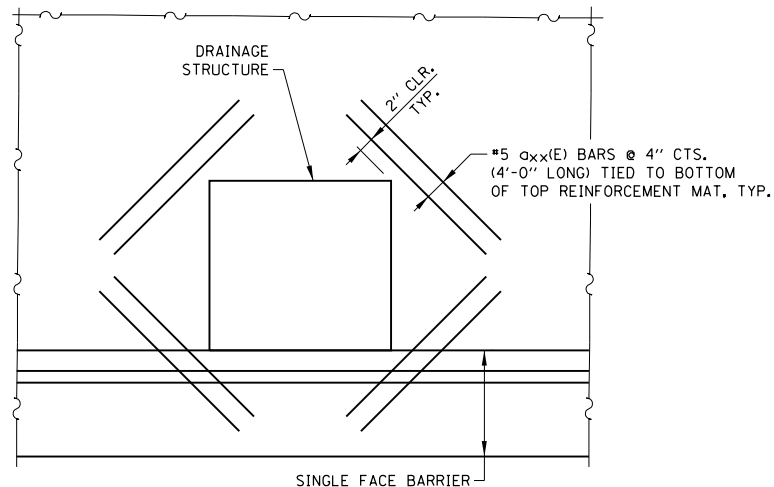
BAR $d_{xx}(E)$

BAR $d_{xx}(E)$



SECTION M-M

(SEE NOTE 6)

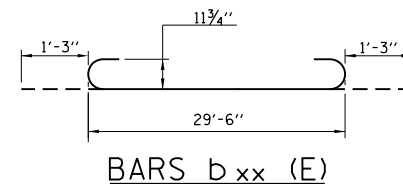


ADDITIONAL REINFORCEMENT AT DRAINAGE STRUCTURES

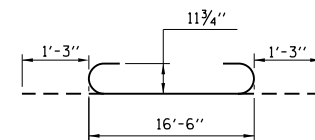
CUT TRANSVERSE $d_{xx}(E)$ BARS AND LONGITUDINAL $b_{xx}(E)$ BARS IN SLAB TO CLEAR DRAINAGE STRUCTURE. RESPACE $d_{xx}(E)$ BARS TO MISS DRAINAGE STRUCTURE.

NOTE TO DESIGNER

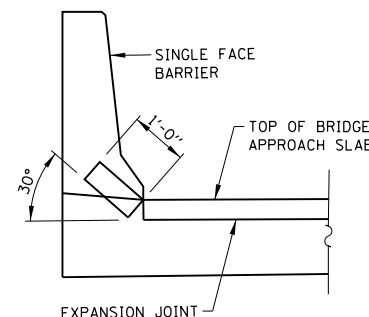
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BARS $b_{xx}(E)$



BARS $b_{xx}(E)$



SECTION H-H

BILL OF MATERIAL FOR APPROACH AND TRANSITION SLABS

BAR	NO.	SIZE	LENGTH	SHAPE
$d_{xx}(E)$				
$b_{xx}(E)$		#9	32'-0"	
$b_{xx}(E)$		#9	19'-0"	
$d_{xx}(E)$		#5	8'-4"	
PAY ITEM NO.	DESCRIPTION		UNIT	QUANTITY
J1420040	BRIDGE APPROACH SLAB		SO. YD.	
J1420041	TRANSITION APPROACH SLAB		SO. YD.	
J1420046	TRANSITION APPROACH SHOULDER SLAB		SO. YD.	
JT525135	BONDED PREFORMED JOINT SEAL		FT.	
*	REINFORCEMENT BARS, EPOXY COATED		LBS.	
*	PROTECTIVE COAT		SO. YD.	
*	BRIDGE DECK GROOVING		SO. FT.	

