

1.0 GENERAL NOTES

1.1 ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION BY EAST BATON ROUGE PARISH DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION (STANDARD SPECIFICATIONS).

1.2 THE CONTRACTOR SHALL PROVIDE FOR AND MAINTAIN THROUGH AND LOCAL TRAFFIC AT ALL TIMES AND SHALL CONDUCT OPERATIONS IN SUCH A MANNER AS TO CAUSE THE LEAST POSSIBLE INTERFERENCE WITH TRAFFIC AND BUSINESS. ALL COSTS OF MAINTAINING TRAFFIC SHALL BE INCLUDED IN THE PRICE FOR ITEM 9050100.

1.3 CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL SOIL AND DEBRIS AND THE CLEANING OF THE PROJECT ROADWAY SEGMENTS AND SIDEWALKS AS A RESULT OF THEIR CONSTRUCTION ACTIVITIES DURING THE CONTRACT PERIOD AT NO DIRECT PAY.

1.4 CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND/OR REPLACING ADJOINING PAVEMENT AND SUBSURFACE UTILITIES TO REMAIN DAMAGED BY THEIR CONSTRUCTION ACTIVITIES AT NO DIRECT PAY.

1.5 THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE WORK AND VERIFYING ALL MEASUREMENTS AND GRADES PRIOR TO THE BEGINNING OF CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE PROJECT CENTERLINE AND ANY NECESSARY TEMPORARY BENCHMARKS FOR CONSTRUCTION PURPOSES PRIOR TO THE START, DESTROYING EXISTING MONUMENTS/NAILS/CROSS CUTS, ETC.

1.6 PRIOR TO BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR SHALL PERFORM AN AUDIO-VIDEO SURVEY OF THE PROJECT SITE. THE ELECTRONIC FILE OF THE AUDIO-VIDEO SURVEY SHALL BE PROVIDED TO THE PROJECT ENGINEER AND PAID FOR UNDER ITEM 9140100.

1.7 UNLESS SPECIFIED OTHERWISE, ALL SEWER CLEANOUTS, WATER METER BOXES, VALVE BOXES, JUNCTION BOXES, ETC. SHALL BE ADJUSTED FLUSH WITH THE SIDEWALK. THIS WORK SHALL BE PERFORMED AND COORDINATED WITH THE THE APPROPRIATE UTILITY OWNER.

1.8 DURING CONSTRUCTION, THE ENTIRE RIGHT-OF-WAY WIDTH SHALL BE CLEARED OF ANY TRASH, DEBRIS, VEGETATION, ETC. IN THE CASE OF VEGETATION, AN EIGHT FOOT MINIMUM "HEAD SPACE" SHALL BE PROVIDED. AT THE COMPLETION OF THE PROJECT, THE ENTIRE PROJECT LENGTH SHALL BE RE-CLEARED WITHIN THE RIGHT-OF-WAY. ALL COSTS SHALL BE INCLUDED IN THE BID ITEM FOR CLEARING AND GRUBBING (ITEM 2010100). THE CONTRACTOR SHALL NOTIFY THE ADJACENT PROPERTY OWNER 14 DAYS PRIOR TO THE REMOVAL OF TREES, SHRUBS, ETC. THE CONTRACTOR SHALL REPLACE, IN KIND, ALL DISTURBED TREES, SHRUBBERY, FLOWERS AND LANDSCAPING OUTSIDE OF THE FOOTPRINT OF THE SIDEWALK WITH PLAN MATERIAL OF SIMILAR SIZE AND TYPE.

1.9 EXISTING RAISED PAVEMENT MARKERS SHALL BE REMOVED AT NO DIRECT PAY PER THE SPECIFICATIONS AND AS DIRECTED BY THE PROJECT ENGINEER. CONTRACTOR SHALL INSTALL BLUE COLOR RAISED PAVEMENT MARKERS ADJACENT TO EACH FIRE HYDRANT LOCATION. MARKERS ARE TO BE PLACED PER THE PLANS. PAY ITEM 9051100.

1.10 CONTRACTOR TO NOTIFY ADJACENT BUSINESSES OF CONSTRUCTION A MINIMUM OF 7 DAYS PRIOR TO START OF CONSTRUCTION.

1.11 NOISE CONTROL – CONTRACTOR SHALL TAKE REASONABLE MEASURES TO AVOID UNNECESSARY NOISE APPROPRIATE FOR THE AMBIENT SOUND LEVELS ON THE AREA DURING WORKING HOURS. ALL CONSTRUCTION MACHINERY AND VEHICLES SHALL BE EQUIPPED WITH PRACTICAL SOUND MUFFLING DEVICES, AND OPERATED IN A MANNER TO CAUSE THE LEAST NOISE, CONSISTENT WITH EFFICIENT PERFORMANCE OF THE WORK (NO DIRECT PAYMENT) PER LOCAL NOISE ORDINANCE.

2.0 ROADWAY

2.1 THE CONTRACTOR SHALL INSTALL THE INTERSECTION PAVEMENT MARKINGS PER THE EAST BATON ROUGE STANDARD PLAN 905-50 (PAGES 1,2, & 4). FOR TURN LANES ONTO JEFFERSON, REFER TO LADOTD STANDARD PLANS PM-01 AND PM-05.

3.0 DRIVEWAYS, SIDEWALKS, AND CURB RAMPS

3.1 FULL-DEPTH SAWCUTTING IS REQUIRED AT ALL AREAS OF DRIVEWAY AND CURB REMOVAL.

3.2 SIDEWALKS REPLACED THROUGH DRIVEWAY LIMITS SHALL BE 6" IN DEPTH UNLESS OTHERWISE SPECIFIED.

3.3 UNLESS NOTED OTHERWISE, ALL SIDEWALKS SHALL MATCH ADJACENT DRIVEWAY ELEVATIONS AT A 2% MAX CROSS SLOPE, OR GO THROUGH DRIVEWAYS WITH A 2% MAX CROSS SLOPE.

3.4 SIDEWALK RAMPS SHALL BE LAID OUT AND BUILT PER EAST BATON ROUGE PARISH STANDARD PLAN 907-01 (PAGES 1-6).

3.5 CONTRACTOR SHALL MAINTAIN EXISTING SIDEWALKS AS BEST AS POSSIBLE. IF MAINTAINING PEDESTRIAN ACCESS ON THE NORTHWEST SIDE OF BLUEBONNET & JEFFERSON IS NOT POSSIBLE, INSTALL SIDEWALK CLOSED SIGNS AS APPROPRIATE.

4.0 HORTICULTURE REQUIREMENTS

4.1 THE CONTRACTOR SHALL ONLY REMOVE TREES, SHRUBS, ETC. LOCATED WITHIN THE STREET ROW THAT ARE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS. TREES SHALL BE REMOVED UNDER ITEM 2010300. SHRUBS SHALL BE REMOVED UNDER ITEM 2010100. THE CONTRACTOR SHALL NOTIFY THE ADJACENT PROPERTY OWNER 14 DAYS PRIOR TO REMOVAL OF TREES, SHRUBS, ETC.

4.2 ANY TRIMMING REQUIRED SHALL BE DONE IN ACCORDANCE WITH STANDARD HORTICULTURE AND ARBORICULTURAL PRACTICES UNDER ITEM NO. 2010100.

5.0 UTILITY REQUIREMENTS

5.1 CONTRACTOR SHALL CONTACT THE FOLLOWING, NOT ALL-INCLUSIVE LIST, AT LEAST THREE (3) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION AROUND THEIR RESPECTIVE UTILITIES AND THE CONTRACTOR SHALL COORDINATE WITH UTILITY OWNERS REGARDING ANY NECESSARY UTILITY ADJUSTMENTS:

UNDER GROUND UTILITIES

- | | | |
|---|----------------------|----------------|
| 1. AT&T DISTRIBUTION | - TRACY LAUVRAY | - 225.367.0613 |
| 2. BATON ROUGE WATER | - RYAN SCARDINA | - 225.952.7619 |
| 3. CENTURY LINK (QWEST AND LEVEL 3) | - CHARDRICK KIRKLAND | - 318.362.1737 |
| 4. CONTERRA (DETEL) | - ZACKERY SANDERS | - 318.597.0303 |
| 5. COX COMMUNICATIONS | - THOMAS FLOYD | - 225.237.5098 |
| 6. EATEL | - BRANDI AKIN | - 225.621.4217 |
| 7. ENTERGY GAS | - CAITLIN STONE | - 225.354.3053 |
| 8. ENTERGY ELECTRIC | - ARNOLD KERNEY | - 504.595.3771 |
| 9. UNITI FIBER (FORMERLY HUNT TELECOM & SOUTHERN LIGHT) | - JONATHAN OHLER | - 504.265.2640 |
| 10. DOTD LIGHTING | - ELIZABETH DELANEY | - 225.379.2519 |
| 11. CITY OF BATON ROUGE LIGHTING | - CYNDI PENNINGTON | - 225.389.3246 |

5.2 CONTRACTOR SHALL CONTACT LA ONE CALL, THE APPROPRIATE UTILITY COMPANY, THE CITY PARISH DEPARTMENT OF TRANSPORTATION AND DRAINAGE – TRAFFIC DIV. (398-2346) AND SANITARY SEWER DIV. (389-4845), PRIOR TO THE START OF CONSTRUCTION FOR CONFIRMATION OF EXISTING UTILITIES. LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE, AND DEPTH OF ALL UTILITIES, PIPELINES AND STRUCTURES. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGES CAUSED BY FAILURE TO COMPLY.

5.3 THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT ENGINEER IF EXISTING UNMARKED DRAINAGE STRUCTURES OR FACILITIES ARE UNCOVERED. THE PROJECT ENGINEER WILL DETERMINE WHETHER TO REMOVE, REPLACE AND/OR CONNECT THE FACILITY TO THE PROPOSED DRAINAGE SYSTEM. CONNECTION TO A PROPOSED ADJACENT MANHOLE SHALL BE MADE AT NO DIRECT PAY.

6.0 TRAFFIC CONTROL

6.1 CONTRACTOR SHALL PROVIDE A TEMPORARY TRAFFIC CONTROL PLAN PREPARED IN ACCORDANCE WITH SECTION 905 OF THE STANDARD SPECIFICATIONS FOR PROJECT ENGINEER'S APPROVAL PRIOR TO CLOSING ANY PORTION OF THE ROADWAY.

6.2 UNLESS SPECIFIED OTHERWISE, CONTRACTOR SHALL PERMANENTLY ADJUST OR RELOCATE EXISTING SIGNAGE, AS INDICATED ON THE PLANS, OUTSIDE THE LIMITS OF THE PROPOSED SIDEWALK AND WITHIN THE EXISTING RIGHT-OF-WAY, AT NO DIRECT PAY.

6.3 CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN ALL NECESSARY BARRICADES, SUITABLE LIGHTS AND DANGER SIGNALS AND SHALL TAKE ALL THE NECESSARY PRECAUTIONS FOR THE PROTECTION OF WORK AND SAFETY OF THE GENERAL PUBLIC. ALL SAFETY LIGHTING AND MARKING SHALL MEET OR EXCEED THE REQUIREMENTS AS DESCRIBED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.

6.4 ALL EXISTING TRAFFIC CONTROL DEVICES THAT ARE IN CONFLICT WITH THE CONSTRUCTION OR WORK ZONE TRAFFIC CONTROL PLAN SHALL BE COVERED OR REMOVED BY THE CONTRACTOR, AND THE REMOVED DEVICES RETURNED TO THE CITY. ALL EXISTING DEVICES LEFT IN THE CONSTRUCTION OR WORK ZONE SHALL BE MAINTAINED IN GOOD CONDITION BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION.

6.5 ANY DAMAGE CAUSED BY THE CONTRACTOR'S WORK SHALL BE IMMEDIATELY REPORTED BY THE CONTRACTOR TO THE PROJECT ENGINEER. REPAIRS SHALL BE PERFORMED BY THE CONTRACTOR OR BY THE CITY-PARISH, AT THE DISCRETION OF THE CITY-PARISH TRAFFIC ENGINEER, WITH ALL ASSOCIATED COSTS BEING PAID BY THE CONTRACTOR.

6.6 THE CONTRACTOR WILL NOT BE ALLOWED TO CLOSE ANY LANES DURING THE WEEK DAY BEFORE 8:30 AM OR AFTER 3:30 PM UNLESS APPROVED BY THE CITY-PARISH TRAFFIC ENGINEER. THE CLOSURE OF LANES SHALL BE KEPT TO A MINIMUM. CONTRACTOR MAY NARROW LANES DURING CONSTRUCTION TO MAINTAIN SAFETY AND MINIMAL TRAFFIC DISRUPTION.

6.7 TWO PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE PLACED APPROXIMATELY 1/2 MILE IN ADVANCE OF THE CONSTRUCTION IN A LOCATION APPROVED BY THE CITY PARISH TRAFFIC ENGINEER. SUGGESTED MESSAGE IS "CONSTRUCTION AHEAD AT JEFFERSON AND BLUEBONNET" AND/OR "LANE CLOSED AHEAD AT JEFFERSON AND BLUEBONNET". VERIFY MESSAGE WITH CITY PARISH TRAFFIC ENGINEER.

SURVEYOR'S NOTES

SURVEY PROJECT NOTE

CITY/PARISH PROJECT NO. 20-CP-HC-0046
JEFFERSON HIGHWAY AT BLUEBONNET INTERSECTION IMPROVEMENTS
EAST BATON ROUGE PARISH

LOUISIANA STATE PLANE COORDINATES
ZONE 1702, LA SOUTH, US SURVEY FEET

HORIZONTAL CONTROL
NAD 83 (2011)(EPOCH:2010.00)

VERTICAL CONTROL
NAVD 88 (GEOID 2012A)

H009489 FIELD BOOKS 201-250 (LEVELS)
200-518 (MISC.)

H010652 FIELD BOOKS 400-824 (LEVEL BOOK)
204-426 (CROSS SECTION BOOK)
204-427 (CROSS SECTION BOOK)

C/P PROJECT NO. 20-CP-HC-0046 FIELD BOOKS
20-8 (LEVEL BOOK)
20-13 (CROSS SECTION BOOK)
21-4 (CROSS SECTION BOOK)

LA. ONE CALL TICKETS:
210092004 # 210092005 # 210092006 #210092007

THIS TOPOGRAPHIC SURVEY IS A COMBINATION OF THE SURVEY FOR SP NO. H.010652 COMPLETED BY SJB GROUP ON AUGUST 19, 2020 AND CITY/PARISH PROJECT NO. 20-CP-HC-0046 COMPLETED BY SJB GROUP ON MAY 21, 2021. SP NO. H.010652 CONSISTS SOLELY OF THE SURVEY ALONG LA 73. THE TOPOGRAPHIC SURVEY WIDTH WAS INCREASED BASED ON THE LIMITS SHOWN IN THE TOPOGRAPHIC SURVEY LOCATION MAP DATED SEPTEMBER 30, 2020, REVISED ON OCTOBER 21, 2020 AND INCLUDED AS PART OF THIS SUBMITTAL. NO EFFORT WAS MADE TO UPDATE THE TOPOGRAPHIC SURVEY WITHIN THE ORIGINAL LIMITS OF SP NO. H.010652.

SUBSURFACE UTILITIES SHOWN ON THIS SURVEY ARE CONSIDERED ASCE 38-02 QUALITY LEVEL C. THE POSITIONS SHOWN HEREON WERE DERIVED FROM RECORDS AND SURVEYED ABOVE GROUND FEATURES.

CITY/PARISH PROJECT NO 20-CP-HC-0046 WAS CONSTRAINED TO THE PRIMARY SURVEY CONTROL SET UNDER SP NO. H.009489 AND H.010652.

LEGEND

- | | | | |
|------------------|----------------------------|---|-----------------------------|
| ————— | PAVEMENT EDGE | ⊗ | TRAFFIC SIGNAL POLE |
| ----- | CROWN OF ROAD | ⊙ | GAS VALVE |
| - - - - - | DTM BREAKLINE | ⊗ | GAS METER |
| — tv — tv — tv — | OVERHEAD POWER LINE | ⊕ | FIRE HYDRANT |
| — t — t — t — | TV/CABLE LINE | ⊙ | WATER METER |
| — t — t — t — | TELEPHONE LINE | ⊙ | WATER VALVE |
| — t — t — t — | TRAFFIC SIGNAL POWER LINE | ⊙ | WATER VALVE VAULT |
| — s — s — s — | SEWER LINE | ⊙ | TELEPHONE PEDESTAL |
| ----- | CULVERT DRAINAGE LINE | ⊙ | TELEPHONE CROSS CONNECT BOX |
| ----- | DITCH TOP | ⊙ | UTILITY MARKER |
| ----- | DITCH TOE | ⊙ | SEWER MANHOLE |
| ----- | DITCH CENTER | ⊙ | SEWER CLEANOUT |
| ----- | GUARDRAIL CENTERLINE | ⊙ | DRAINAGE DROP INLET |
| ----- | SHRUBBERY BED EDGE | ⊙ | DRAINAGE CURB INLET |
| | WOODS EDGE | ⊙ | DRAINAGE MANHOLE |
| | HEDGE LINE | ⊙ | RIGHT-OF-WAY MONUMENT |
| | FENCE LINE | ● | PROPERTY CORNER FOUND |
| | GATE | ▲ | PRIMARY CONTROL |
| ○—○ | POWER POLE (W/GUY WIRE) | ▲ | REFERENCE MARK |
| ● | COMBINATION POLE | ▲ | TEMPORARY BENCHMARK |
| ⊞ | POWER TRANSFORMER | ⊞ | PROPERTY CORNER FOUND |
| ⊞ | POWER JUNCTION BOX | ⊞ | SIGN |
| * | GENERAL PRIVATE LIGHT | ⊞ | BUSH |
| ⊞ | TRAFFIC SIGNAL POWER VAULT | ⊞ | TREE/TREE CLUSTER |
| ⊞ | TRAFFIC SIGNAL CONTROL BOX | | |

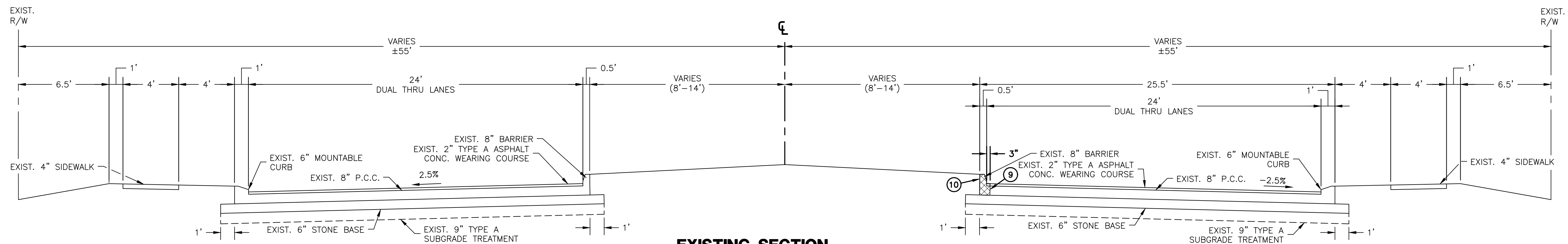
SHEET NUMBER	1a
PARISH	EAST BATON ROUGE PARISH
CITY PROJECT	20-CP-HC-0046
STATE PROJECT	N/A
DESIGNED	DHD
CHECKED	DHD
DATE	12/09/2022
DATE	12/09/2022
NO.	
BY	
REVISION DESCRIPTION	



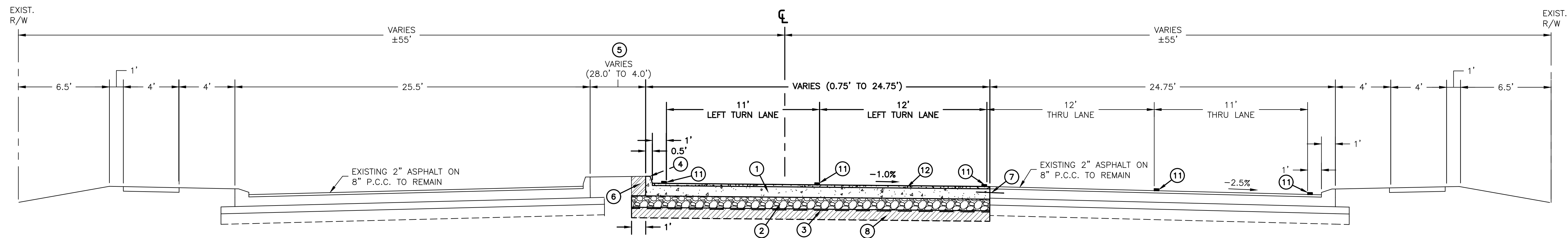
GENERAL NOTES
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD



MEYER ENGINEERS, LTD.



**EXISTING SECTION
BLUEBONNET ROAD**
APPLIES STA. 77+02 TO 79+91 T=4'



**PROPOSED SECTION
BLUEBONNET ROAD**
APPLIES STA. 77+02 TO 79+91 T=4'

LEGEND:

- ① 9" PORTLAND CEMENT CONCRETE PAVEMENT
- ② 10" STONE BASE
- ③ GEOTEXTILE FABRIC
- ④ 8" CONCRETE BARRIER CURB
- ⑤ STA. 77+02 TO 79+43 - SODDING WHERE GRASS IS DISTURBED
STA. 79+43 TO 79+91 - 4" INCIDENTAL CONCRETE PAVING (SEE SHEET 2a)
- ⑥ EMBANKMENT
- ⑦ LONGITUDINAL BUTT JOINT (SEE LBJ DETAIL ON SHEETS 502-01) (PAID UNDER ITEM, 5020109)
- ⑧ TYPE A SUBGRADE TREATMENT (9")
- ⑨ SAW CUT FULL DEPTH
- ⑩ REMOVE EXISTING CURB
- ⑪ STRIPING - SEE PAVEMENT MARKING SHEETS
- ⑫ 2" ASPHALT CONCRETE PAVEMENT (WEARING COURSE LEVEL 2F)

NOTE:

- 1. SEE CITY/PARISH STANDARD DETAIL SHEET "501-01" FOR ASPHALT OVERLAY DETAILS.
- 2. SEE CITY/PARISH STANDARD DETAIL SHEET "502-01" FOR CONCRETE PAVEMENT DETAILS.

SHEET NUMBER	2
PARISH	EAST BATON ROUGE PARISH
CITY PROJECT	20-CP-HC-0046
STATE PROJECT	N/A
DESIGNED	DHD
CHECKED	DHD
DATE	12/09/2022
DESIGNED	TJG
CHECKED	DHD
DATE	12/09/2022
NO.	1 OF 3
BY	
REVISION DESCRIPTION	
DATE	



TYPICAL SECTIONS AND DETAILS
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD

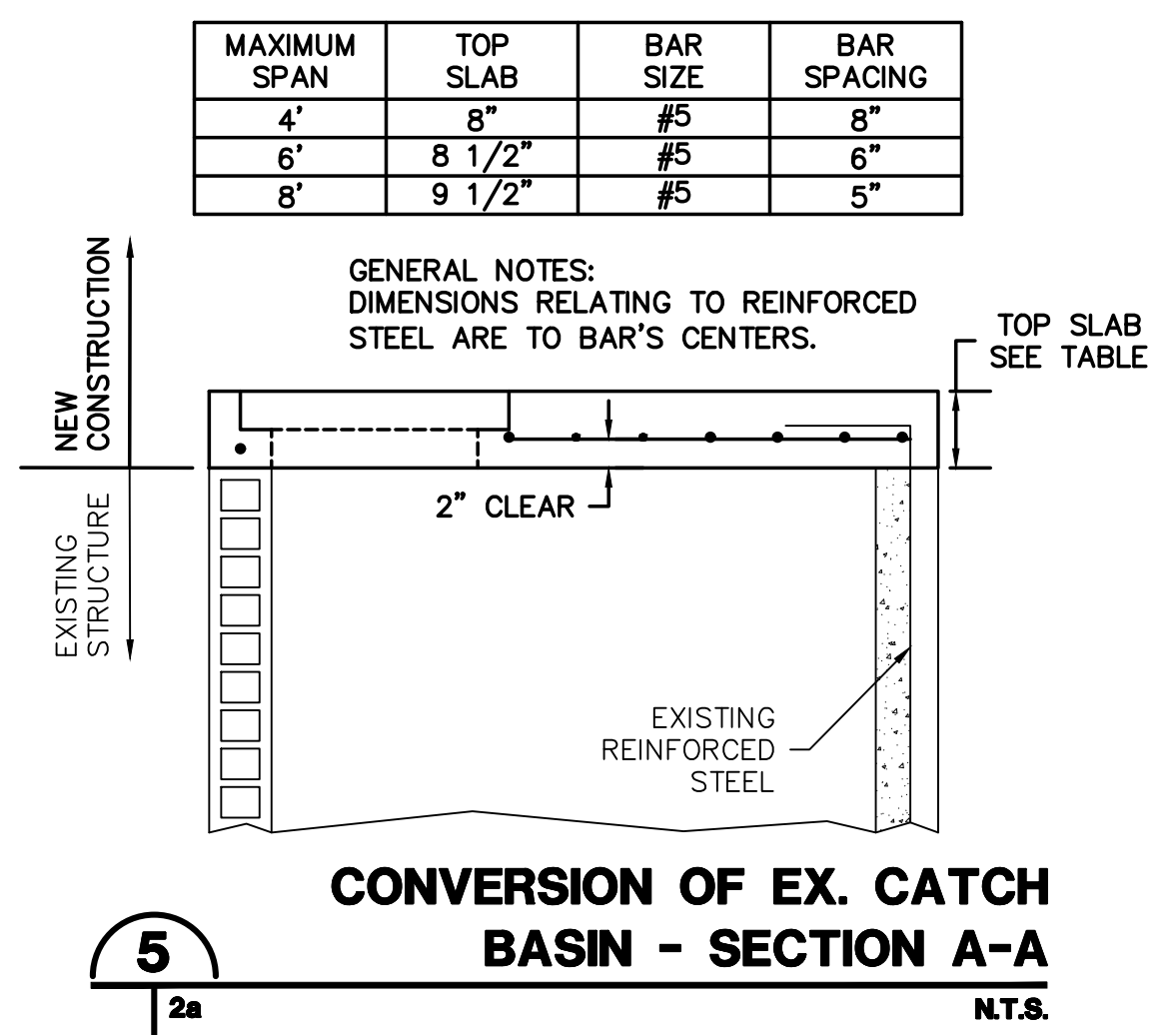
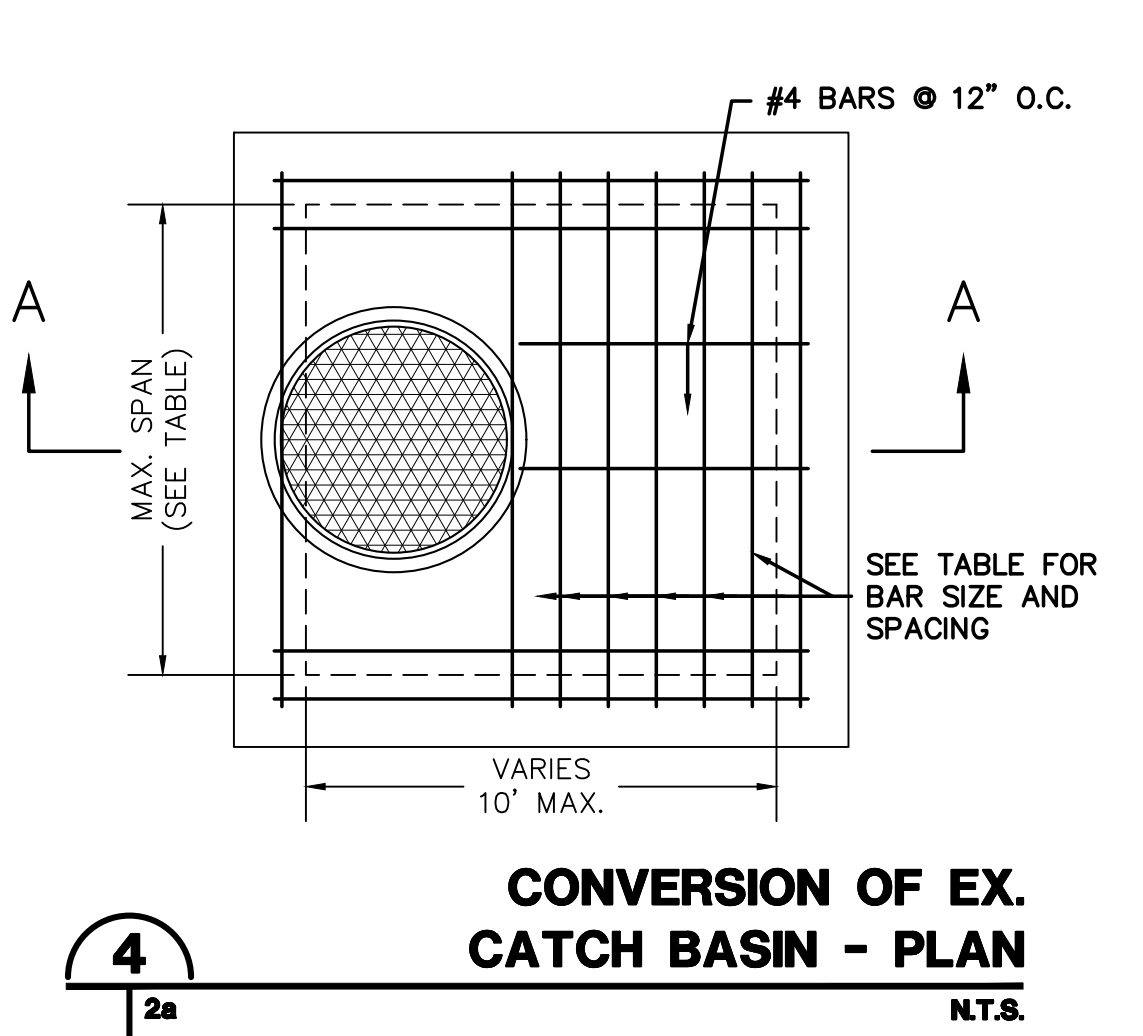
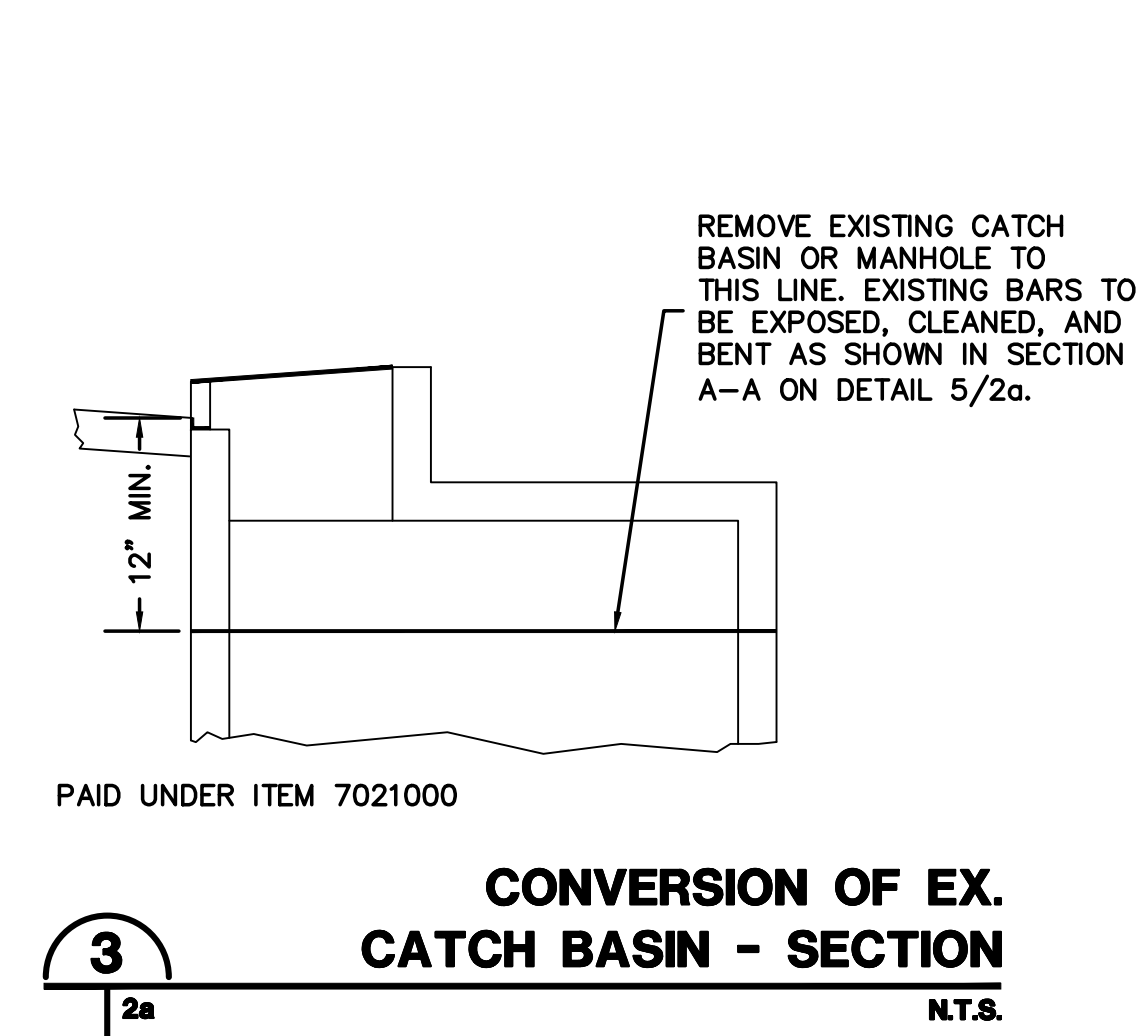
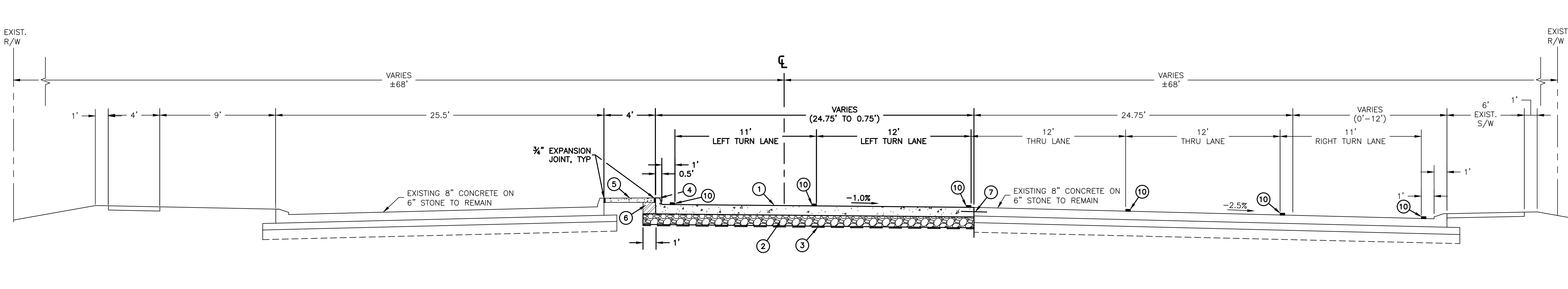
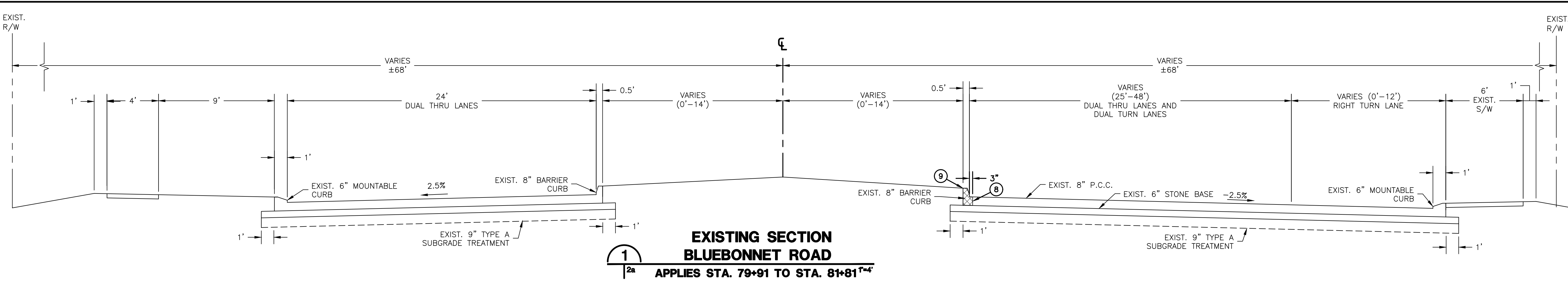


MEYER ENGINEERS, LTD.

NO.	DATE	REVISION DESCRIPTION	BY



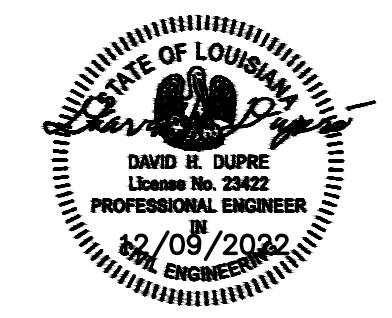
TYPICAL SECTIONS AND DETAILS
 JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD



LEGEND:

- ① 9" PORTLAND CEMENT CONCRETE PAVEMENT
- ② 10" STONE BASE
- ③ GEOTEXTILE FABRIC
- ④ 6" CONCRETE BARRIER CURB
- ⑤ 4" INCIDENTAL CONCRETE PAVING
- ⑥ EMBANKMENT
- ⑦ LONGITUDINAL BUTT JOINT (SEE LBJ DETAIL ON SHEETS 502-01) (PAID UNDER ITEM, 5020109)
- ⑧ SAW CUT FULL DEPTH
- ⑨ REMOVE EXISTING CURB
- ⑩ STRIPING - SEE PAVEMENT MARKING SHEETS

NOTE:
 1. SEE CITY/PARISH STANDARD DETAIL SHEET "502-01" FOR CONCRETE PAVEMENT DETAILS.



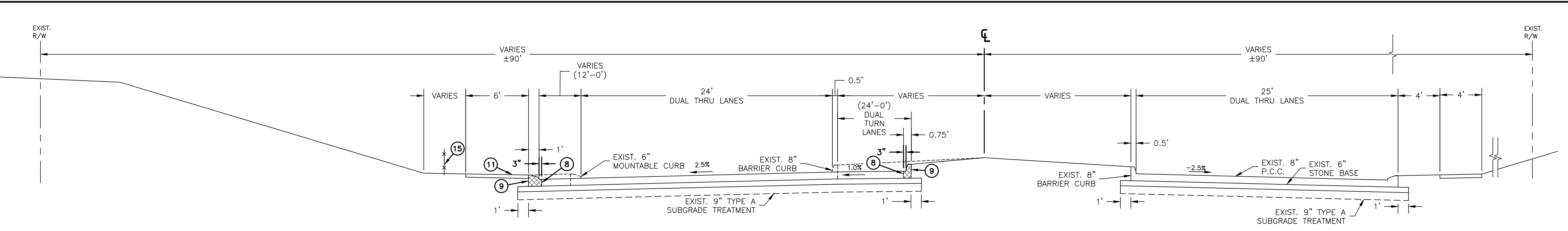
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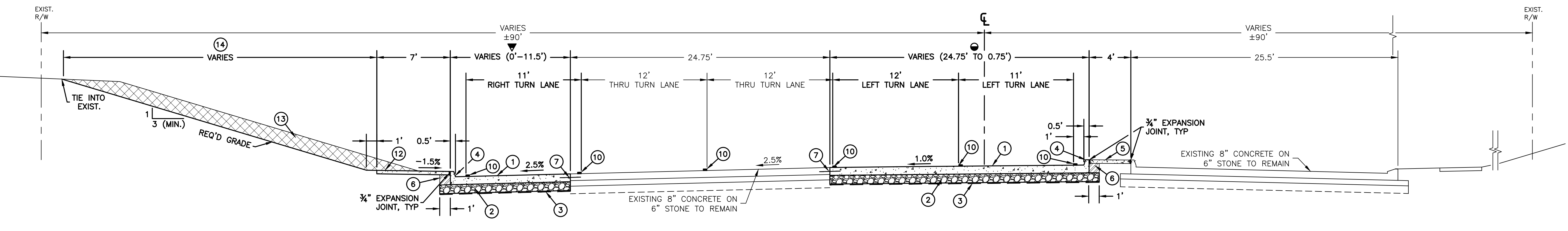
TYPICAL SECTIONS AND DETAILS
 JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD



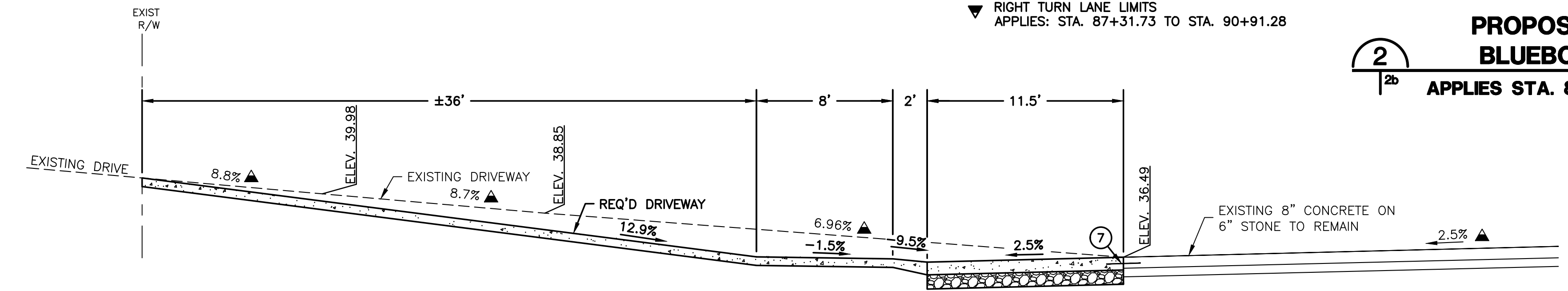
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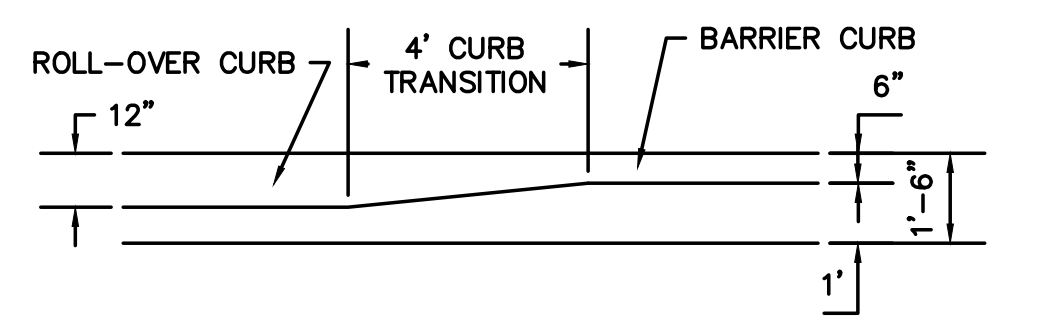
1
EXISTING SECTION
BLUEBONNET ROAD
 APPLIES STA. 86+28 TO STA. 90+91^{T+5}



2
PROPOSED SECTION
BLUEBONNET ROAD
 APPLIES STA. 86+28 TO STA. 90+91^{T+5}



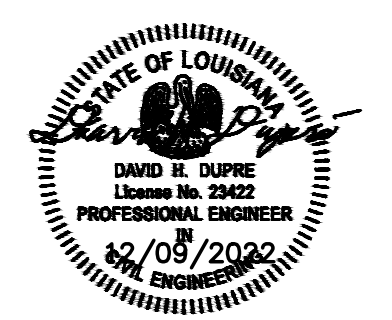
3
COMMERCIAL DRIVE SECTION
 APPLIES STA. 89+41 TO 89+99^{T+5}



4
CURB TRANSITION - PLAN VIEW
 N.T.S.

- LEGEND:**
- ① 9" PORTLAND CEMENT CONCRETE PAVEMENT
 - ② 10" STONE BASE
 - ③ GEOTEXTILE FABRIC
 - ④ 6" CONCRETE BARRIER CURB
 - ⑤ STA. 86+28 TO 87+00 - 4" INCIDENTAL CONCRETE PAVING
STA. 87+00 TO 91+19 - SODDING WHERE GRASS IS DISTURBED
 - ⑥ EMBANKMENT
 - ⑦ LONGITUDINAL BUTT JOINT (SEE LBJ DETAIL ON SHEETS 502-01) (PAID UNDER ITEM, 5020109)
 - ⑧ SAW CUT FULL DEPTH
 - ⑨ REMOVE EXISTING CURB
 - ⑩ STRIPING - SEE PAVEMENT MARKING SHEETS
 - ⑪ REMOVE EXISTING SIDEWALK
 - ⑫ 7' SIDEWALK (4" THICK)
 - ⑬ EXCAVATION
 - ⑭ SOD
 - ⑮ TEMPORARY SILT FENCING

- NOTES:**
1. SEE CITY/PARISH STANDARD DETAIL SHEET "502-01" FOR CONCRETE PAVEMENT DETAILS.
 2. COMMERCIAL DRIVE WORK SHALL BE IN ACCORDANCE WITH CITY/PARISH STANDARD DETAIL 907-03.



