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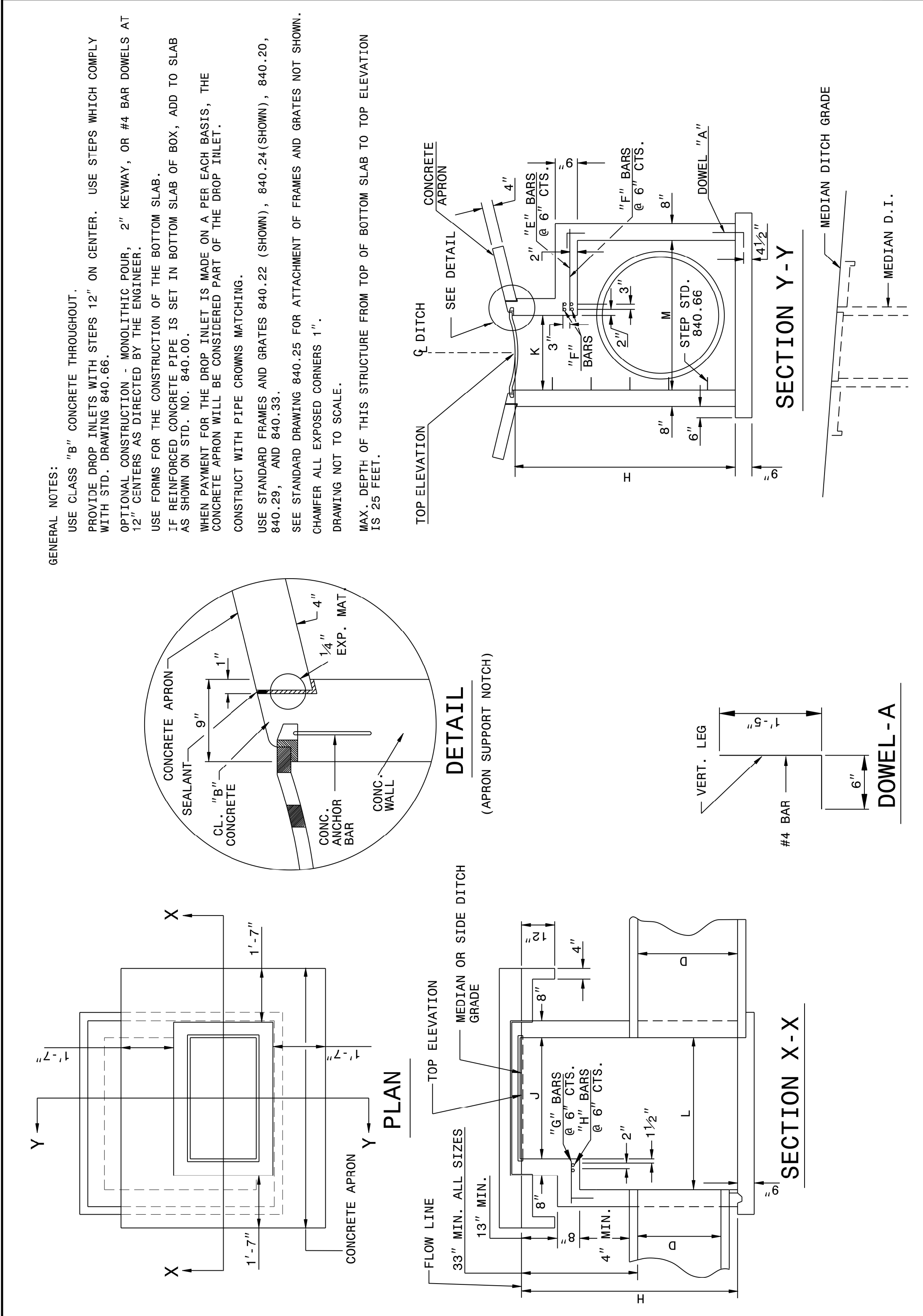
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01-MAR-2018 07:33 S:\Contracts\Projects\Stand\840d17 Extra Depth 2GI.dgn J:\power-ton AT_CSD-292595

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
CONCRETE MEDIAN DROP INLET TYPE 'A'
EXTRA DEPTH OVER 12' TO 25'
12" THRU 72" PIPE

SHEET 1 OF 2
840D17



STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

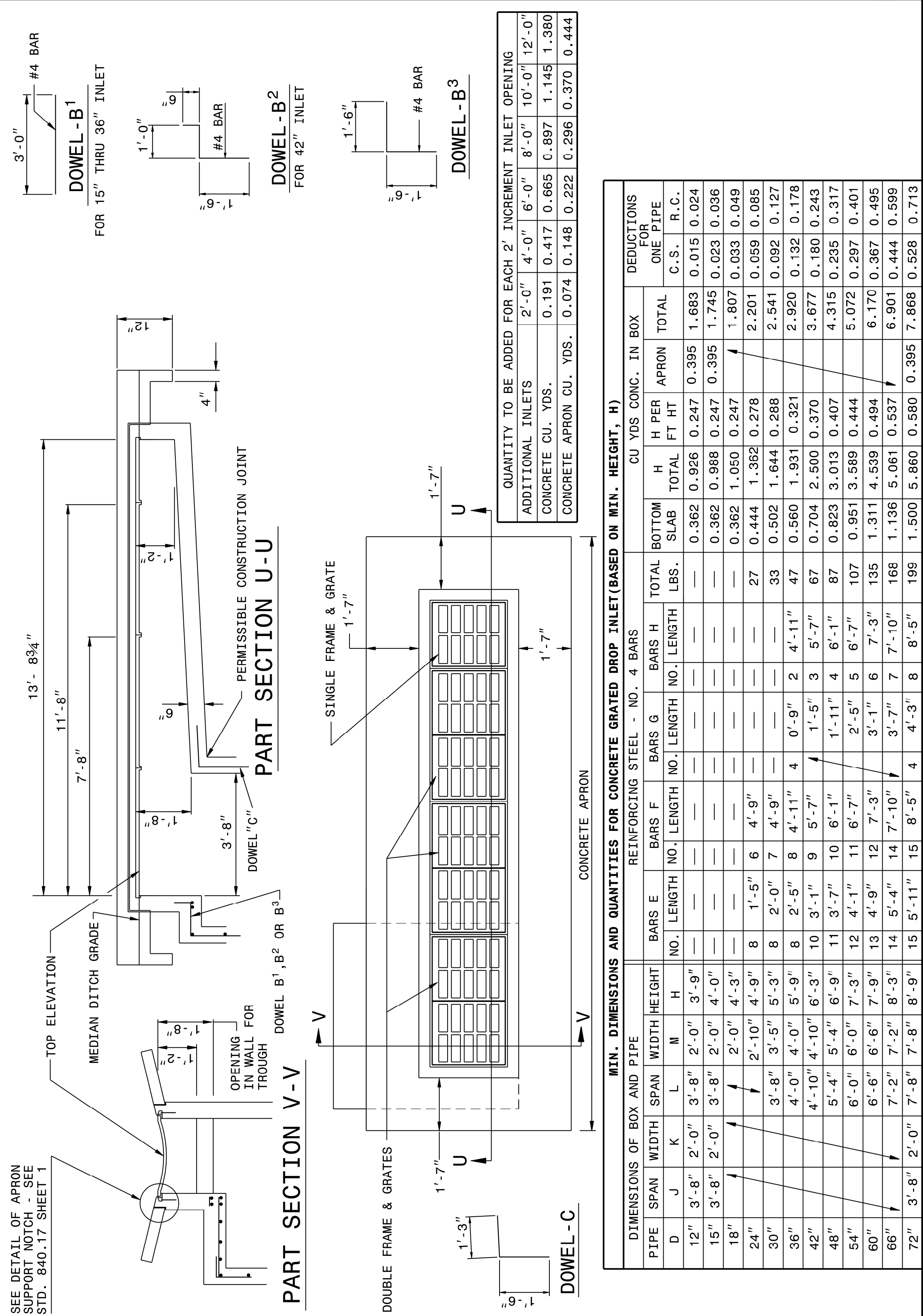
ENGLISH DETAIL DRAWING FOR
CONCRETE MEDIAN DROP INLET TYPE 'A'
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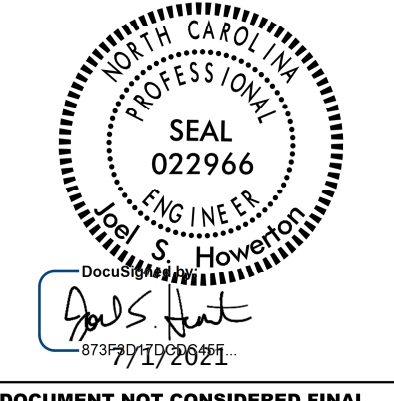
SHEET 2 OF 2
840D17