* FOR INFORMATION ONLY

BILL OF MATERIAL FOR BARRIERS

BAR	NO.	SIZE	LENGTH	SHAPE
$d_{xx}(E)$		#5	6'-10"	
$e_{xx}(E)$				
PAY ITEM NO.	DESCRIPTION		UNIT	QUANTITY
50300255	CONCRETE SUPERSTRUCTURE		CU. YD.	
50800205	REINFORCEMENT BARS, EPOXY COATED		LBS.	
50300300	PROTECTIVE COAT		SO. YD.	

NOTES:

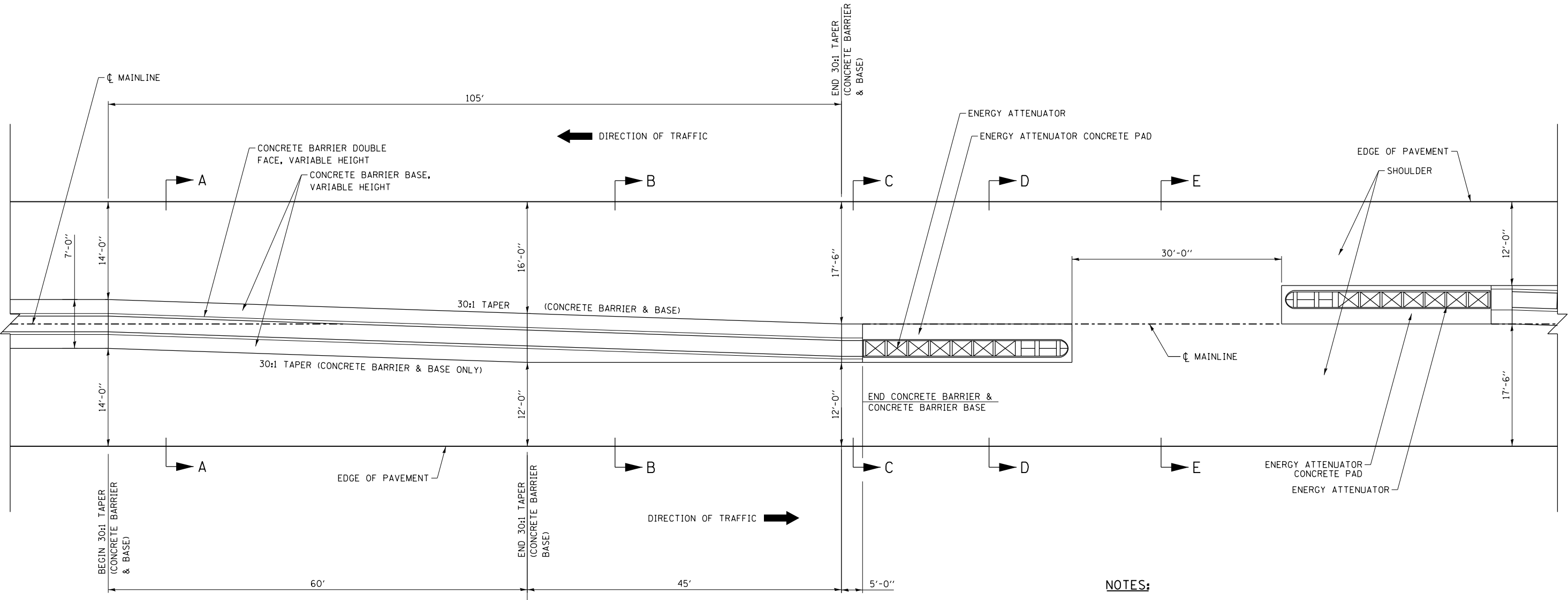
- THE AREA OF EACH BRIDGE APPROACH SLAB, TRANSITION APPROACH SLAB AND TRANSITION APPROACH SHOULDER SLAB WILL BE MEASURED IN PLACE AND COMPUTED IN SQUARE YARDS. SEE SPECIAL PROVISIONS FOR OTHER WORK THAT IS INCLUDED IN THE COST OF THIS ITEM.
- THE DIMENSION + IS THE THICKNESS OF THE TRANSITION APPROACH SLAB AS DEFINED IN THE ROADWAY PLANS.
- FOR GENERAL NOTES SEE SHEET 1 OF THIS SERIES.
- COORDINATE NEED FOR 2" PVC CONDUIT WITH ELECTRICAL AND ITS PLANS. CONDUIT SHALL BE PLACED TO MISS REINFORCEMENT. DO NOT CUT REINFORCEMENT BARS.
- THE THICKNESS OF THE STABILIZED SUBBASE AND SUBGRADE AGGREGATE SHALL BE THE SAME AS FOR THE ADJACENT PAVEMENT SECTIONS.
- IF THE CONTRACTOR ELECTS TO SLIPFORM THE PARAPET THEN THE PARAPET CROSS-SECTIONAL AREA, PARAPET REINFORCEMENT BARS CLEARANCES AND THE APPROACH SLAB REINFORCEMENT BARS SHALL BE REVISED ACCORDINGLY TO ACCOUNT FOR THE ADDITIONAL SLAB WIDTH TO ALLOW SLIPFORM.