EARTHWORK			
STATION	STATION	EXCAVATION	EMBANKMENT
		CU. YDS.	CU. YDS.
BLUEBONNET BLVD.			
77+02.19	81+81.12	629	14
86+28.85	90+91.28	946	22
TOTAL		1575	36

REMOVAL OF CONCRETE CURB				
STATION	STATION	SIDE C/L	DESCRIPTION	REMOVAL OF CONCRETE CURB & GUTTER
				LIN. FT.
BLUEBONNET BLVD.				
77+02.19	81+81.12	LT & RT.	CONCRETE CURB (BARRIER TYPE)	481
86+28.85	89+22.37	LT & RT.	CONCRETE CURB (BARRIER TYPE)	298
83+46.66	83+50.66	LT.	CONCRETE CURB (BARRIER TYPE)	11
85+31.49	85+35.49	RT.	CONCRETE CURB (BARRIER TYPE)	11
87+31.73	89+30.80	LT.	CONCRETE CURB (MOUNTABLE TYPE)	199
90+04.57	90+91.28	LT.	CONCRETE CURB (MOUNTABLE TYPE)	86
TOTAL				1086

● MEASURED DIGITALLY

REMOVAL OF CONCRETE PAVEMENT AND HIGH EARLY STRENGTH CONCRETE							
STATION	STATION	LENGTH	AVG WIDTH	DESCRIPTION	REMOVAL OF PORTLAND CEMENT CONCRETE PAVEMENT	HIGH EARLY STRENGTH CONCRETE	REMOVAL OF CONCRETE WALKS AND DRIVES
		LIN. FT.	LIN. FT.		SQ. YDS.	SQ. YDS.	SQ. YDS.
BLUEBONNET BLVD.							
78+71.50	78+83.00	11.50	4.0	CONCRETE WALK			5.1
78+88.75	79+11.75	23.0	4.0	CONCRETE WALK			10.2
80+59.00	80+69.00	10.0	4.0	CONCRETE WALK			4.4
83+46.66	83+50.66	4.0	4.0	MEDIAN	1.8		
85+31.49	85+35.49	4.0	4.0	MEDIAN	1.8		
87+31.73	87+79.76	48.0	6.0	CONCRETE WALK			32.0
87+38.75	87+77.41	38.7	2.1	CONCRETE PANEL	9.0	9.0	
87+79.76	89+35.97	156.2	4.0	CONCRETE WALK			69.4
88+16.38	88+73.54	57.2	2.4	CONCRETE PANEL	137.2	137.2	
88+73.54	89+31.57	58.0	11.4	CONCRETE PANEL	73.5	73.5	
88+92.85	89+12.46	19.6	11.4	CONCRETE PANEL	24.8	24.8	
89+41.09	89+97.66	56.6	52.5	CONCRETE DRIVEWAY			234.5
89+98.94	90+78.42	79.5	4.0	CONCRETE WALK			35.3
TOTAL					249	244.5	390.9

● MEASURED DIGITALLY

DRAINAGE STRUCTURES					
STATION	SIDE C/L	ADJUSTING DRAIN MANHOLES, INLETS, & JUNCTION BOXES	SINGLE CURB INLET (702-01)	DOUBLE CURB INLET (702-02)	15" RCP
		EACH	EACH	EACH	LIN. FT.
BLUEBONNET BLVD.					
88+24.18	LT.	1			4
90+22.69	LT.	1			5
TOTAL		2	1	1	9

PLASTIC TRAFFIC STRIPING										
STATION	STATION	SIDE C/L	REFLECTORIZED RAISED PAVEMENT MARKERS	PLASTIC TRAFFIC STRIPING (4" WIDTH) (SOLID)(WHITE)	PLASTIC TRAFFIC STRIPING (4" WIDTH) (SOLID)(YELLOW)	PLASTIC TRAFFIC STRIPING (4" WIDTH) (BROKEN)(WHITE)	PLASTIC TRAFFIC STRIPING (8" WIDTH) (TYPE B DOTTED)(WHITE)	PLASTIC TRAFFIC STRIPING (8" WIDTH) (SOLID)(WHITE)	PLASTIC TRAFFIC STRIPING (12" WIDTH) (SOLID)(YELLOW)	PLASTIC LEGENDS AND SYMBOLS (SINGLE HEAD ARROW)
			EACH	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH
BLUEBONNET BLVD.										
77+02.19	83+75.77	LT. & RT.	74	674	698	340	180	536	18	7
86+28.85	90+91.28	LT. & RT.	62	462	604	300	144	433	18	7
TOTAL			136	1136	1302	640	324	969	36	14

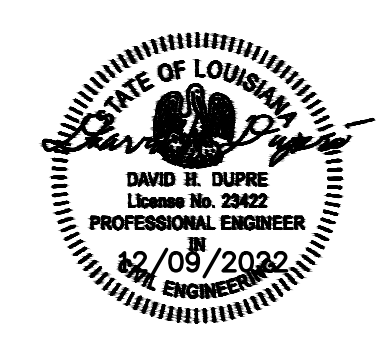
STRIPING SEPARATED BY TYPE AND COLOR FOR INFORMATIONAL PURPOSES

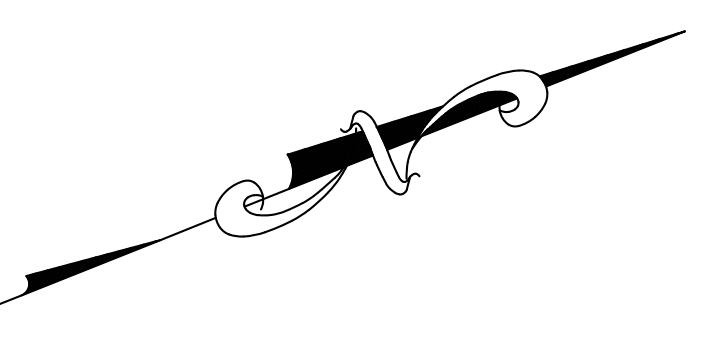
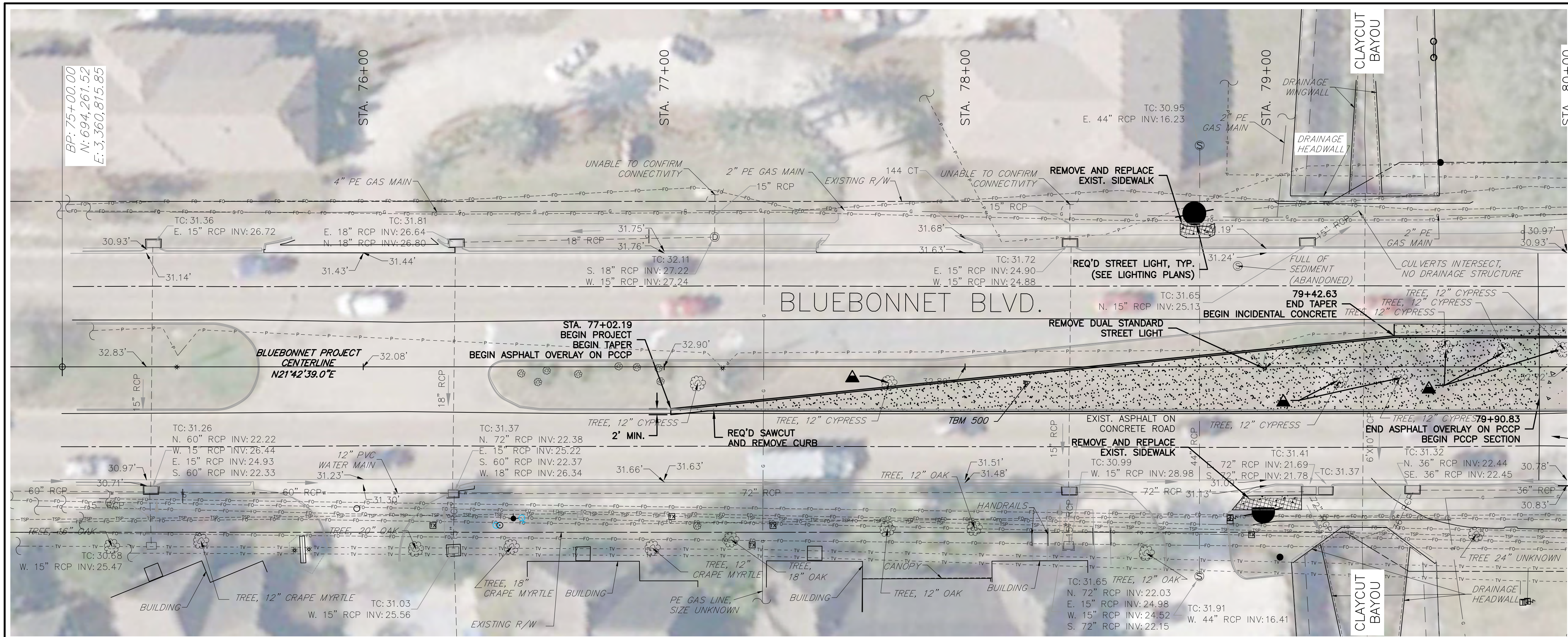
PAVEMENT AND BASE													
STATION	STATION	SIDE C/L	DESCRIPTION	LENGTH LIN. FT.	AVG. WIDTH LIN. FT.	ASPHALT CONCRETE		PORTLAND CEMENT CONCRETE PAVEMENT (9" THICK)	STONE BASE COURSE (10" THICK)	GEOTEXTILE FABRIC	INCIDENTAL CONCRETE PAVING (4" THICK)	CONCRETE WALKS (4" THICK)	CONCRETE DRIVES (6" THICK)
						SQ. YDS.	TONS	SQ. YDS.	SQ. YDS.	SQ. YDS.	SQ. YDS.	SQ. YDS.	
							2" WEARING COURSE (LEVEL II)						
BLUEBONNET BLVD.													
77+02.19	79+42.63	LT. & RT.	ROADWAY WIDENING W/ ASPH.	240.4	12.38	330.7	36.4	330.7	357.4	357.4			
78+71.50	78+83.00	LT.	SIDEWALK	11.50	4.0							5.1	
78+88.75	79+11.75	RT.	SIDEWALK	23.0	VARIES							14.6	
79+42.63	79+90.83	LT. & RT.	ROADWAY W/ ASPH.	48.2	24.75	132.6	14.6	132.6	138.0	138.0			
79+42.63	81+81.12	LT.	MEDIAN	238.5	4.0						106.0		
79+90.83	81+81.12	LT. & RT.	ROADWAY	190.3	12.38			291.8	312.9	312.9		4.4	
80+59.00	80+69.00	LT.	SIDEWALK	10.0	4.0								
83+46.66	83+50.66	LT.	MEDIAN	4.0	5.0						2.0		
85+31.49	85+35.49	RT.	MEDIAN	4.0	5.0						2.0		
86+28.41	87+00.01	RT.	MEDIAN	71.6	4.0						31.8		
86+28.41	89+22.37	LT. & RT.	ROADWAY WIDENING	294.0	12.38			277.8	297.9	297.9			
87+31.73	88+73.54	LT.	ROADWAY WIDENING	141.8	5.75			77.5	82.9	82.9			
87+31.73	89+48.54	LT.	SIDEWALK	216.8	7.0							168.6	
88+73.54	90+00.00	LT.	ROADWAY	126.5	12.38			174.0	188.1	188.1			
89+41.09	89+97.66	LT.	CONCRETE DRIVEWAY	56.6	40.0								143.1
89+63.15	89+73.73	LT.	SIDEWALK	10.6	7.0							8.2	
89+92.99	90+78.42	LT.	SIDEWALK	85.4	7.0							66.4	
90+00.00	90+91.28	LT.	ROADWAY WIDENING	91.3	5.75			58.3	68.4	68.4			
TOTALS							51	1342.7	1445.6	1445.6	141.8	267.3	143.1

● MEASURED DIGITALLY

INTEGRAL CONCRETE CURBS					
STATION	STATION	SIDE C/L	DESCRIPTION	INTEGRAL CONCRETE CURB (6" BARRIER)	INTEGRAL CONCRETE CURB (8" BARRIER)
				LIN. FT.	LIN. FT.
BLUEBONNET BLVD.					
77+02.19	79+90.83	LT & RT.	8" CONCRETE CURB (BARRIER TYPE)		289
79+90.83	81+81.12	LT & RT.	6" CONCRETE CURB (BARRIER TYPE)	192	
86+28.85	89+22.37	LT & RT.	6" CONCRETE CURB (BARRIER TYPE)	293	
87+31.73	89+41.09	LT.	6" CONCRETE CURB (BARRIER TYPE)	209	
89+62.51	89+78.57	LT.	6" CONCRETE CURB (BARRIER TYPE)	16	
89+63.15	89+73.73	LT.	6" CONCRETE CURB (BARRIER TYPE)	11	
89+92.66	90+91.28	LT.	6" CONCRETE CURB (BARRIER TYPE)	99	
TOTAL				820	289

SAW CUTTING CONCRETE OR ASPHALT				
STATION	STATION	SIDE C/L	DESCRIPTION	SAW CUTTING CONCRETE OR ASPHALT
				LIN. FT.
BLUEBONNET BLVD.				
77+02.19	79+90.83	RT.	CONC. ROADWAY W/ ASPH. OVERLAY	289
79+90.83	81+81.12	LT & RT.	CONC. ROADWAY	192
86+28.85	87+38.75	LT & RT.	CONC. ROADWAY	112
87+31.73	88+16.38	LT.	CONC. ROADWAY	85
87+77.41	88+92.85	LT.	CONC. ROADWAY	117
89+12.46	89+22.37	LT.	CONC. ROADWAY	10
89+31.57	90+91.28	LT.	CONC. ROADWAY	160
TOTAL				965



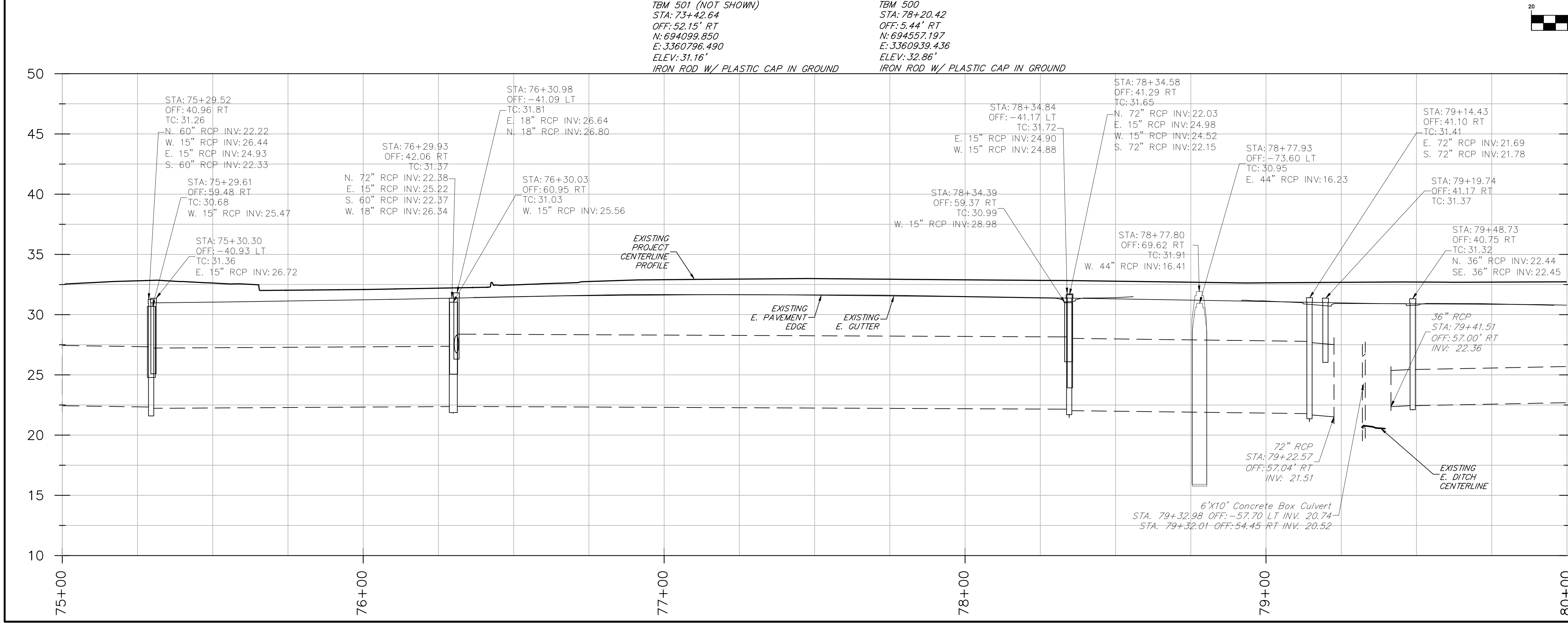
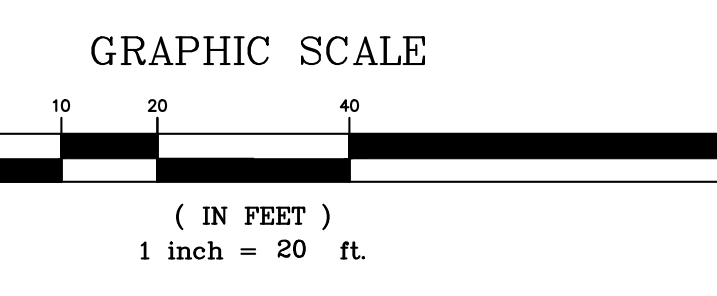


LEGEND

	REQ'D CONCRETE PAVEMENT
	REQ'D INCIDENTAL CONCRETE
	REQ'D ASPHALT OVERLAY ON PCCP
	REQ'D SIDEWALK REMOVAL

- NOTES:**
- LIMITS OF CONSTRUCTION ARE WITHIN THE EXISTING PROJECT R/W UNLESS OTHERWISE NOTED IN THE PLANS.
 - CLEAN ALL EXISTING DRAINAGE PIPES (EXCLUDING THE BOX CULVERT) WITHIN THE LIMITS OF THIS PROJECT FROM STA. 77+02.18 TO STA. 99+91.28. (N.D.P.)

REMOVE TREE



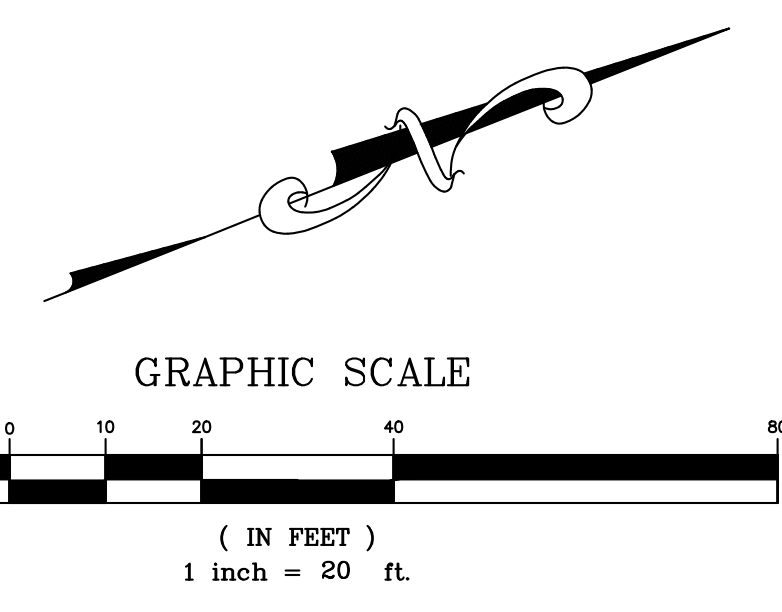
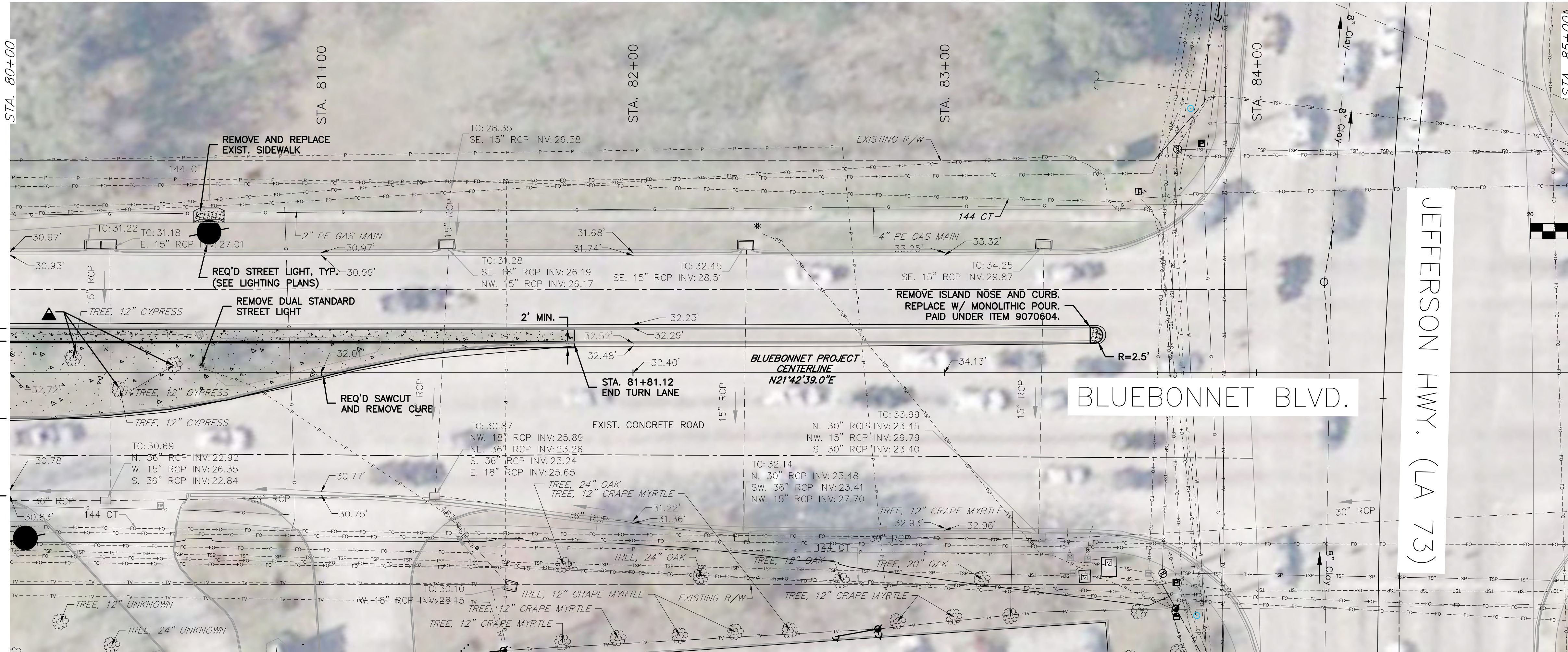
SHEET NUMBER	4
PARISH	EAST BATON ROUGE PARISH
CITY PROJECT	20-CP-HC-0046
STATE PROJECT	N/A
DESIGNED	DHD
CHECKED	DHD
DATE	12/09/2022
BY	
REVISION DESCRIPTION	
NO.	
DATE	
NO.	



PLAN AND PROFILES
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD

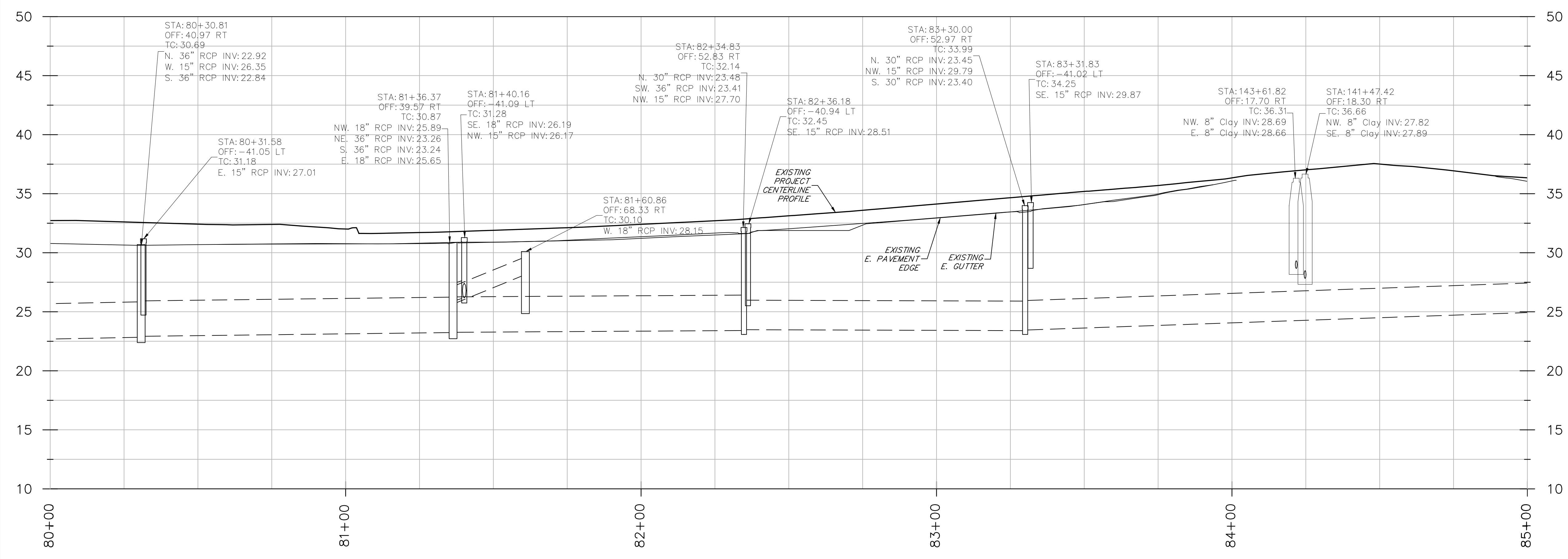
MEYER ENGINEERS, LTD.

SHEET NUMBER	5
PARISH	EAST BATON ROUGE PARISH
CITY PROJECT	20-CP-HC-0046
STATE PROJECT	N/A
DESIGNED	DHD
CHECKED	DHD
DATE	12/09/2022
SHEET	2 OF 4



- NOTES:
- LIMITS OF CONSTRUCTION ARE WITHIN THE EXISTING PROJECT R/W UNLESS OTHERWISE NOTED IN THE PLANS.
 - CLEAN ALL EXISTING DRAINAGE PIPES (EXCLUDING THE BOX CULVERT) WITHIN THE LIMITS OF THIS PROJECT FROM STA. 77+02.18 TO STA. 99+91.28. (N.D.P.)

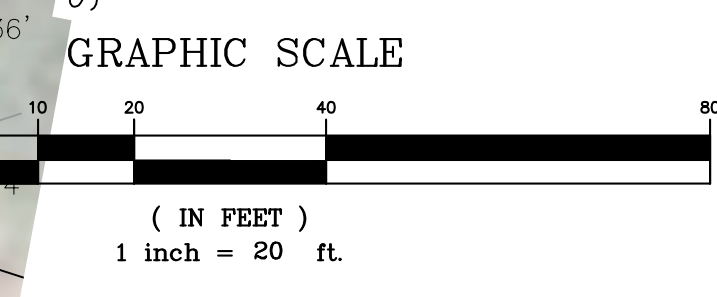
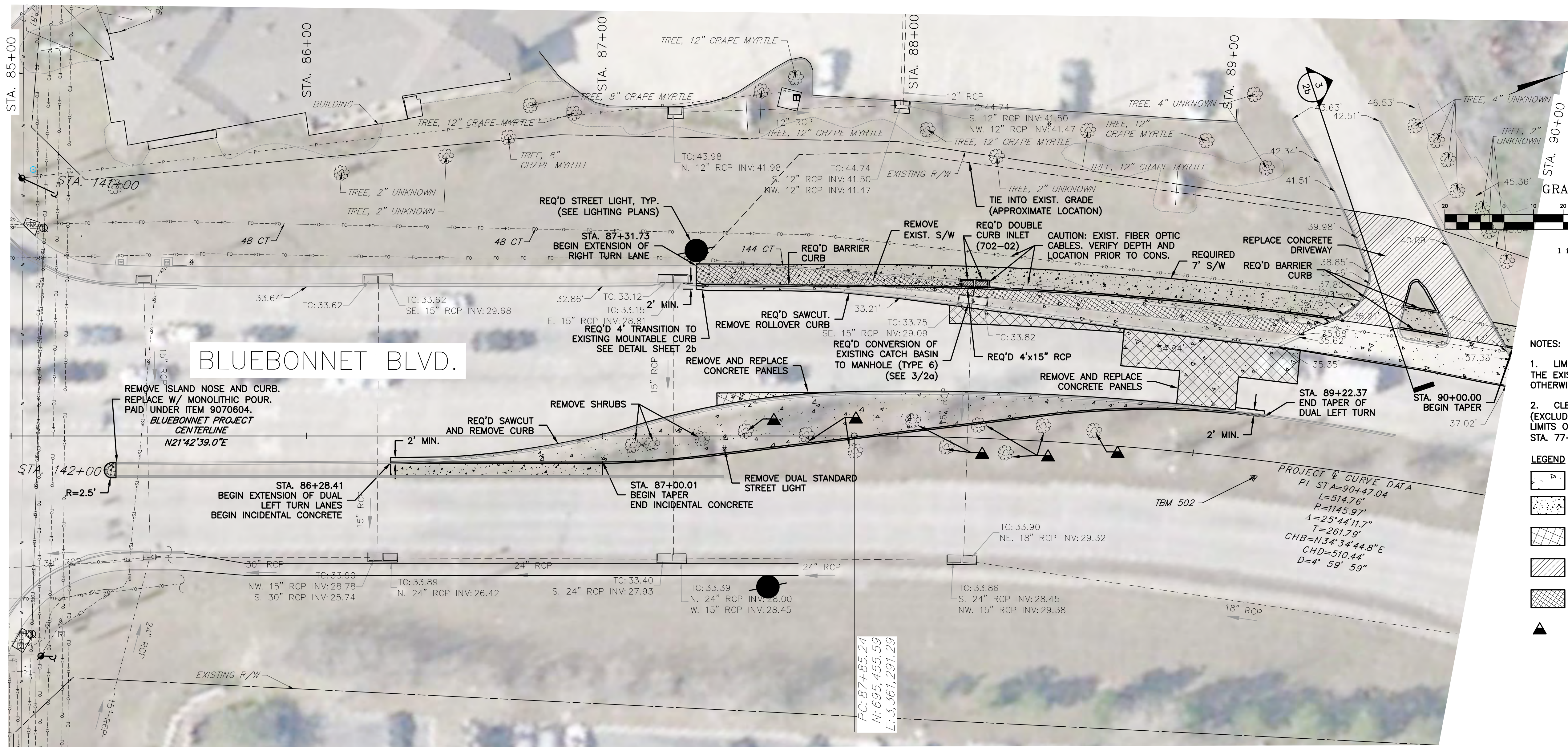
- LEGEND
- REQ'D CONCRETE PAVEMENT
 - REQ'D INCIDENTAL CONCRETE
 - REQ'D SIDEWALK REMOVAL
 - REMOVE TREE



PLAN AND PROFILES
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD



MEYER ENGINEERS, LTD.



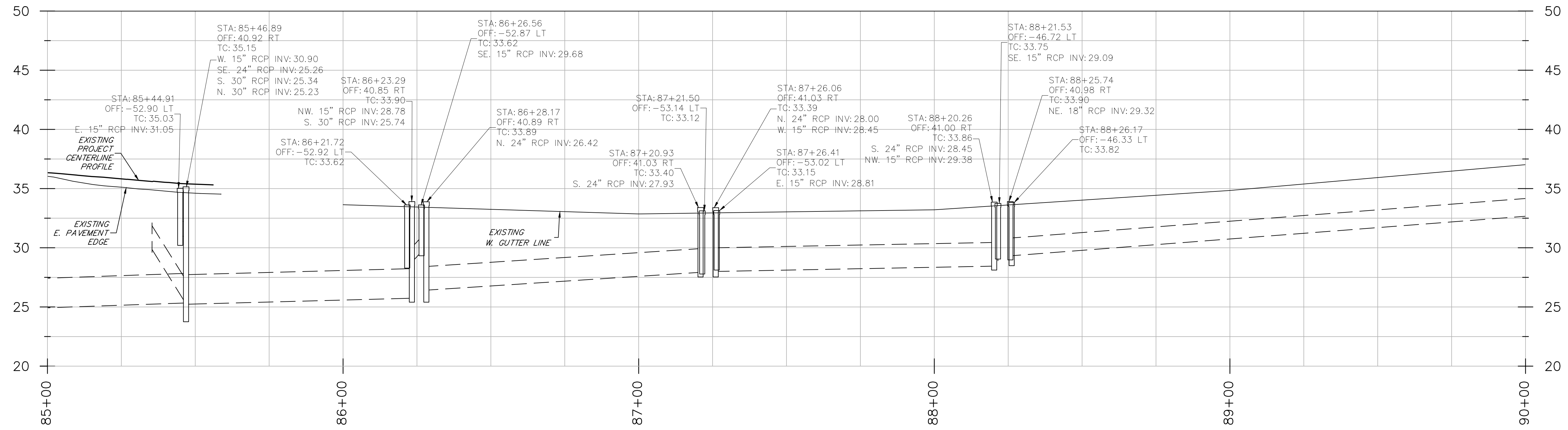
- NOTES:**
1. LIMITS OF CONSTRUCTION ARE WITHIN THE EXISTING PROJECT R/W UNLESS OTHERWISE NOTED IN THE PLANS.
 2. CLEAN ALL EXISTING DRAINAGE PIPES (EXCLUDING THE BOX CULVERT) WITHIN THE LIMITS OF THIS PROJECT FROM STA. 77+02.18 TO STA. 99+91.28. (N.D.P.)

- LEGEND**
- REQ'D CONCRETE PAVEMENT
 - REQ'D INCIDENTAL CONCRETE
 - REMOVE AND REPLACE CONCRETE PANELS AT THE DIRECTION OF THE PROJECT ENGINEER
 -
 - REQ'D SIDEWALK REMOVAL
 - REMOVE TREE

PROJECT @ CURVE DATA
 PI STA=90+47.04
 L=514.76'
 R=1145.97'
 $\Delta=25^{\circ}44'11.7''$
 T=261.79'
 CHB=N34^{\circ}34'44.8\"/>

TBM 502
 STA: 89+21.36
 OFF: 6.00' RT
 N: 695575.905
 E: 3361354.308
 ELEV.: 36.76'
 IRON ROD W/ PLASTIC CAP IN GROUND

PC: 87+85.24
 N: 695,455.59
 E: 3,361,291.29



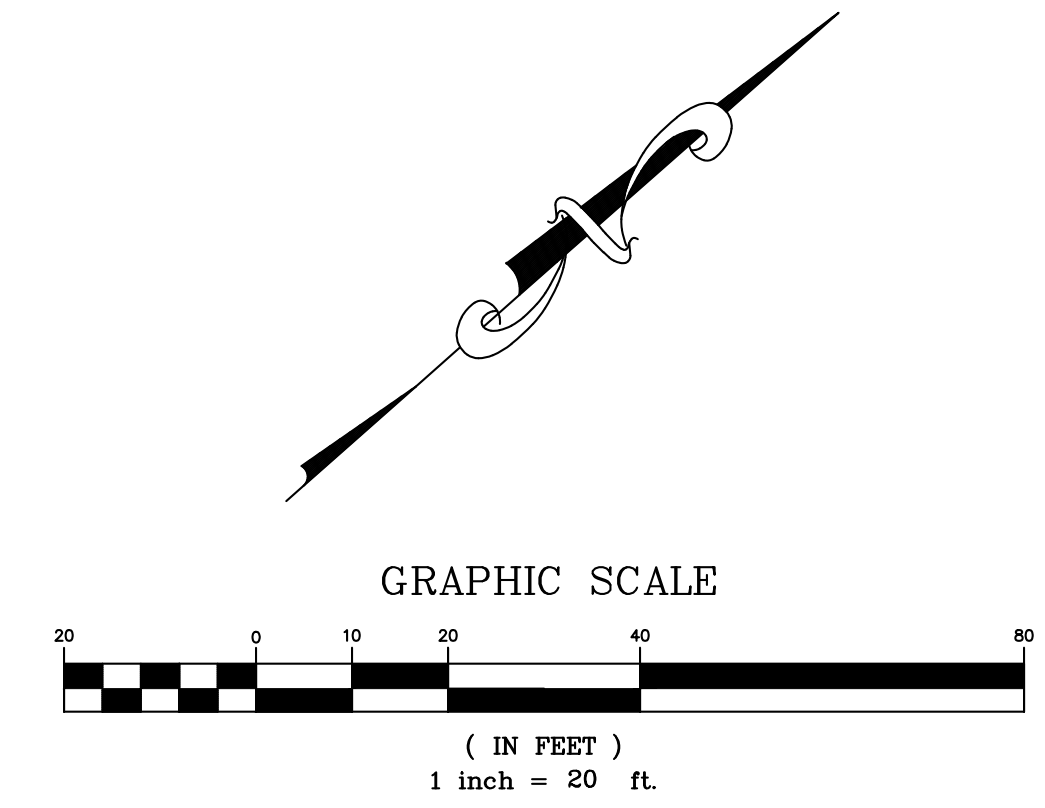
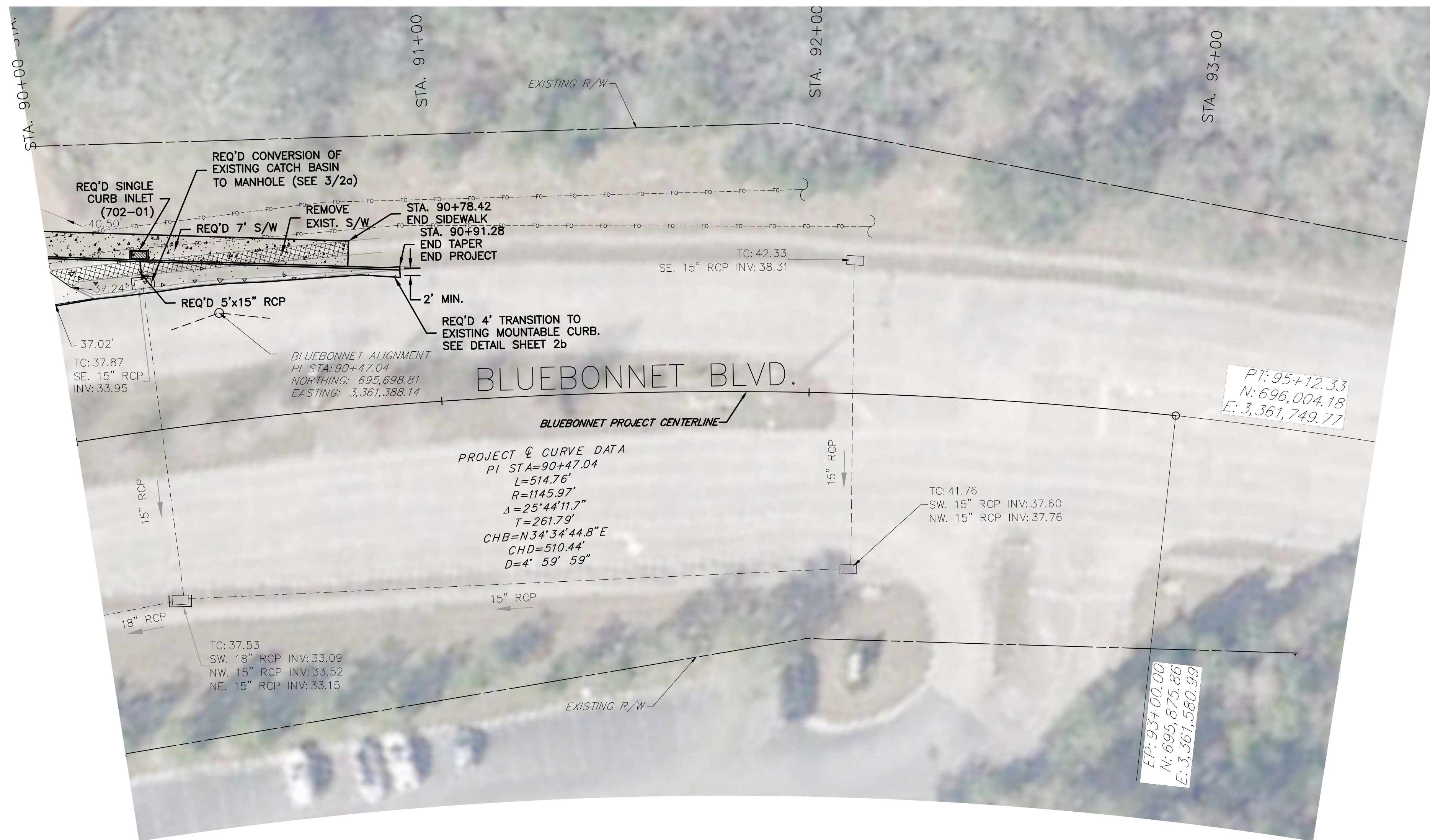
SHEET NUMBER	6
PARISH	EAST BATON ROUGE PARISH
CITY PROJECT	20-CP-HC-0046
STATE PROJECT	N/A
DESIGNED	DHD
CHECKED	DHD
DATE	12/09/2022
BY	
NO.	3 OF 4
REVISION DESCRIPTION	
DATE	

PLAN AND PROFILES
 JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD

MEYER ENGINEERS, LTD.