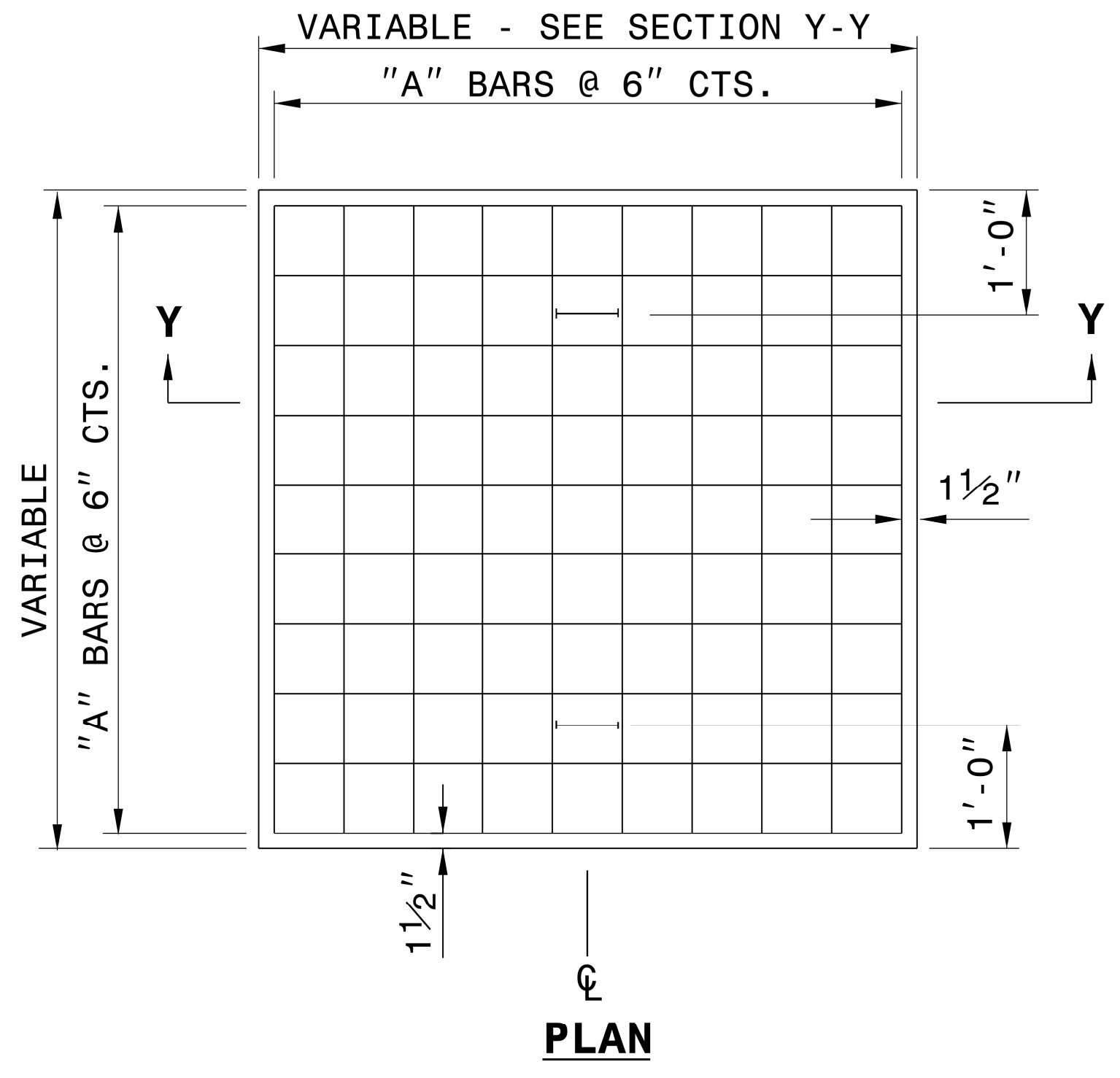
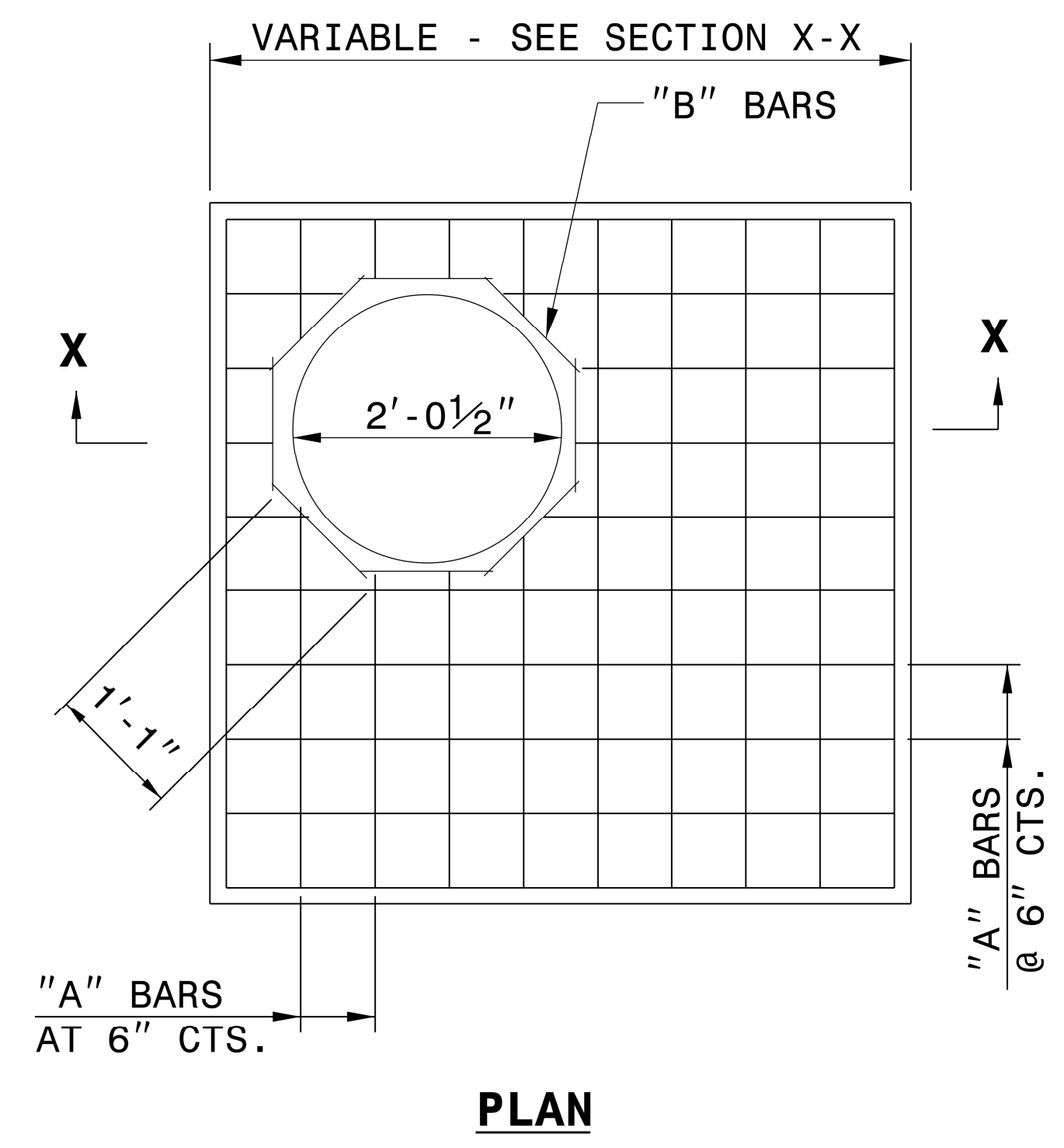
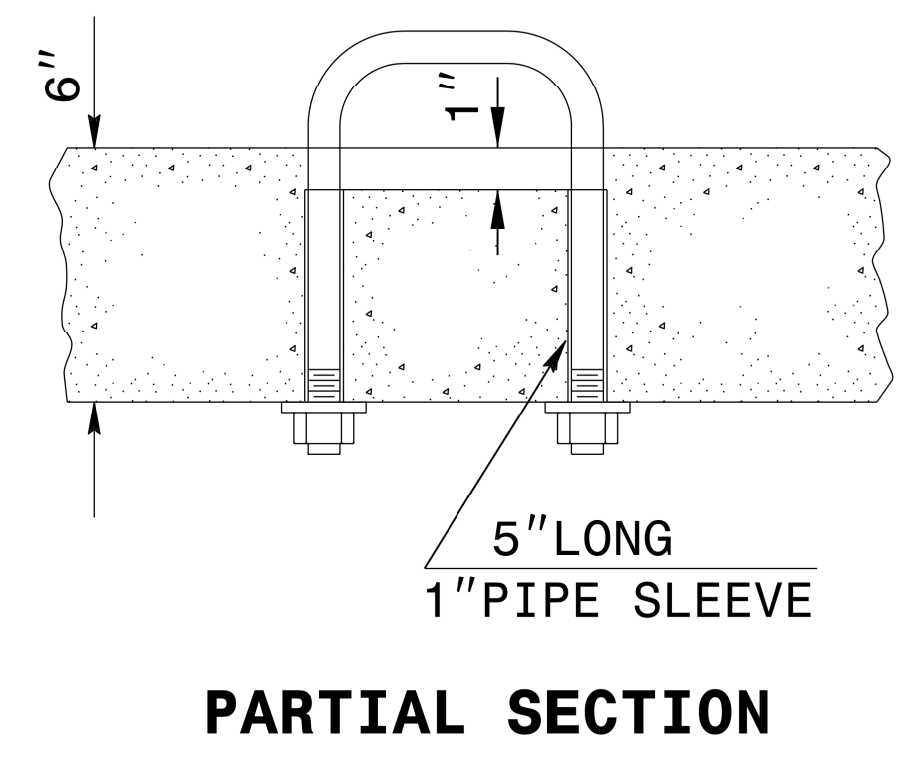
CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: 2002 STD.840.17 DATE: 07-06-09
MODIFIED BY: K.A. KEMPF DATE: 07-06-09
CHECKED BY: DATE:
FILE SPEC.: /stand/840d17 Extra Depth 2GI.dgn