SHEET 5 OF 5
BASE SHEET M-RDY-409



APPROACH SLAB, RAMP

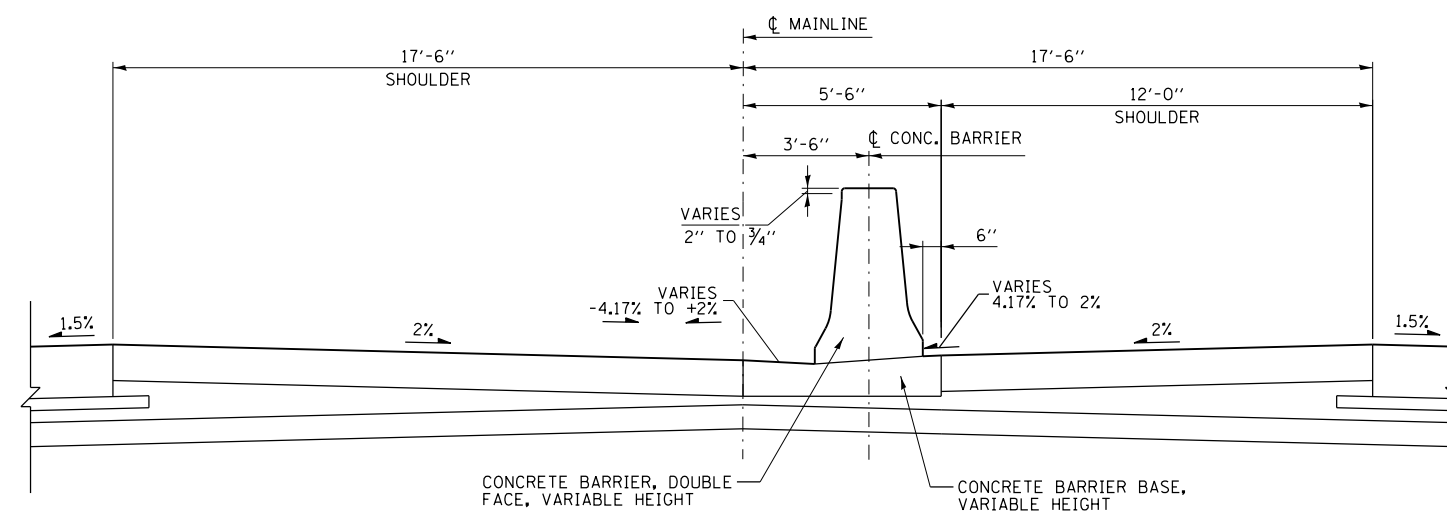