BR
 CITY OF BATON ROUGE
 PROFESSIONAL ENGINEER

DAVID R. DUPRE
 License No. 29422
 PROFESSIONAL ENGINEER
 12/05/2022

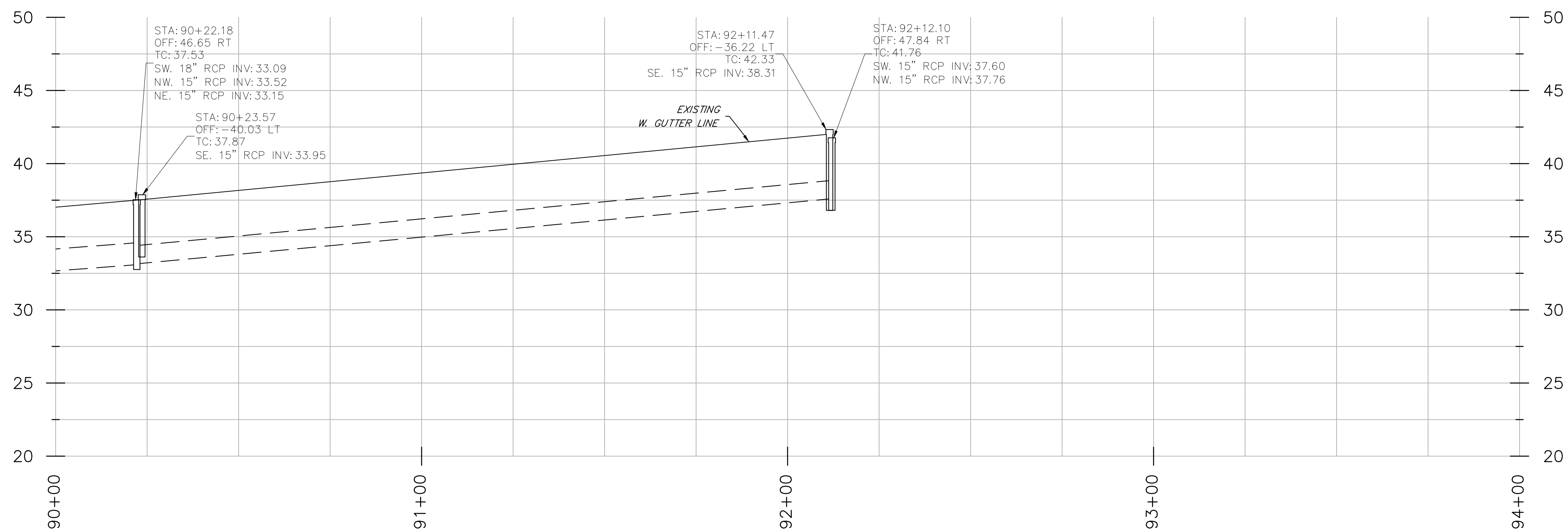


LEGEND

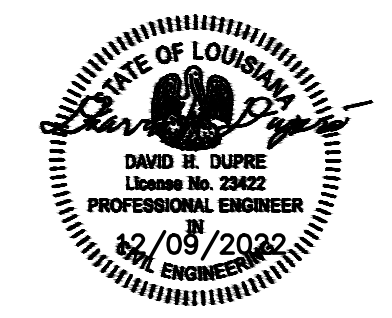
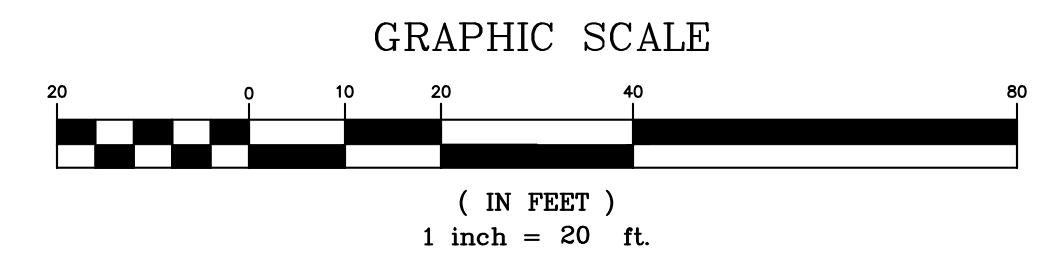
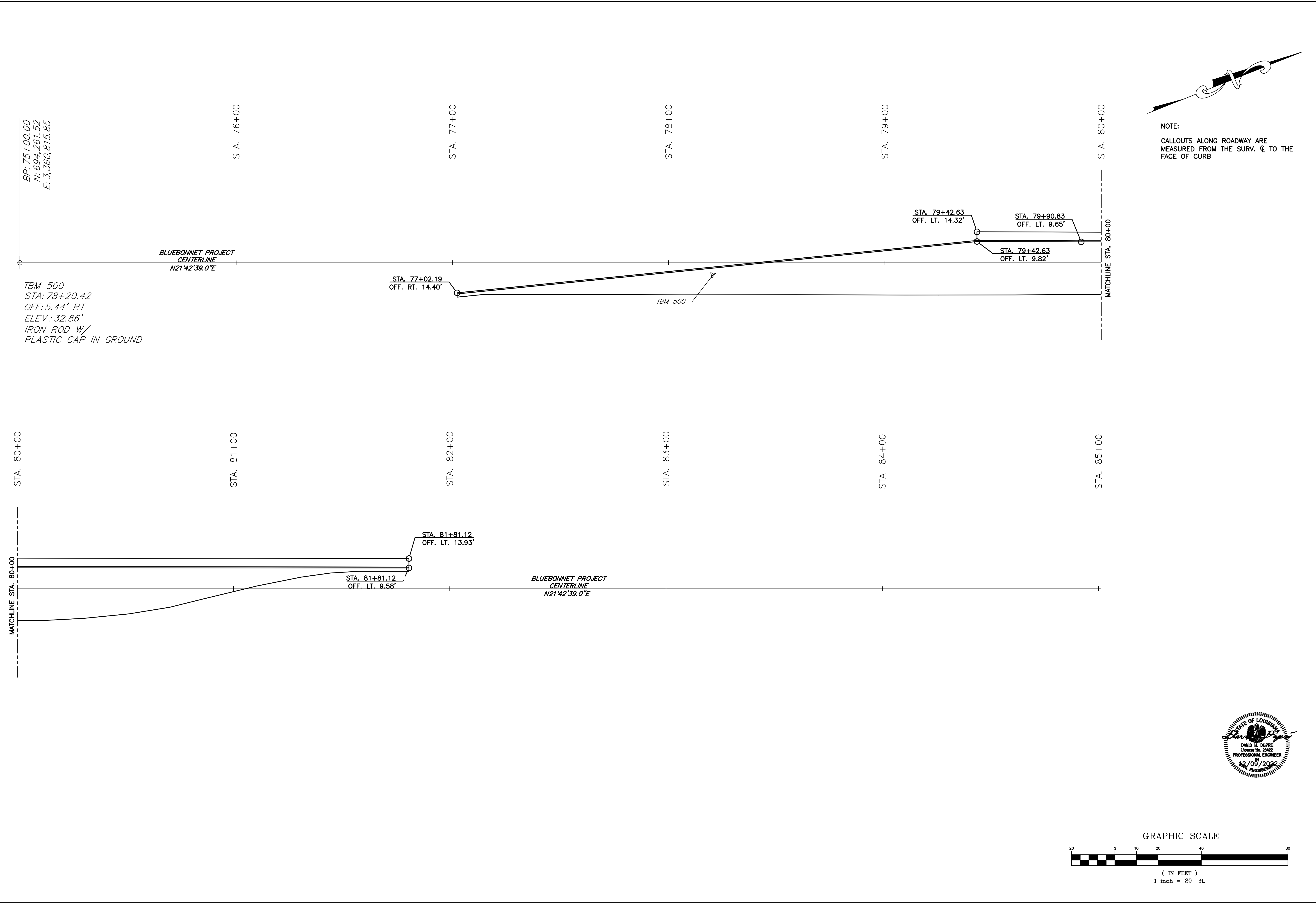
- REQ'D CONCRETE PAVEMENT
- REQ'D INCIDENTAL CONCRETE
- REQ'D SIDEWALK REMOVAL
- REMOVE TREE

NOTES:

1. LIMITS OF CONSTRUCTION ARE WITHIN THE EXISTING PROJECT R/W UNLESS OTHERWISE NOTED IN THE PLANS.
2. CLEAN ALL EXISTING DRAINAGE PIPES (EXCLUDING THE BOX CULVERT) WITHIN THE LIMITS OF THIS PROJECT FROM STA. 77+02.18 TO STA. 99+91.28. (N.D.P.)



SHEET NUMBER	7	PARISH	EAST BATON ROUGE PARISH	DESIGNED	DHD	CHECKED	DHD
CITY PROJECT	20-CP-HC-0046	T/JC		DATE	12/09/2022	SHEET	4 OF 4
STATE PROJECT	N/A	REVISION DESCRIPTION		NO.		DATE	
PLAN AND PROFILES JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD							
MEYER ENGINEERS, LTD.							



SHEET NUMBER		8	
PARISH	EAST BATON ROUGE PARISH	CITY PROJECT	20-CP-HC-0046
DESIGNED	DHD	DATE	12/09/2022
CHECKED	DHD	SHEET	1 OF 2
DESIGNED	TJC	DATE	
CHECKED	DHD	SHEET	
NO.		DATE	
		REVISION DESCRIPTION	BY
<p>BR CITY OF BATON ROUGE ENGINEERS & ARCHITECTS</p> <p>MEYER ENGINEERS, LTD.</p>			



GEOMETRIC DETAILS
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD

NO.	DATE	REVISION DESCRIPTION	BY

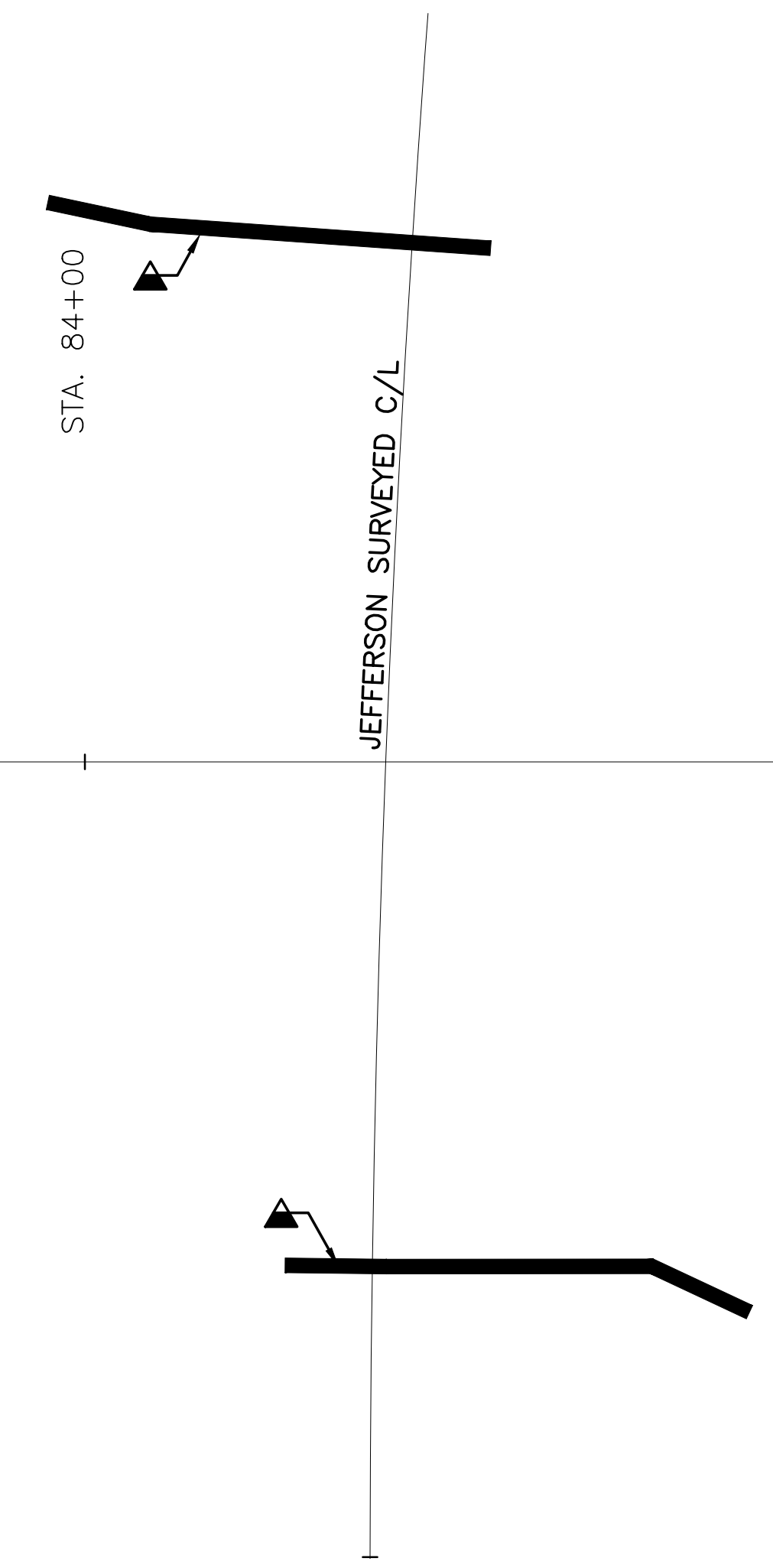
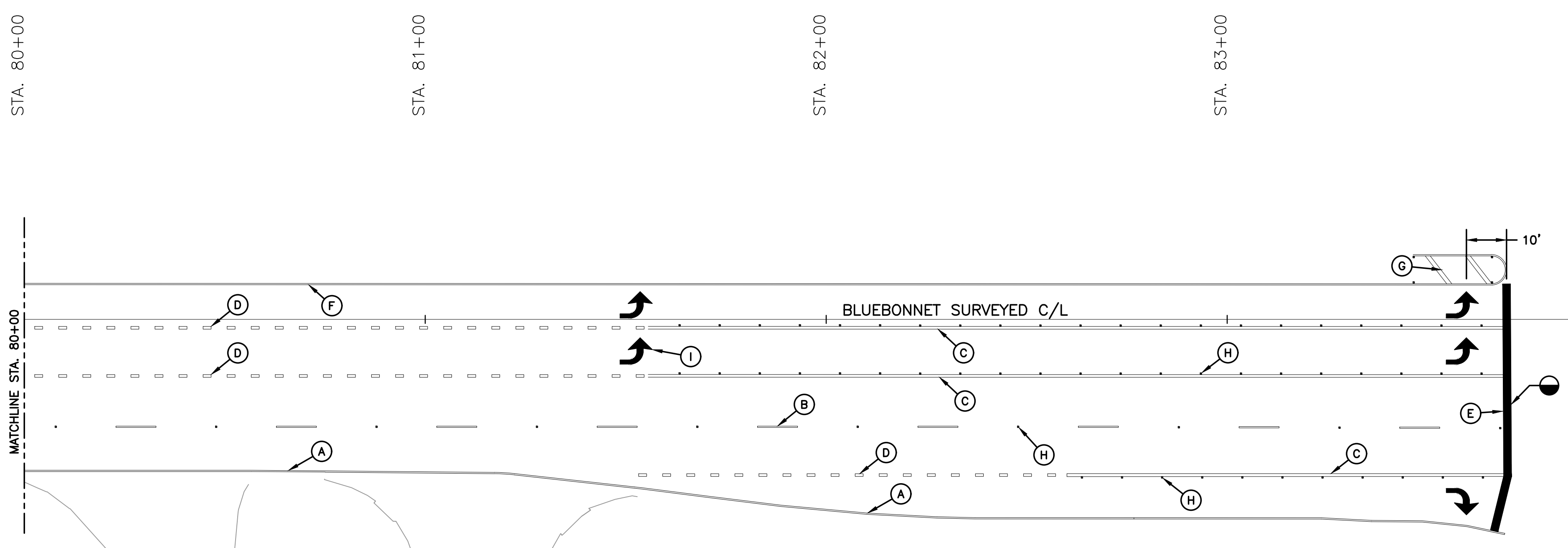
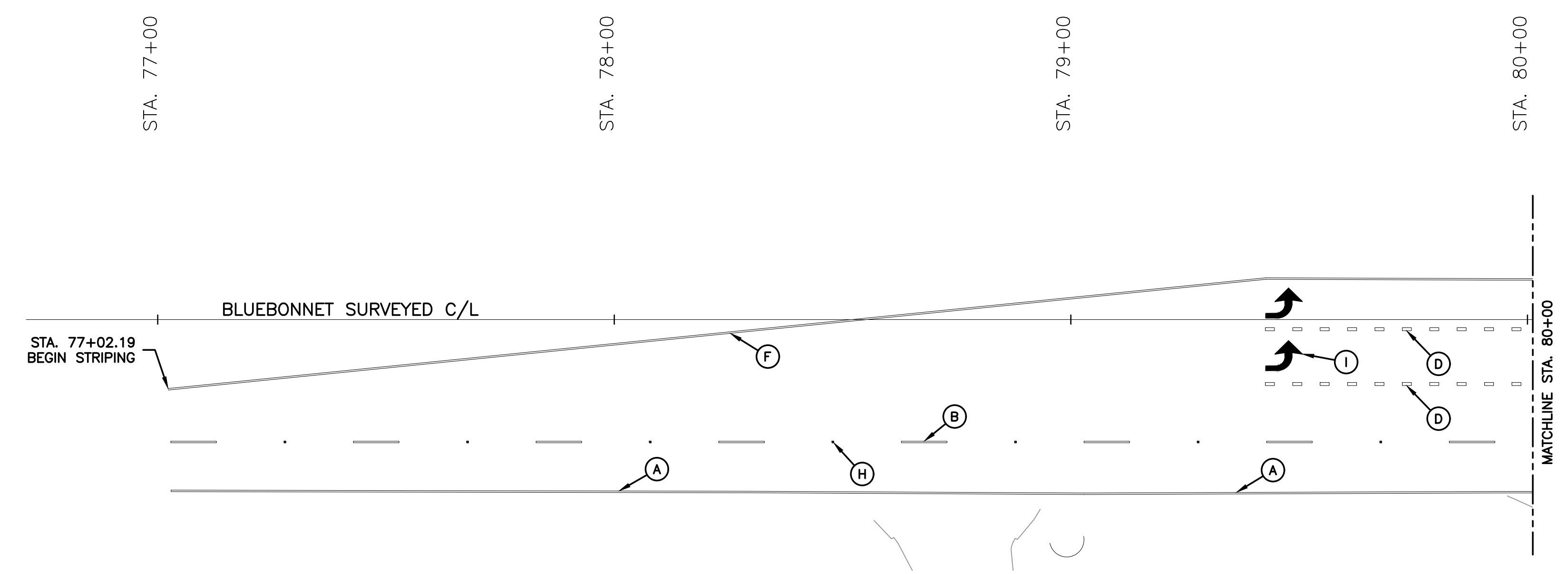


PAVEMENT MARKINGS
 JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD

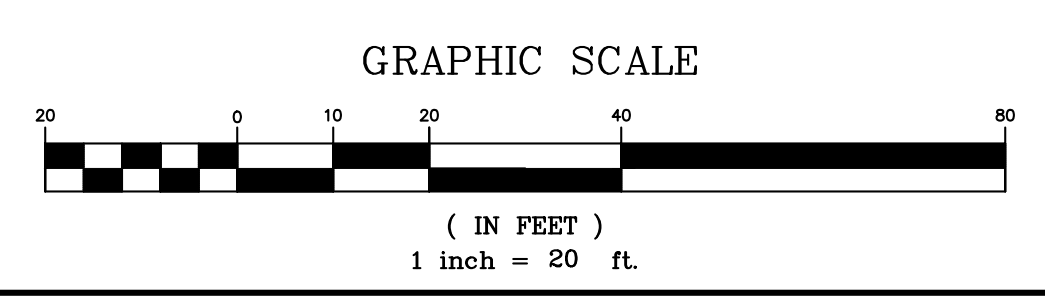
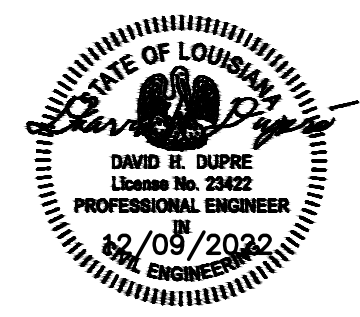


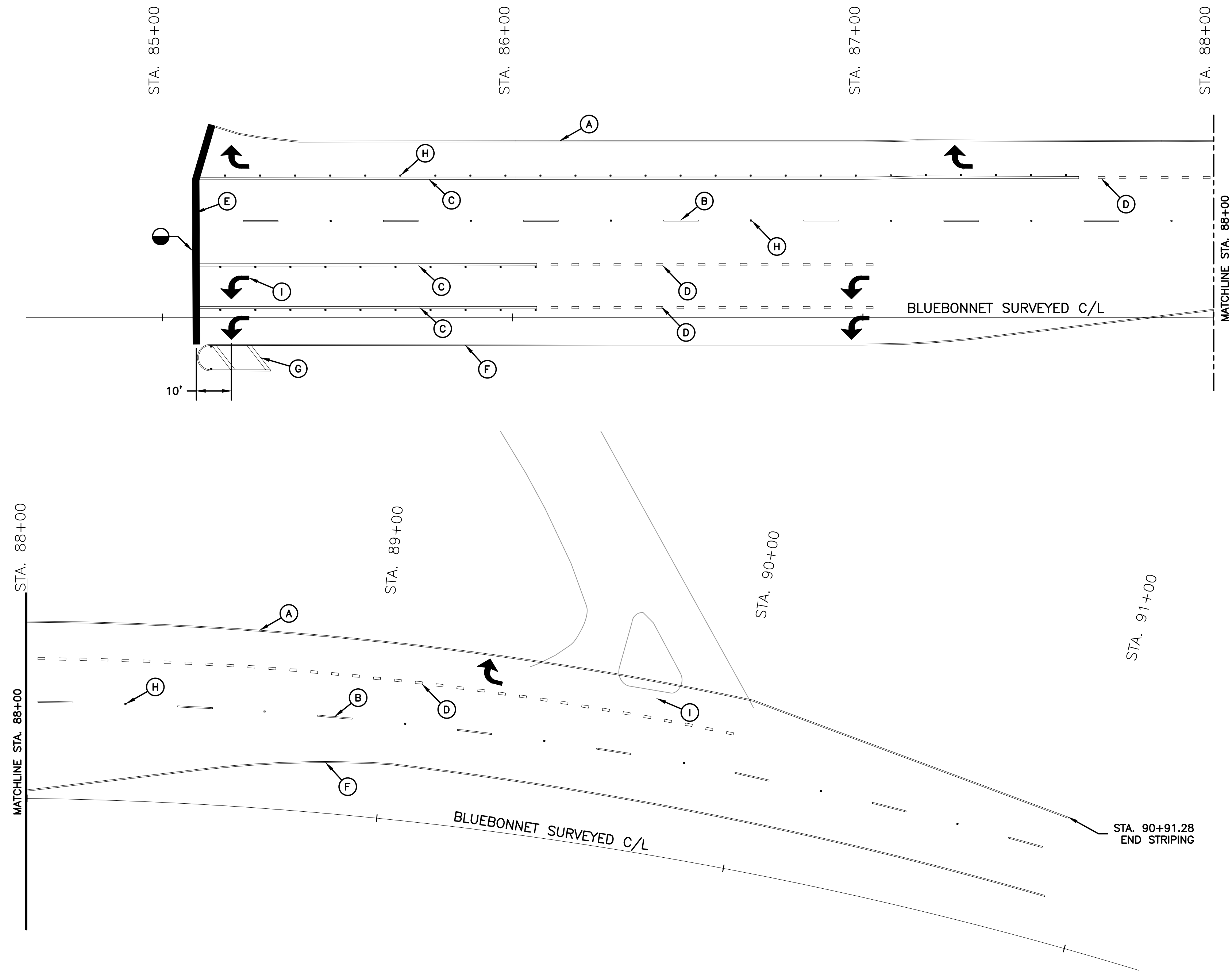
MEYER ENGINEERS, LTD.

- LEGEND:**
- (A) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (SOLID LINE) (4" WIDTH) (THERMOPLASTIC 90 MIL)
 - (B) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (BROKEN) (4" WIDTH) (THERMOPLASTIC 90 MIL)
 - (C) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (SOLID LINE) (8" WIDTH) (THERMOPLASTIC 90 MIL)
 - (D) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (TYPE B DOTTED) (8" WIDTH) (THERMOPLASTIC 90 MIL)
 - (E) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (SOLID) (24" WIDTH) (THERMOPLASTIC 125 MIL)(INFORMATIONAL ONLY)
 - (F) PERMANENT YELLOW PLASTIC PAVEMENT STRIPING (SOLID LINE) (4" WIDTH) (THERMOPLASTIC 90 MIL)
 - (G) PERMANENT YELLOW PLASTIC PAVEMENT STRIPING (SOLID LINE) (12" WIDTH) (THERMOPLASTIC 90 MIL)
 - (H) REFLECTORIZED PAVEMENT MARKERS (CLASS IV) (CRYSTAL/RED REFLECTOR)
 - (I) PLASTIC PAVEMENT LEGENDS AND SYMBOLS



- STOP BAR ON JEFFERSON TO BE REPLACED ON A FUTURE PROJECT
- STOP BAR, CROSS WALK, AND MEDIAN STRIPING TO REMAIN AND BE REPLACED IN A FUTURE PROJECT BY OTHERS
- NOTES:**
- REMOVE ALL PAVEMENT MARKINGS WITHIN THE LIMITS OF THE REQ'D PAVEMENT MARKINGS. THE EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY GRINDING.
 - UNLESS OTHERWISE NOTED ON THIS PLAN, WORK SHALL BE IN ACCORDANCE WITH EBR STANDARD PLAN 905-50.
 - FOR TURN LANES ONTO JEFFERSON HWY., REFER TO LADOTD STANDARD PLAN PM-05.





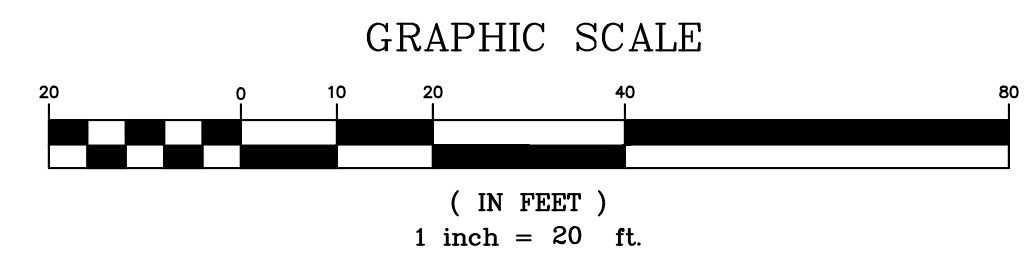
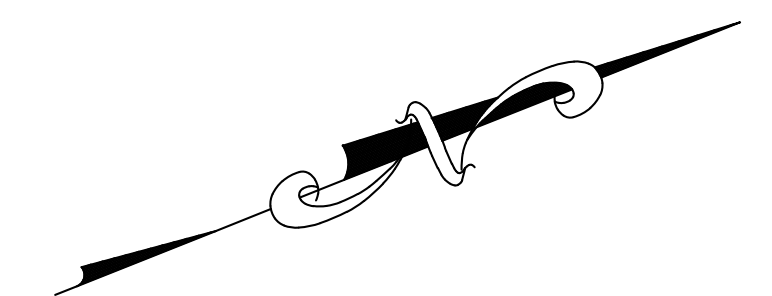
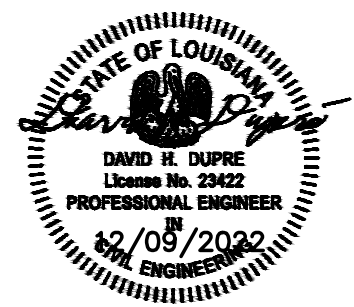
LEGEND:

- (A) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (SOLID LINE) (4" WIDTH) (THERMOPLASTIC 90 MIL)
- (B) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (BROKEN) (4" WIDTH) (THERMOPLASTIC 90 MIL)
- (C) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (SOLID LINE) (8" WIDTH) (THERMOPLASTIC 90 MIL)
- (D) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (TYPE B DOTTED) (8" WIDTH) (THERMOPLASTIC 90 MIL)
- (E) PERMANENT WHITE PLASTIC PAVEMENT STRIPING (SOLID) (24" WIDTH) (THERMOPLASTIC 125 MIL)(INFORMATIONAL ONLY)
- (F) PERMANENT YELLOW PLASTIC PAVEMENT STRIPING (SOLID LINE) (4" WIDTH) (THERMOPLASTIC 90 MIL)
- (G) PERMANENT YELLOW PLASTIC PAVEMENT STRIPING (SOLID LINE) (12" WIDTH) (THERMOPLASTIC 90 MIL)
- (H) REFLECTORIZED PAVEMENT MARKERS
- (I) PLASTIC PAVEMENT LEGENDS AND SYMBOLS

● STOP BAR, CROSS WALK, AND MEDIAN STRIPING TO REMAIN AND BE REPLACED IN A FUTURE PROJECT BY OTHERS

NOTES:

1. REMOVE ALL PAVEMENT MARKINGS WITHIN THE LIMITS OF THE REQ'D PAVEMENT MARKINGS. THE EXISTING PAVEMENT MARKINGS SHALL BE REMOVED BY GRINDING.
2. UNLESS OTHERWISE NOTED ON THIS PLAN, WORK SHALL BE IN ACCORDANCE WITH EBR STANDARD PLAN 905-50.
3. FOR TURN LANES ONTO JEFFERSON HWY., REFER TO LADOTD STANDARD PLAN PM-05.



SHEET NUMBER	11
DESIGNED DHD	
CHECKED DHD	
DATE	12/09/2022
SHEET	2 OF 2
PARISH	EAST BATON ROUGE PARISH
CITY PROJECT	20-CP-HC-0046
STATE PROJECT	N/A
NO.	
DATE	
REVISION DESCRIPTION	
BY	



PAVEMENT MARKINGS
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD



MEYER ENGINEERS, LTD.

STA. 77+00

STA. 78+00

STA. 79+00

STA. 80+00

STA. 81+00

STA. 86+00

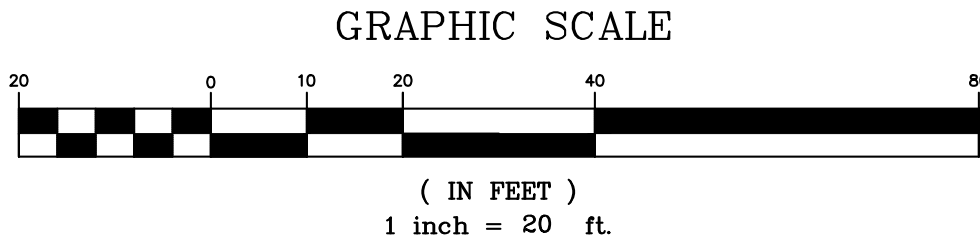
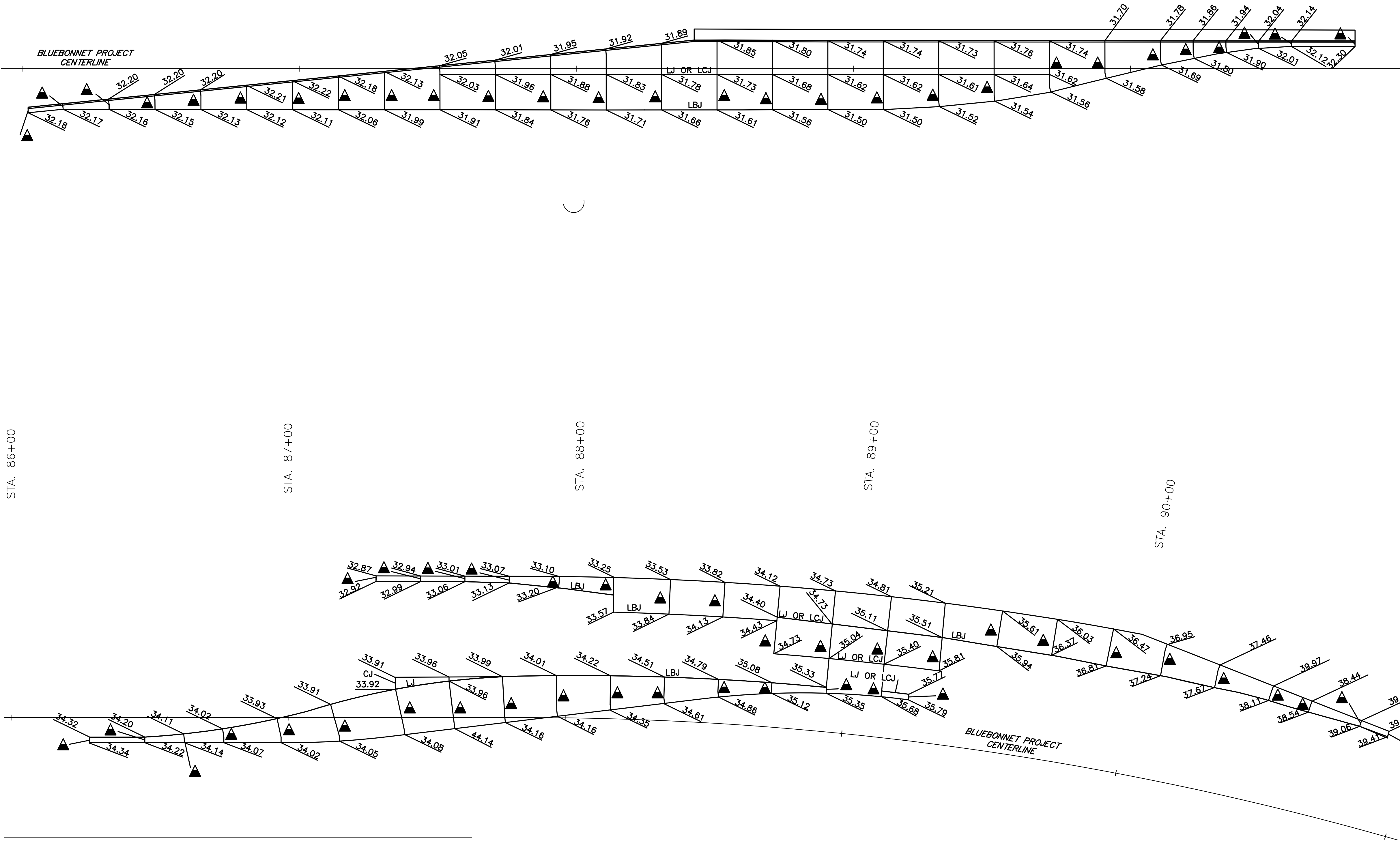
STA. 87+00

STA. 88+00

STA. 89+00

STA. 90+00

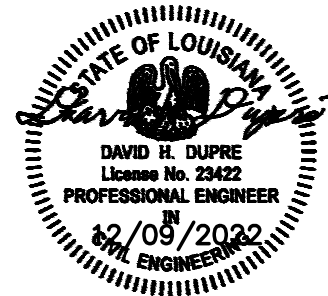
STA. 91+00



NOTES:

- ELEVATIONS SHOWN FROM STA. 77+02 TO STA. 79+91 ARE FOR THE TOP OF ASPHALT OVERLAY.
- JOINT LOCATIONS AND ELEVATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY JOINT LOCATIONS AND ELEVATIONS IN FIELD AND ALIGN PROPOSED JOINTS WITH EXISTING
- MATCH LOCATION OF ALL EXISTING EXPANSION JOINTS.

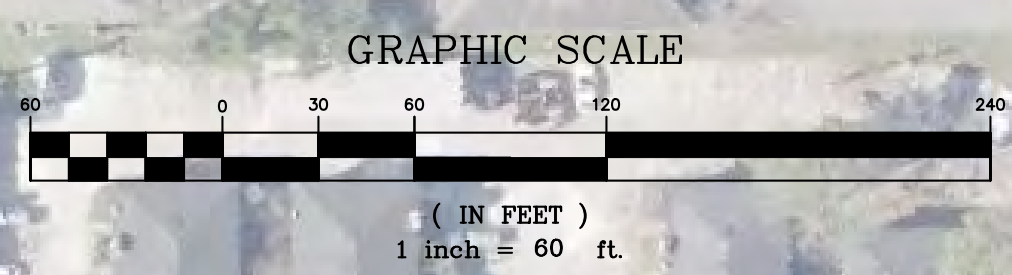
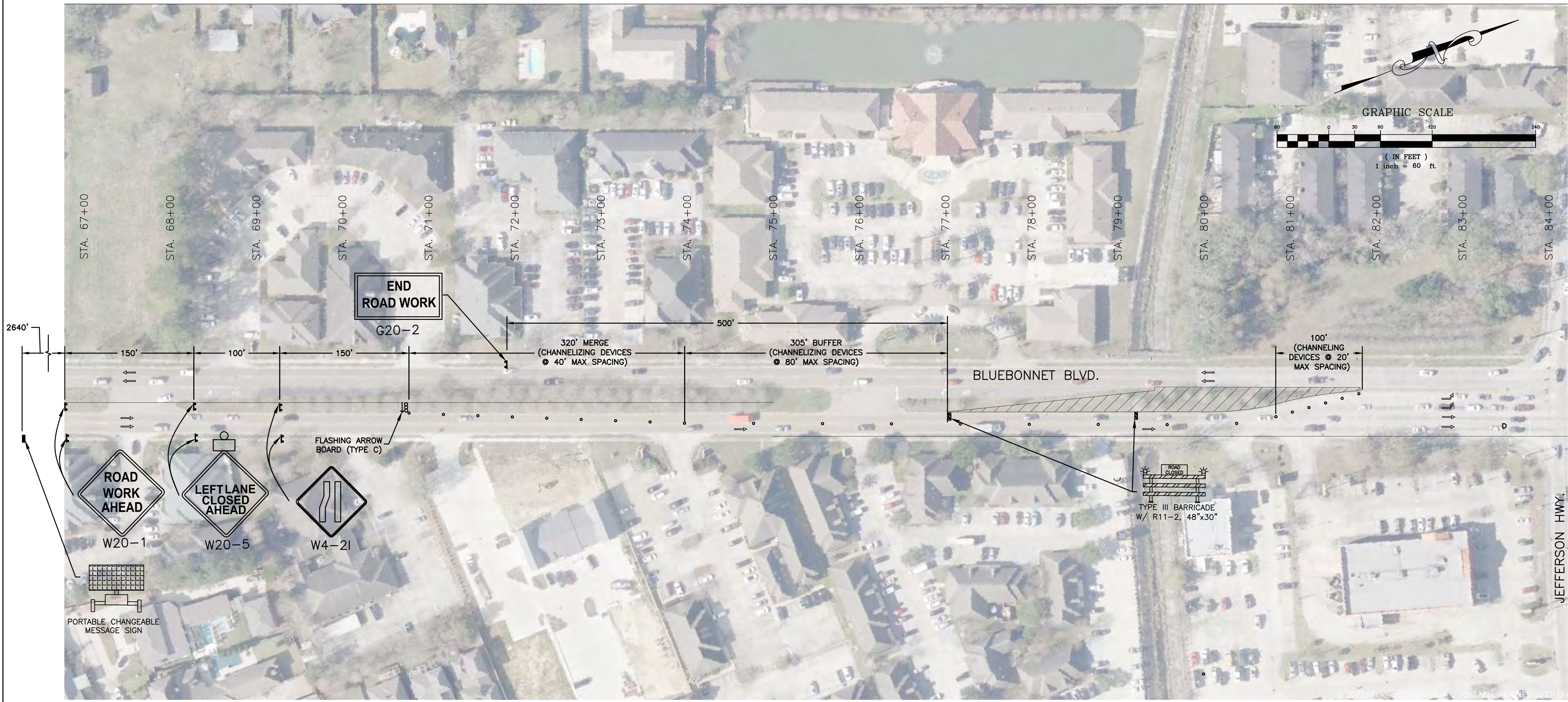
LJ = LONGITUDINAL JOINT, TYP.
 DJ = DUMMY JOINT
 LBJ = LONGITUDINAL BUTT JOINT
 CJ = CONSTRUCTION JOINT
 LCJ = LONGITUDINAL CONSTRUCTION JOINT
 ▲ = DJ OR CJ



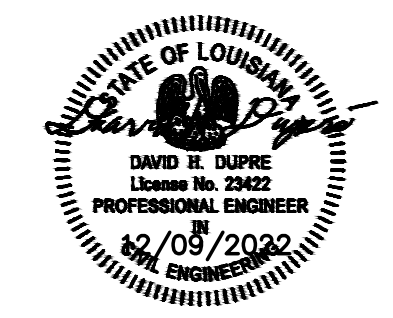
SHEET NUMBER	12
PARISH	EAST BATON ROUGE PARISH
CITY PROJECT	20-CP-HC-0046
STATE PROJECT	N/A
DESIGNED DHD	
CHECKED DHD	
DATE	12/09/2022
SHEET	1 OF 1
NO.	
DATE	
BY	
REVISION DESCRIPTION	

GRAPHICAL GRADES AND JOINT LAYOUT
 JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD

MEYER ENGINEERS, LTD.