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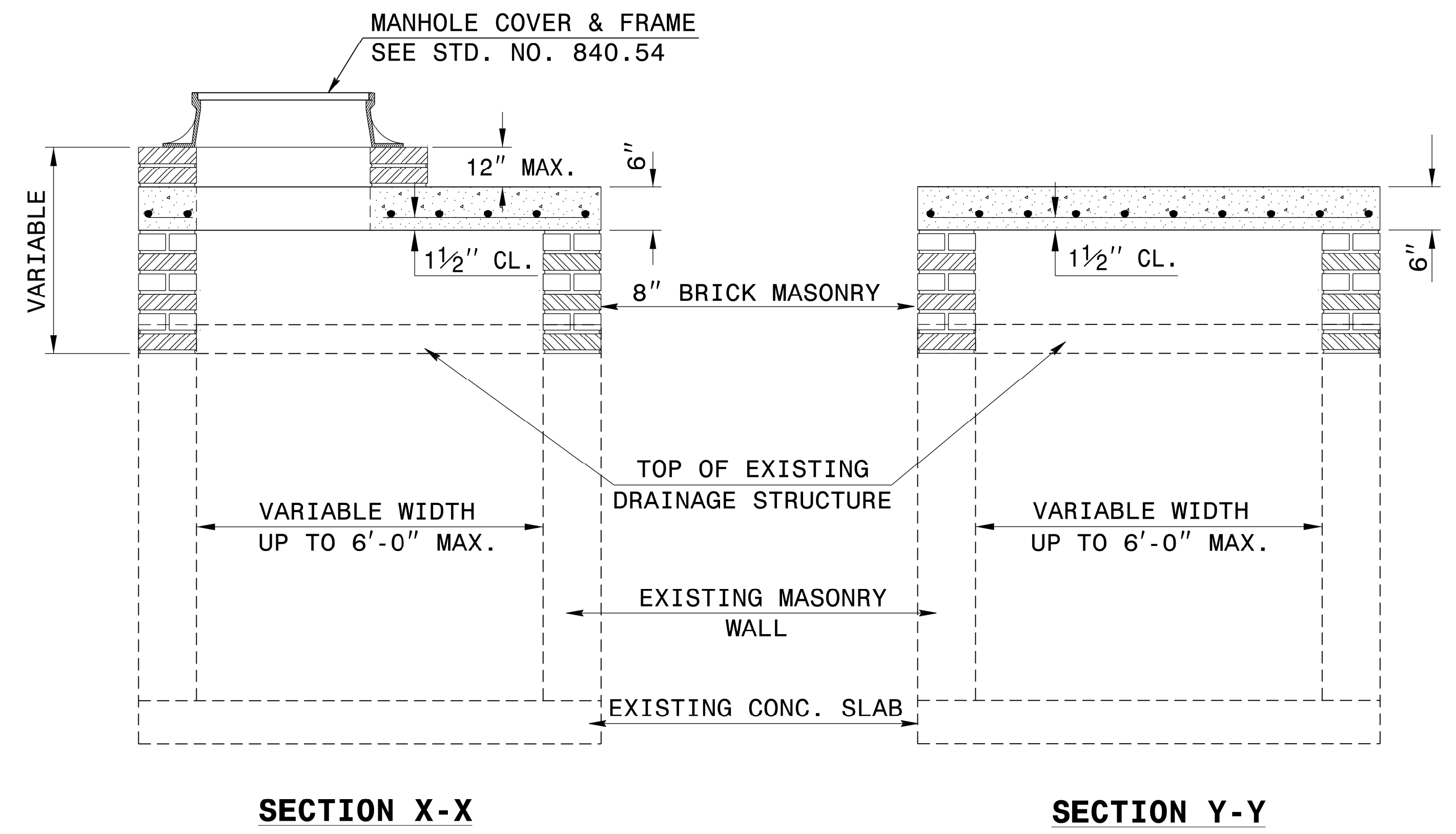
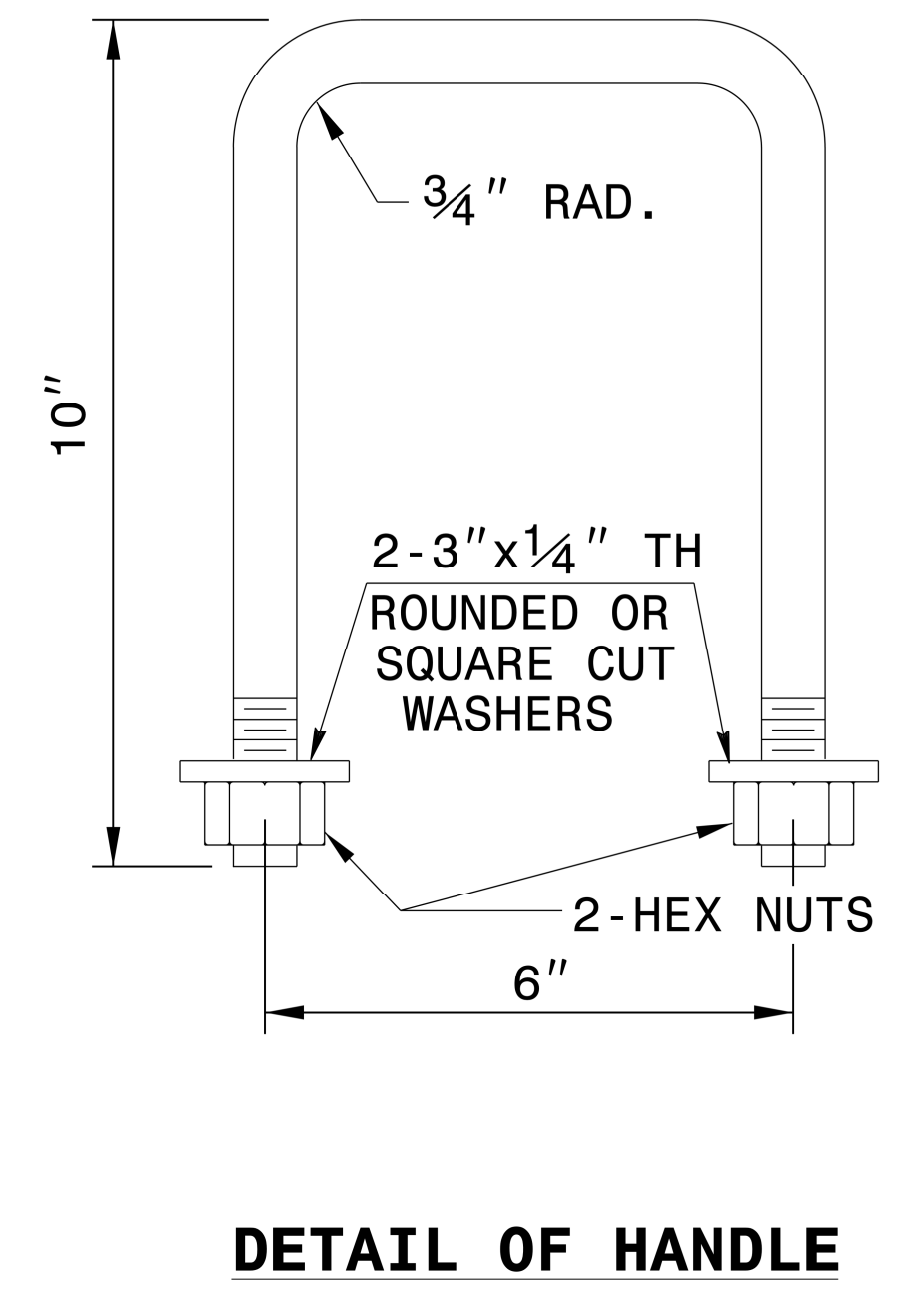
GENERAL NOTES:

CONSTRUCT IN ACCORDANCE WITH SECTION 859 OF THE STANDARD SPECIFICATIONS.

THE DIMENSIONS FOR THE EXISTING BOXES ARE APPROXIMATE AND MAY VARY SLIGHTLY.

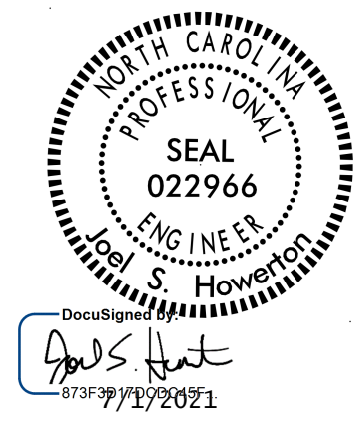
DETAIL INTENDED FOR NON-TRAFFIC BEARING DRAINAGE STRUCTURES.

BILL OF MATERIALS				
REINFORCING STEEL				
CODE	SIZE	QTY.	LENGTH	REINF. STEEL LBS.
A	#4	20	4'-6"	60.12
B	#4	8	1'-1"	5.79
TOTAL				65.91 *
MASONRY				CU YDS
TOP SLAB CONCRETE CLASS "B"				.4326 *
BRICK MASONRY PER FT HT (MIN)				.4111



*** NOTE:**
 QUANTITIES BASED ON 3'-6" X 3'-6" DRAINAGE STRUCTURE. ADJUST QUANTITIES FOR LARGER STRUCTURES AND MANHOLE CONSTRUCTION.

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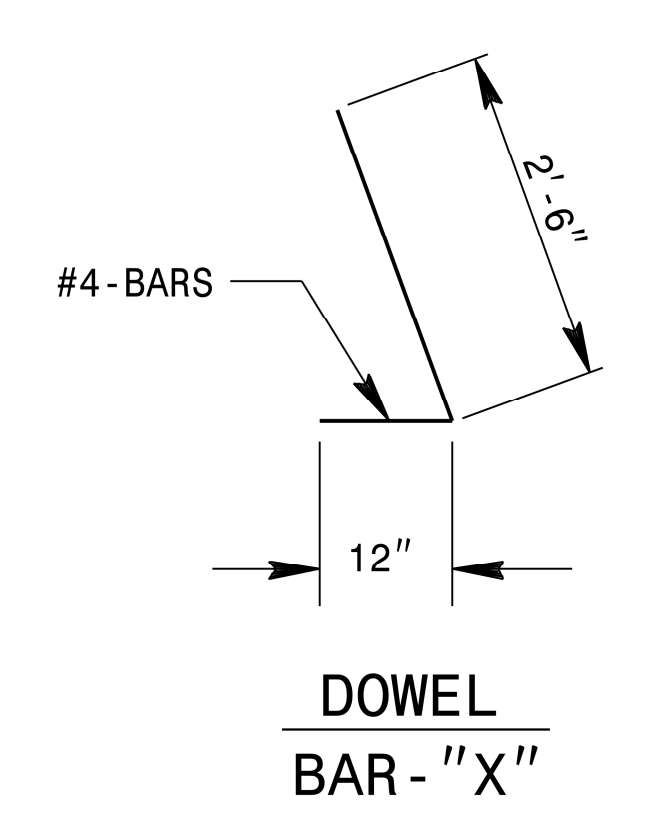
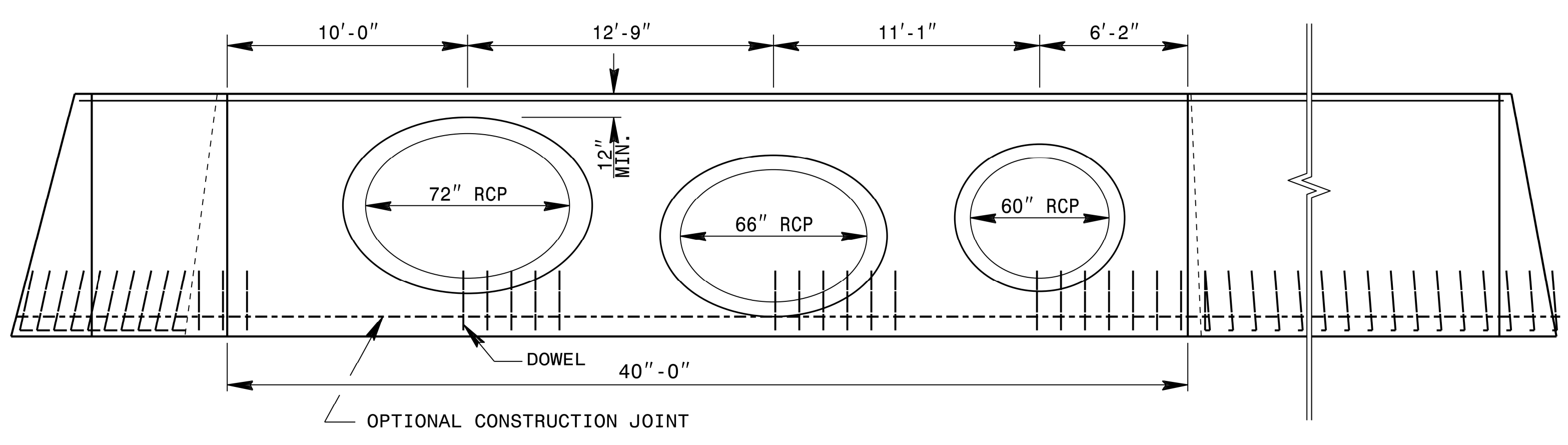
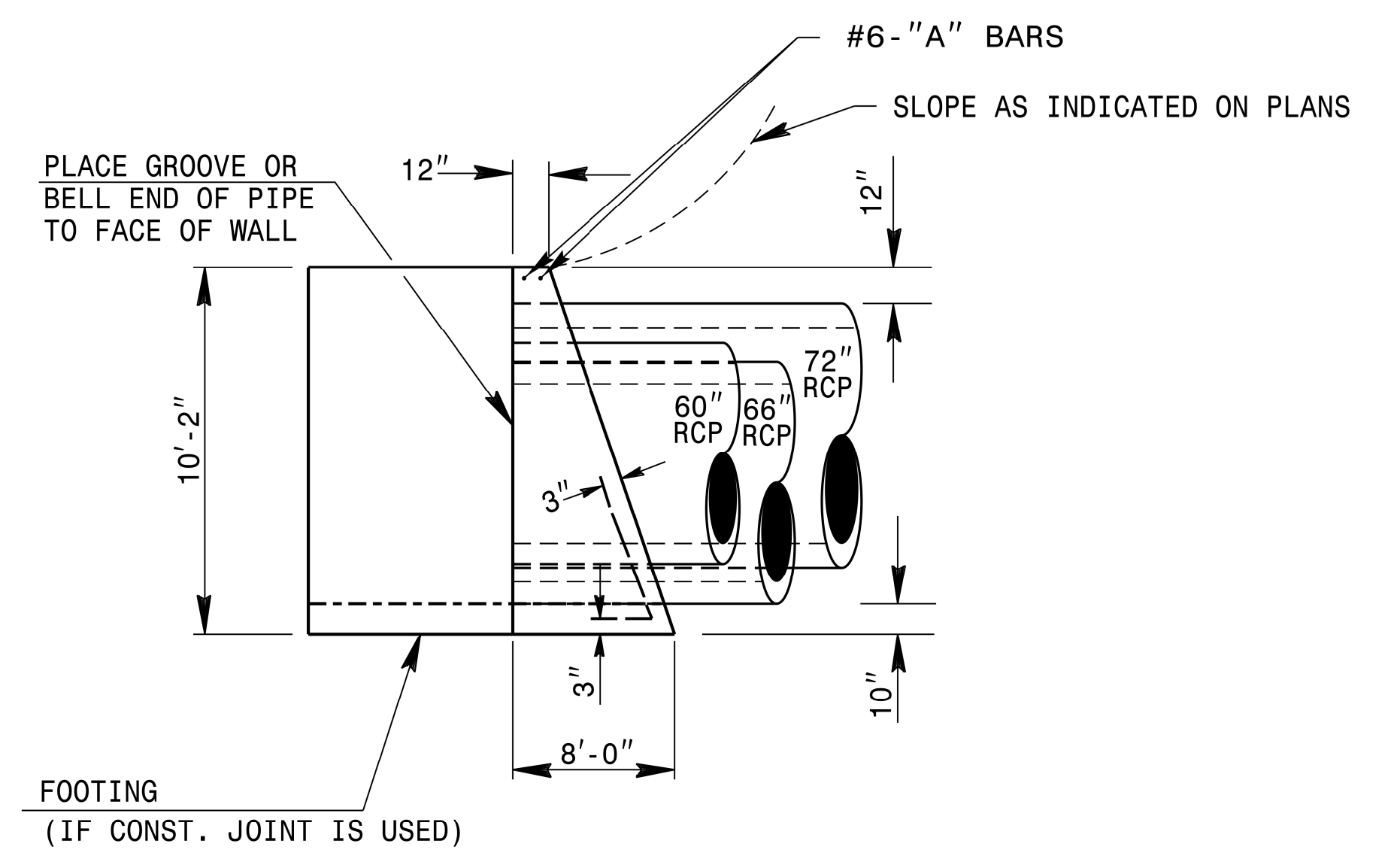
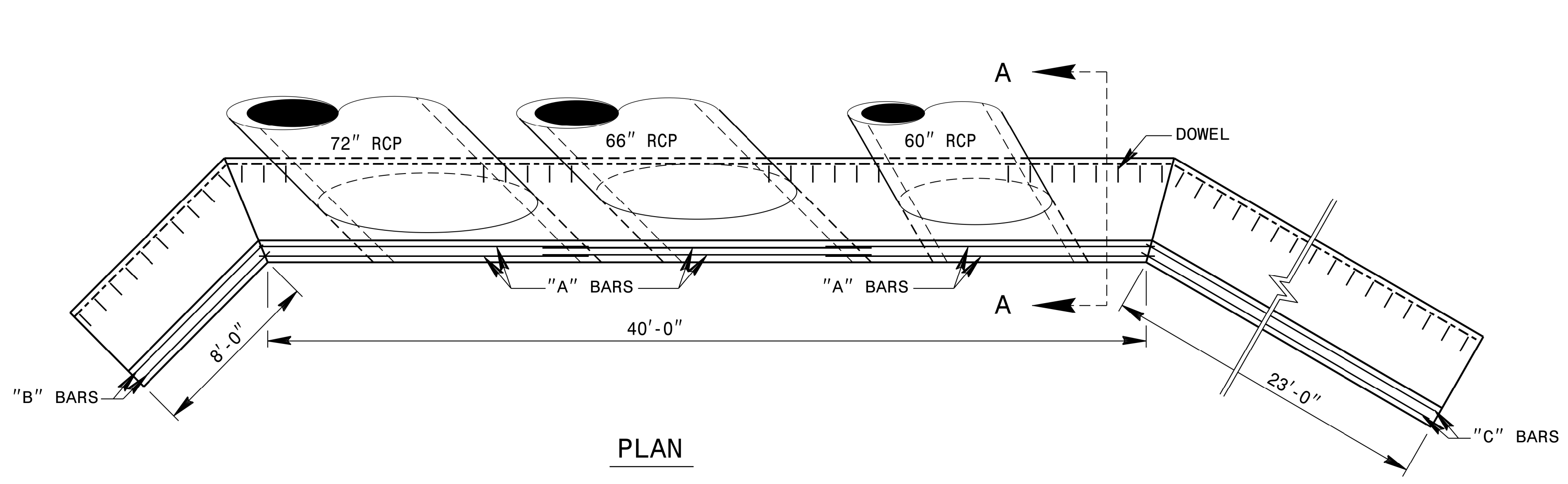