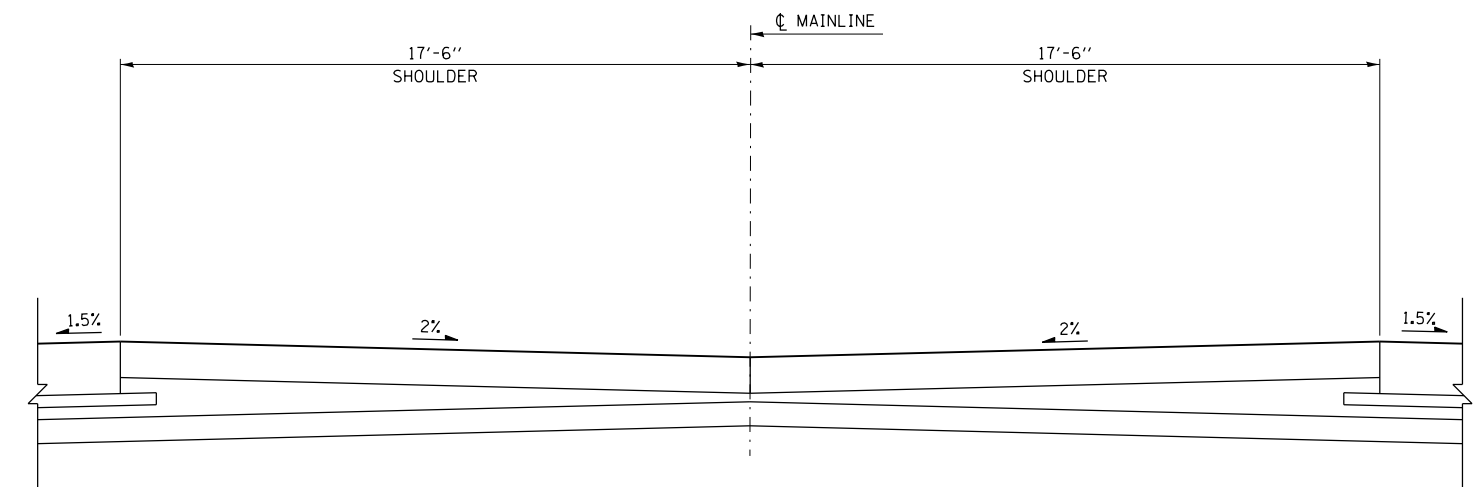
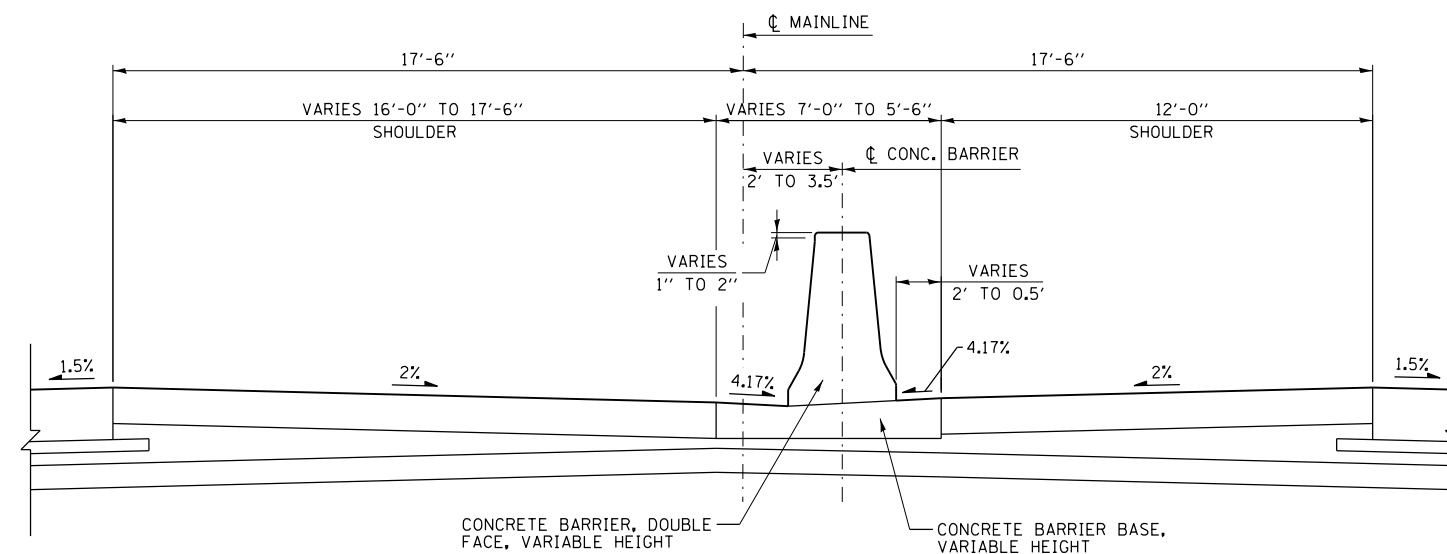