**PHASE 1 - LEFT LANE CLOSURE
SOUTH OF JEFFERSON**



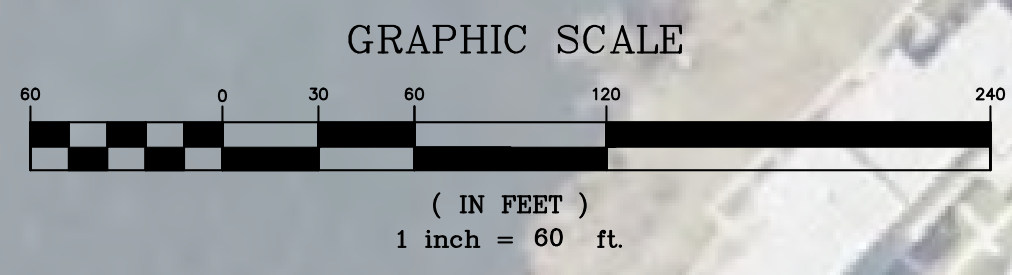
TRAFFIC NOTES:

1. ALL SIGNS SHALL BE ORANGE, MOUNTED ON POSTS, 7' FROM GRADE TO BOTTOM OF SIGN, AND 48"x48".
2. FOR WORK NEAR INTERSECTION SEE SHEET 5. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO PROJECT ENGINEER FOR THIS WORK.
3. FOR ADDITIONAL TRAFFIC CONTROL NOTES, SEE SHEET 1a.

LEGEND:

- WORK ZONE
- CHANNELIZING DEVICES (PLASTIC DRUMS) WITH TYPE C OR D LIGHTS ON EACH DRUM.
- TRAFFIC SIGNS
- FLASHING ARROW BOARD (TYPE C)
- DIRECTION OF TRAVEL
- TYPE B LIGHT
- TYPE 3 BARRICADE
- PORTABLE CHANGEABLE MESSAGE SIGN

SHEET NUMBER	13	PARISH	EAST BATON ROUGE PARISH	CITY PROJECT	20-CP-HC-0046
DESIGNED / DHD		STATE PROJECT	N/A	DATE	12/09/2022
CHECKED / DHD		NO. OF SHEETS	1 OF 3	REVISION DESCRIPTION	
DATE		BY			
SUGGESTED CONSTRUCTION SIGNING JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD					
MEYER ENGINEERS, LTD.					



**PHASE 1 - RIGHT LANE CLOSURE
 NORTH OF JEFFERSON**

TRAFFIC NOTES:

- ALL SIGNS SHALL BE ORANGE, MOUNTED ON POSTS, 7' FROM GRADE TO BOTTOM OF SIGN, AND 48"x48".
 - FOR ADDITIONAL TRAFFIC CONTROL NOTES, SEE SHEET 1a.
- ▲ ADDITIONAL SIDEWALK CLOSURE SIGN TO BE PLACED ON THE WEST SIDE OF THE INTERSECTION OF BLUEBONNET BLVD. AND CELTIC DR. AT APPROXIMATE STA. 107+15.



LEGEND:

- WORK ZONE
- CHANNELIZING DEVICES (PLASTIC DRUMS) WITH TYPE C OR D LIGHTS ON EACH DRUM.
- TRAFFIC SIGNS
- FLASHING ARROW BOARD (TYPE C)
- DIRECTION OF TRAVEL
- TYPE B LIGHT
- TYPE 3 BARRICADE
- PORTABLE CHANGEABLE MESSAGE SIGN

SHEET NUMBER	14
PARISH	EAST BATON ROUGE PARISH
CITY PROJECT	20-CP-HC-0046
STATE PROJECT	N/A
DESIGNED DHD	
CHECKED DHD	
DATE	12/09/2022
DESIGNED TJC	
CHECKED DHD	
DATE	2 OF 3
NO.	
DATE	
BY	
REVISION DESCRIPTION	



SUGGESTED CONSTRUCTION SIGNING
 AND SEQUENCING
 JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD



MEYER ENGINEERS, LTD.



**PHASE 2 - LEFT LANE CLOSURE
NORTH OF JEFFERSON**



TRAFFIC NOTES:

1. ALL SIGNS SHALL BE ORANGE, MOUNTED ON POSTS, 7' FROM GRADE TO BOTTOM OF SIGN, AND 48"x48".
2. FOR WORK NEAR INTERSECTION SEE SHEET 6. CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO PROJECT ENGINEER FOR THIS WORK.
3. FOR ADDITIONAL TRAFFIC CONTROL NOTES, SEE SHEET 1a.

LEGEND:

- WORK ZONE
- CHANNELIZING DEVICES (PLASTIC DRUMS) WITH TYPE C OR D LIGHTS ON EACH DRUM.
- TRAFFIC SIGNS
- FLASHING ARROW BOARD (TYPE C)
- DIRECTION OF TRAVEL
- TYPE B LIGHT
- TYPE 3 BARRICADE
- PORTABLE CHANGEABLE MESSAGE SIGN

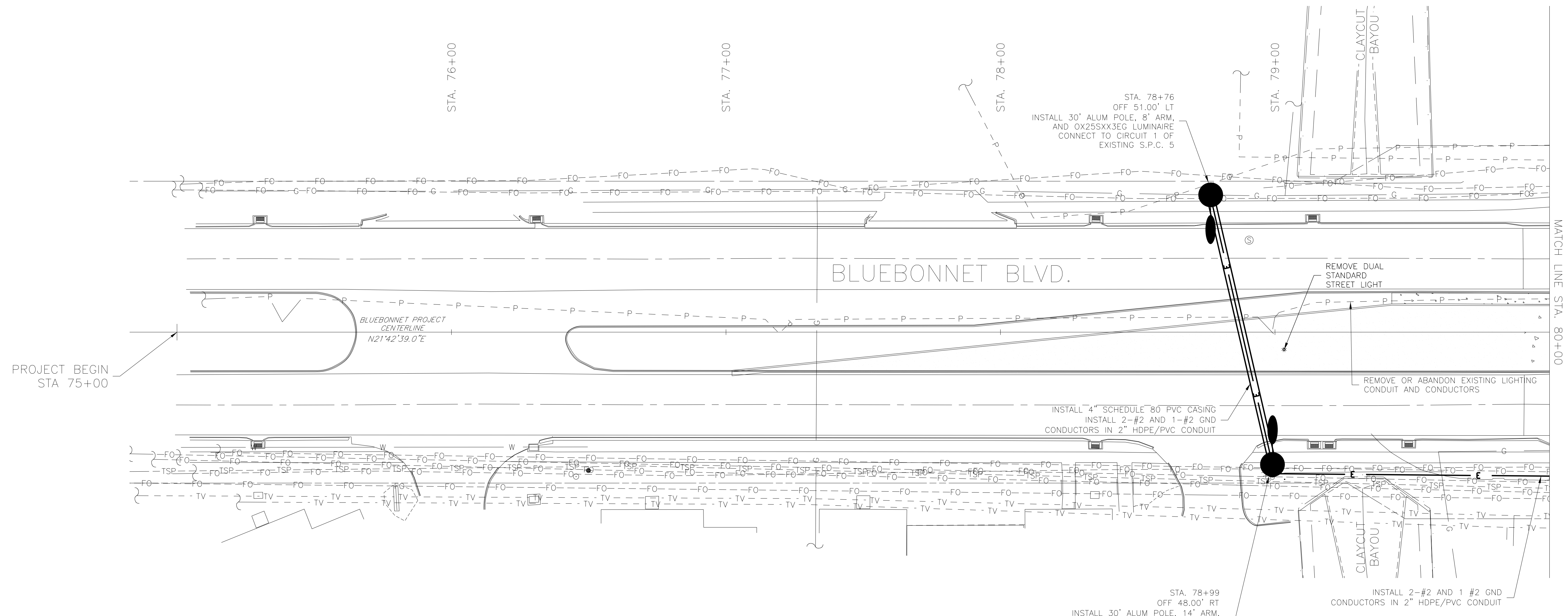
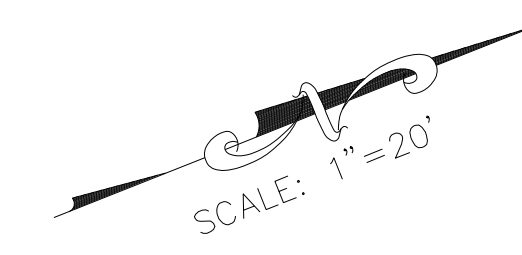
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PARISH	EAST BATON ROUGE PARISH
CITY PROJECT	20-CP-HC-0046
STATE PROJECT	N/A
DESIGNED	DHD
CHECKED	DHD
DATE	12/08/2022
BY	TJG
NO.	3 OF 3
REVISION DESCRIPTION	
DATE	







SUGGESTED CONSTRUCTION SIGNING AND SEQUENCING
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD

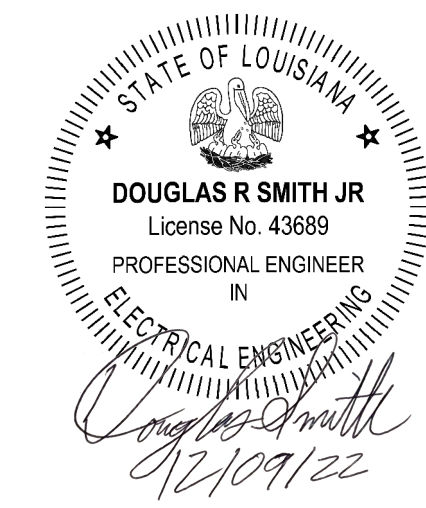


MEYER ENGINEERS, LTD.



LEGEND

-  EXISTING LIGHT POLE
-  ELECTRICAL JUNCTION BOX
-  NEW 30' ALUM POLE WITH BREAKAWAY BASE
LUMINAIRE TYPE - OX25SXX3EG - 250W HPS
- 4" SCHEDULE 80 HDPE/PVC CASING
-  HDPE/PVC CONDUIT WITH CONDUCTORS (UNDERGROUND)



SHEET NUMBER 101

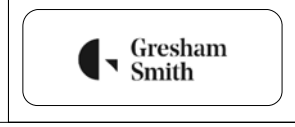
PARISH EAST BATON ROUGE PARISH
CITY PROJECT 20-CP-HC-0046
STATE PROJECT N/A

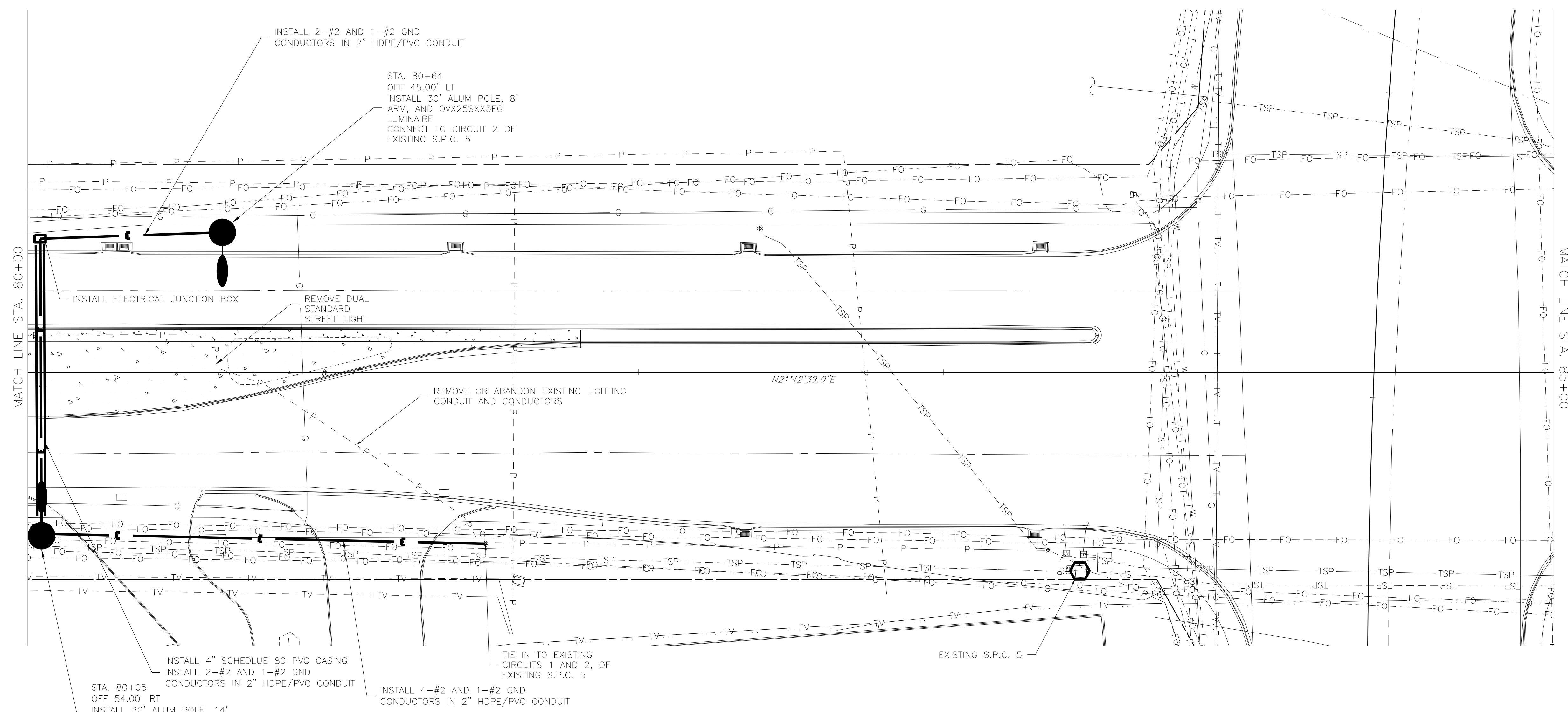
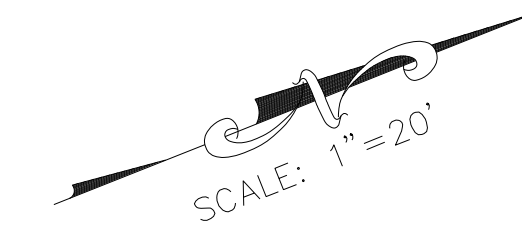
DESIGNED DS
CHECKED JA
DETAILED DK
CHECKED DS
DATE 03/10/2022
SHEET

NO.	DATE	REVISION DESCRIPTION	BY





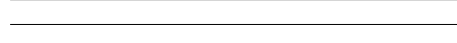



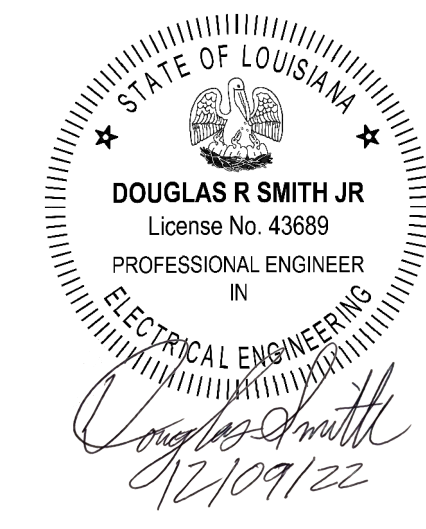
STREET LIGHTING PLANS
STA 75+00 TO 80+00
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD





LEGEND

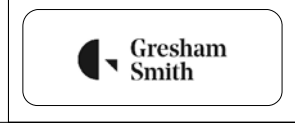
-  EXISTING LIGHT POLE
-  ELECTRICAL JUNCTION BOX
-  SECONDARY POWER CONTROLLER
-  NEW 30' ALUM POLE WITH BREAKAWAY BASE
LUMINAIRE TYPE - OVX25SXX3EG - 250W HPS
-  4" SCHEDULE 80 HDPE/PVC CASING
-  HDPE/PVC CONDUIT WITH CONDUCTORS (UNDERGROUND)



NO.	DATE	REVISION DESCRIPTION	BY



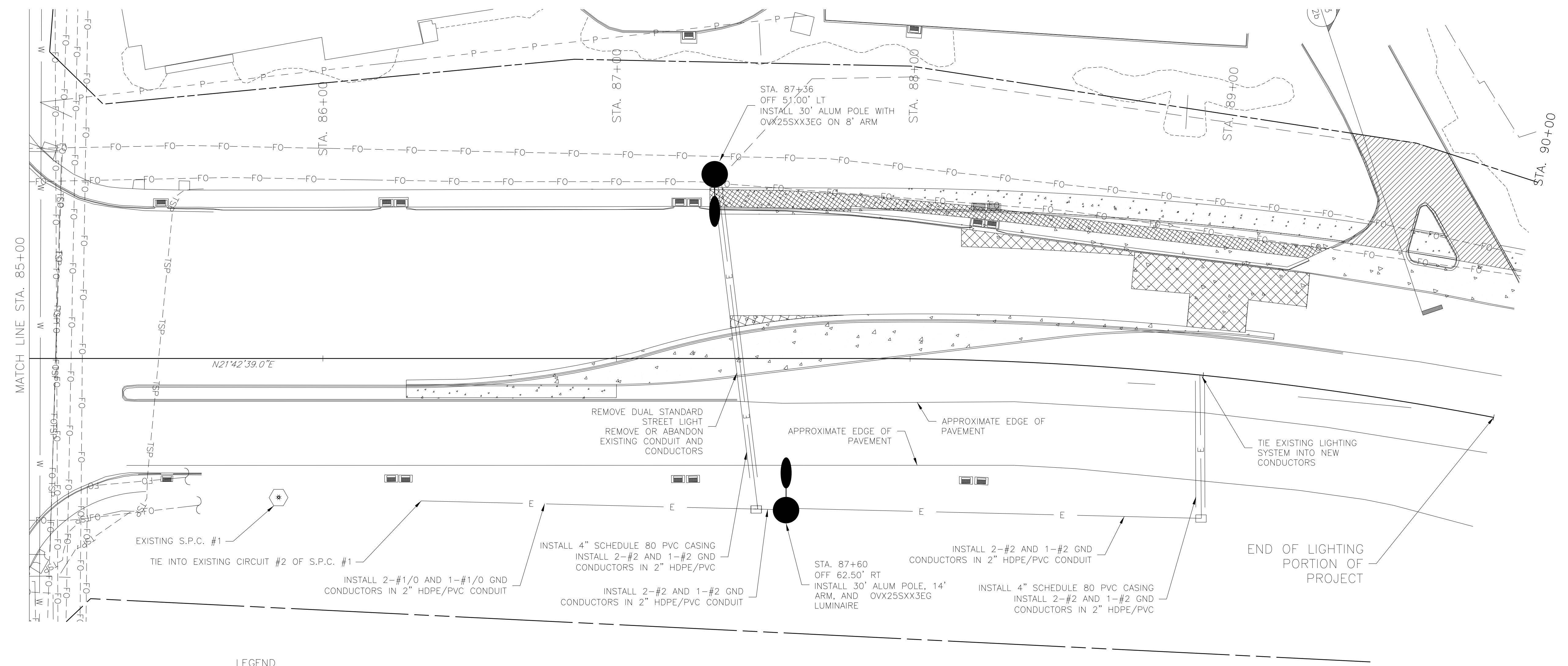
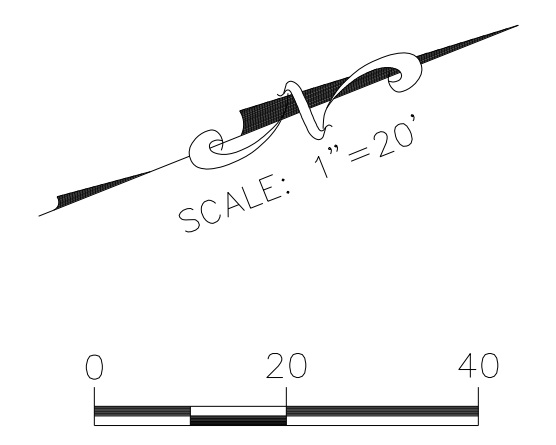
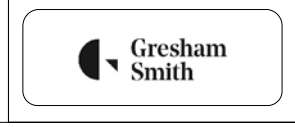
STREET LIGHTING PLANS
 STA 80+00 TO 85+00
 JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD



NO.	DATE	REVISION DESCRIPTION	BY

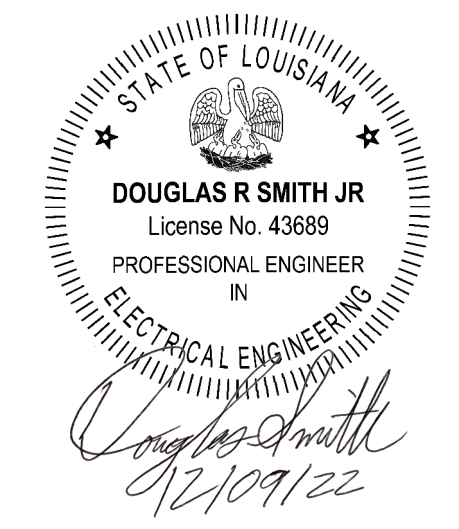


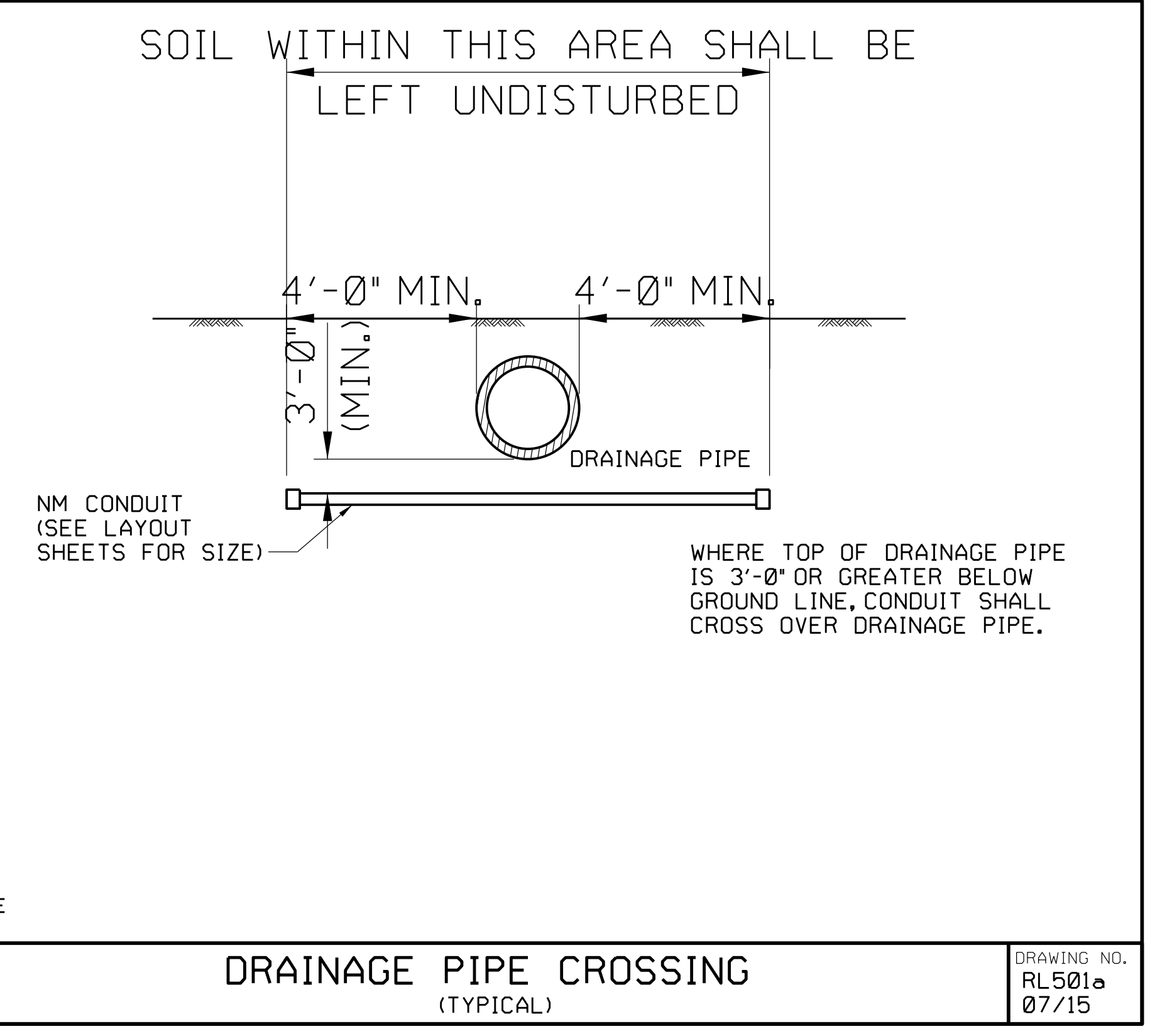
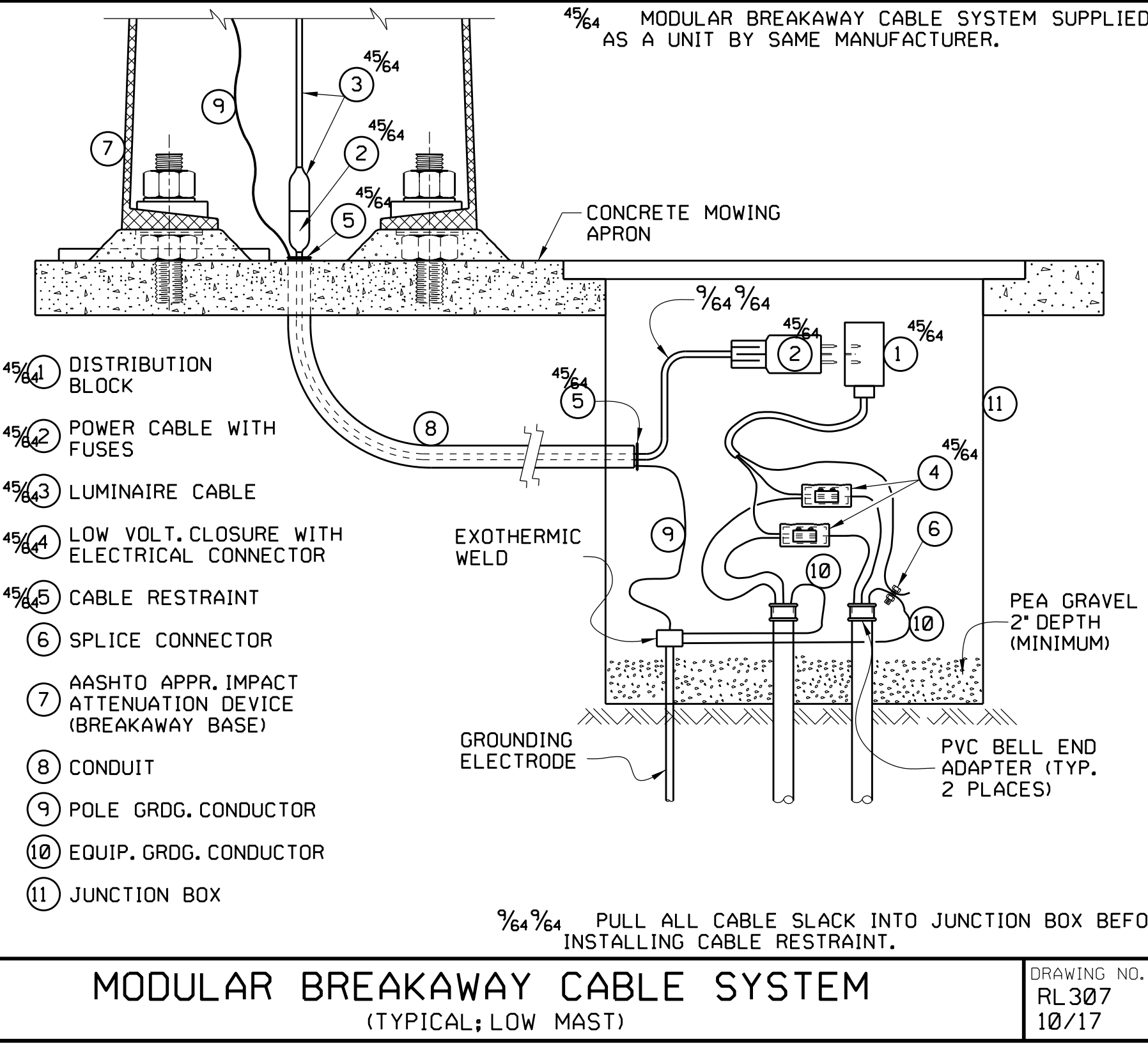
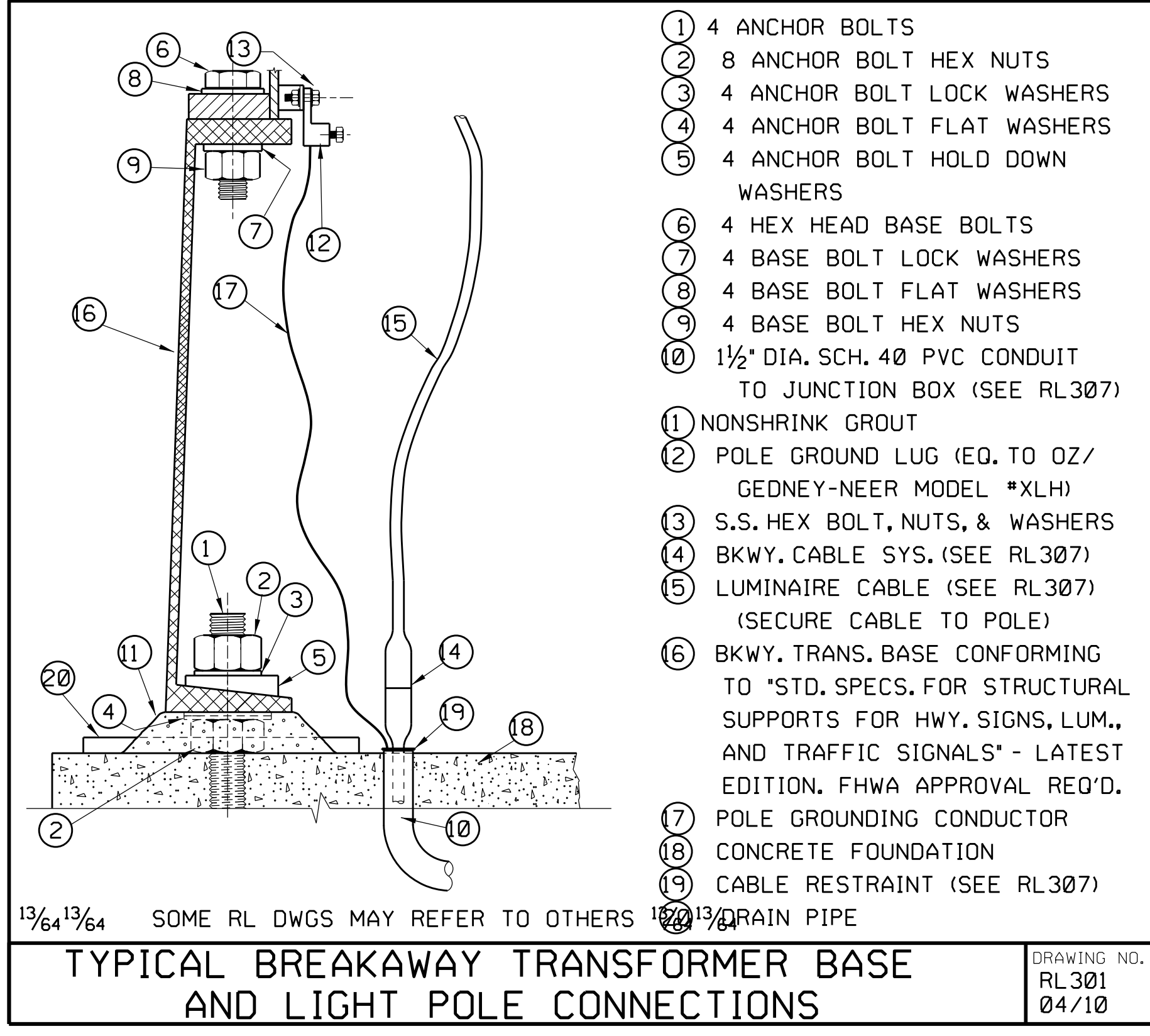
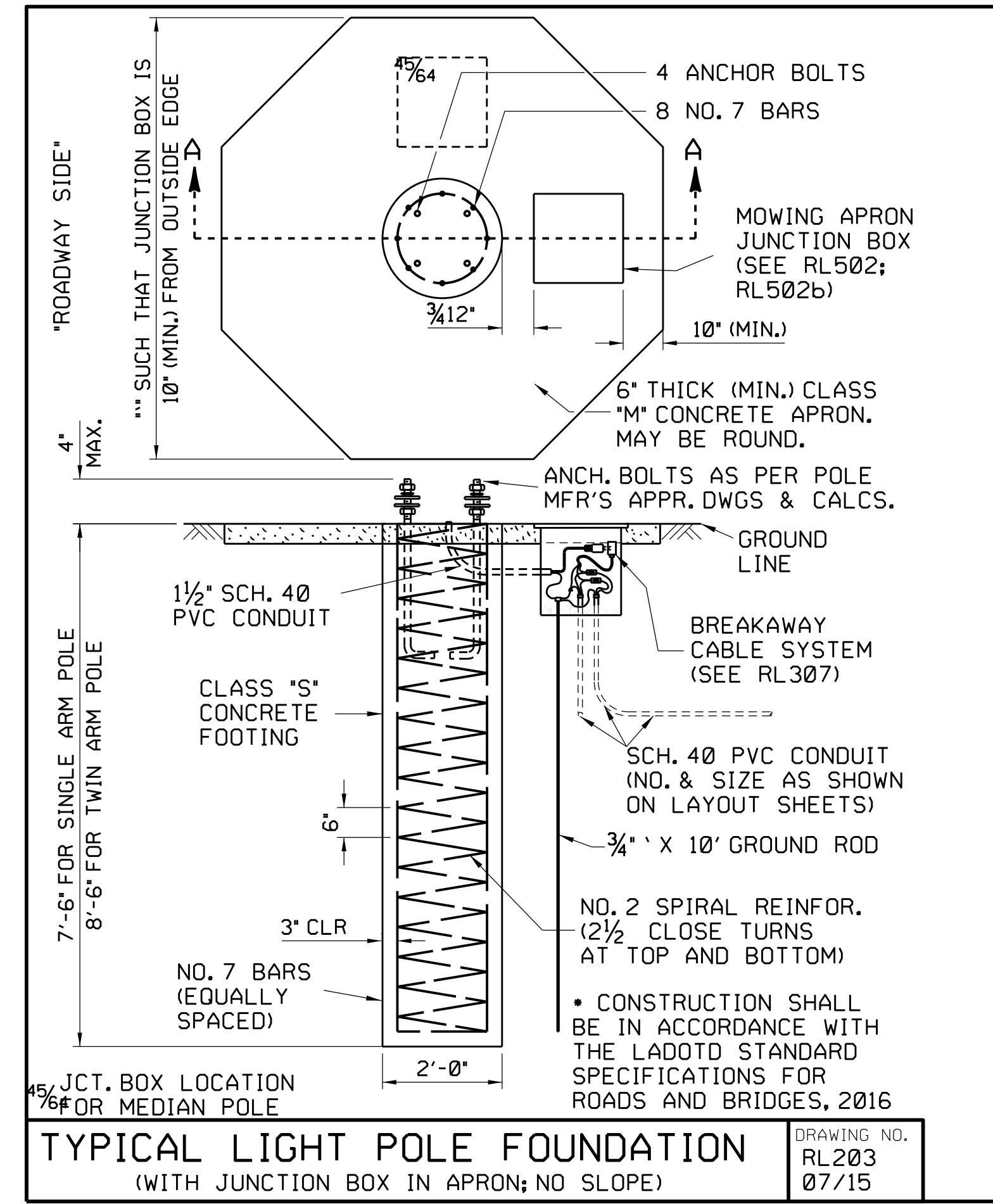
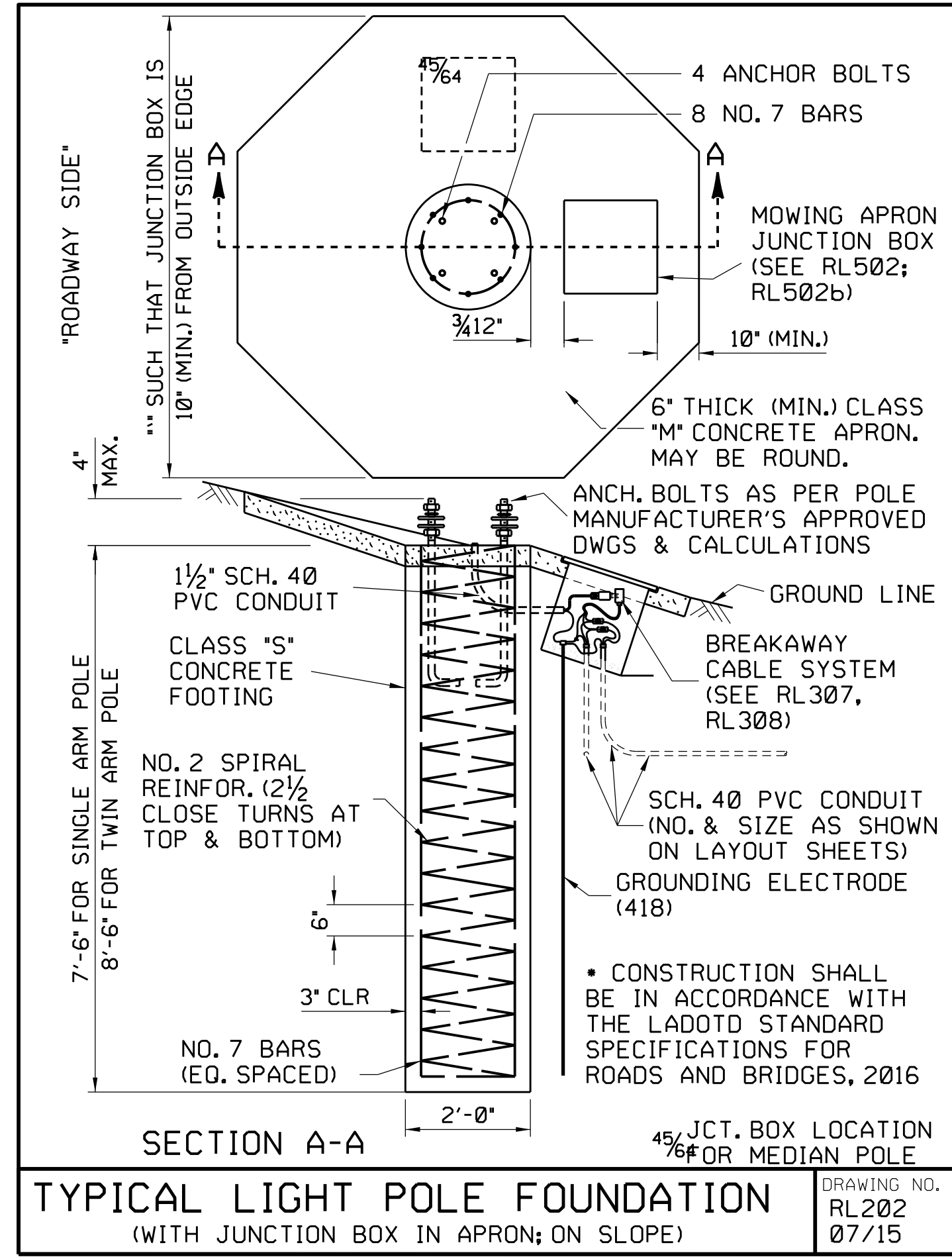
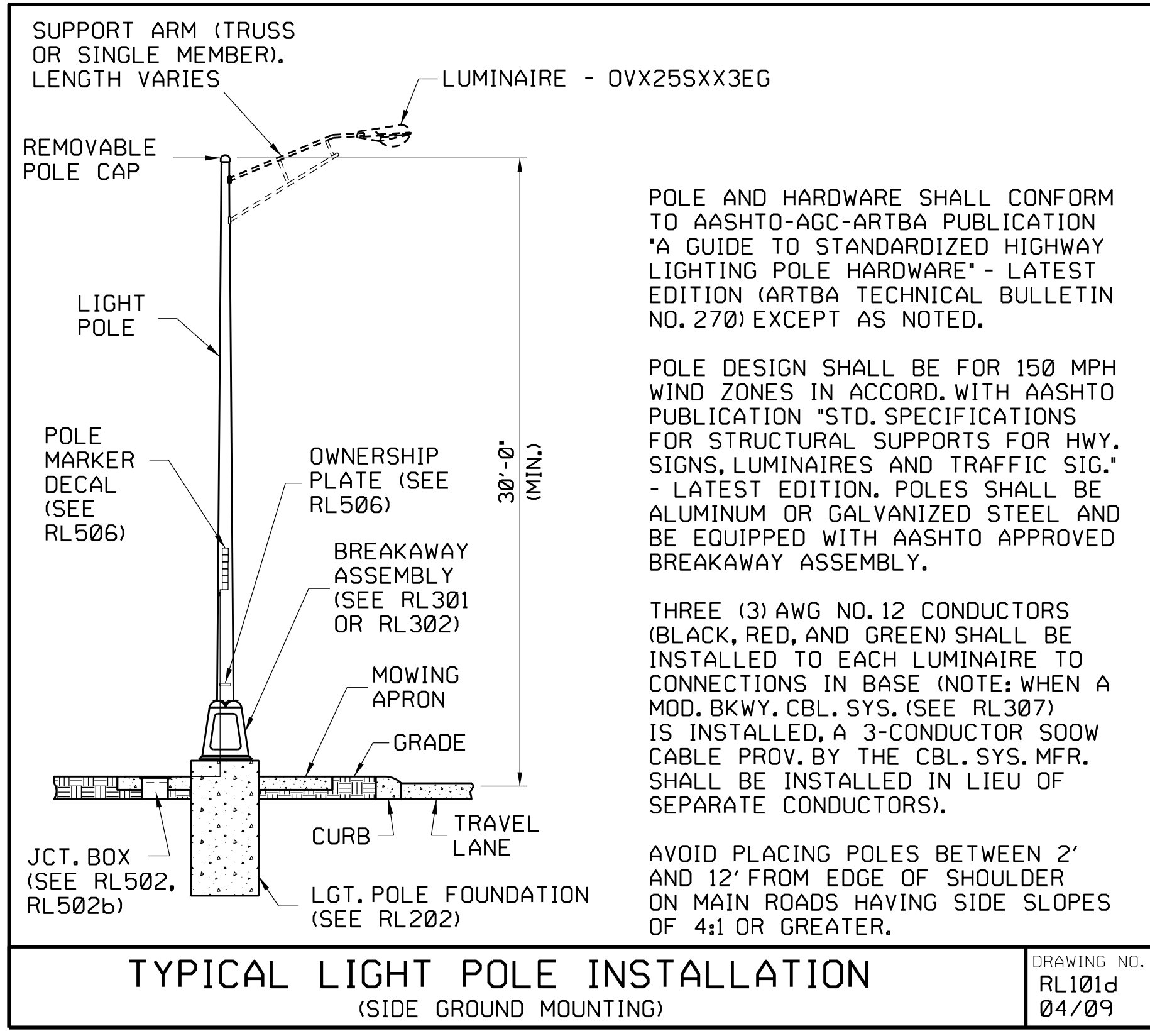
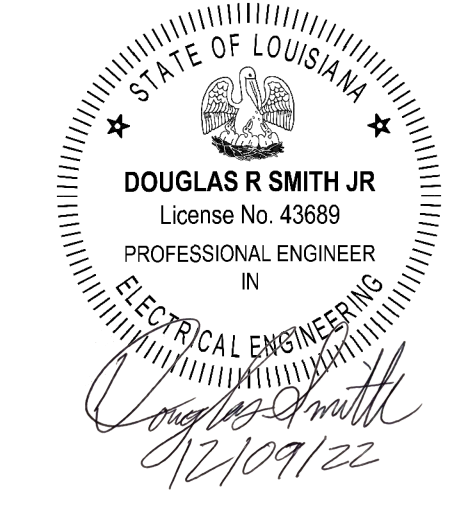
STREET LIGHTING PLANS
 STA 85+00 TO 90+00
 JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD