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DETAIL TO CONVERT EXISTING DI, CB, OTCB or GI TO JUNCTION BOX (MANHOLE OPTIONAL)

ORIGINAL BY: T.S.S. DATE: NOV. 1997
 MODIFIED BY: T.S.S. DATE: FEB. 2000
 CHECKED BY: DATE:
 FILE SPEC.: ds174:/usr/details/stand/boxtojb.dgn

* NOT TO SCALE



- GENERAL NOTES:
- CHAMFER ALL CORNERS 1".
 - USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
 - WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE, PLACE BAR 'X' DOWELS IN THE BASE AS SHOWN ON PLANS. SPACING OF BARS IS TO BE APPROXIMATELY 12" CENTERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE AND POUR THE BASE SEPARATELY THE POUR SHALL BE LEFT ROUGH.
 - REINFORCING STEEL TO BE CUT, BENT OR RELOCATED AS DIRECTED BY THE ENGINEER.
 - FINAL LOCATION OF PIPES TO BE DETERMINED BY THE ENGINEER.
 - SEE SPECIAL DETAIL FOR FENCE INSTALLATION IF REQUIRED BY THE ENGINEER.
 - USE CLASS "B" CONCRETE.

BILL OF MATERIALS				
BAR	QTY	SIZE	LENGTH	WEIGHT
A	6	#6	15'-0"	120
B	2	#6	8'-0"	90
C	2	#6	23'-0"	90
X	63	#4	3'-6"	147
TOTAL REINF. STEEL (lbs.)				447
TOTAL CONC. CU. YDS.				120.3
PIPE DEDUCTIONS CU. YDS.				23.0

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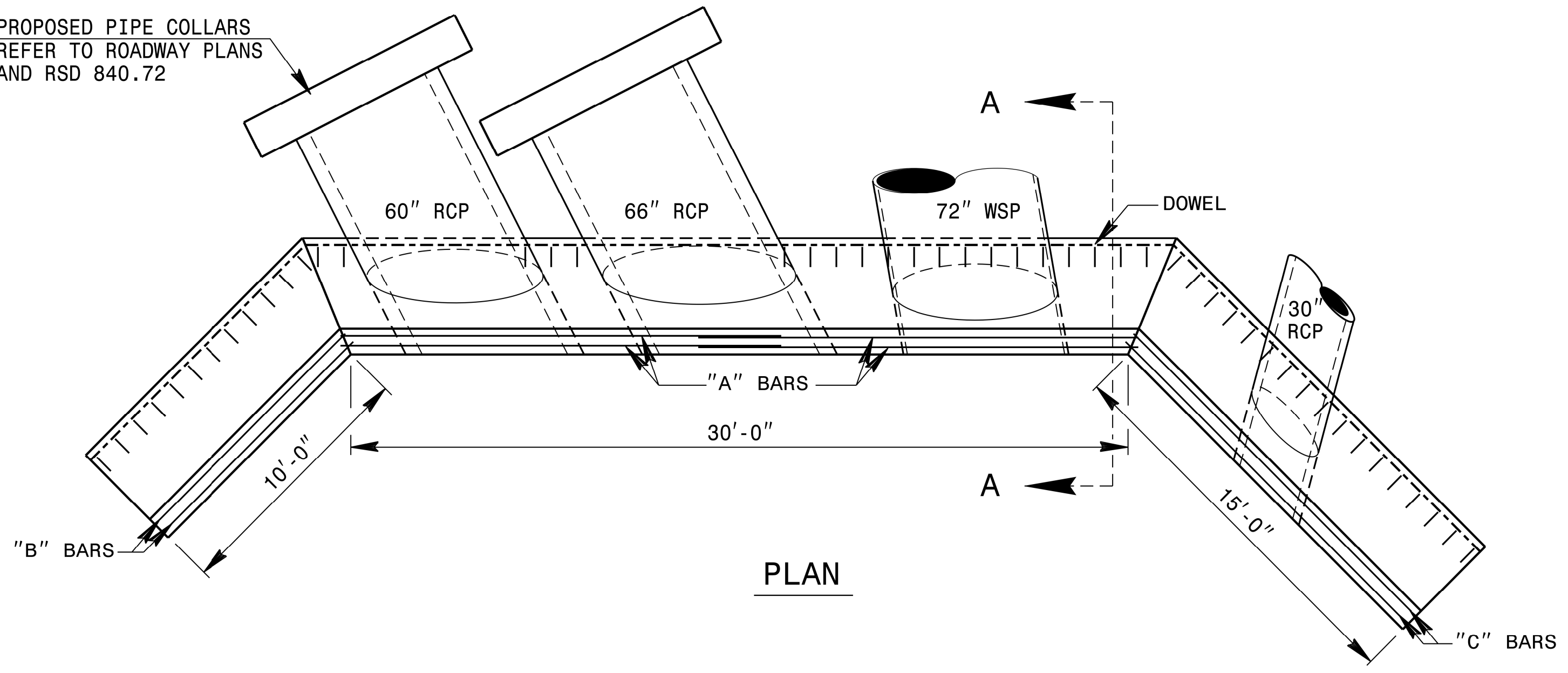
CONCRETE ENDWALL FOR 60" RCP, 66" RCP, 72" WSP, W/ WINGWALL

ORIGINAL BY: K KEMPF DATE: 05-07-18
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC.: kkempf\english\U4405_endwalls.dgn