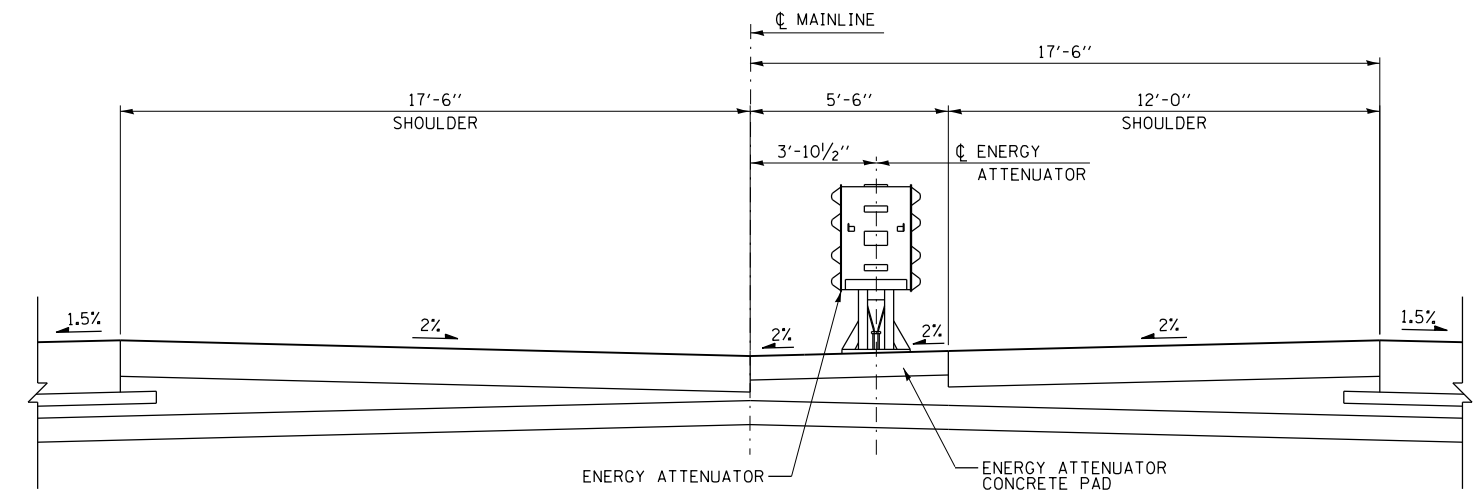
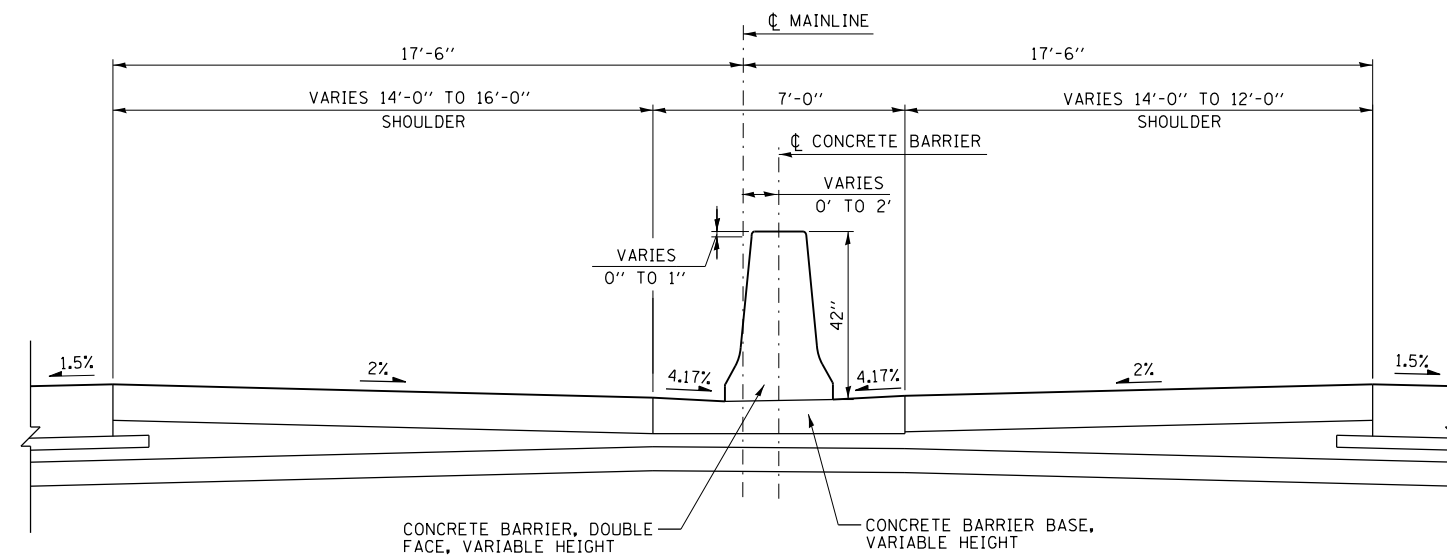
DATE
3-01-2018