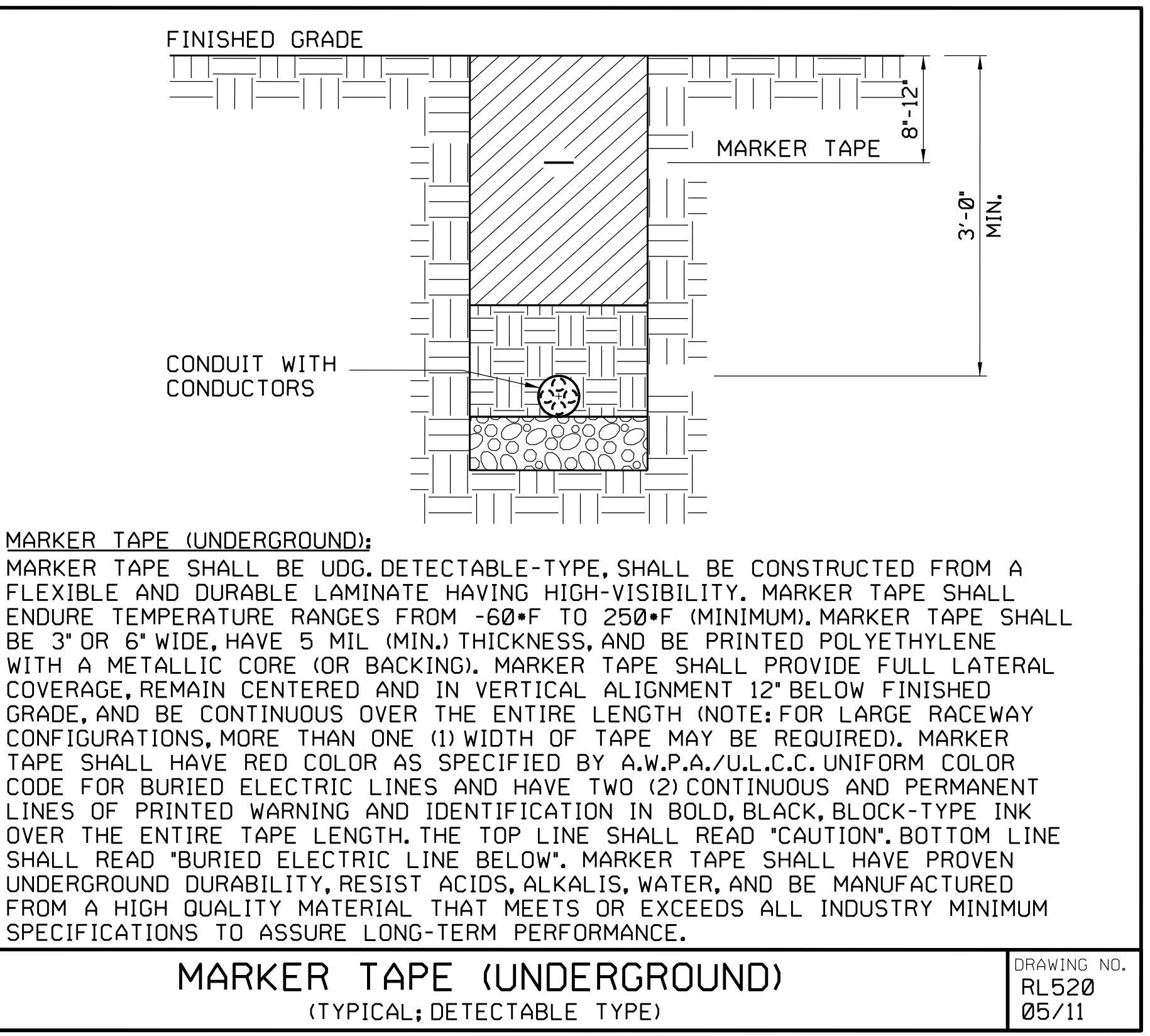
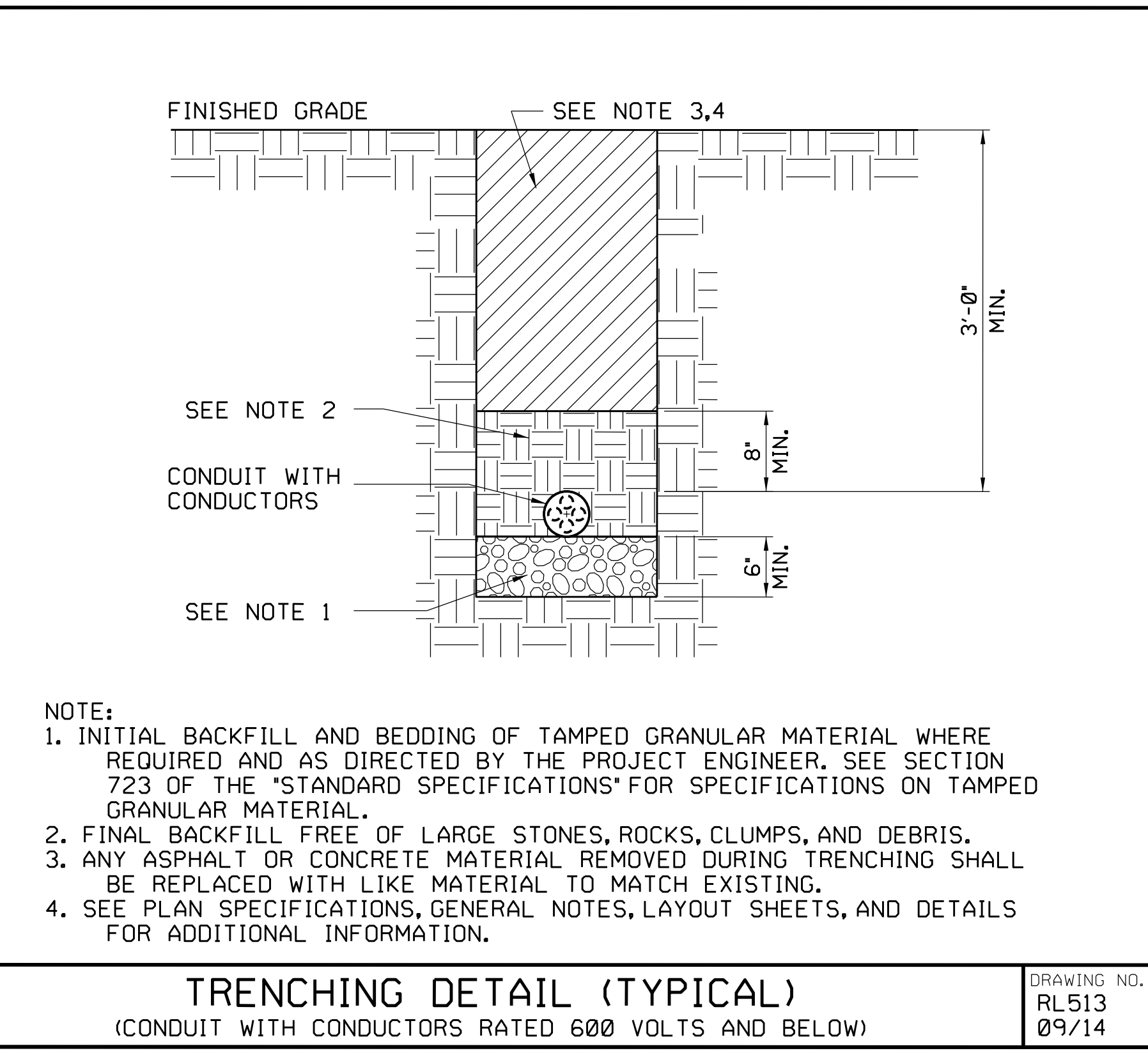
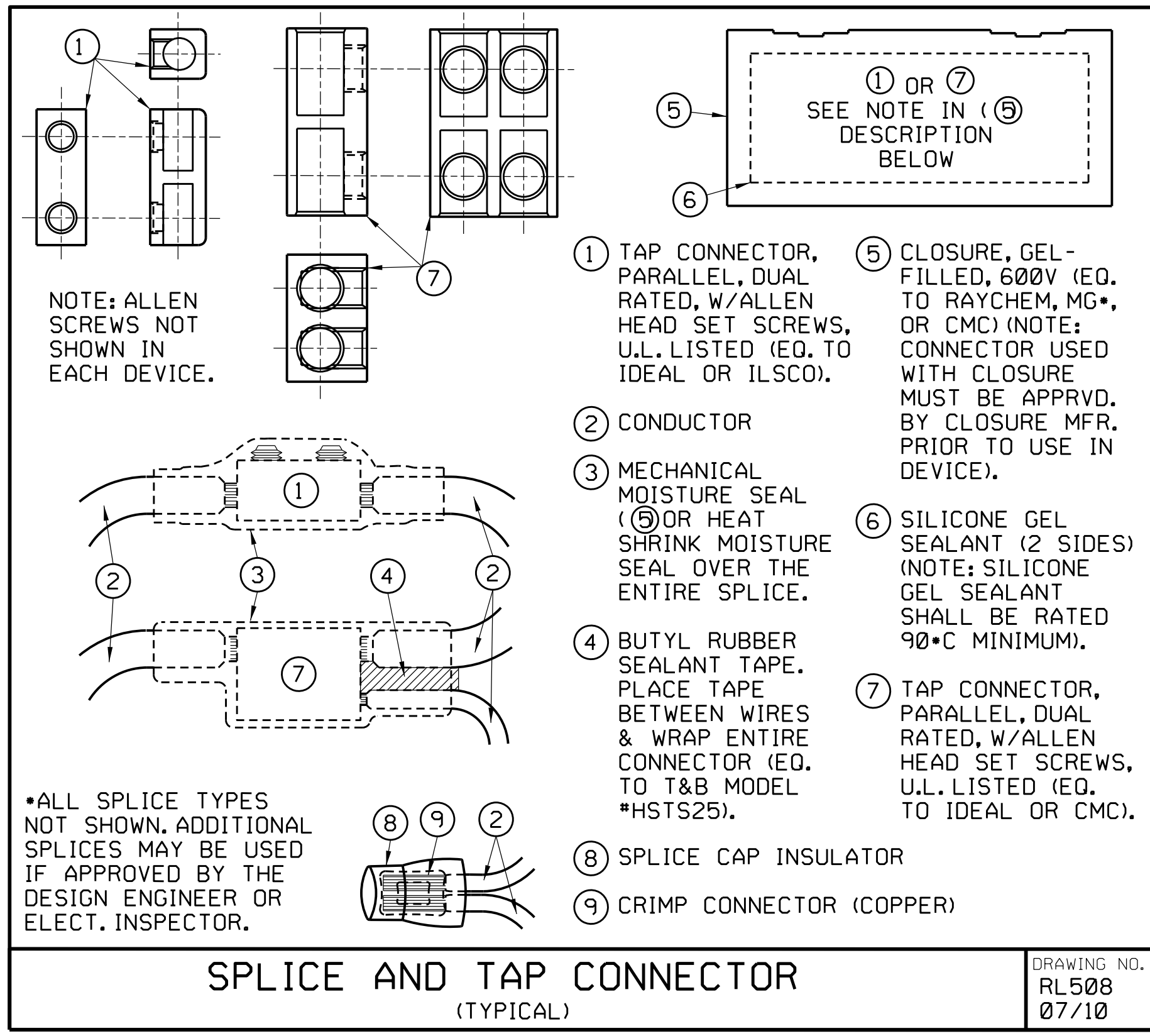
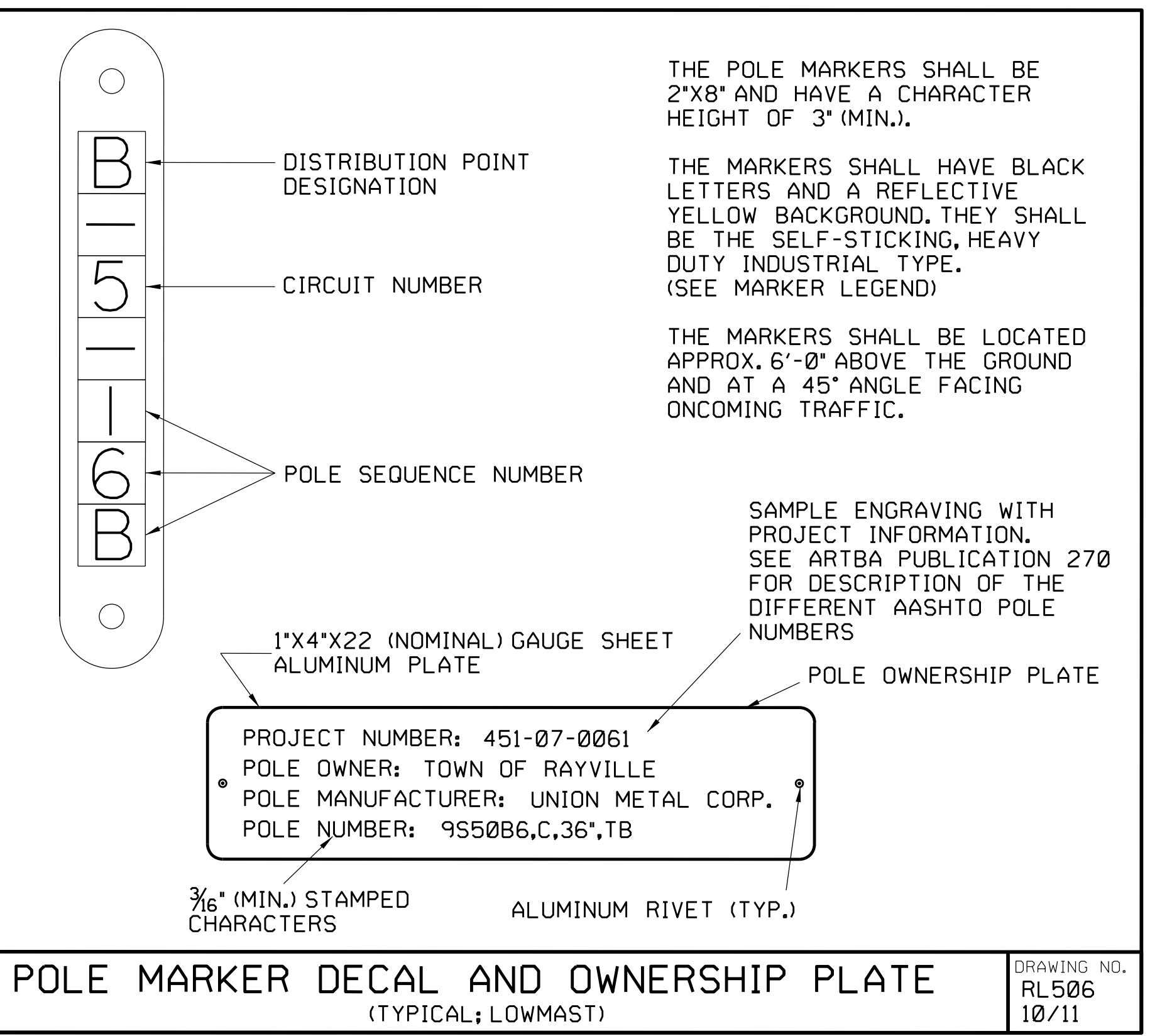
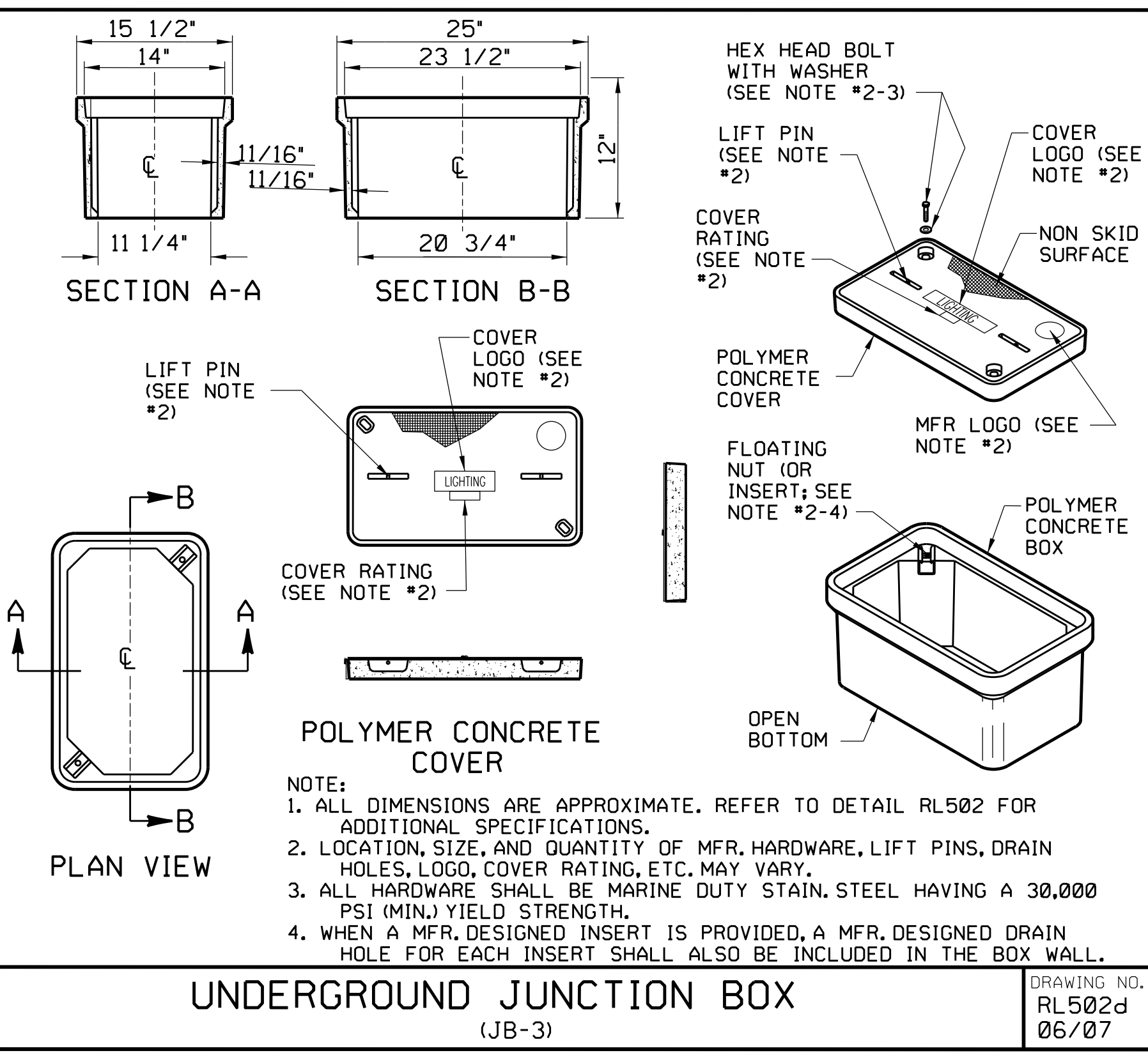
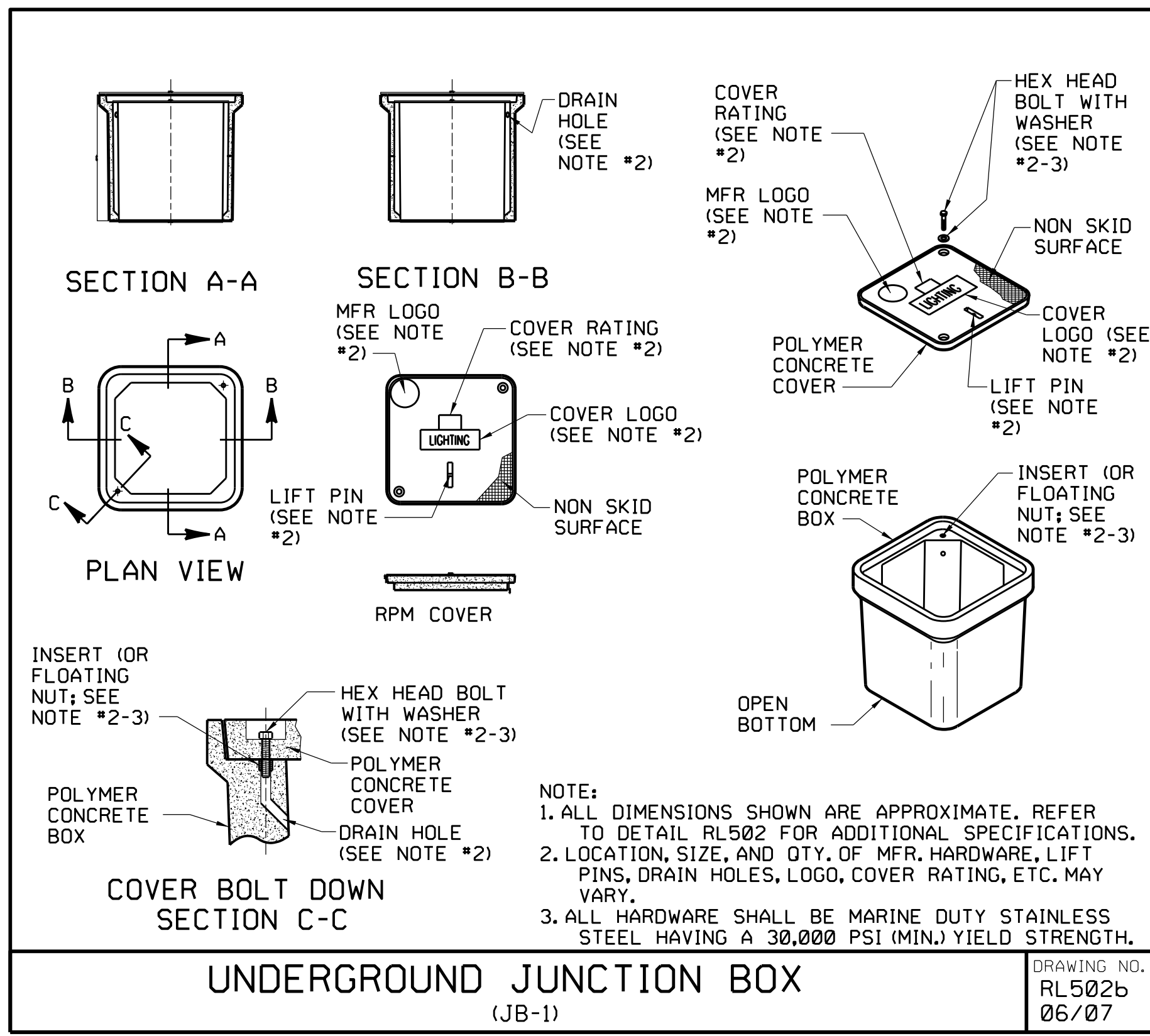


LEGEND

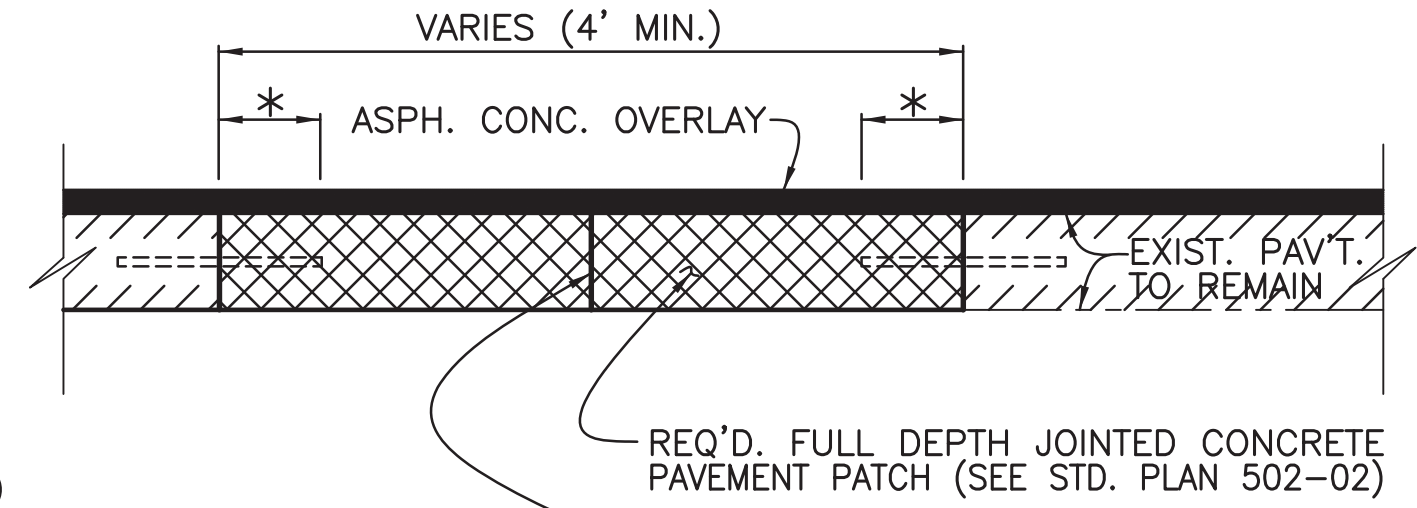
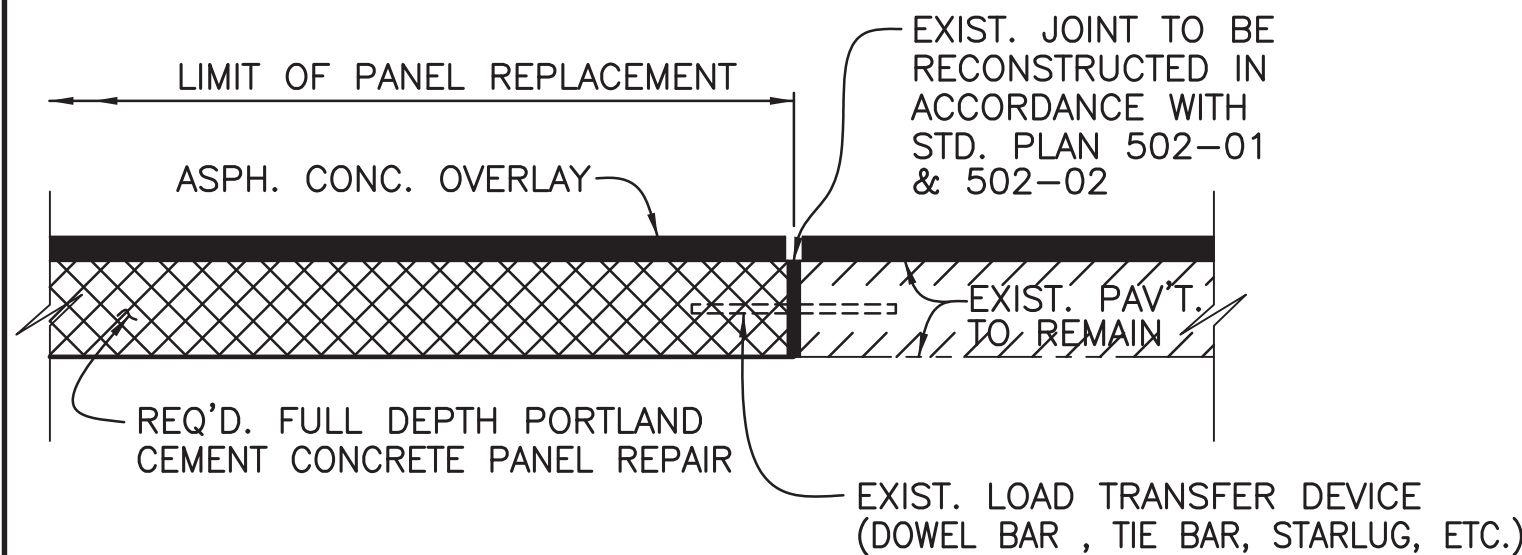
	EXISTING LIGHT POLE
	ELECTRICAL JUNCTION BOX
	EXISTING SECONDARY POWER CONTROLLER
	NEW 30' ALUM POLE WITH BREAKAWAY BASE LUMINAIRE TYPE - OVX25SXX3EG - 250W HPS
	4" SCHEDULE 80 HDPE/PVC CASING BORED
	HDPE/PVC CONDUIT WITH CONDUCTORS (UNDERGROUND)







PROJECT NO.	SHEET
	201

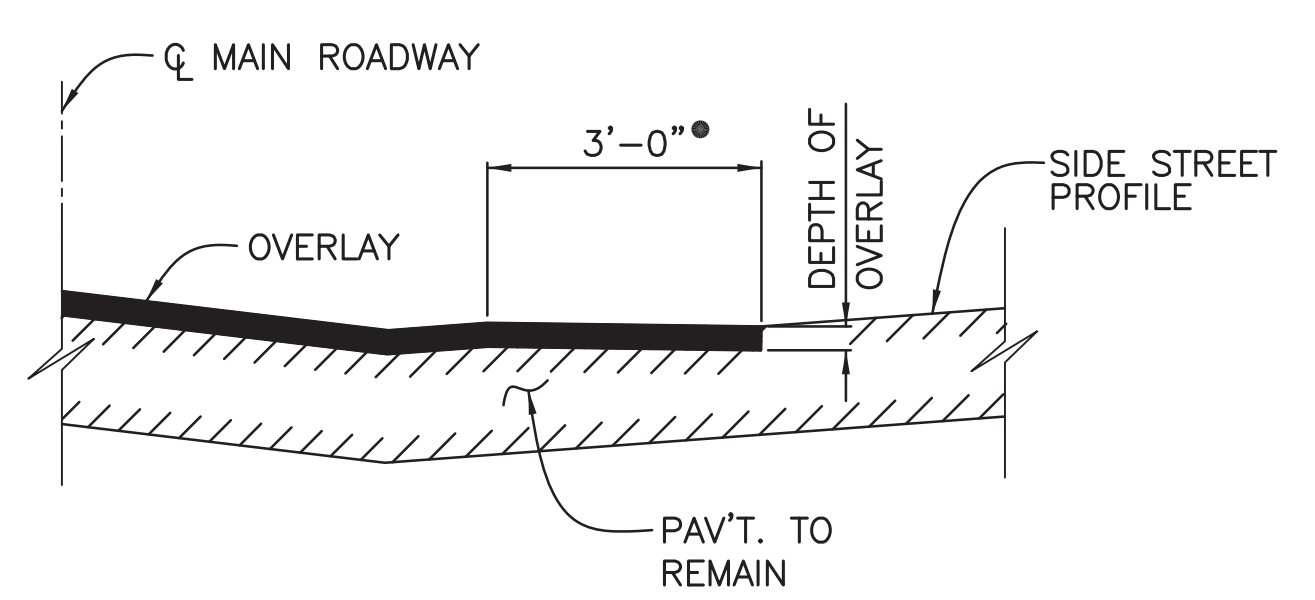
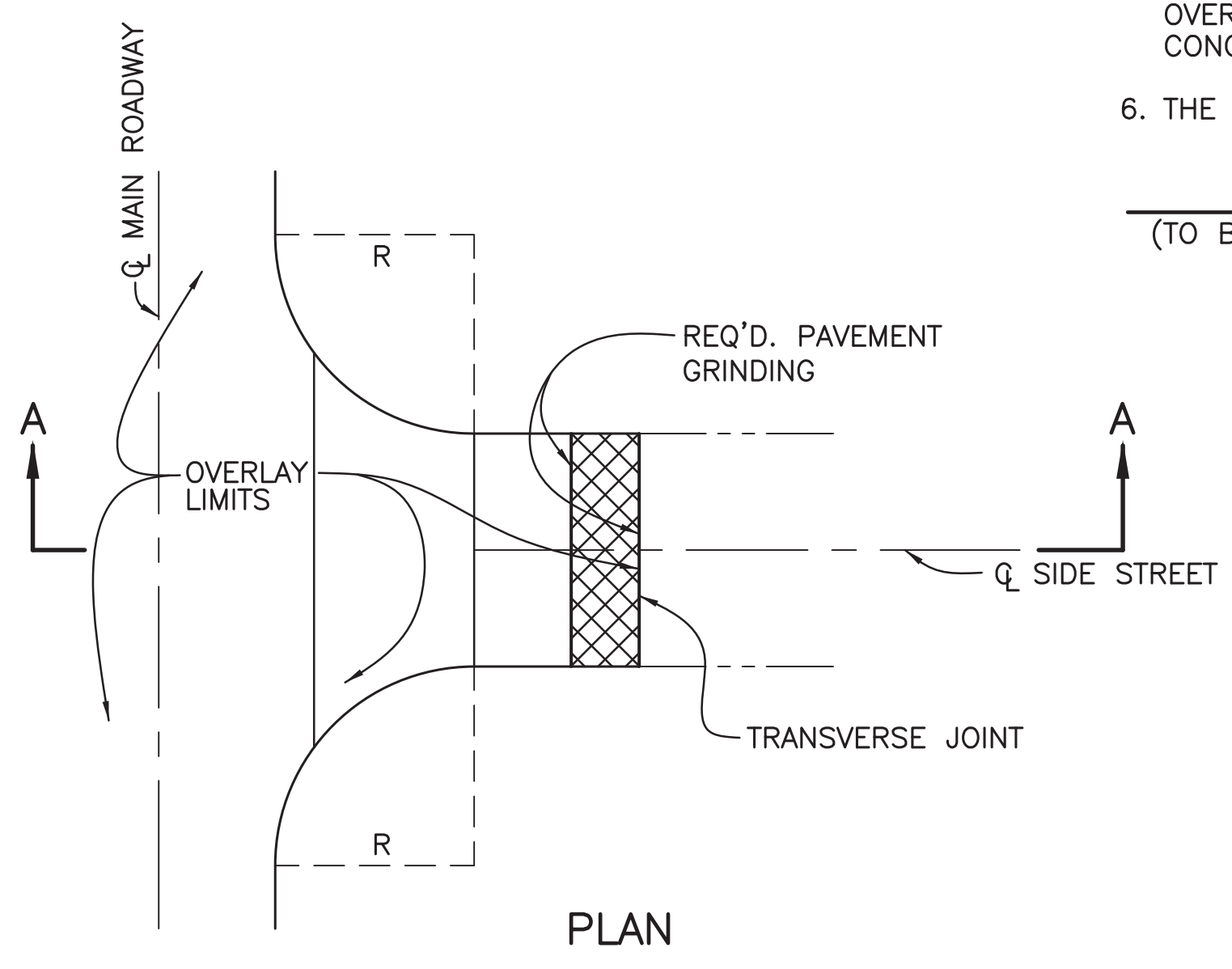


1. DURING CONCRETE REMOVAL, THE CONTRACTOR SHALL TAKE PRECAUTION TO PRESERVE THE INTEGRITY OF EXISTING LOAD TRANSFER DEVICES. (SEE LOAD TRANSFER DEVICE NOTES BELOW)
2. DETERIORATED BASE COURSE SHALL BE REMOVED AND REPLACED WITH CONCRETE. AN APPROVED BOND BREAKER SHALL BE PLACED BETWEEN THE REPAIRED BASE COURSE AND PORTLAND CEMENT CONCRETE PATCH.
3. JOINTS SHALL BE REESTABLISHED IN THE PORTLAND CEMENT CONCRETE PANEL REPLACEMENT AT THE ORIGINAL JOINT LOCATIONS. JOINTS SHALL BE SEALED. JOINTS SHALL BE SAWED AND SEALED IN THE ASPHALT CONCRETE OVERLAY. SEE DETAILS OF SAWING AND SEALING JOINTS IN ASPHALT CONCRETE OVERLAY.
4. THE PANEL REPAIR SURFACE SHALL BE A DRAG FINISH.

- JOINT TO BE RECONSTRUCTED IN ORIGINAL LOCATION IN ACCORDANCE WITH STD. PLAN 502-01
- *1. AN 18" CLEARANCE BETWEEN THE SAWCUT AND THE NEAREST TRANSVERSE CRACK IS DESIRED. MINIMUM CLEARANCE SHALL BE 6".
 2. DURING CONCRETE REMOVAL, THE CONTRACTOR SHALL TAKE PRECAUTION TO PRESERVE THE INTEGRITY OF EXISTING LOAD TRANSFER DEVICES. (SEE LOAD TRANSFER DEVICE NOTES BELOW).
 3. DETERIORATED BASE COURSE SHALL BE REMOVED AND REPLACED WITH CONCRETE. AN APPROVED BOND BREAKER SHALL BE PLACED BETWEEN THE REPAIRED BASE COURSE AND THE PORTLAND CEMENT CONCRETE PATCH.
 4. FACE OF EXISTING CONCRETE SHALL BE COATED WITH AN APPROVED EPOXY ADHESIVE (DOTD QPL 32) BEFORE PLACING CONCRETE
 5. JOINTS SHALL BE REESTABLISHED IN THE PORTLAND CEMENT CONCRETE PATCH AT THE ORIGINAL JOINT LOCATION. JOINTS SHALL BE SEALED. JOINTS SHALL BE SAWED AND SEALED IN THE ASPHALT CONCRETE OVERLAY. SEE DETAILS OF SAWING AND SEALING JOINTS IN ASPHALT CONCRETE OVERLAY BELOW.
 6. THE PANEL REPAIR SURFACE SHALL BE A DRAG FINISH.

CONCRETE PAVEMENT PATCHING
(TO BE USED @ WHOLE PANEL REPLACEMENT LOCATIONS)

CONCRETE PAVEMENT PATCHING
(TO BE USED @ JOINT REPAIR AND PARTIAL PANEL REPLACEMENT LOCATIONS)

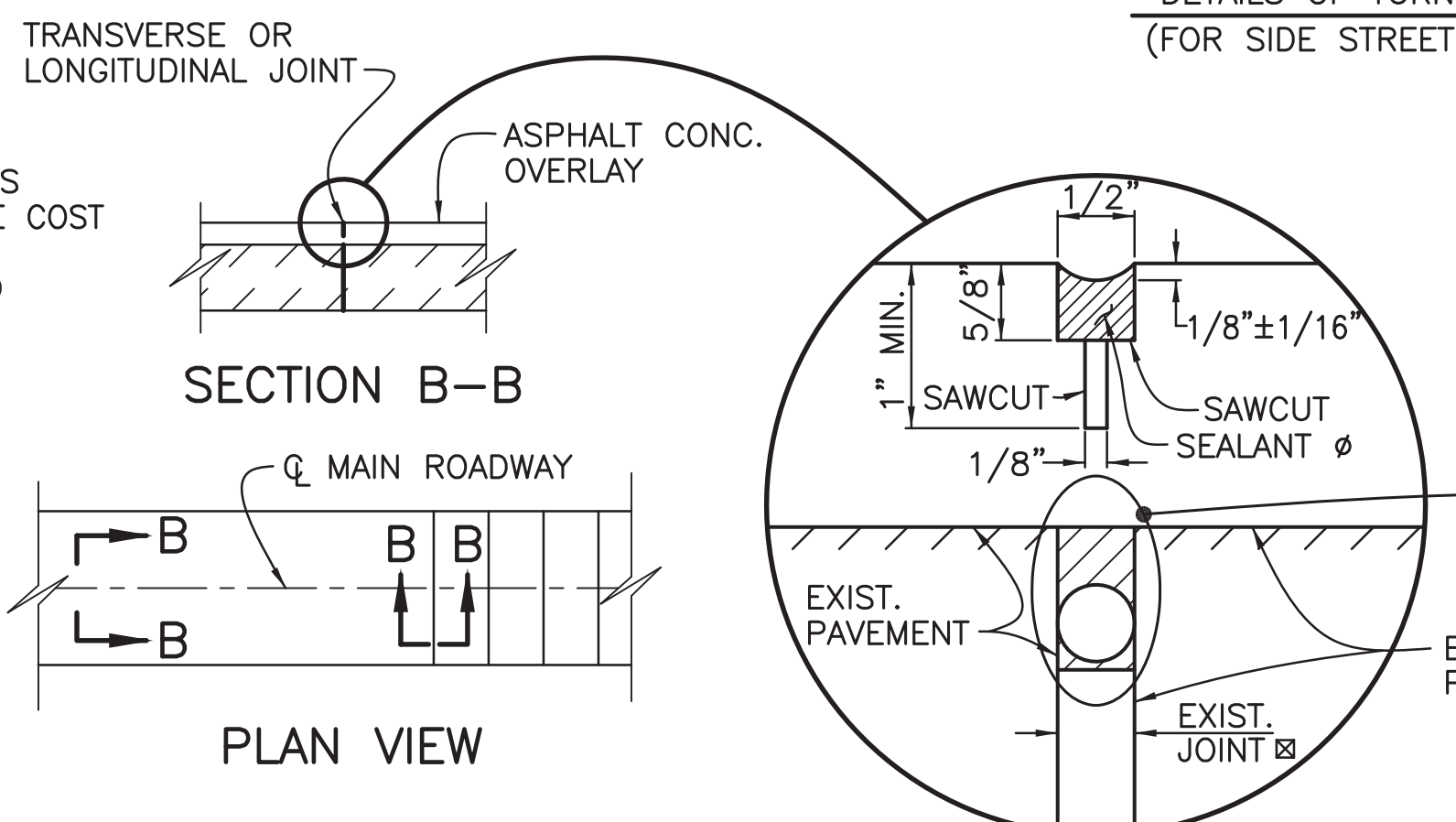


- LOCATION OF PAVEMENT GRINDING TO BE AT CURB RETURN OR NEXT TRANSVERSE JOINT AS DETERMINED BY THE ENGINEER.