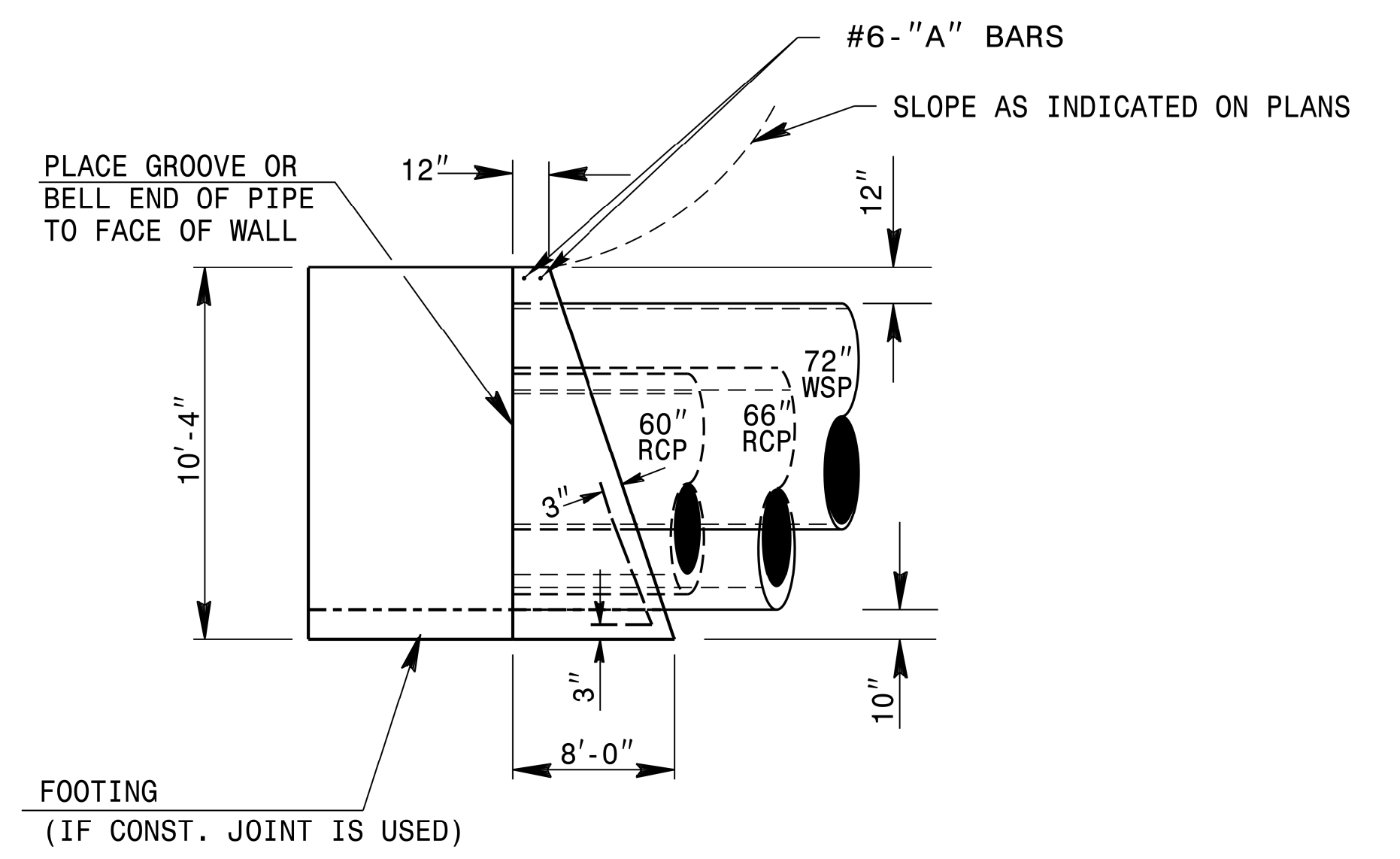


* NOT TO SCALE

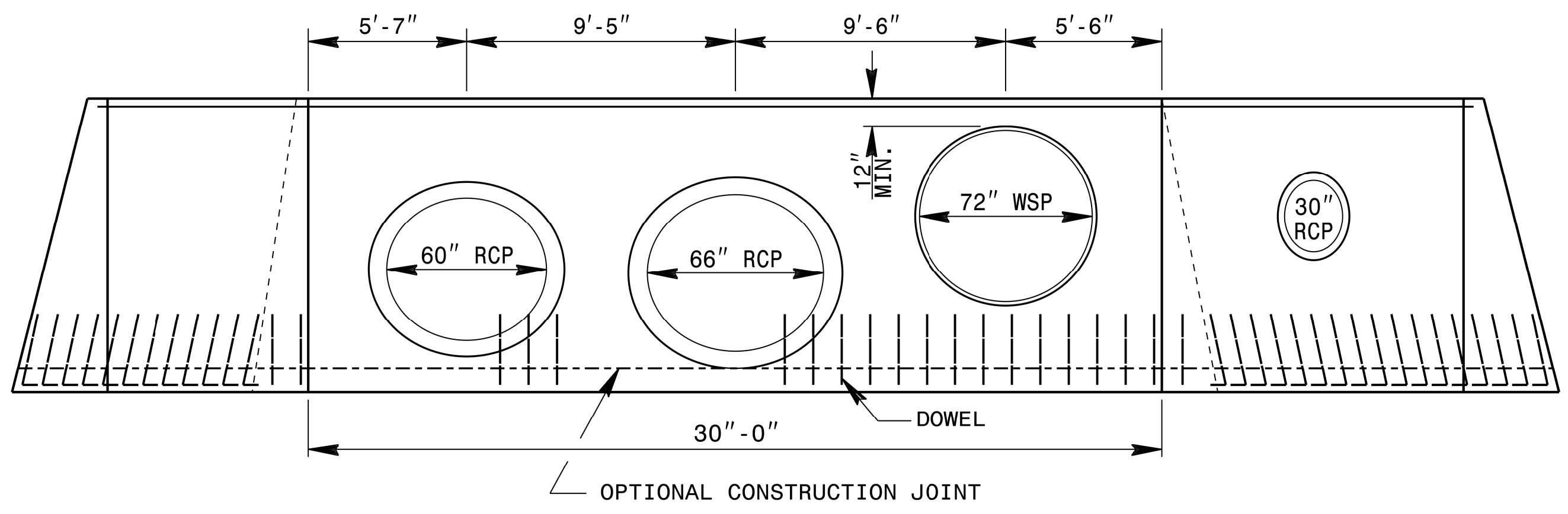
PROPOSED PIPE COLLARS
REFER TO ROADWAY PLANS
AND RSD 840.72



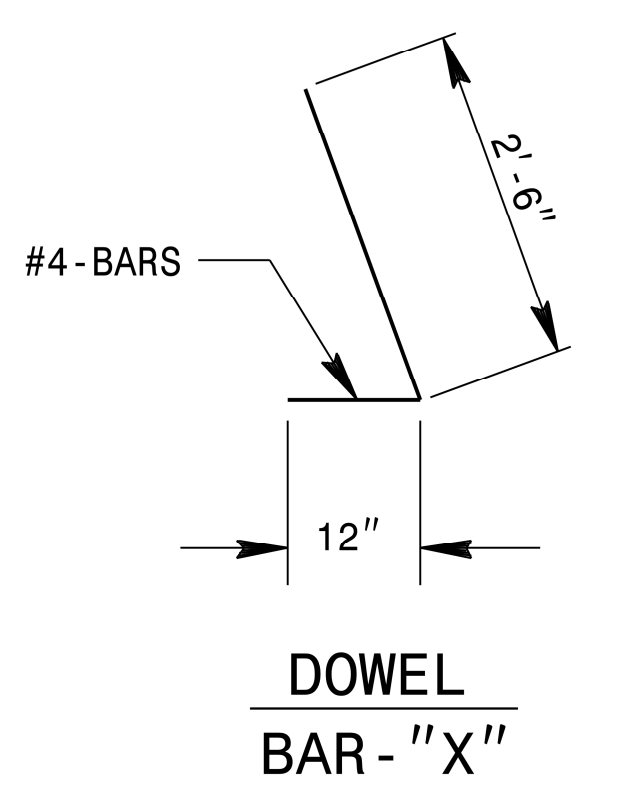
PLAN



'A' SECTION



ELEVATION



DOWEL
BAR - "X"

- GENERAL NOTES:
- CHAMFER ALL CORNERS 1".
 - USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
 - WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE, PLACE BAR "X" DOWELS IN THE BASE AS SHOWN ON PLANS. SPACING OF BARS IS TO BE APPROXIMATELY 12" CENTERS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - WHEN THE CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT AT THE BOTTOM OF THE PIPE AND POUR THE BASE SEPARATELY THE POUR SHALL BE LEFT ROUGH.
 - REINFORCING STEEL TO BE CUT, BENT OR RELOCATED AS DIRECTED BY THE ENGINEER.
 - FINAL LOCATION OF PIPES TO BE DETERMINED BY THE ENGINEER.
 - SEE SPECIAL DETAIL FOR FENCE INSTALLATION IF REQUIRED BY THE ENGINEER.
 - USE CLASS "B" CONCRETE.

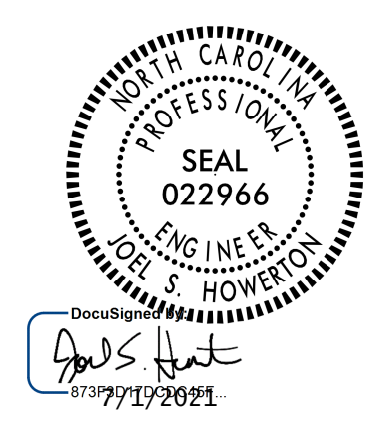
BILL OF MATERIALS				
BAR	QTY	SIZE	LENGTH	WEIGHT
A	4	#6	17'-0"	102
B	2	#6	10'-2"	31
C	2	#6	15'-2"	46
X	49	#4	3'-6"	115
TOTAL REINF. STEEL (lbs.)				294
TOTAL CONC. CU. YDS.				94.7
PIPE DEDUCTIONS CU. YDS.				13.4