- NOTES:**
1. SEE SHEET 2 OF THIS SERIES FOR SECTIONS A-A THROUGH E-E.
 2. THE TAPER SHOWN FOR THE CONCRETE BARRIER AND CONCRETE BARRIER BASE IS DUPLICATED FOR THE OPPOSING TRAFFIC DIRECTION.

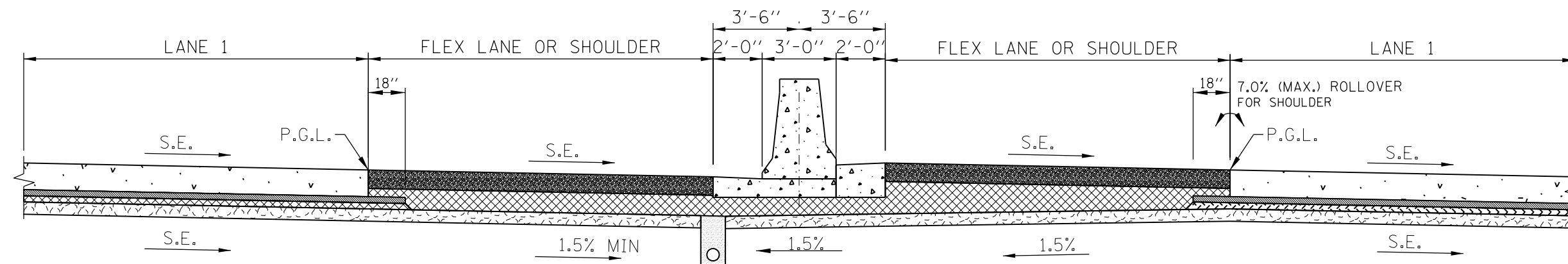
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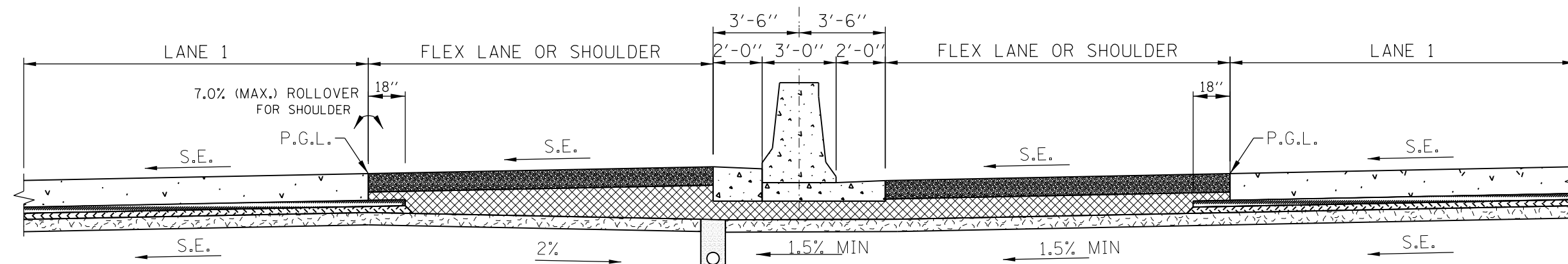