SECTION A-A
DETAILS OF TURNOUTS AND INTERSECTIONS
(FOR SIDE STREETS WITHOUT OPEN DITCHES)

LOAD TRANSFER DEVICE NOTES

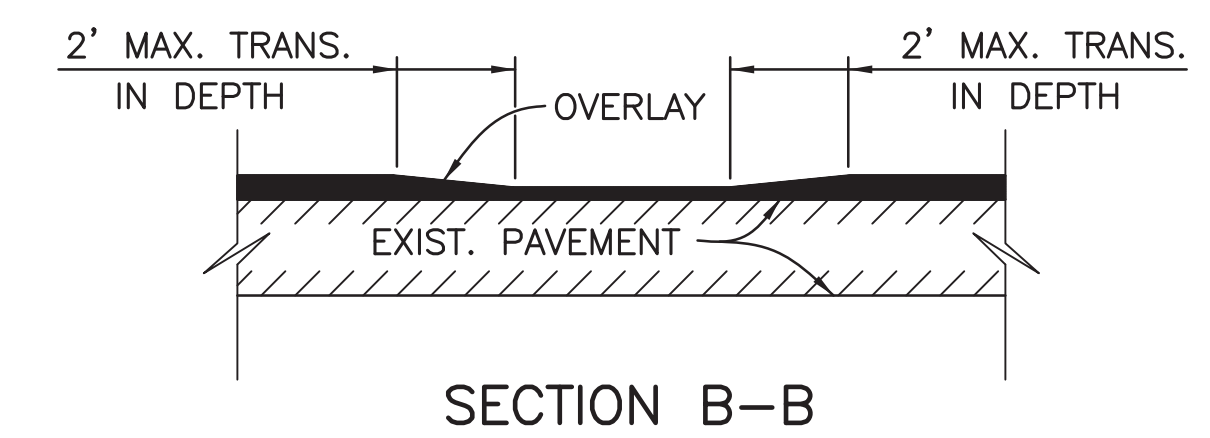
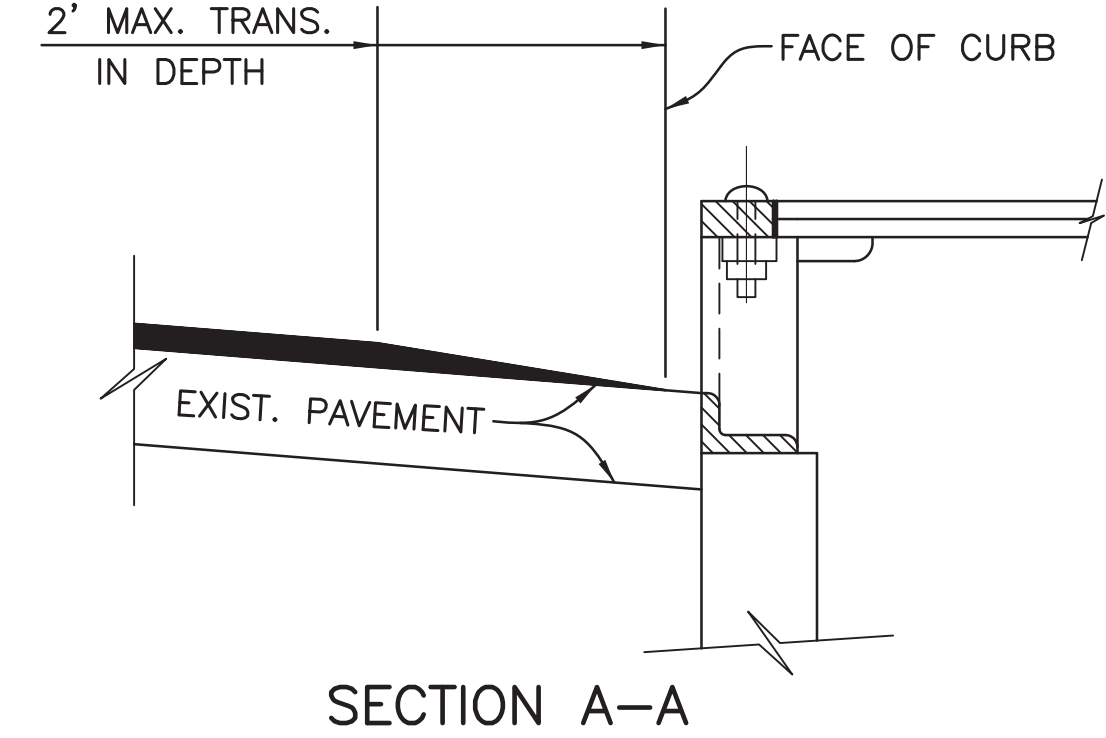
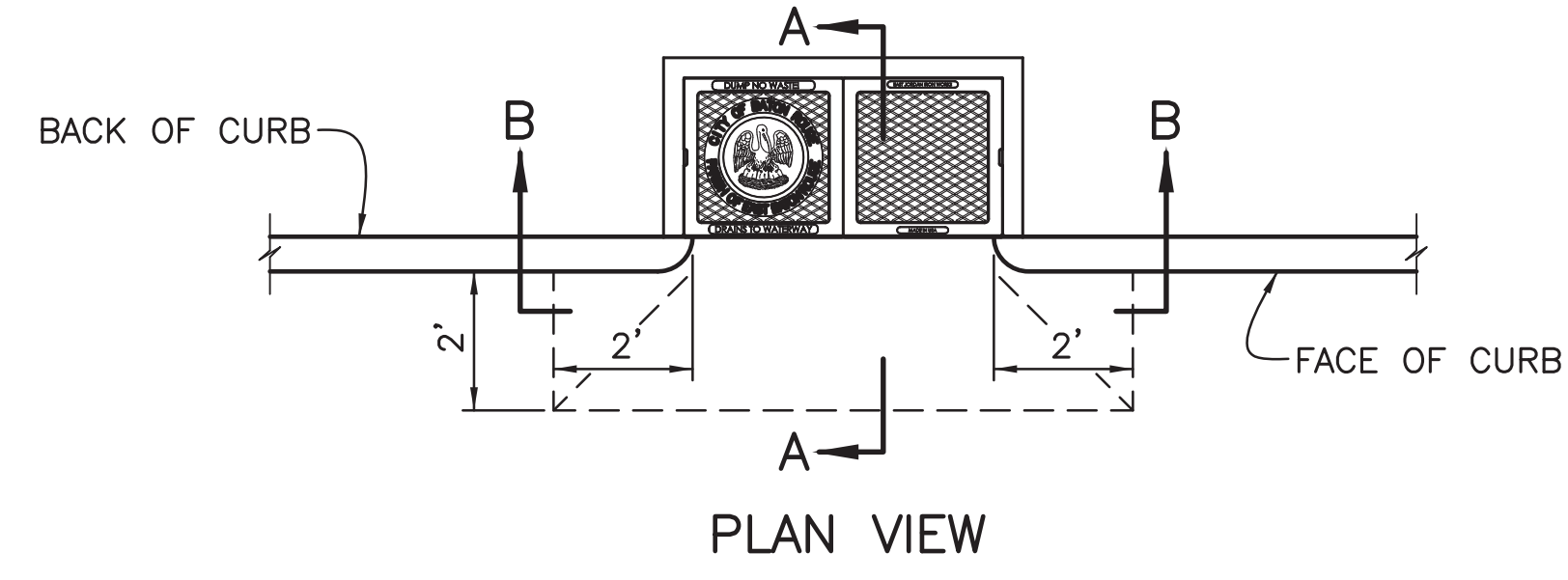
1. DOWEL BARS SHALL BE INSTALLED AT JOINT LOCATIONS WHERE EXIST. LOAD TRANSFER DEVICES HAVE FAILED. THE COST OF INSTALLATION, LABOR AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PORTLAND CEMENT CONCRETE PATCH ITEM.
2. 1 1/4"x18" PLASTIC COATED DOWEL BARS SHALL BE INSTALLED ON 12" CENTERS. THE BARS SHALL BE PLACED IN EXISTING PAVEMENT BY DRILLING 1 3/8" HOLES TO A DEPTH OF 9" AND FILLING WITH AN APPROVED EPOXY GROUT BEFORE INSERTION OF DOWEL BARS.
3. TIE BARS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD PLAN 502-01. LABOR AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PORTLAND CEMENT CONCRETE PATCH ITEM.
4. DOWEL BARS AND TIE BARS SHALL BE INSTALLED AS OUTLINED ABOVE AT THE CONTRACTOR'S EXPENSE AT LOCATIONS WHERE THE CONTRACTOR DAMAGES EXIST. LOAD TRANSFER DEVICES OR TIE BARS.



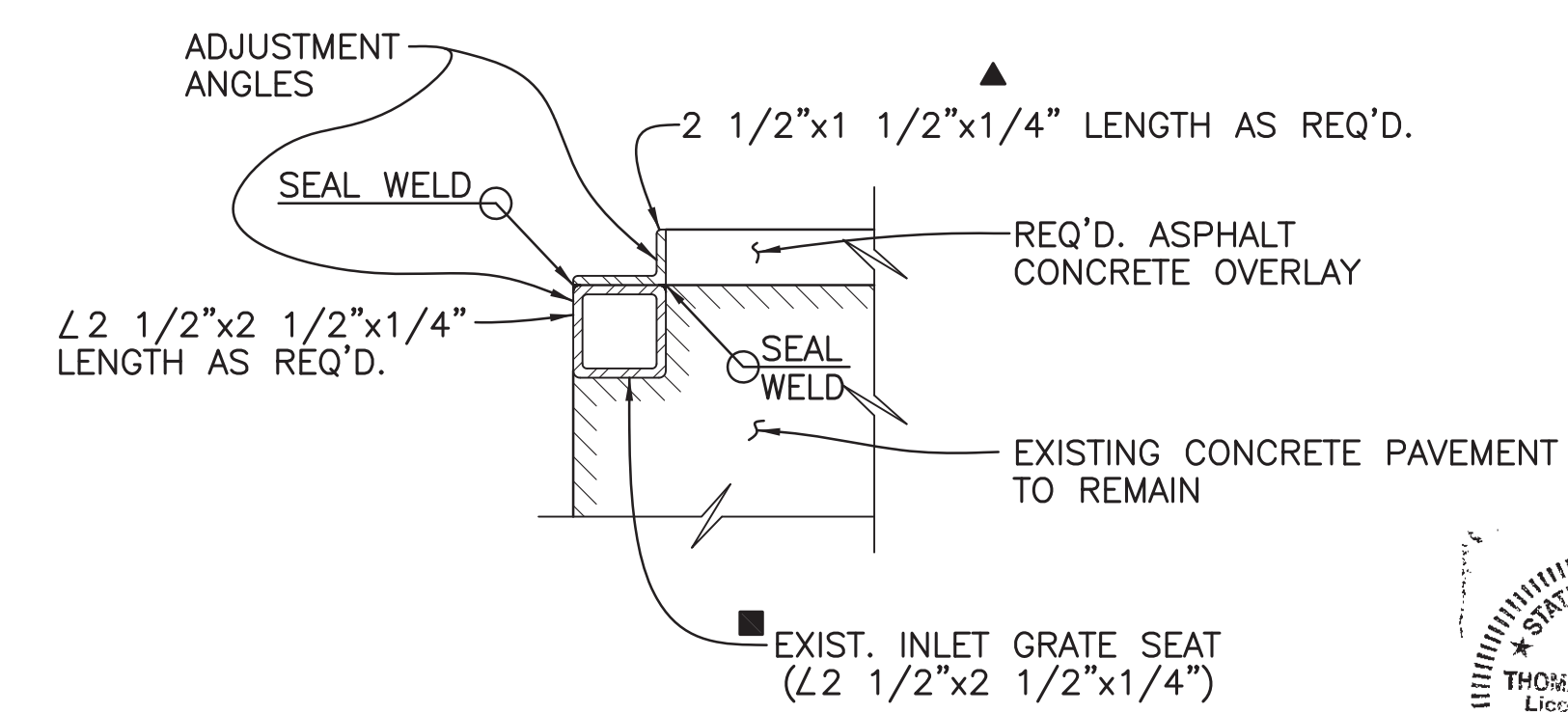
1. INCOMPRESSIBLES SHALL BE REMOVED TO A MINIMUM DEPTH OF HALF THE PAVEMENT THICKNESS FOR JOINTS WIDTHS OF 1" AND LESS AND TO FULL PAVEMENT DEPTH WHERE JOINT WIDTHS ARE OVER 1".

DETAILS OF SAWING AND SEALING JOINTS IN ASPHALT CONCRETE OVERLAY

- EXISTING JOINT TO BE CLEANED AND SEALED.
- SEE SPECIAL PROVISIONS FOR ALLOWED TYPE OF SEALANT.
- FOR DETAIL OF CLEANING AND RESEALING EXISTING JOINTS, SEE STANDARD PLAN 502-02.



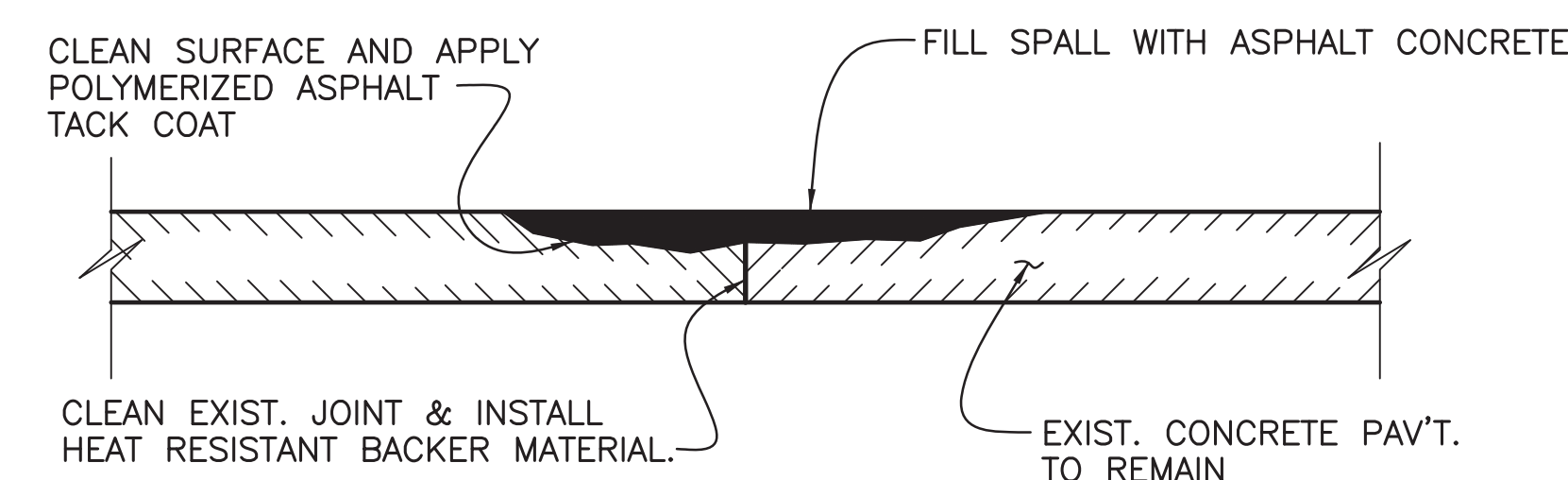
SECTION A-A
DETAIL OF SUMP IN OVERLAY AT SIDE INLET



- NOTES:
1. STRUCTURAL STEEL TO BE A-36 GALVANIZED.
 2. ALL Ls TO BE CUT TO FIT AND WELDED AT CORNERS.
 3. ADJUSTMENT ANGLE DIMENSIONS BASED ON 2" ASPHALT CONCRETE OVERLAY THICKNESS.
 - 4. AT GRATE INLET LOCATIONS WHERE PANEL REPLACEMENT IS REQUIRED THE EXISTING INLET GRATE SEAT SHALL BE RESET TO ITS ORIGINAL ELEVATION AND ADJUSTED AS SHOWN FOR THE REQUIRED OVERLAY.
 - ▲ 5. DIMENSION SHALL BE 1/2" LESS THAN ASPHALT OVERLAY THICKNESS.



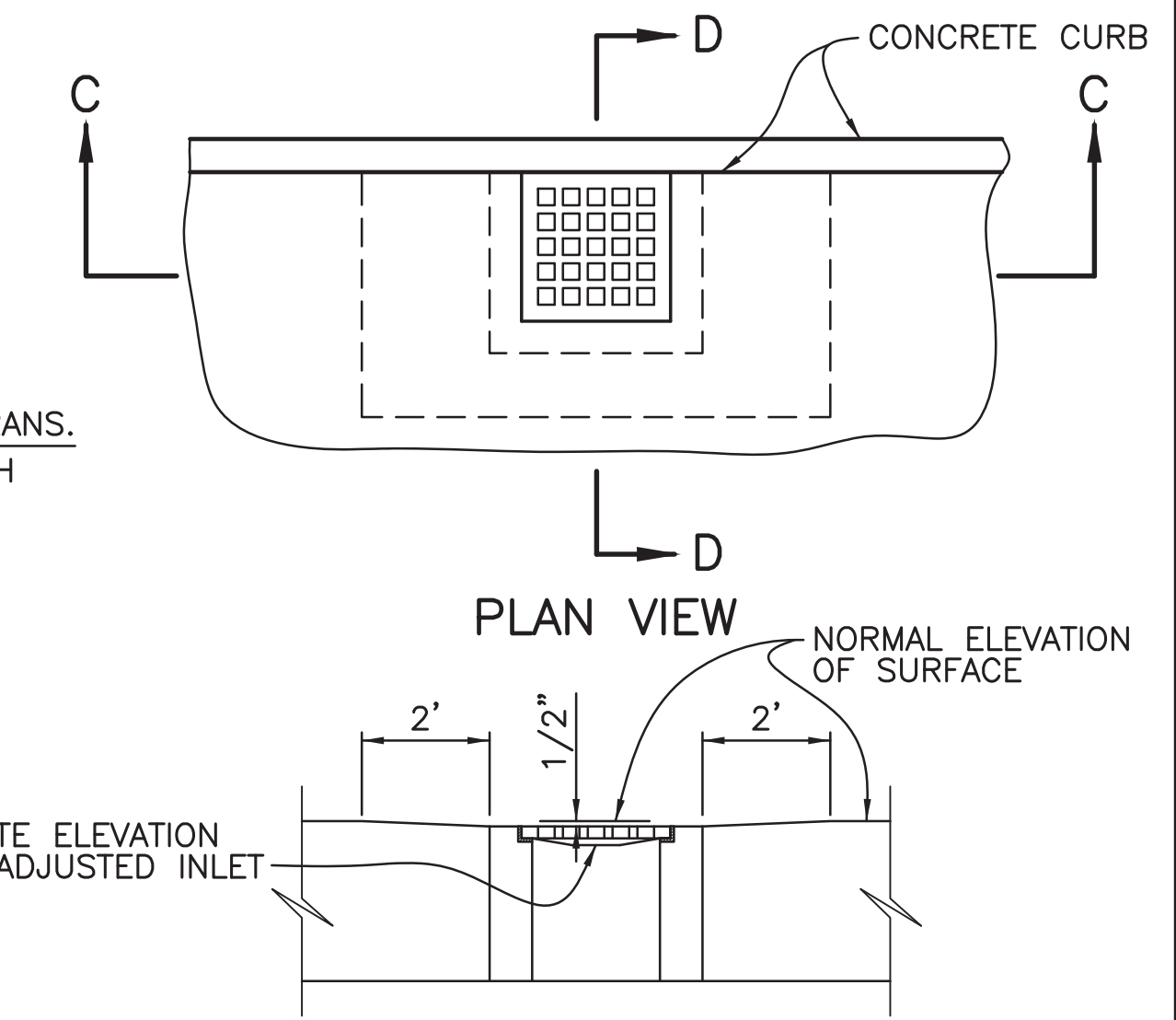
GRATE INLET ADJUSTMENT DETAIL



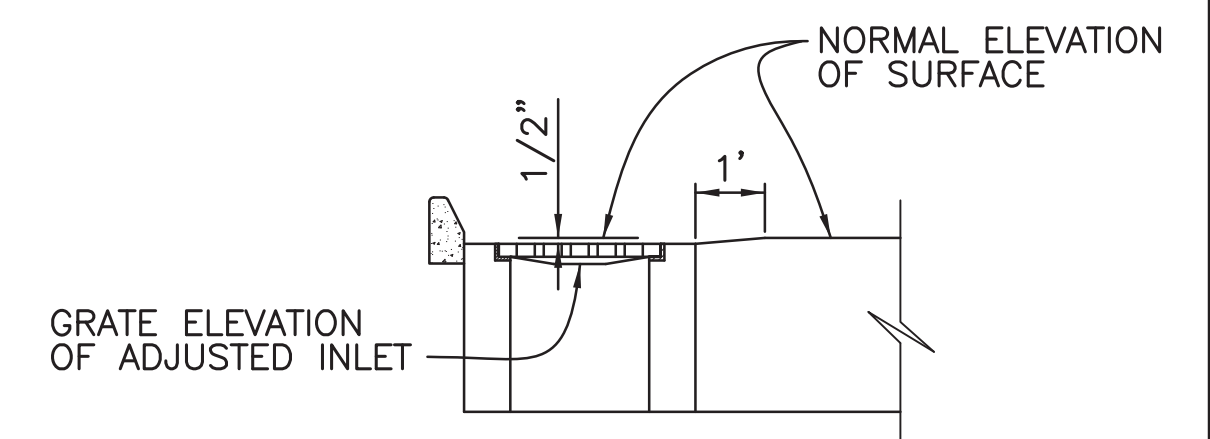
1. SURFACE PREPARATION, APPLICATION OF TACK COAT AND ASPHALT CONCRETE REQUIRED TO FILL SPALLED AREA SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE ASPHALT CONCRETE PAVEMENT ITEM.

SPALL REPAIR DETAIL

DATE	DESCRIPTION	BY

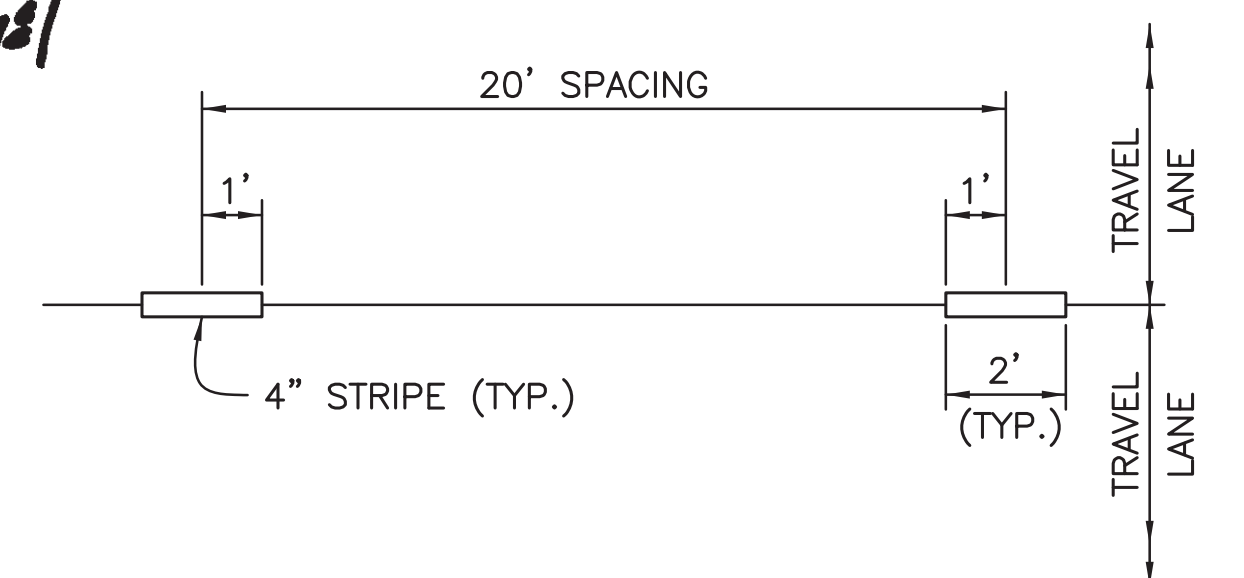


SECTION C-C



SECTION D-D

GRATE INLET SUMP DETAIL
(SHOWING TRANSITION IN SURFACE ELEVATION)



- NOTE:
1. TEMPORARY PAVEMENT MARKINGS REQUIRED IN ALL OVERLAY AREAS.

TEMPORARY PAVEMENT MARKING DETAIL

STANDARD PLAN NO. 501-01	DATED AUGUST 6, 2008	SHEET NO. 1 OF 1
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ASPHALT CONCRETE OVERLAY OF P.C. CONCRETE PAVEMENT

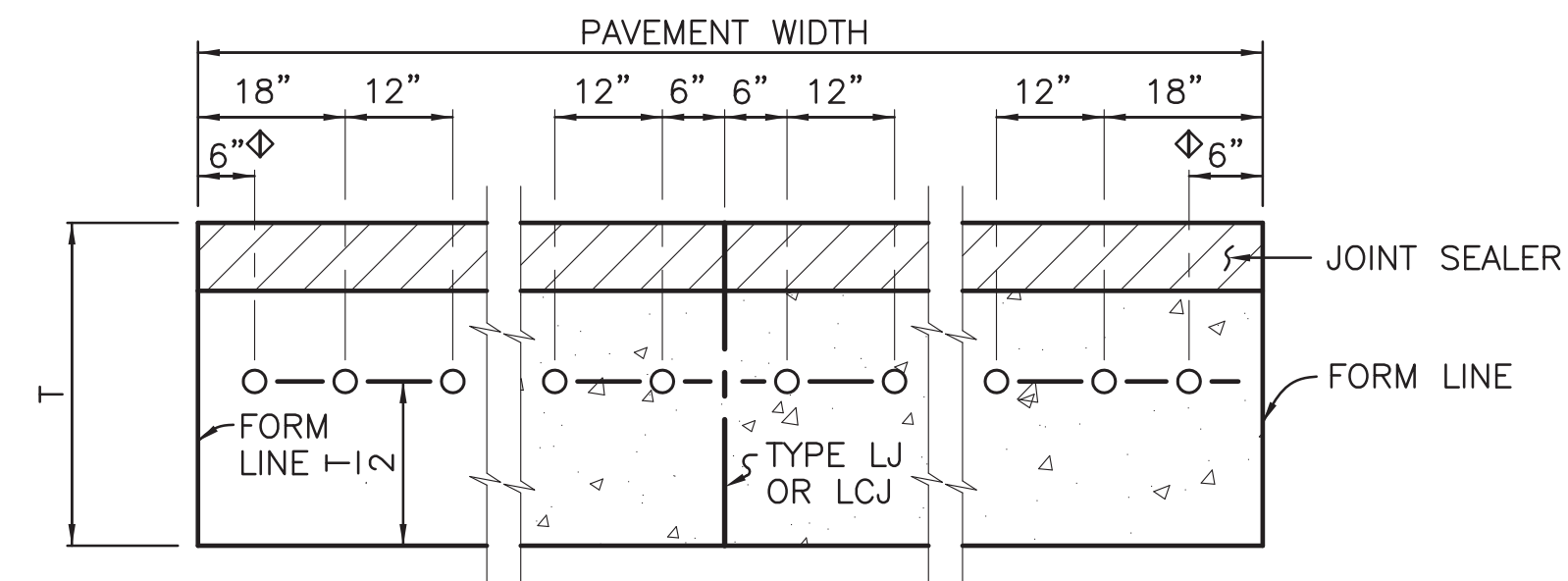
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED R.K. BANKS	DRAWN G. VANNICE	CHECKED R.E. ELLIS	APPROVED T. STEPHENS

TABLE 1
(ALL DIMENSIONS ARE IN INCHES)

PAVEMENT THICKNESS "T"	DOWEL BARS ⊗			MINIMUM DEPTH OF JOINT	
	SIZE	LENGTH	SPACING	C.J. & D.J.	L.J.
6	1	18	12	2	2
8	1 1/4	18	12	3	3
9	1 1/4	18	12	3	3 1/2
10	1 1/4	18	12	3 1/2	4

NOTES:

- ALL JOINTS 10' MIN. SPACING 20' MAX. SPACING
- MAXIMUM SPACING ON EJ OR EJ-1 WILL NOT EXCEED 500 FEET

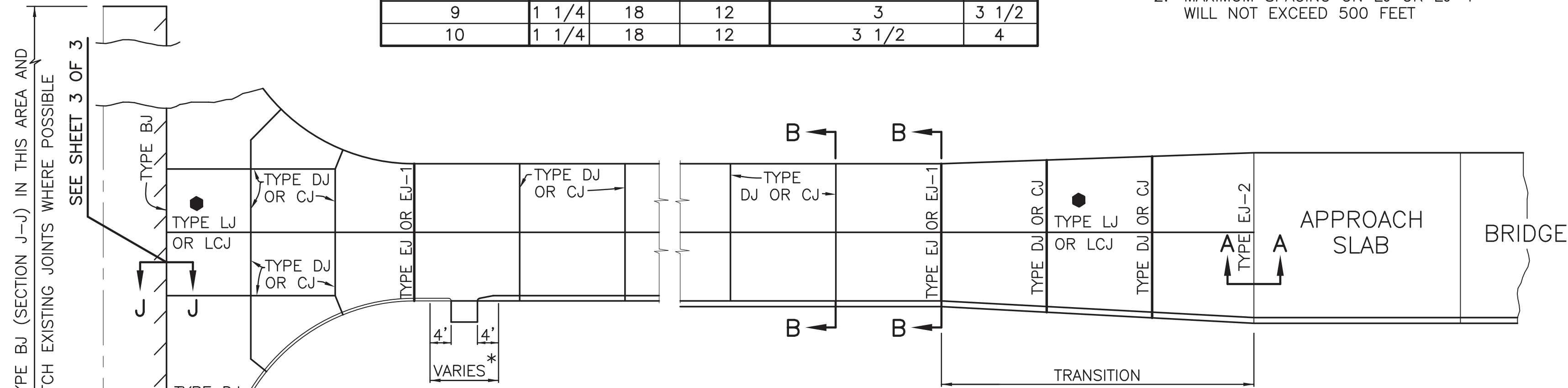


SECTION B-B

DOWEL BAR SPACING FOR TYPE DJ, CJ AND EJ JOINTS
 ⊕ 9" - WHEN MECHANICAL PLACEMENT OF DOWEL BARS IS USED.

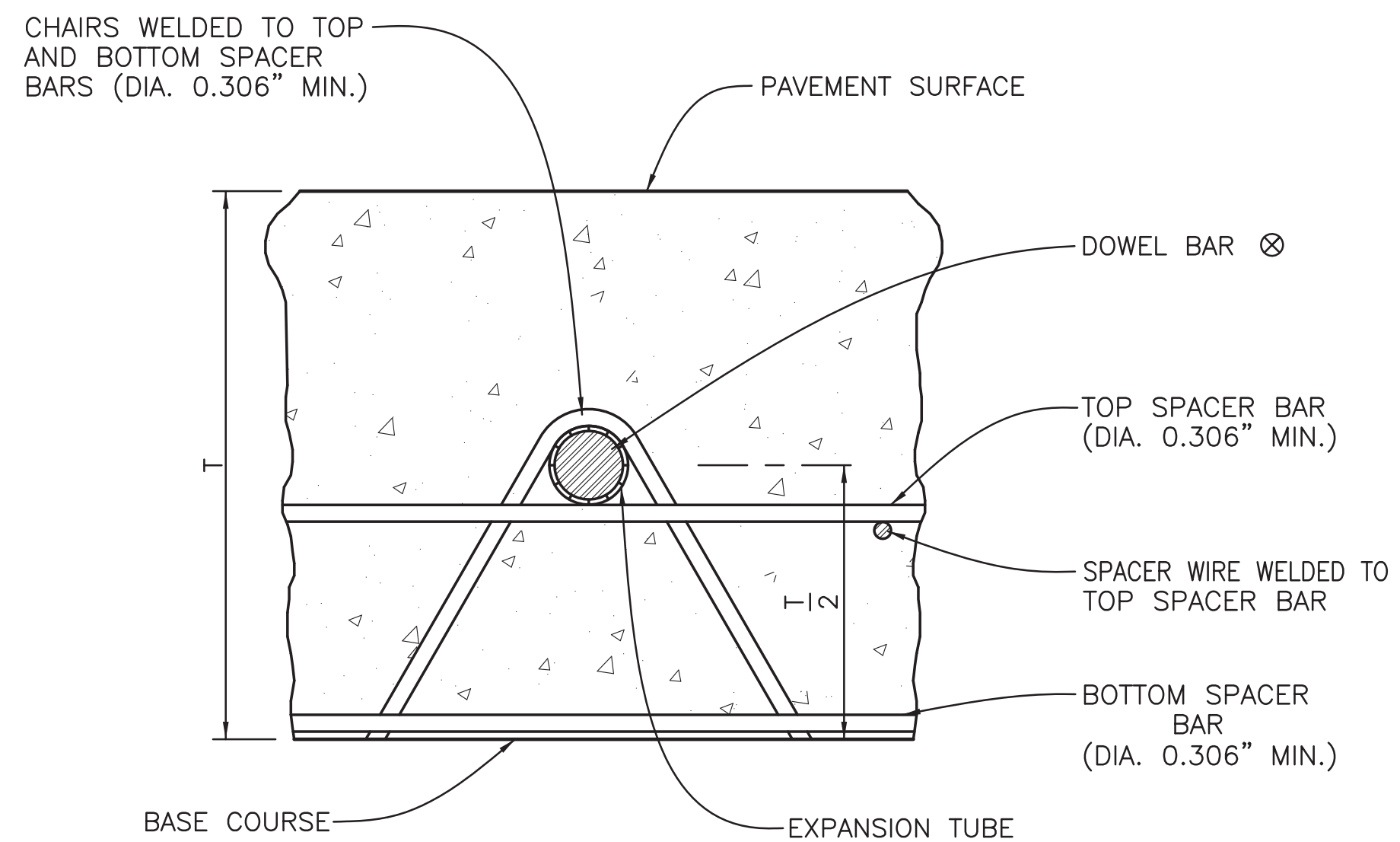
GENERAL NOTES

- OUTSIDE PAVEMENT EDGES SHALL BE ROUNDED 1/4".
- ON TYPE EJ JOINTS, EXPANSION TUBES AND STOPS SHALL BE PLACED ON ALTERNATE ENDS OF EACH DOWEL BAR. BARS SHALL BE SPOT WELDED ON ALTERNATE ENDS TO DOWEL BASKETS.
- TYPE LJ JOINTS SHALL BE SAWED 1/8" WIDE AS SHOWN IN DETAIL "D" ON SHEET 2 TO THE DEPTH SHOWN IN TABLE 1. THEY SHALL BE CLEANED AND SEALED WITH A JOINT SEALER CONFORMING TO SUBSECTION 1007-2.
- TYPE DJ AND CJ JOINTS SHALL BE TO THE DEPTH SHOWN IN TABLE 1. IF SAWED, THEY SHALL HAVE AN INITIAL CUT USING A 1/8" BLADE. OTHERWISE, JOINTS SHALL CONFORM TO DETAILS "B" AND "C" ON SHEET 2. THEY SHALL ALSO BE SAND BLASTED AND CLEANED PRIOR TO SEALING USING A JOINT SEALER CONFORMING TO SUBSECTION 1007-2.
- TYPE DJ JOINTS MAY ALSO BE A COMBINATION JOINT FORMER/SEALER AS SHOWN IN DETAIL "A" ON SHEET 2 CONFORMING TO SUBSECTION 1007-4.
- TYPE EJ JOINTS SHALL BE FORMED FULL DEPTH, USING A WOOD FILLER, EXCEPT FOR THE TOP 1/2" WHICH SHALL BE A JOINT SEALER CONFORMING TO SUBSECTION 1007-2. THE WOOD FILLER SHALL CONFORM TO SUBSECTION 1007-1(b).
- IN LIEU OF DOWEL BASKET, APPROVED VIBRATORY PLACEMENT OF DOWEL BARS AND TIE BARS WILL BE PERMITTED. DOWEL BASKETS SHALL BE SIMILAR TO ONES SHOWN, OR APPROVED EQUALS.
- INSTALL GEOTEXTILE FABRIC UNDER CJ, DJ AND EJ TYPE JOINTS WHEN CONCRETE IS PLACED ON UNSTABILIZED OR UNTREATED BASE COURSE WHEN DOWEL BARS ARE VIBRATED IN PLACE. THE GEOTEXTILE FABRIC SHALL BE ANCHORED TO BASE COURSE WITH PINS.
- TRANSVERSE EXPANSION JOINTS SHALL NOT BE USED FOR CONSTRUCTION JOINTS.
- TIE BARS SHALL NOT BE PLACED WITHIN 18" OF CONTRACTION (DUMMY) OR EXPANSION JOINTS.
- TRANSVERSE EXPANSION JOINTS (TYPE EJ OR EJ-1) SHALL BE PLACED AT MAXIMUM 500-FOOT INTERVALS IN ADDITION TO BEING PLACED AT JUNCTIONS WITH OTHER CONCRETE PAVEMENTS.

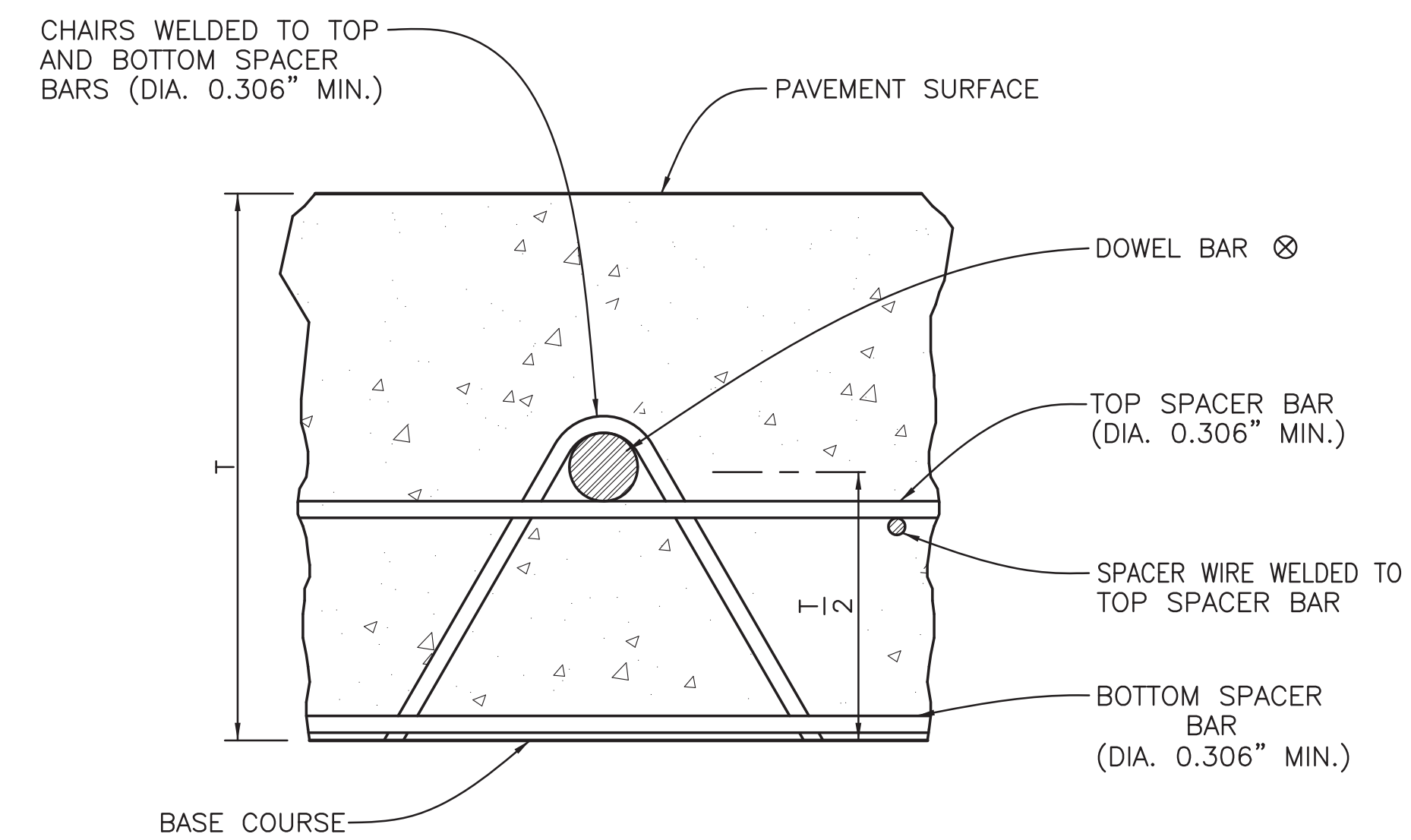


PLAN VIEW OF ROADWAY SHOWING JOINTS

● USE TYPE LCJ JOINT WITH SPLIT SLAB CONSTRUCTION.