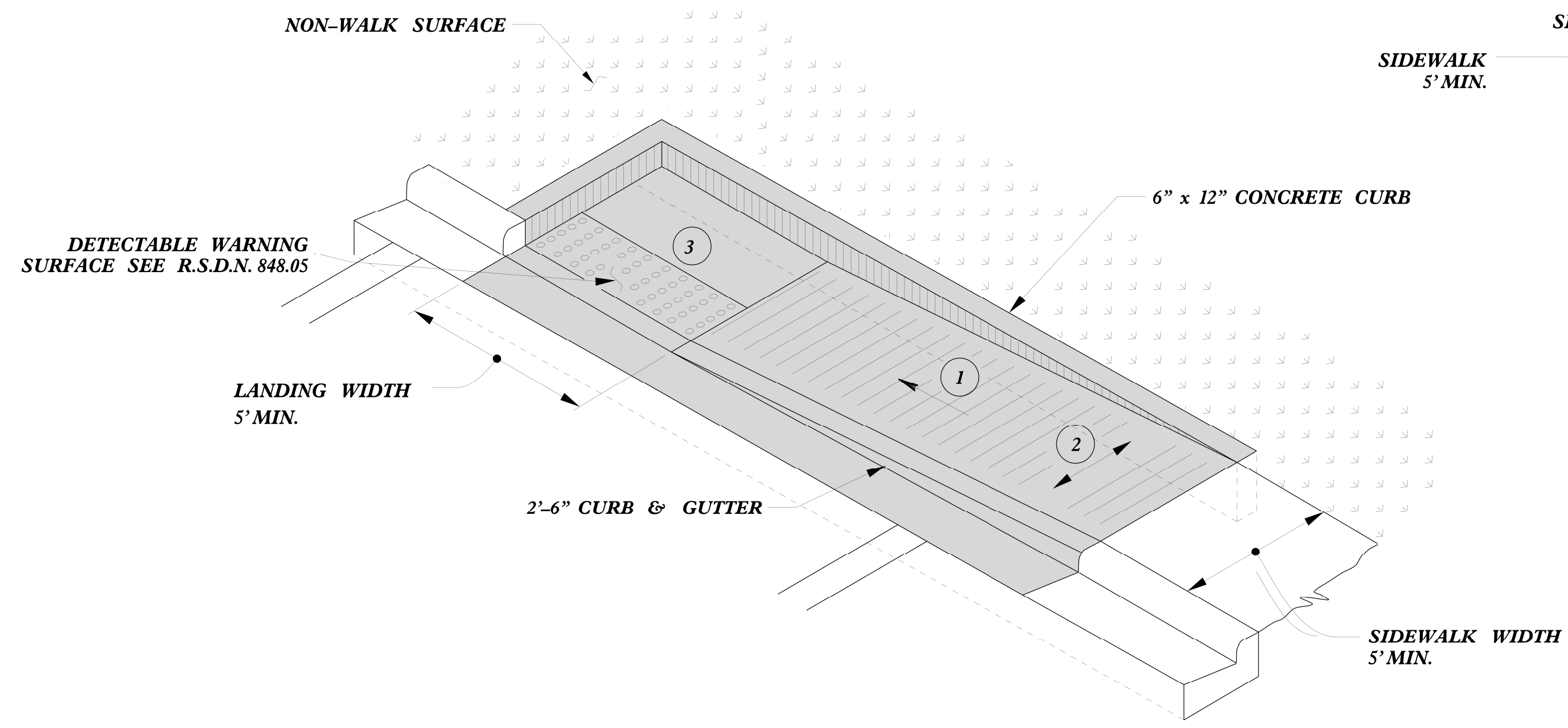
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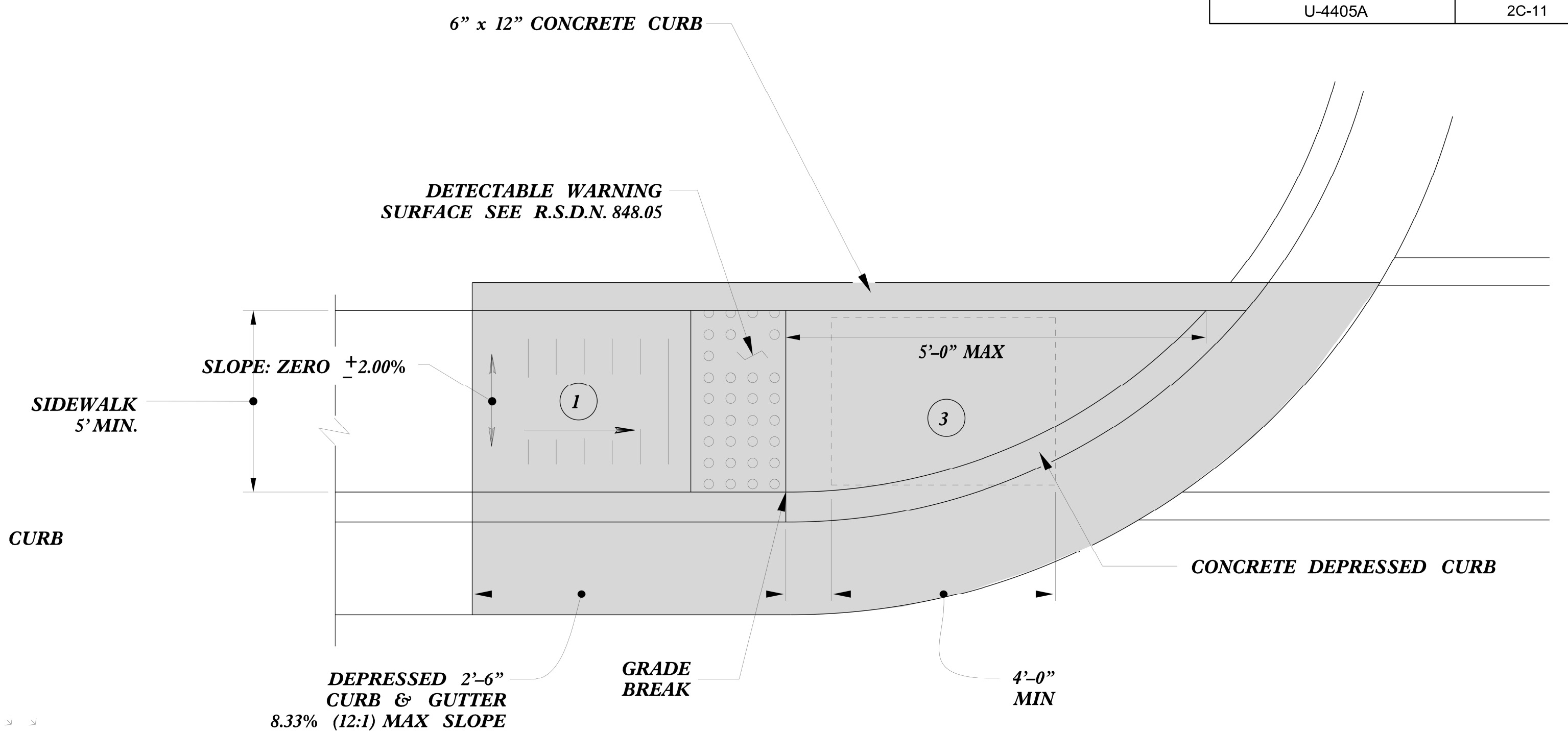
CONCRETE ENDWALL FOR
60"RCP, 66"RCP, 72"WSP,
W/ PIPE IN WINGWALL

ORIGINAL BY: K KEMPF DATE: 05-08-18
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC.: kkempfe\english\U4405_endwalls.dgn

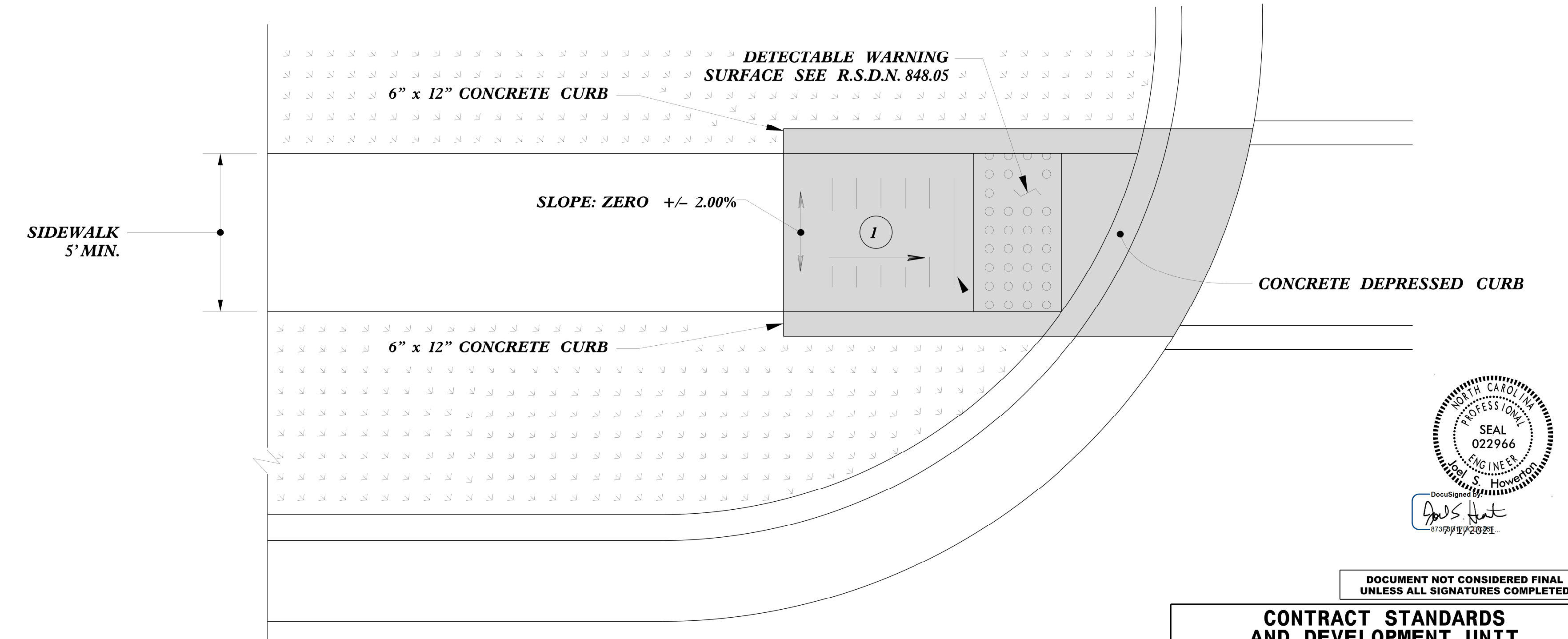




TYPE 1A



TYPE 1

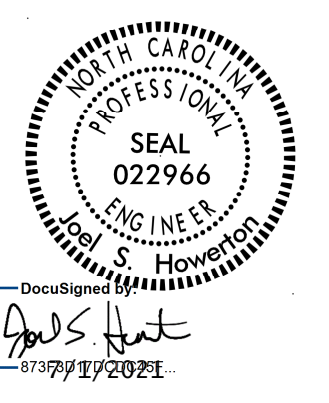


TYPE 1 Modified

- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.