NOTE TO DESIGNER

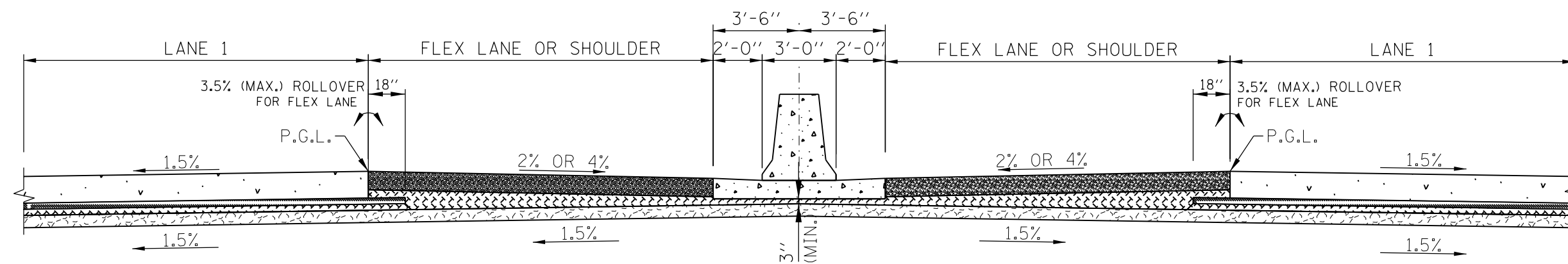
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SUBGRADE SLOPES AND PIPE UNDERDRAIN LOCATION
(SUPERELEVATED SECTION, CURVE TO THE RIGHT)



SUBGRADE SLOPES AND PIPE UNDERDRAIN LOCATION
(SUPERELEVATE SECTION, CURVE TO THE LEFT)



SUBGRADE SLOPES
(NORMAL CROWN SECTION)

NOTE TO DESIGNER

THE UNDERDRAIN CAN BE LOCATED ON EITHER SIDE OF THE MEDIAN. DESIGNER TO DETERMINE WHICH SIDE BASED ON CONSTRUCTION STAGING AND PROJECT SPECIFIC NEEDS.

NOTE TO DESIGNER

IN CASES WHERE 1.5% SUBGRADE CROSS SLOPE AND 3" MIN SUBGRADE CANNOT BE MET, AN UNDERDRAIN OR ALTERNATIVE DESIGN NEEDS TO BE EVALUATED.