SECTION C-C
⊗ SEE TABLE 1



SECTION D-D
⊗ SEE TABLE 1

STATE OF LOUISIANA
 THOMAS A. STEPHENS
 License No. 18417
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
Thomas A. Stephens
 2/16/2013

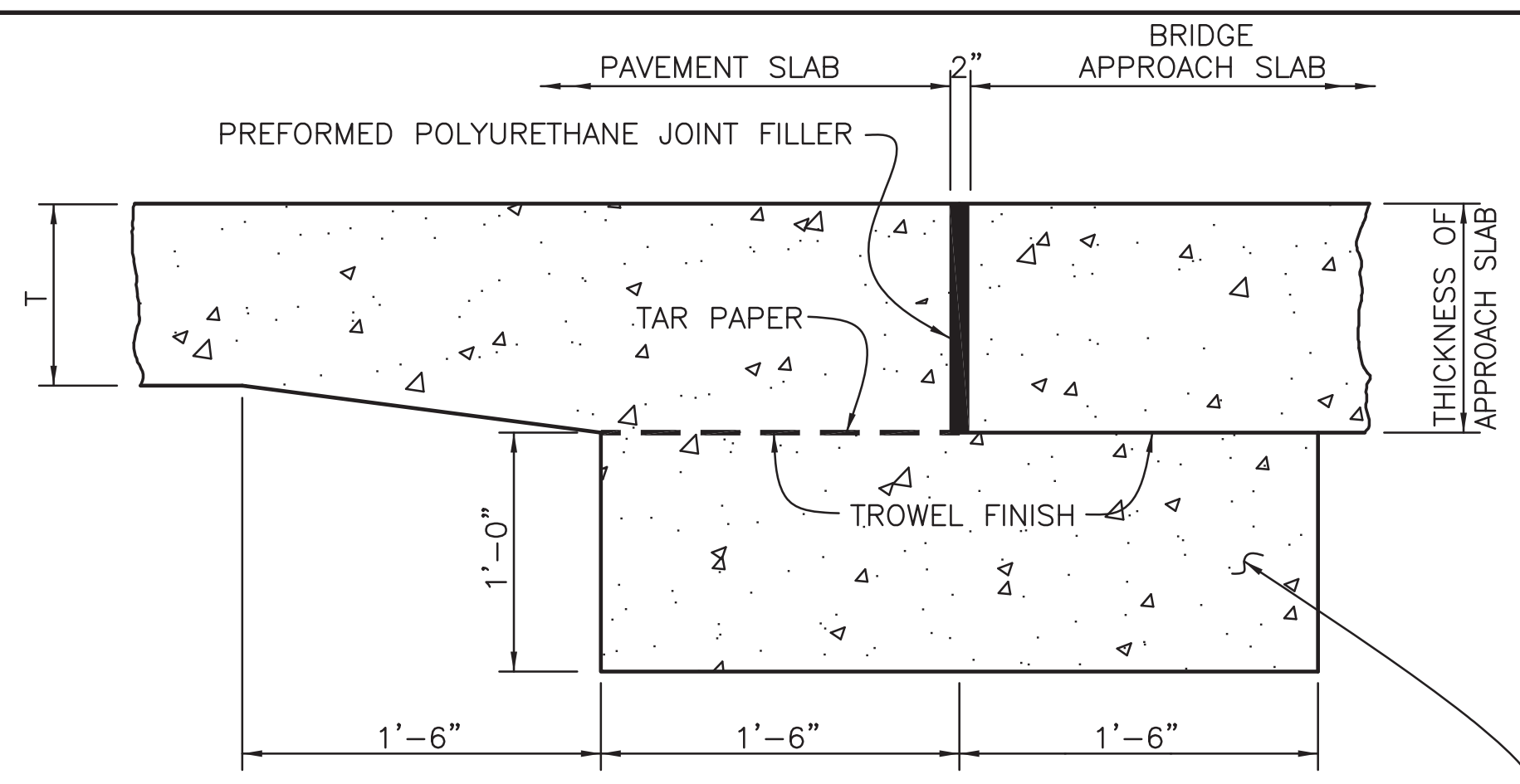
STANDARD PLAN NO. 502-01	DATED January 18, 2008	SHEET NO. 1 OF 3
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**CONCRETE PAVEMENT
DETAILS**

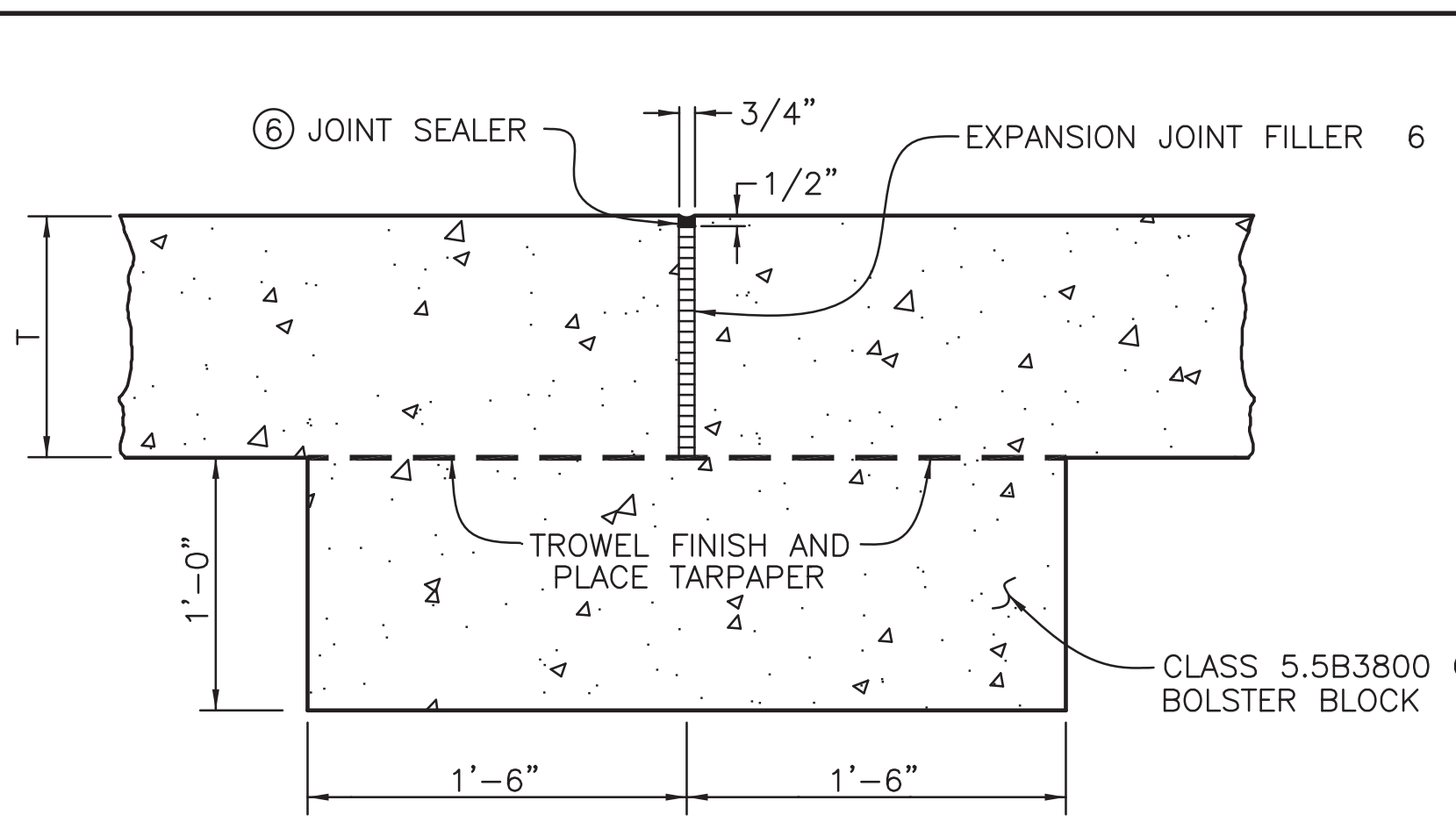
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED	DRAWN	CHECKED	APPROVED
R.E.E./N.A.R.	G. VANNICE	N.A.R./R.E.E.	T. STEPHENS

DATE	DESCRIPTION	BY

PROJECT NO.	SHEET
	203

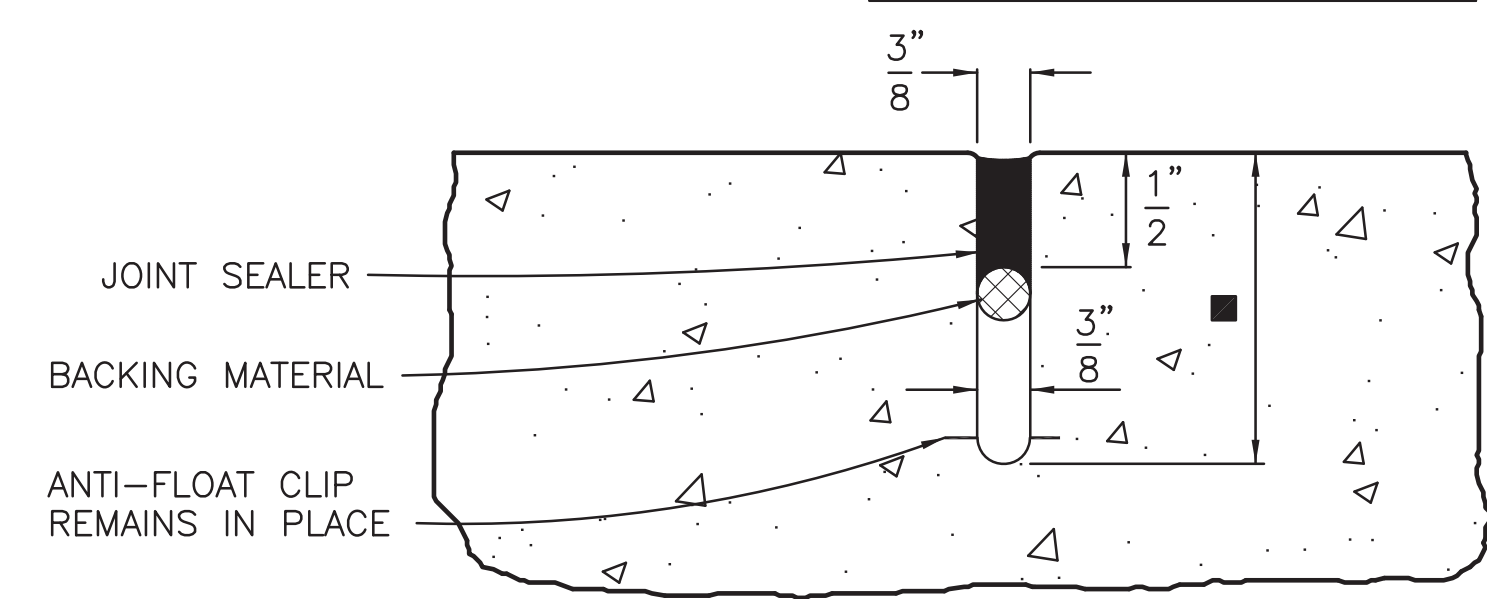


TYPE EJ-2
(TRANSVERSE EXPANSION JOINT)
SECTION A-A

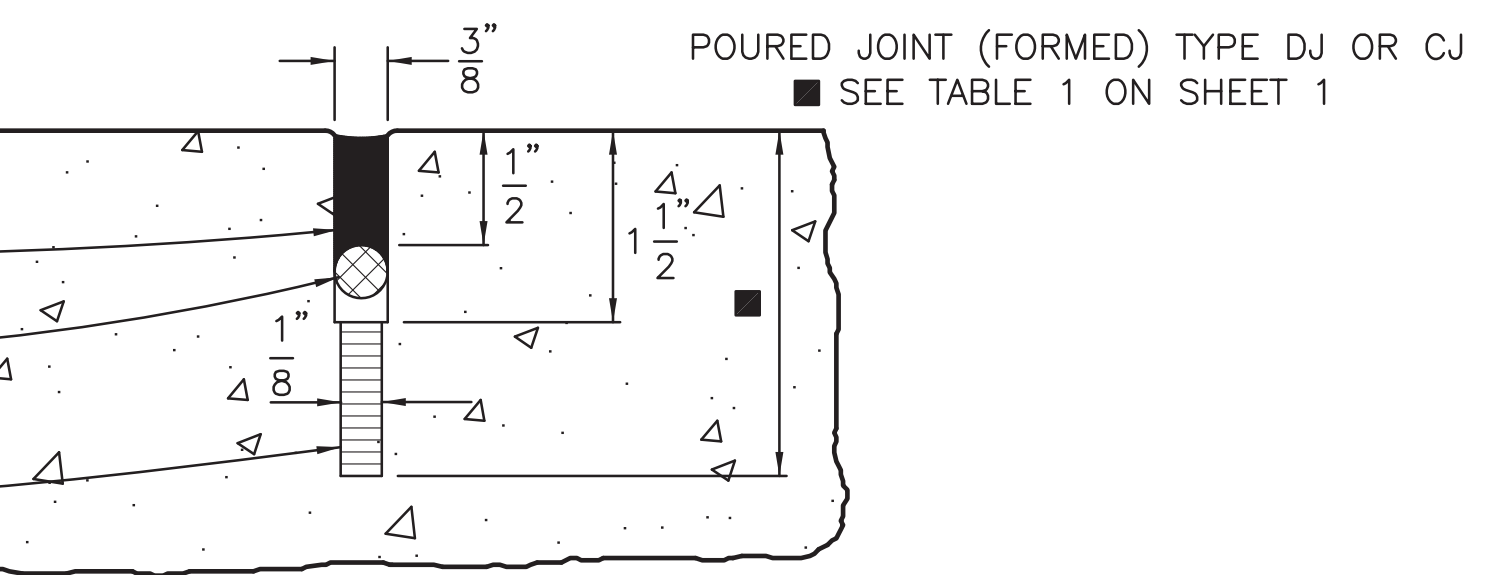


TYPE EJ-1
(TRANSVERSE EXPANSION JOINT)

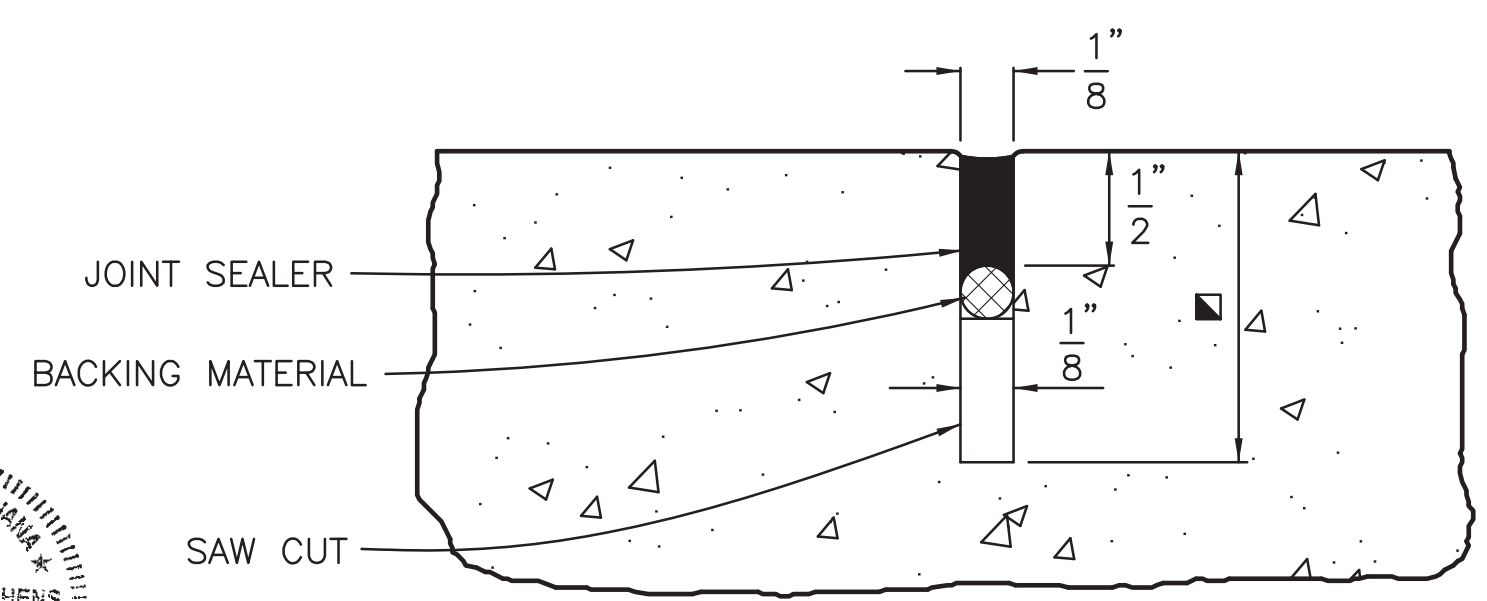
- COMBINATION JOINT FORMER / SEALER NOTES:**
1. AFTER PAVEMENT HAS BEEN FINISHED AND WHILE CONCRETE IS STILL PLASTIC, GROOVES SHALL BE CUT INTO PAVEMENT AT PROPER LOCATION AND DEPTH. INSTALL SEALINSERT FLUSH WITH FINISHED SURFACE.
 2. IMMEDIATELY CONSOLIDATE CONCRETE ON BOTH SIDES OF SEALINSERT WITH AN APPROVED MECHANICAL VIBRATOR.
 3. AFTER FINAL FINISH BUT BEFORE CONCRETE HAS TAKEN ITS INITIAL SET, JOINT EDGES SHALL BE ROUNDED TO RADIUS SHOWN.
 4. TOP CAP SHALL REMAIN IN PLACE UNTIL FINAL CLEAN-UP HAS BEEN COMPLETED.
 5. SEALINSERTS SHALL BE CUT AND INSTALLED TO BE CONTINUOUS ACROSS THE FULL WIDTH OF SLAB, UNLESS FIELD SPLICING IS APPROVED BY THE ENGINEER. FIELD SPLICES SHALL BE SEALED WITH A POURED OR EXTRUDED JOINT SEALANT CONFORMING TO SUBSECTION 1007-2.
 6. AT THE INTERSECTION OF TYPE LJ AND DJ JOINTS USING A COMBINATION JOINT FORMER / SEALER OR SPLIT SLAB CONSTRUCTION, THE GAP SHALL BE FILLED WITH A POURED OR EXTRUDED JOINT SEALANT CONFORMING TO SUBSECTION 1007-2.



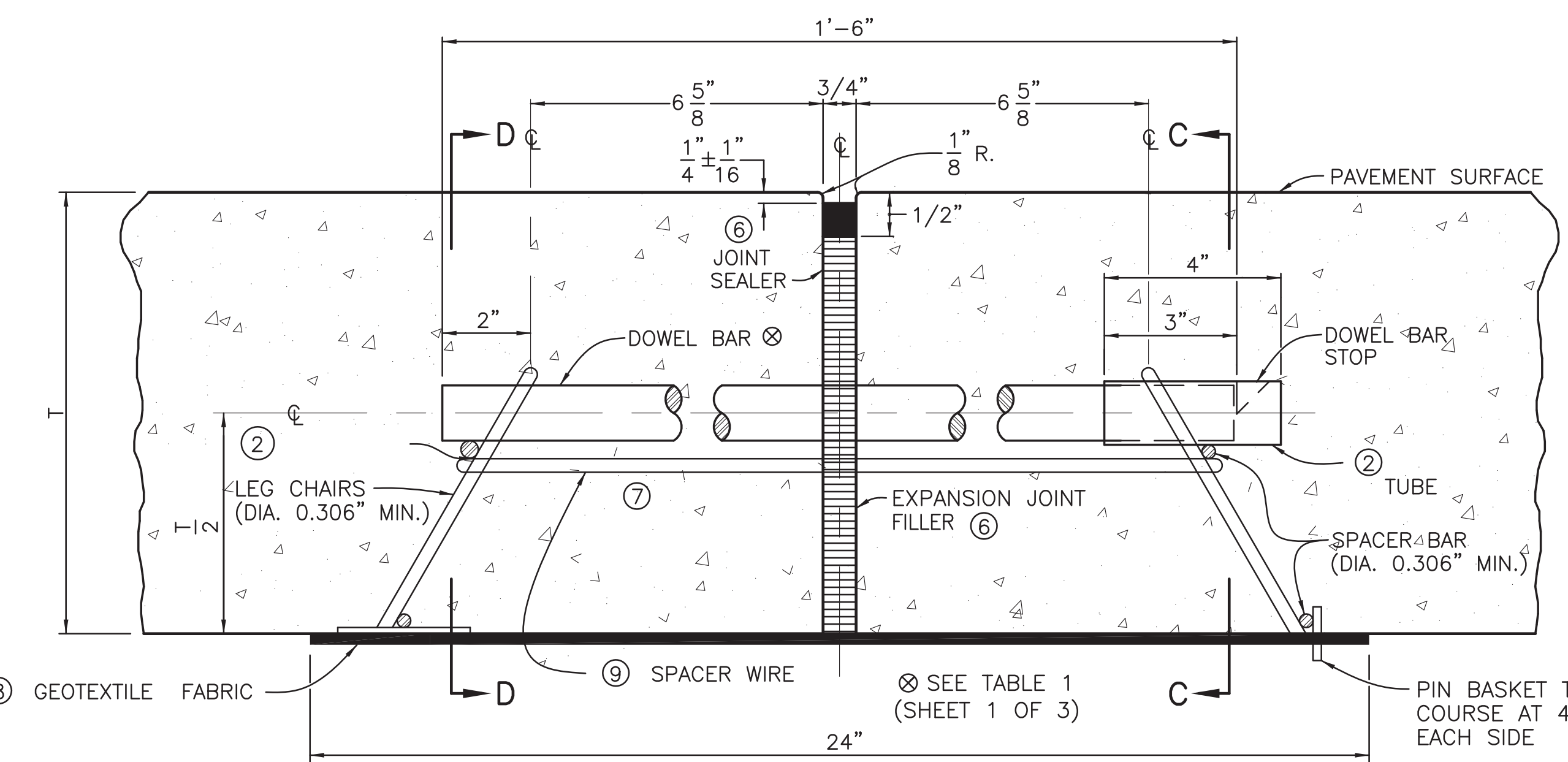
DETAIL "B"



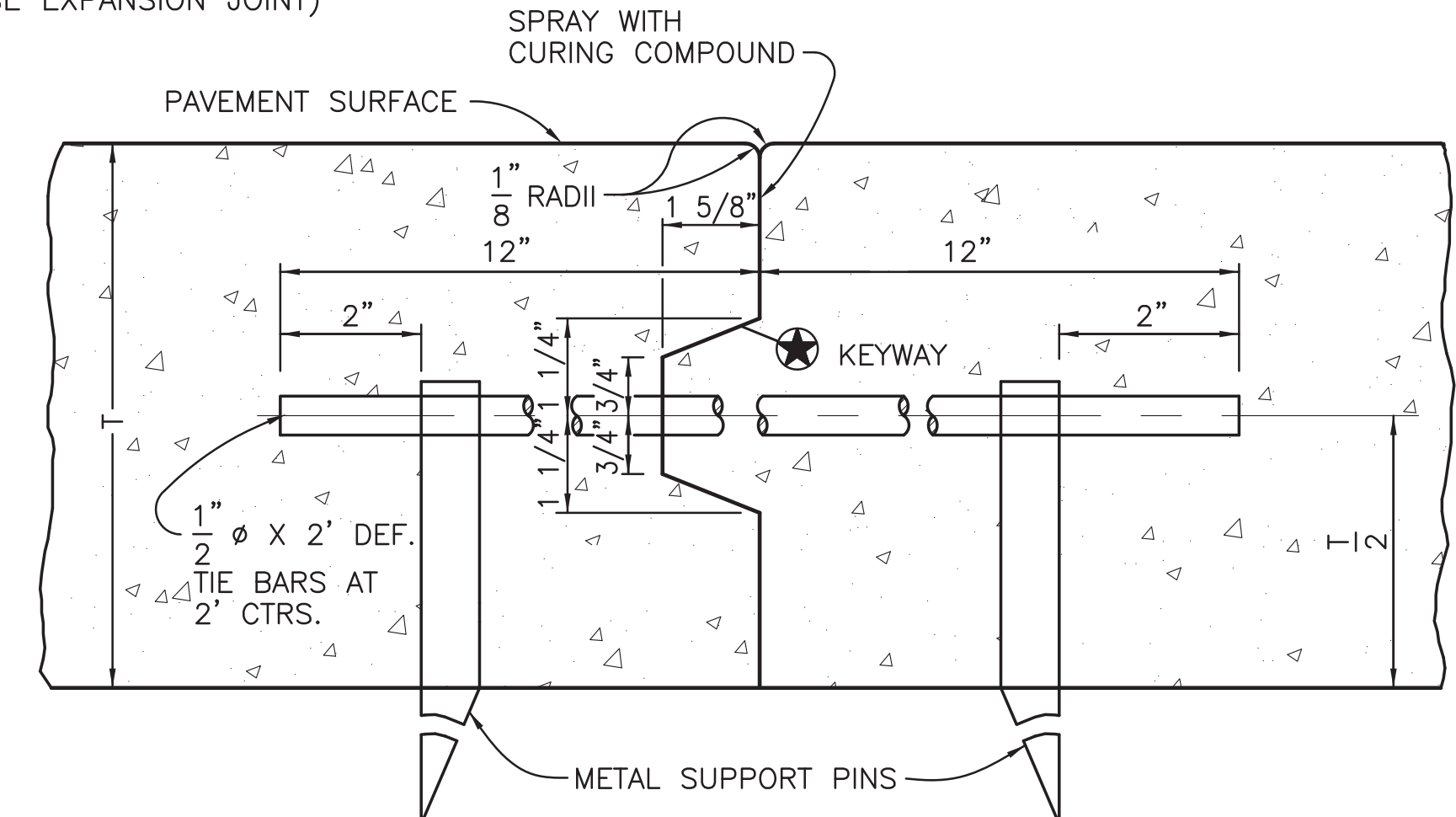
DETAIL "C"
POURED JOINT (FORMED) TYPE DJ OR CJ
SEE TABLE 1 ON SHEET 1



DETAIL "D"
POURED JOINT (SAWED) TYPE DJ OR CJ
SEE TABLE 1 ON SHEET 1

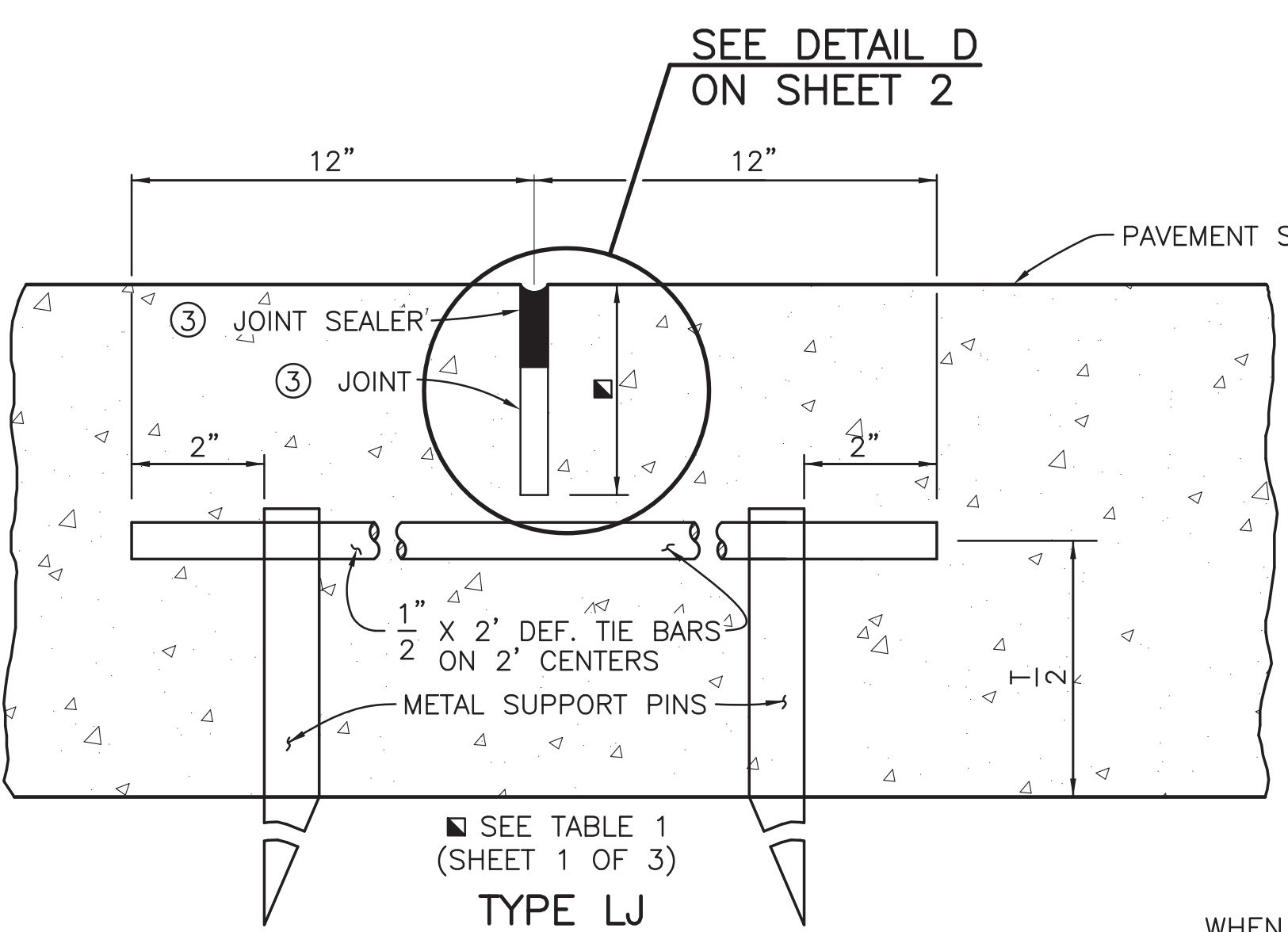
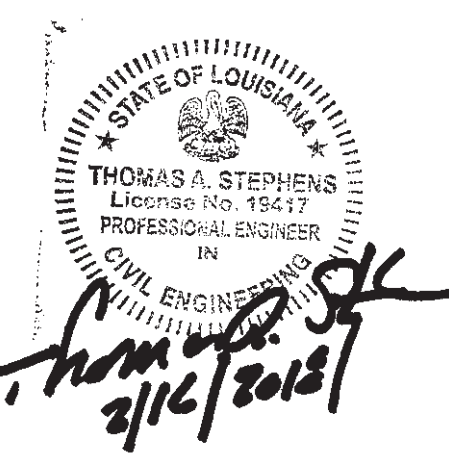


TYPE EJ
(TRANSVERSE EXPANSION JOINT)
AT CONTRACTOR'S OPTION, TYPE EJ-1 JOINT MAY BE USED IN LIEU OF TYPE EJ JOINT.

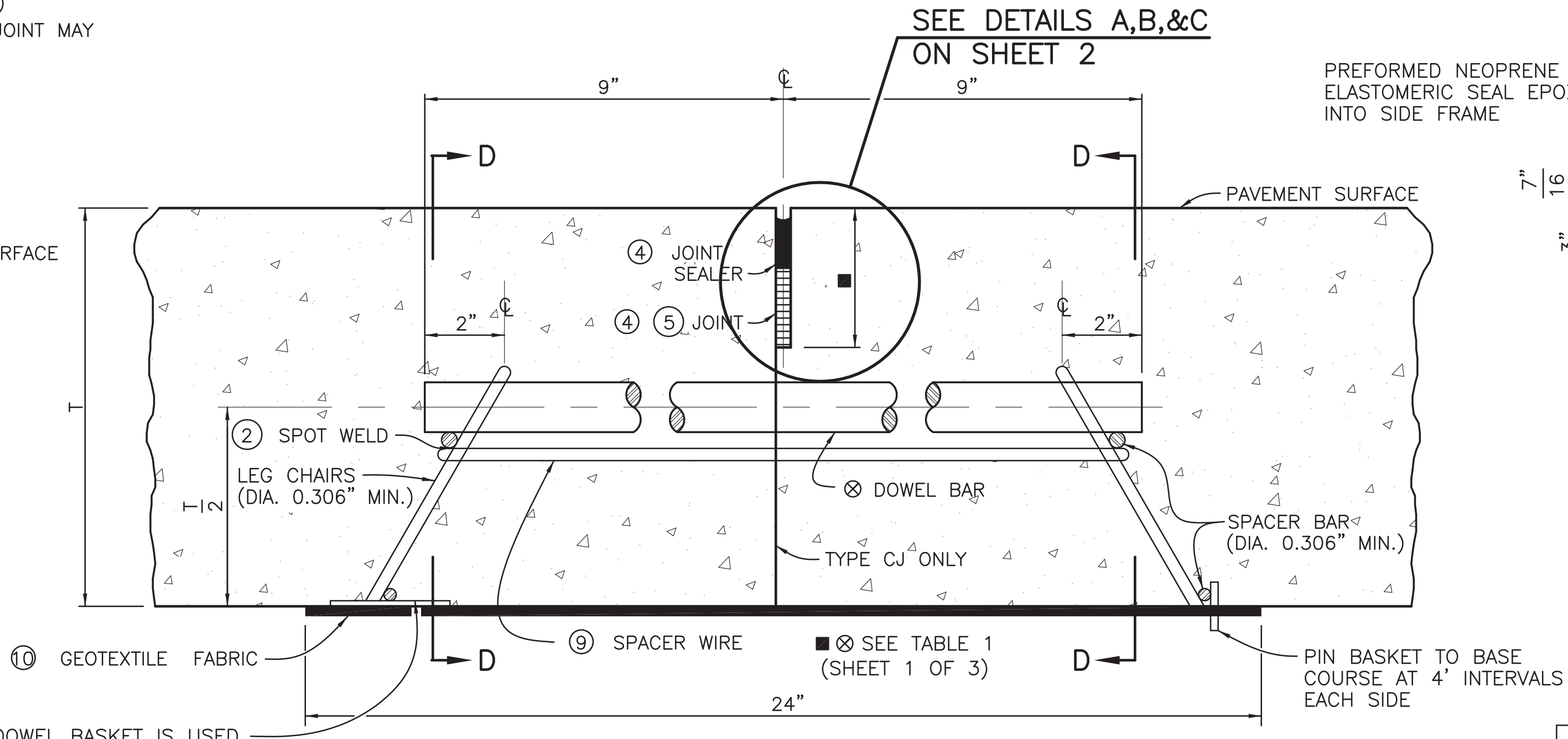


TYPE LCJ
(LONGITUDINAL CONSTRUCTION JOINT)
(SPLIT SLAB CONSTRUCTION)

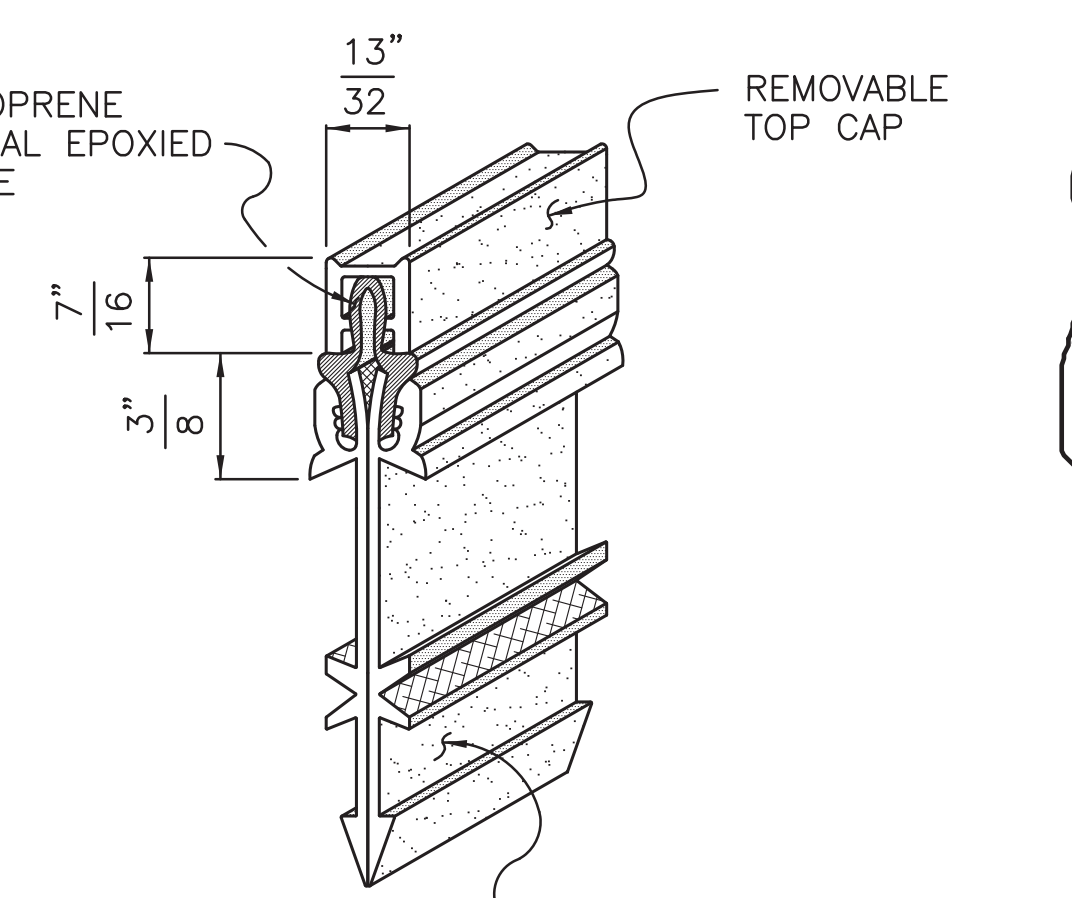
- IN LIEU OF KEYWAY, ONE OF THE FOLLOWING OPTIONS WILL BE ALLOWED:
- a.) INSTALL TIE BARS OF THE SIZE SHOWN ABOVE AT 1/2 SPACING.
 - b.) INSTALL TIE BARS 1/4" LARGER THAN THE TIE BAR DIAMETER SHOWN ABOVE AT SAME SPACING.



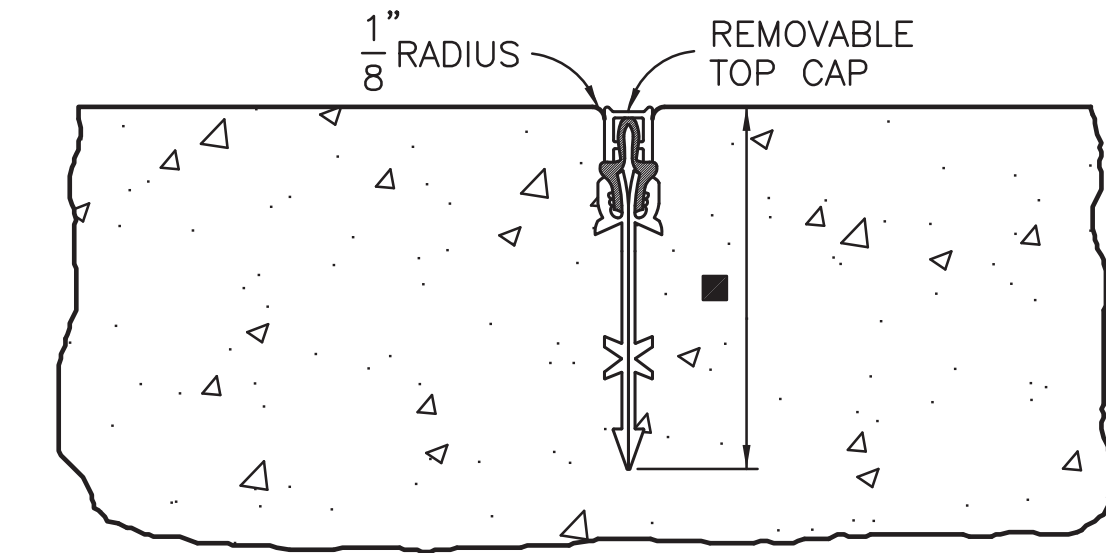
TYPE LJ
(LONGITUDINAL JOINT)
(REQUIRED WHEN PAVEMENT WIDTH EXCEEDS 15')



TYPE DJ OR CJ
(TRANSVERSE DUMMY JOINT OR CONSTRUCTION JOINT)



SEALINSERT DETAIL "A"



DETAIL "A"