PAY LIMITS FOR 1 CURB RAMP


REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

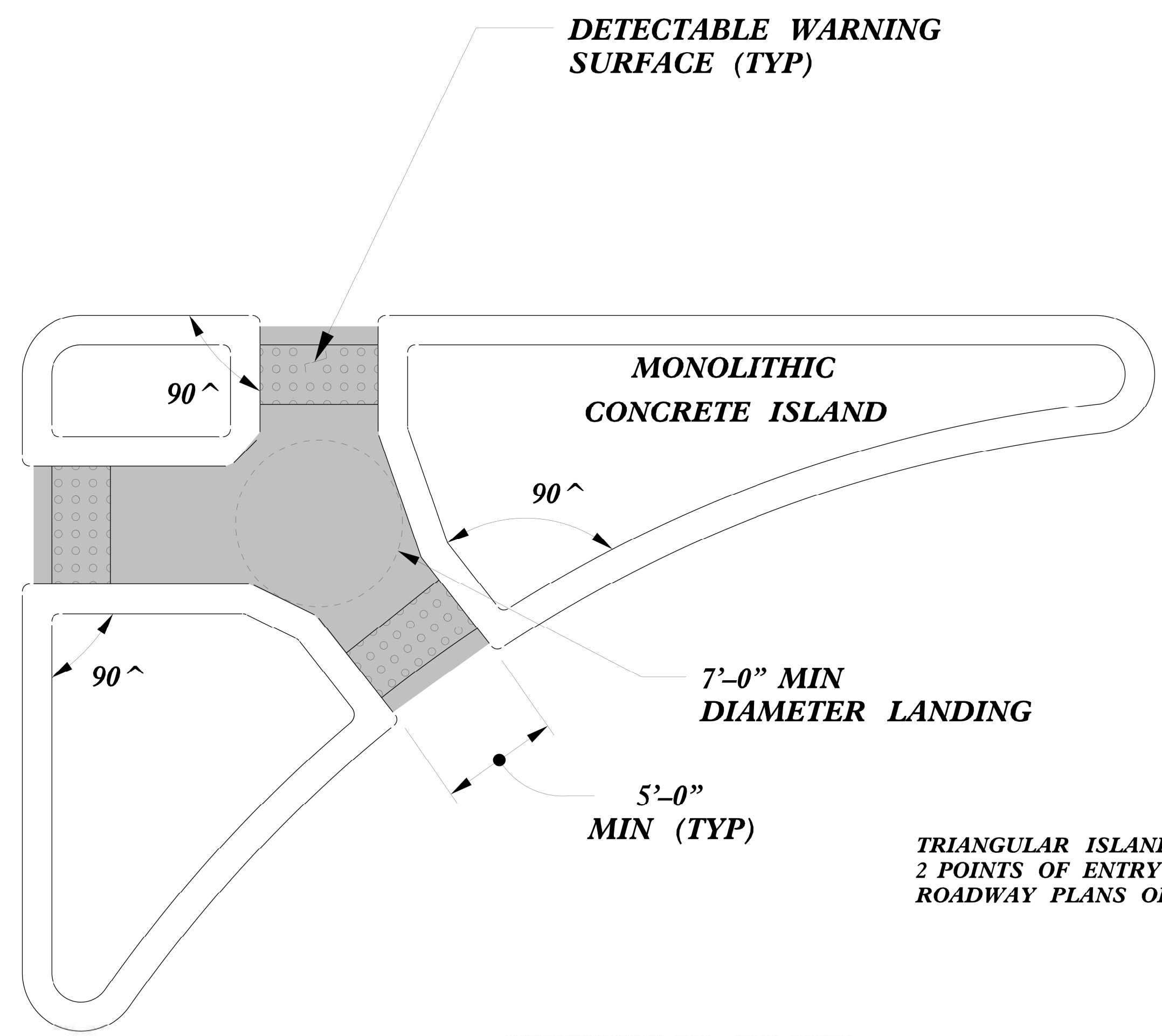


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CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC: .stds/2012CurbRamp/CurbRampDetails.dgn	

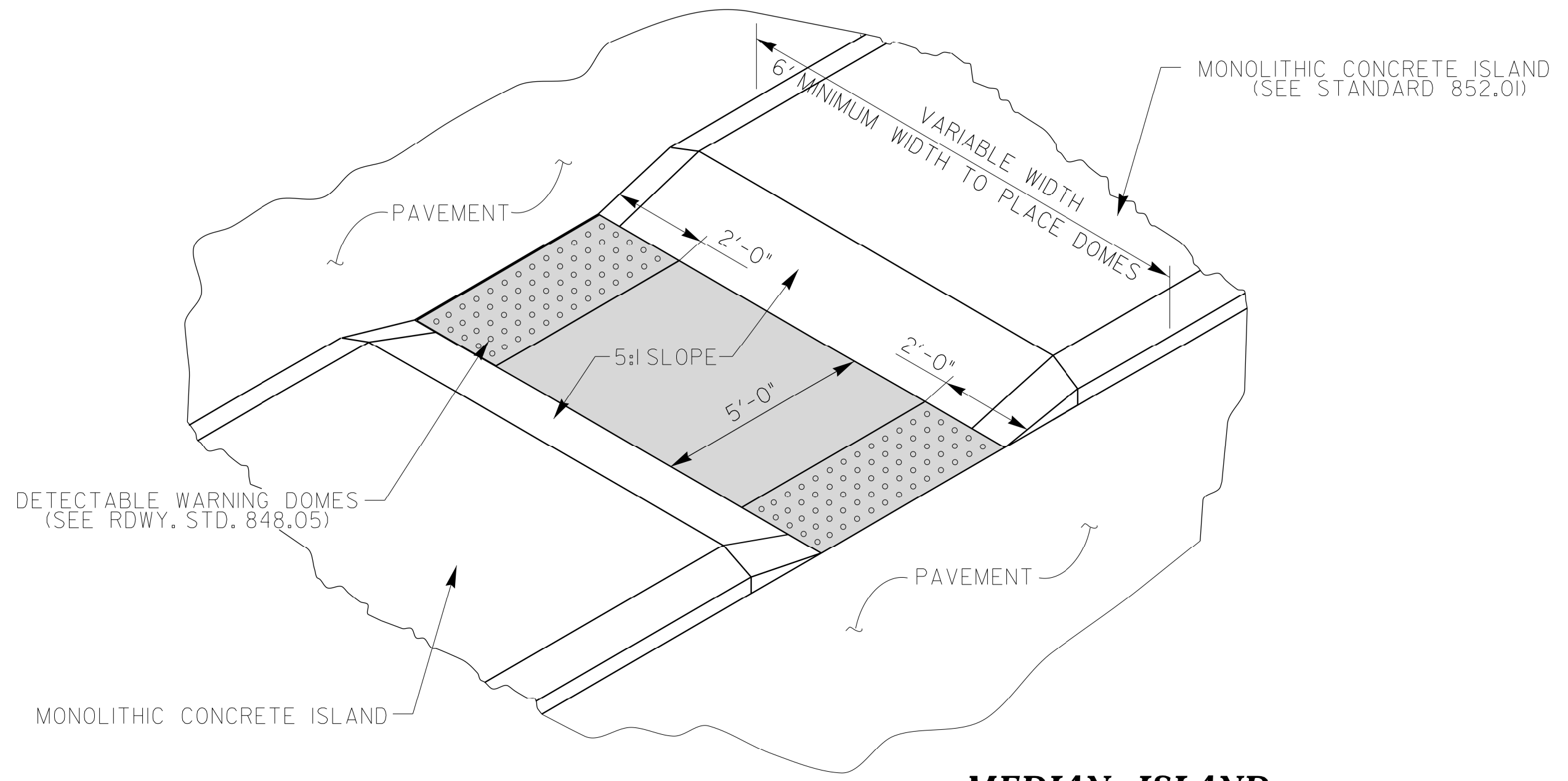
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 PAY LIMITS FOR 2 OR 3 CURB RAMPS
(CALCULATE BASED ON NUMBER OF
SETS OF TRUNCATED DOMES)

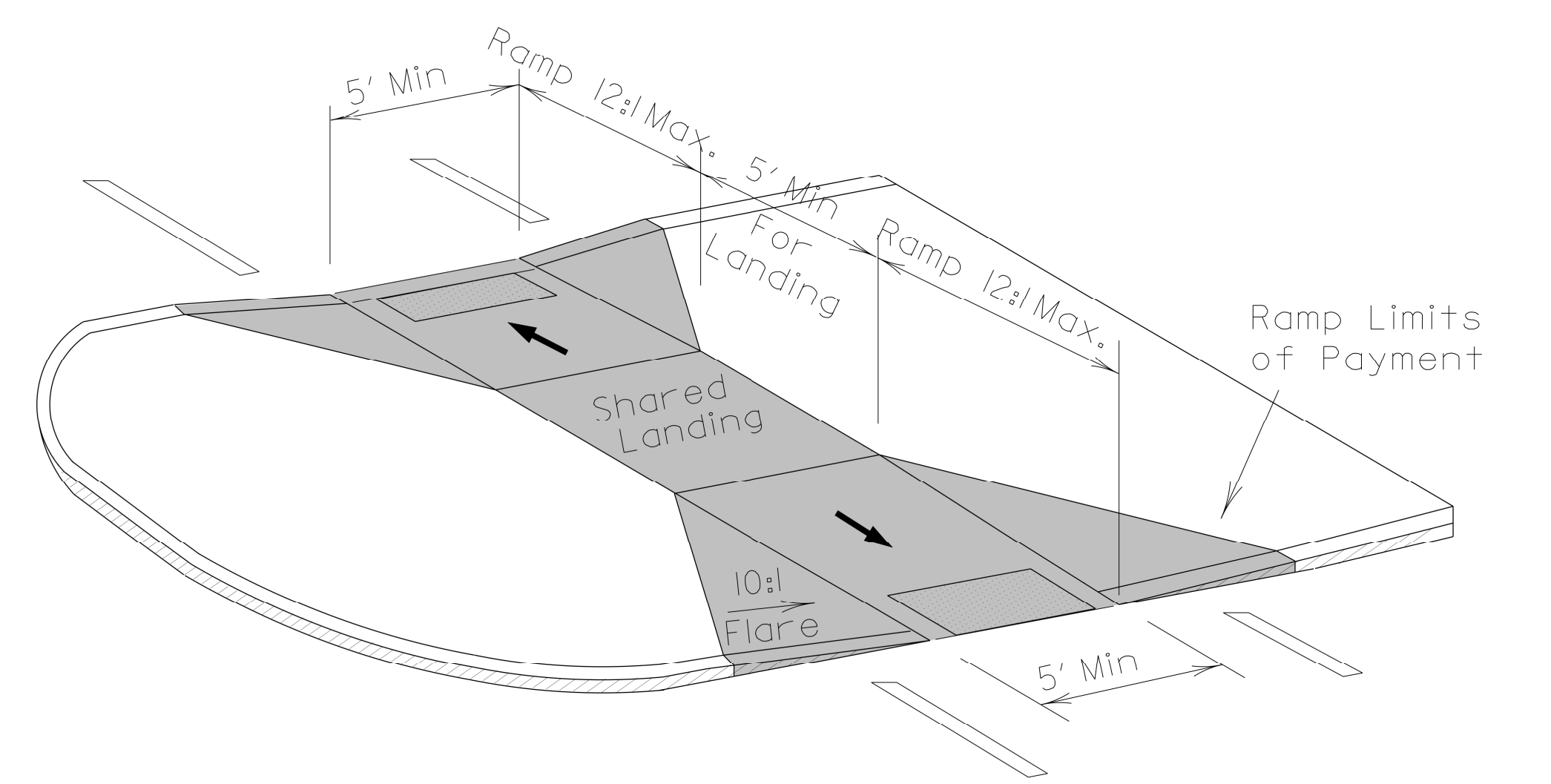


TRIANGULAR ISLANDS MAY BE CONSTRUCTED WITH ONLY
2 POINTS OF ENTRY AND EXIT AS SHOWN IN THE
ROADWAY PLANS OR AS DIRECTED BY THE ENGINEER.