NOTE TO DESIGNER

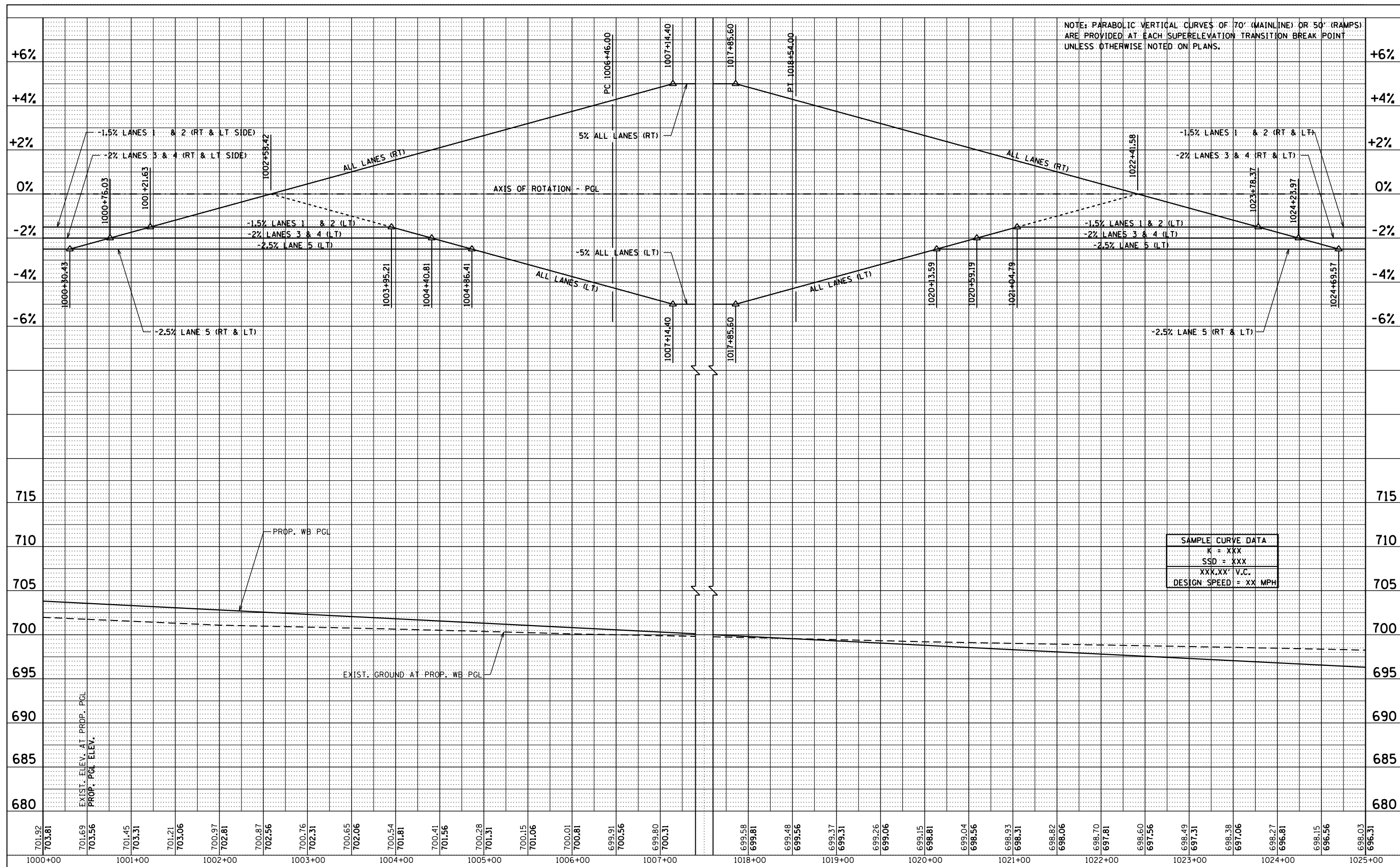
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M-RDY-412



ROADWAY SUBGRADE SLOPES
MEDIAN BARRIER

DATE
3-01-2018



NOTE TO DESIGNER

REFER TO ROADWAY DESIGN CRITERIA FOR PARABOLIC VERTICAL CURVE REQUIREMENTS AT THE SE TRANSITION POINTS TO MEET PAVEMENT SMOOTHNESS CRITERIA.

NOTE TO DESIGNER

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