**TRIANGULAR ISLAND
WITH CUT THROUGH**



**MEDIAN ISLAND
WITH CUT THROUGH**



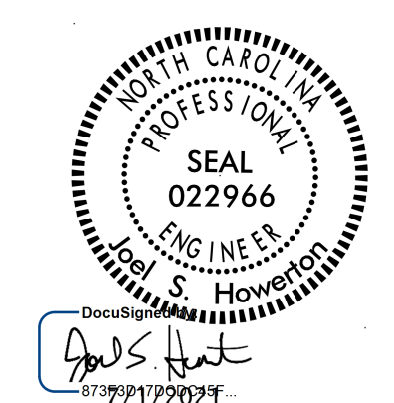
**MEDIAN ISLAND
CURB RAMPS**

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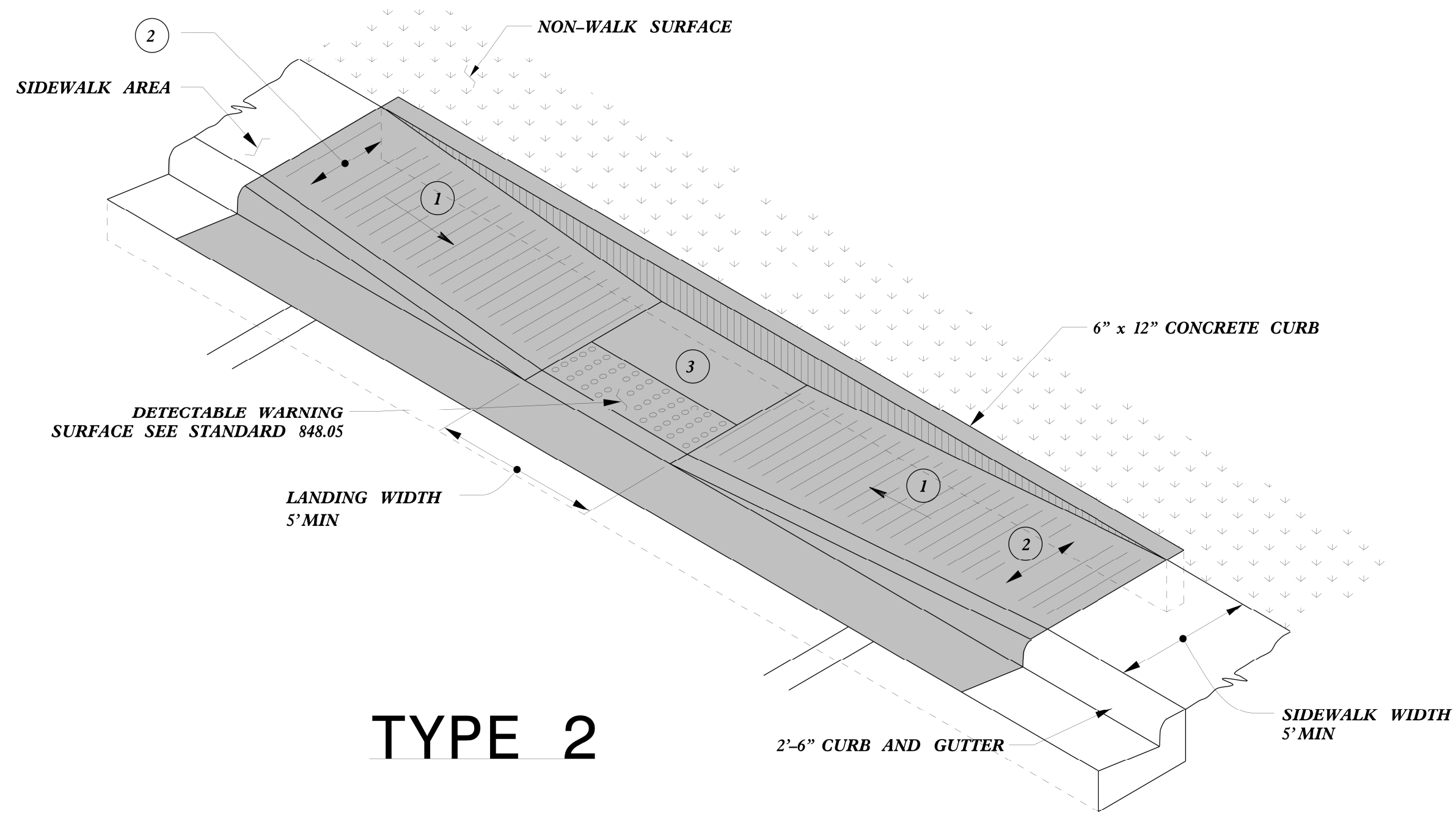
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CURB RAMPS
Median or Turn Lane Islands

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
MODIFIED BY: DATE:
CHECKED BY: DATE:
FILE SPEC: .stds/2012CurbRamp/CurbRampDetails.dgn



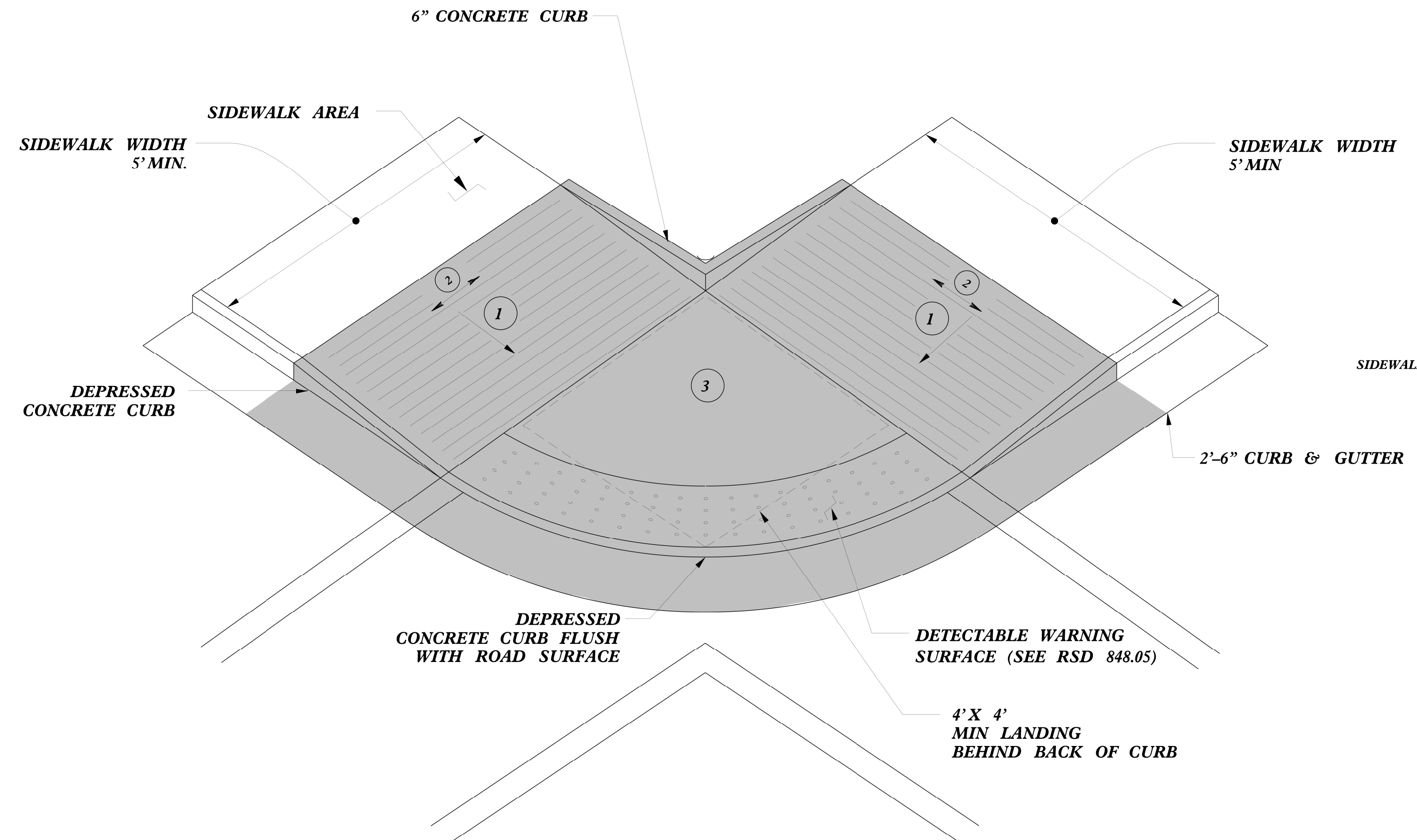
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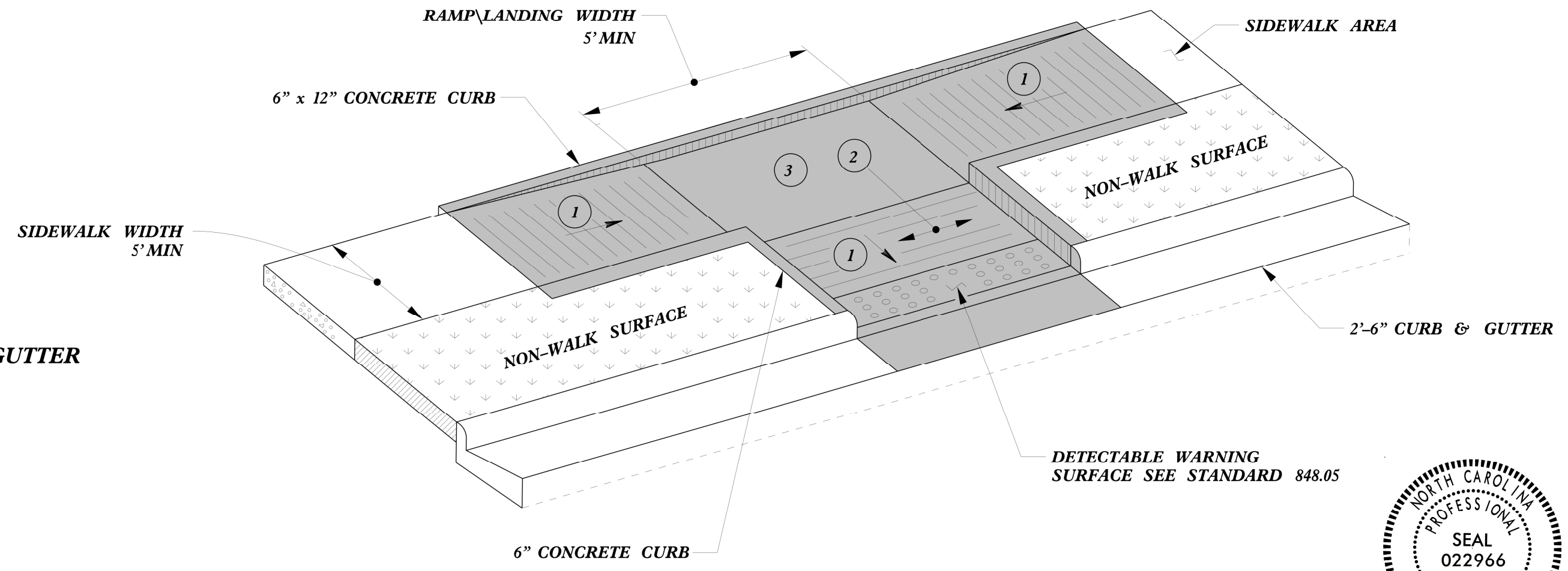
TYPE 2

PAY LIMITS FOR 1 CURB RAMP

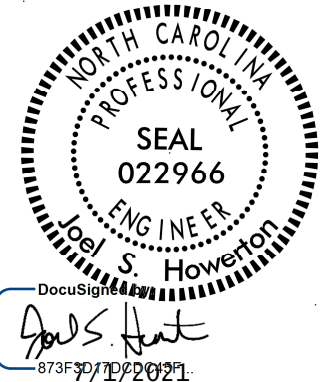
- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



TYPE 2A



TYPE 3



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CURB RAMPS
Parallel Ramps

ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
 MODIFIED BY: _____ DATE: _____
 CHECKED BY: _____ DATE: _____
 FILE SPEC: .stds/2012CurbRamp/CurbRampDetails.dgn

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

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