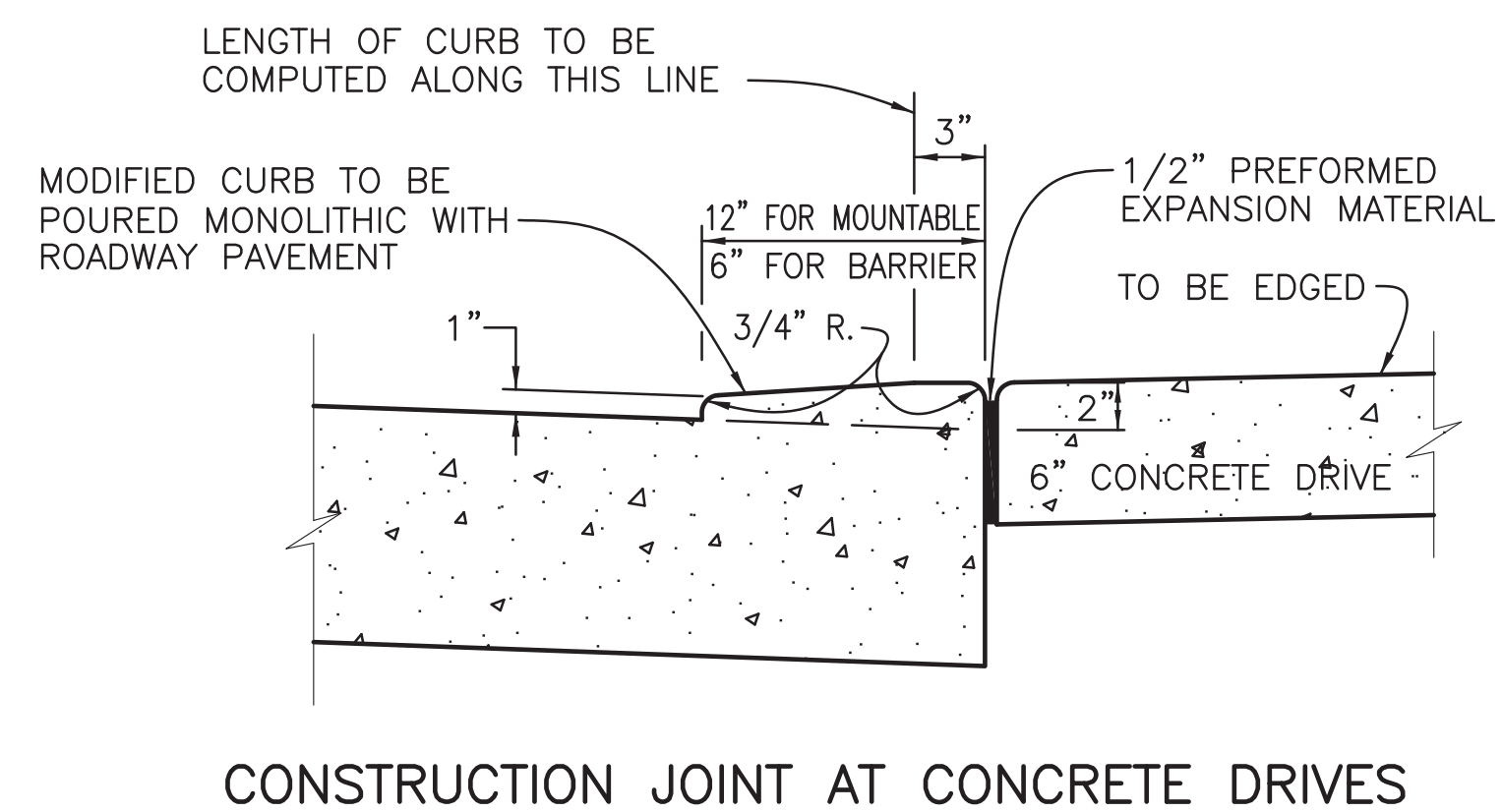
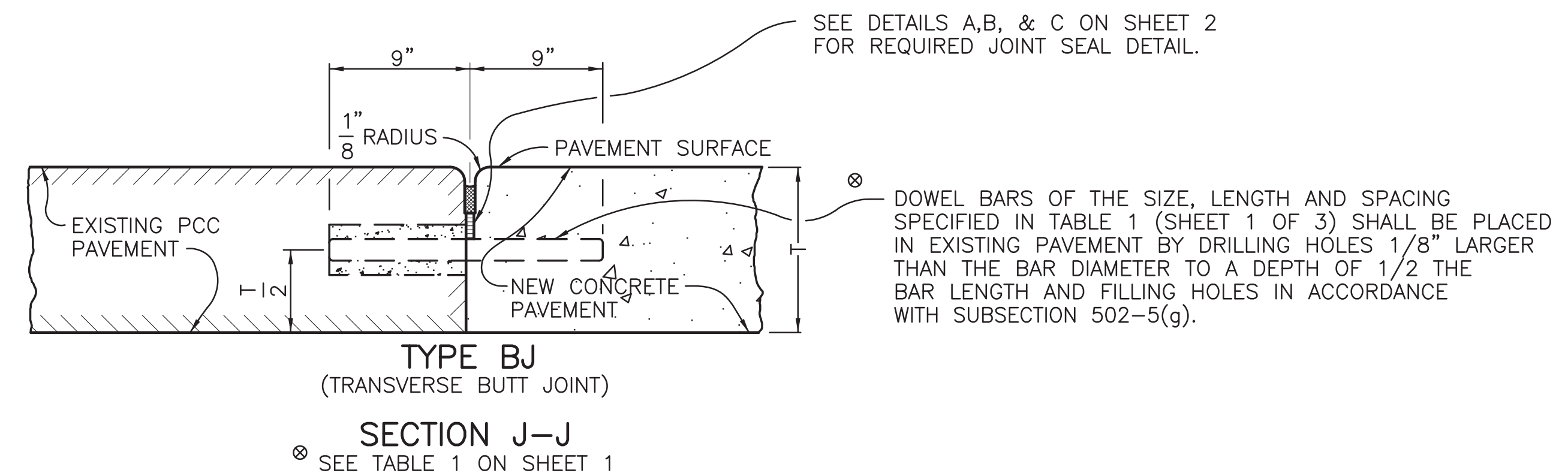
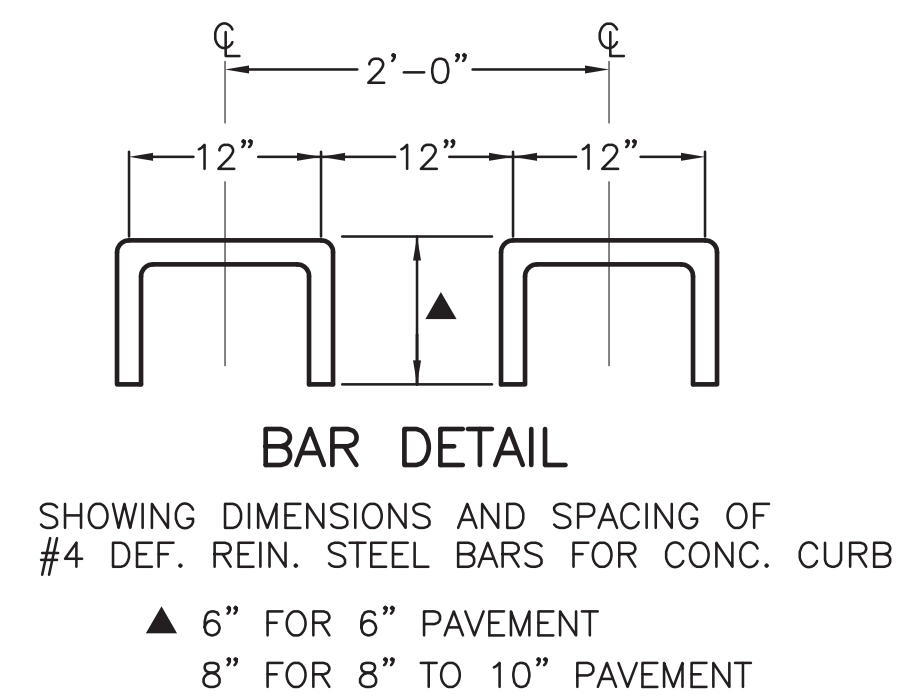
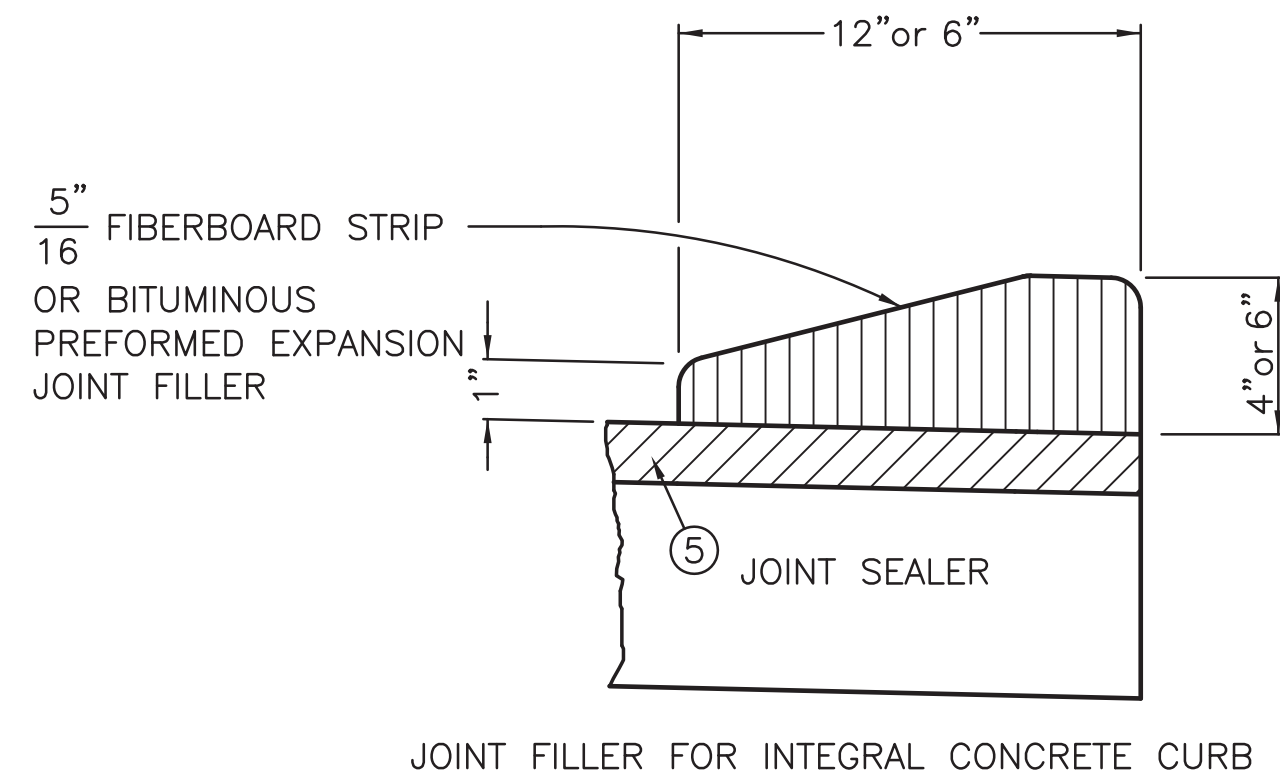
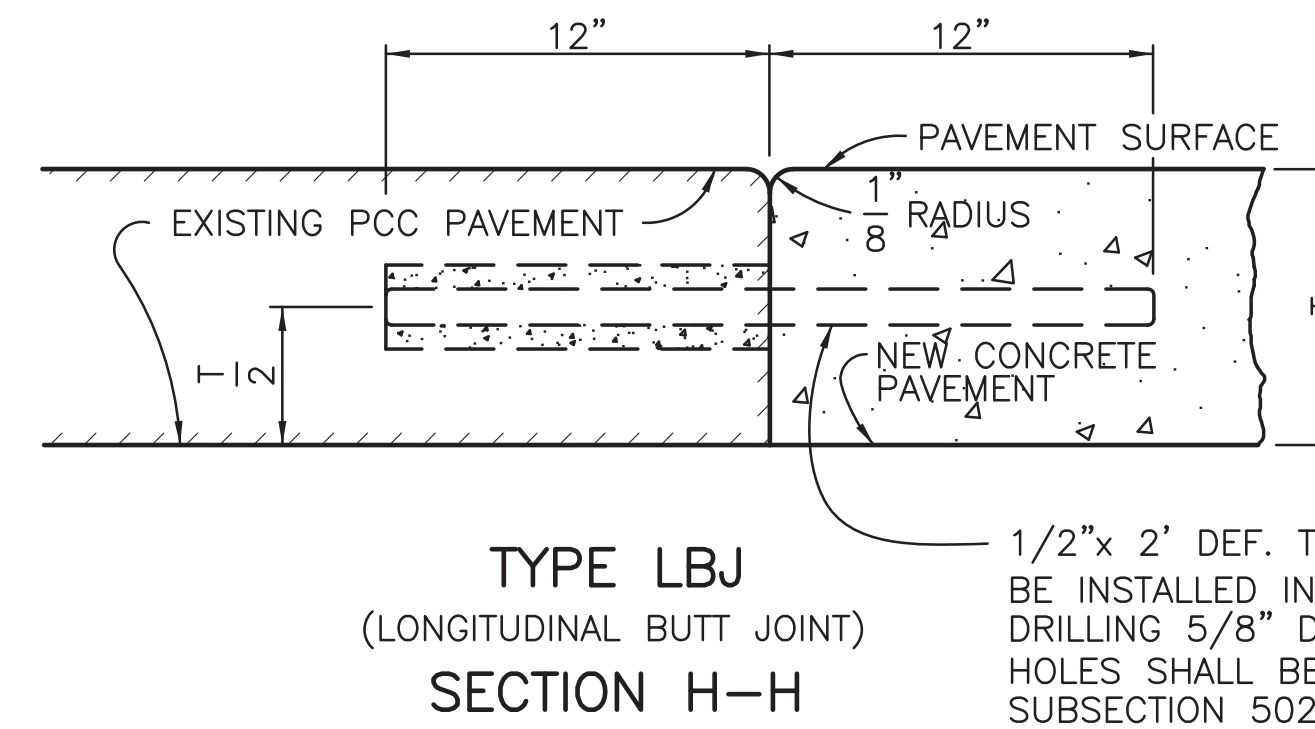
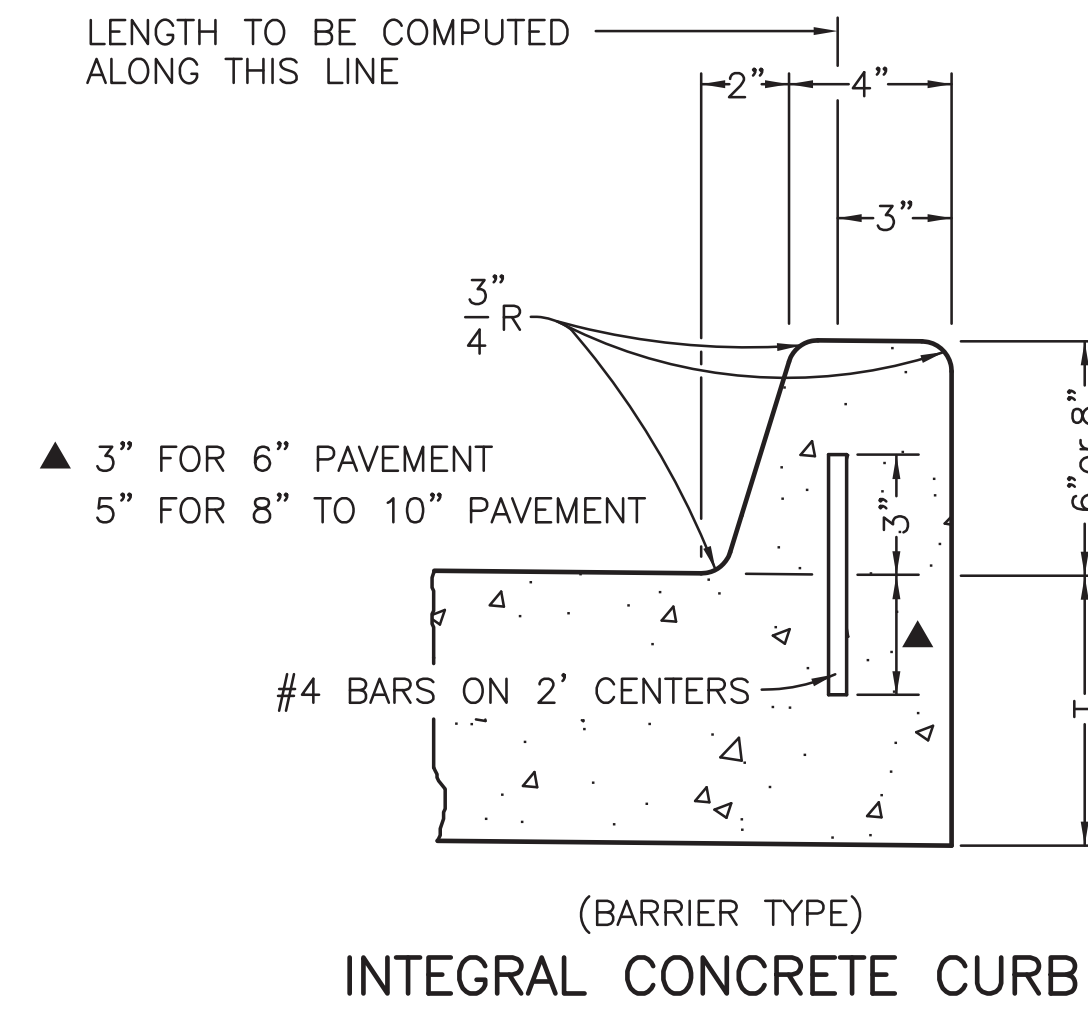
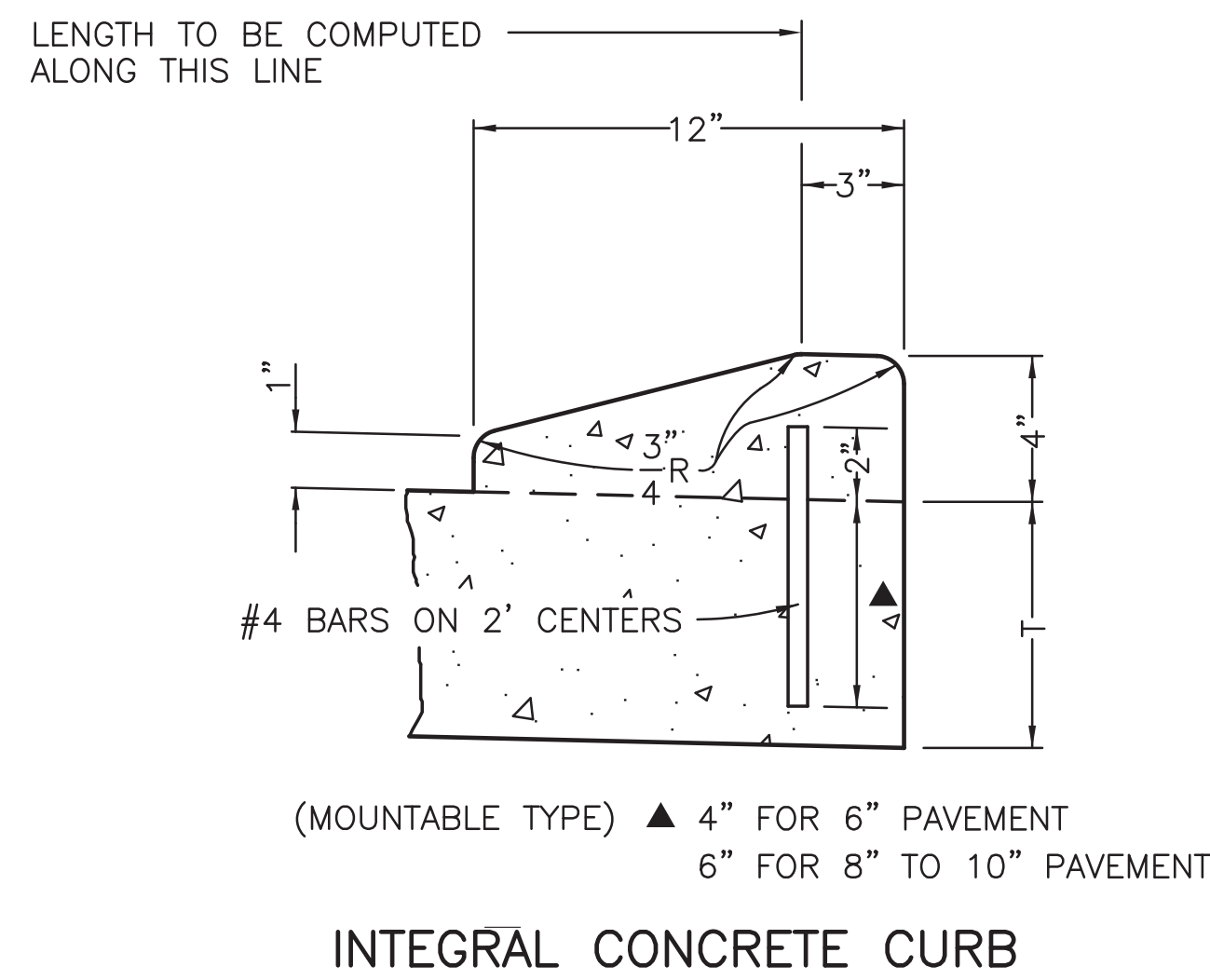
COMBINATION JOINT FORMER / SEALER
SEE TABLE 1 ON SHEET 1

STANDARD PLAN NO. 502-01	DATED January 18, 2008	SHEET NO. 2 OF 3
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CONCRETE PAVEMENT DETAILS			
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED R.E.E./N.A.R.	DRAWN G. VANNICE	CHECKED N.A.R./R.E.E.	APPROVED T. STEPHENS

DATE	DESCRIPTION	BY
	REVISIONS	

PROJECT NO.	SHEET
	204



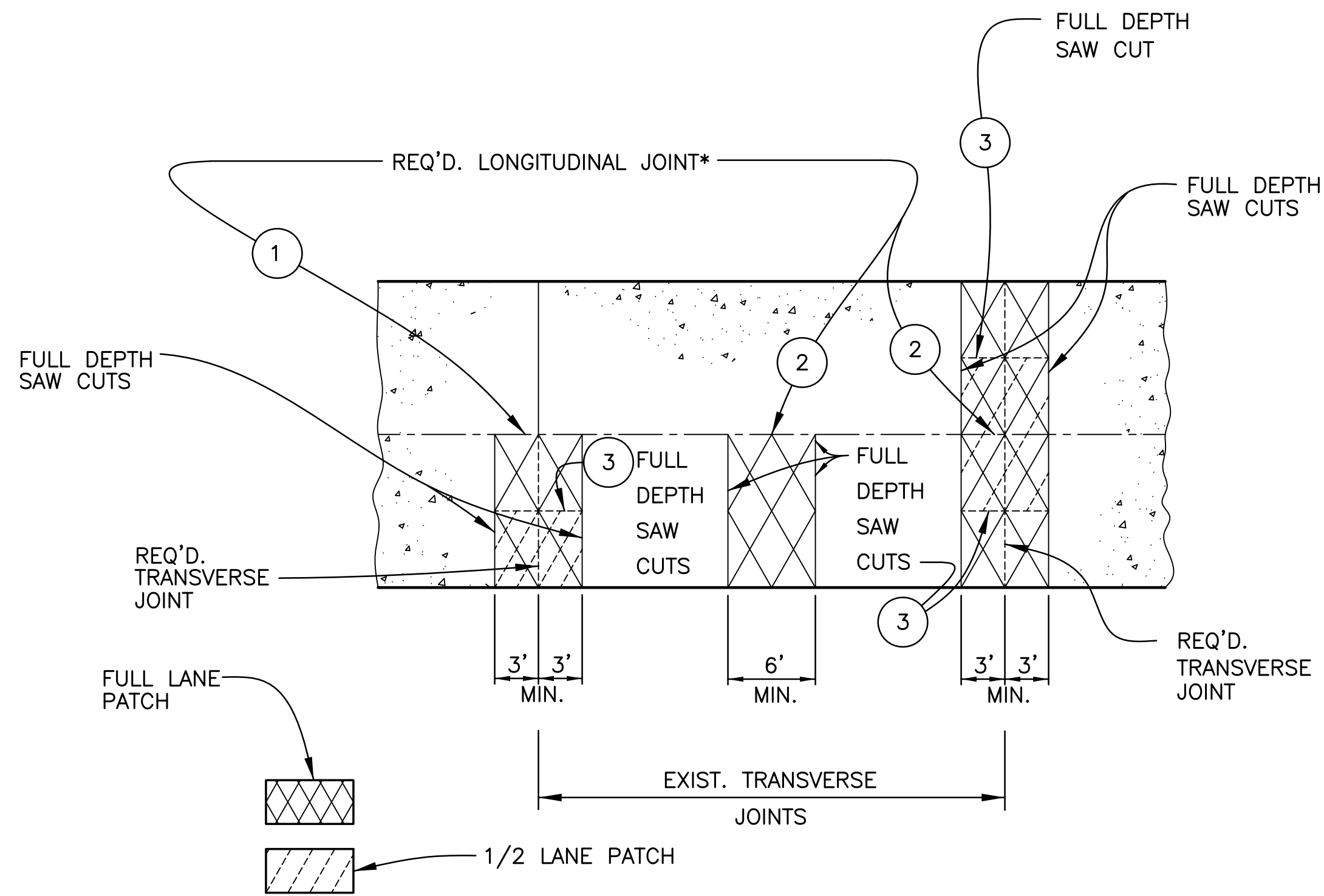
STATE OF LOUISIANA
 THOMAS A. STEPHENS
 License No. 15417
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
 2/16/2018

STANDARD PLAN NO. 502-01	DATED January 18, 2008	SHEET NO. 3 OF 3
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**CONCRETE PAVEMENT
DETAILS**

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED	DRAWN	CHECKED	APPROVED
R.E.E./N.A.R.	G. VANNICE	N.A.R./R.E.E.	T. STEPHENS

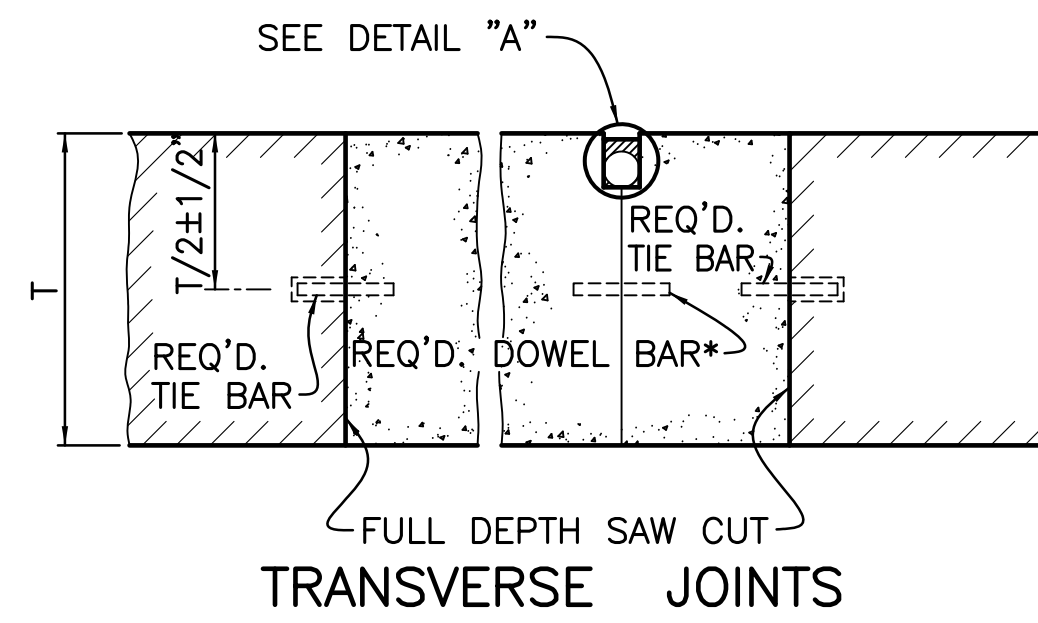
DATE	DESCRIPTION	BY
	REVISIONS	



LONGITUDINAL JOINTS

- * Dowel Bars and Longitudinal Tie Bars shall conform to STD. PLAN CPS 502-01
- △ New Joint to be Formed or Sawed
- ① (a) Tie bars shall be placed along the Longitudinal Joint with respect to the existing Transverse Joint in the Adjacent Slab.
- ② (a) 24" Tie bars shall be placed in the Longitudinal Joint.
- ③ Tie bar (.) to be used along Longitudinal Cut of 1/2 Lane Patch.

DETAILS FOR FULL DEPTH PATCHING OF JOINTED CONCRETE PAVEMENT



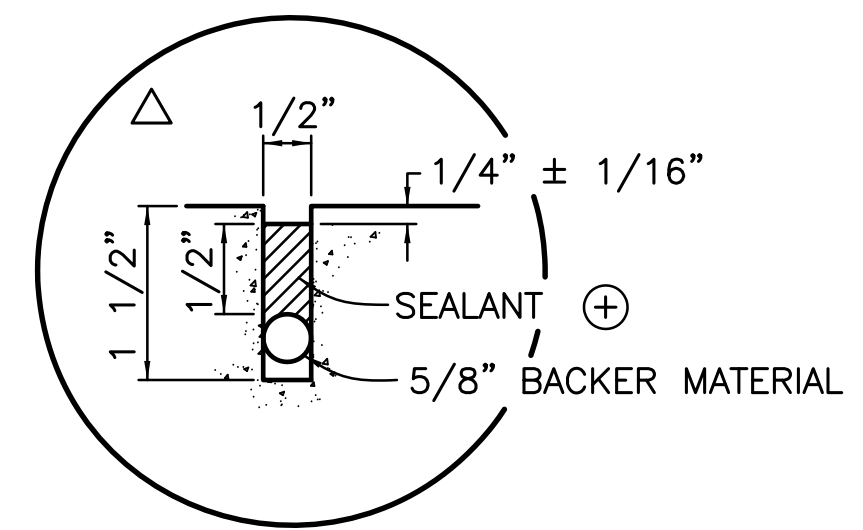
TRANSVERSE JOINTS

Deformed Tie Bars for Transverse Joints shall be 1" in diameter and 24" in length.

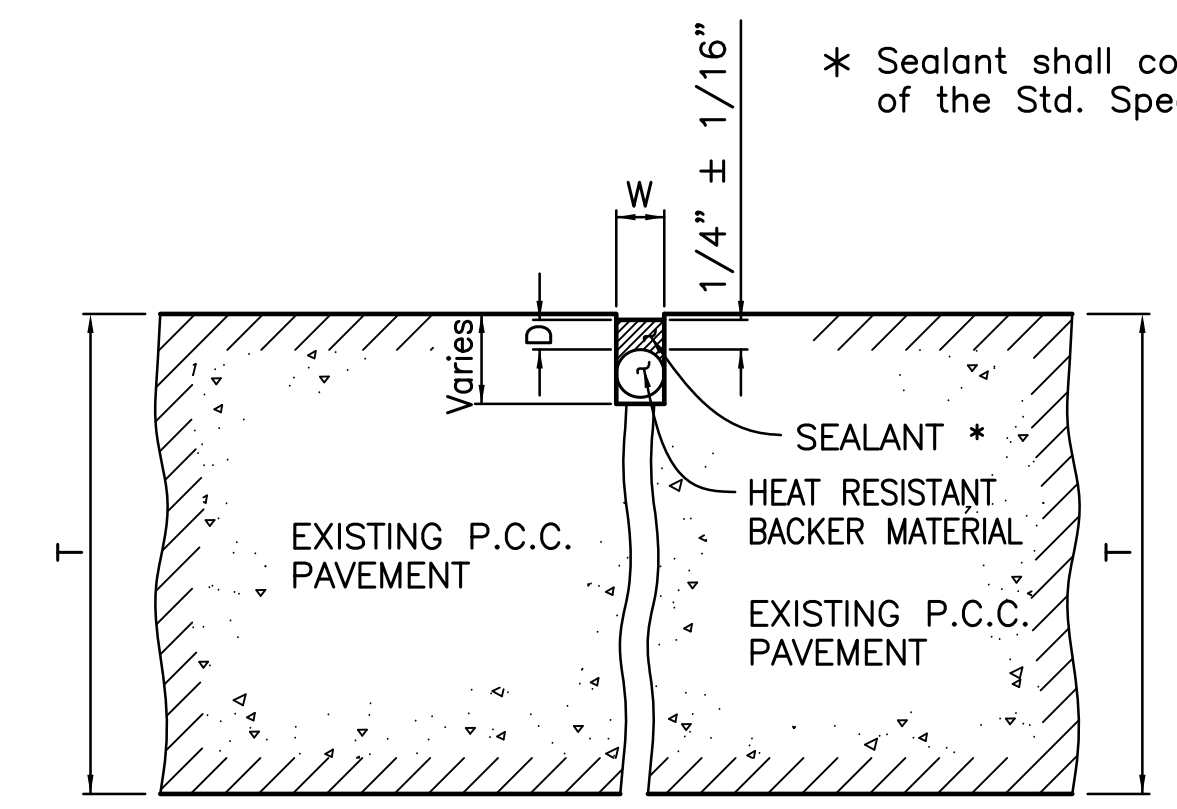
Deformed Tie Bars for Transverse Joints shall be installed in existing pavement by drilling holes 1/8" larger than the diameter of the Bar to a depth of 12" and filling the holes with an approved Epoxy Resin (DOTD QPL) insertion of the Bars. Spacing shall be at 12".

Face of existing Concrete shall be coated with an approved Epoxy Adhesive (DOTD QPL) before placing Concrete.

⊕ Sealant shall conform to Subs. 1007-2 of the Std. Specs.



DETAIL "A" TRANSVERSE JOINT



* Sealant shall conform to Subs. 1007-2 of the Std. Specs.

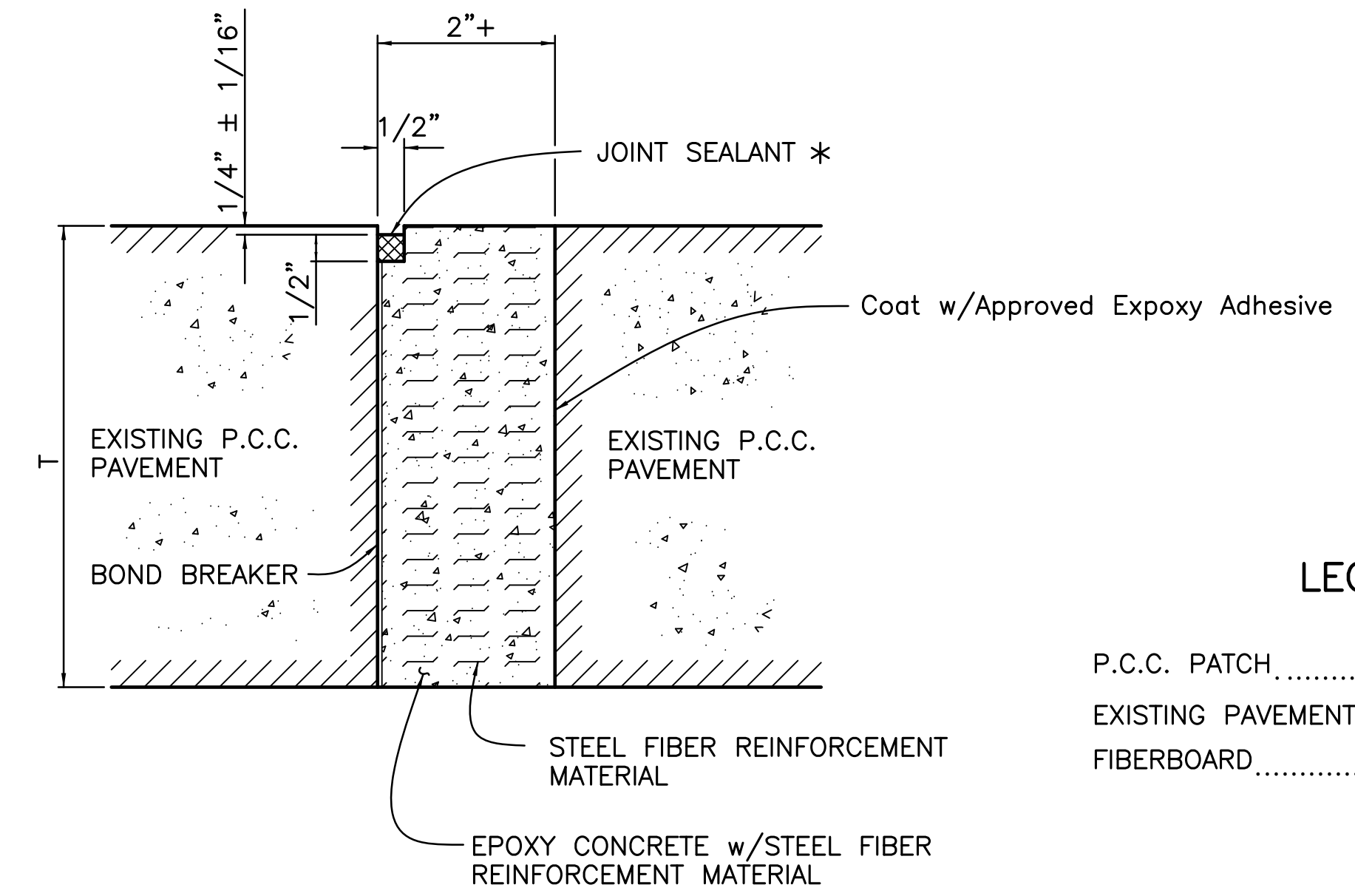
TRANSVERSE JOINT WIDTH (W)	LONGITUDINAL JOINTS WIDTH (W)	D	BACKER MATERIAL (INCH)	MINIMUM DEPTH TO REMOVE INCOMPRESSIBLES
1/2" - 1"	3/8" - 1"	1/2"	W + 25 %	T/2
>1" - 3"	>1" - 2"	W/2	W + 25 %	T

NOTES:

Backer Material shall consist of Heat Resistant, Closed - Cell Cross - Linked Polyethylene or Polyolefin Foam.

DETAIL FOR CLEANING AND RESEALING EXISTING TRANSVERSE & LONGITUDINAL JOINTS

* Sealant shall conform to Subs. 1007-2 of the Std. Specs.



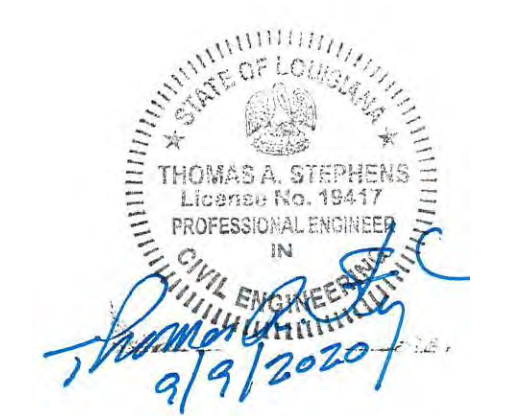
NOTES:

Face of existing concrete (opposite face with Bond Breaker) shall be coated with an approved Epoxy Adhesive (LDOTD QPL) before placement of Epoxy Concrete w/ Steel Fiber Reinforcement Material.

SPECIAL DETAIL CLEANING AND FILLING EXISTING LONGITUDINAL PAVEMENT JOINTS (Existing Opening 2" and wider)

LEGEND

- P.C.C. PATCH
- EXISTING PAVEMENT TO REMAIN
- FIBERBOARD

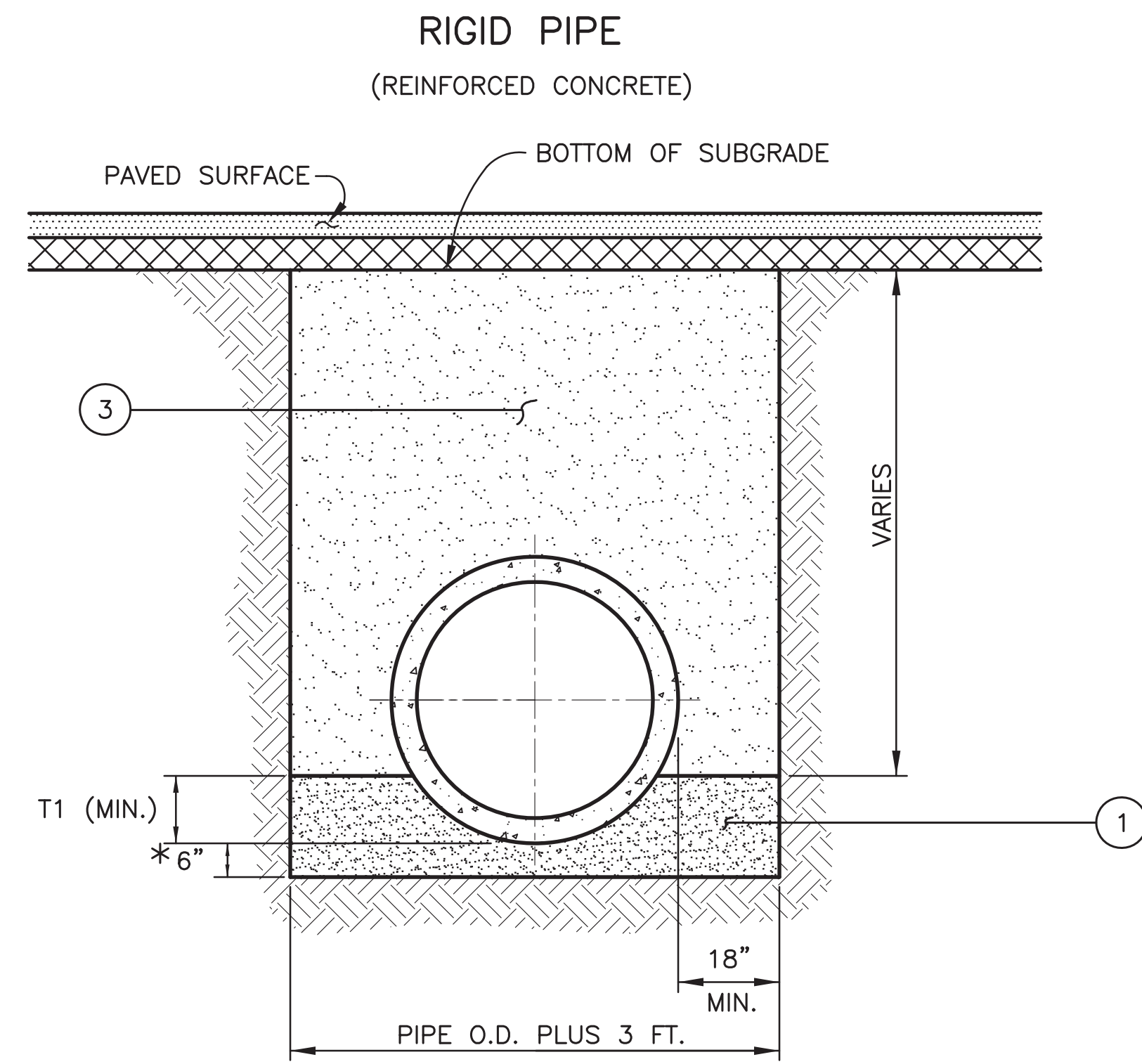


STANDARD PLAN NO. 502-02	DATED DECEMBER 12, 2007	SHEET NO. 1 OF 1
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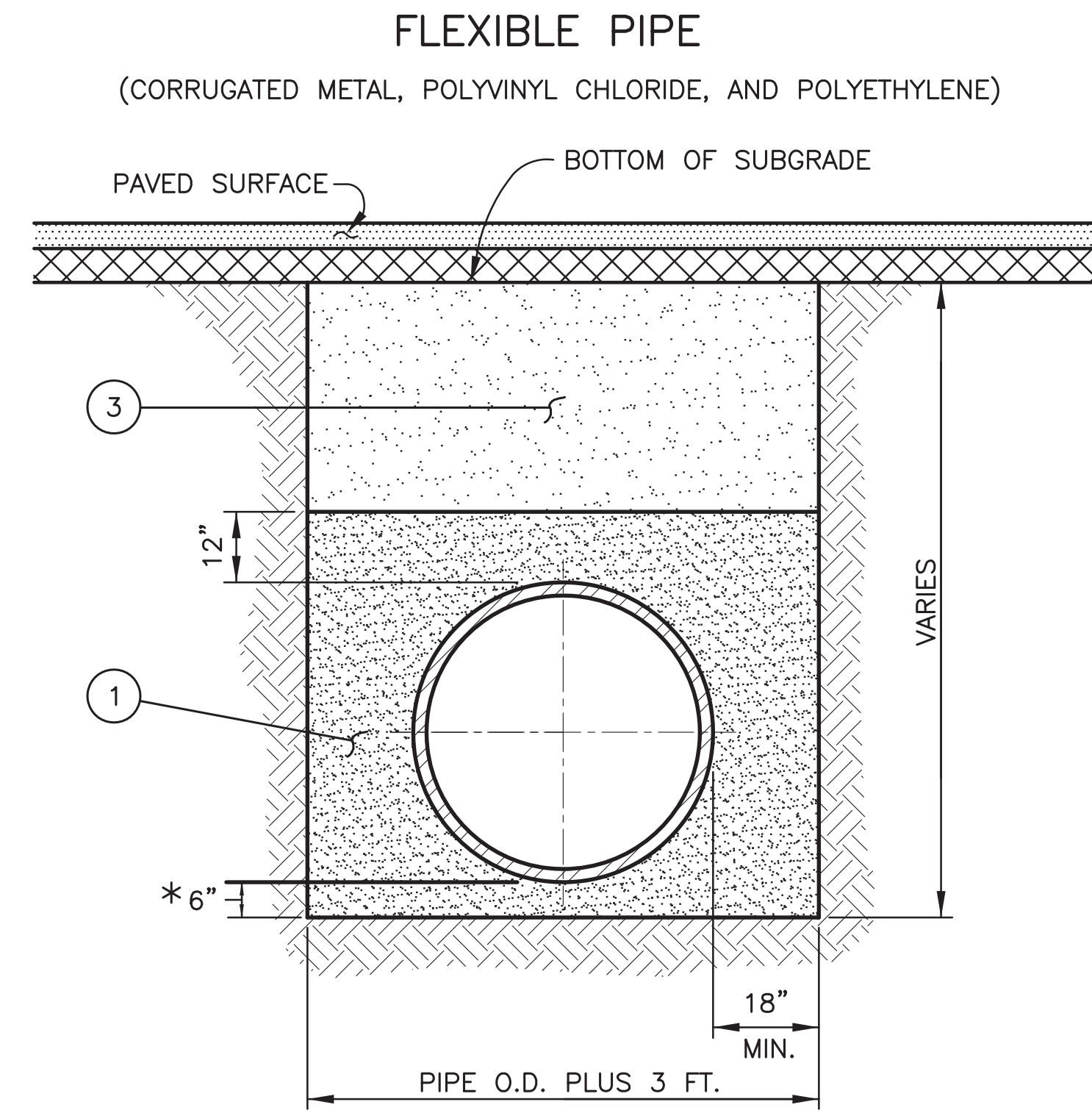
CONCRETE PAVEMENT REPAIR

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED R.K. BANKS	DRAWN G.VANNICE	CHECKED R.K. BANKS	APPROVED T. STEPHENS

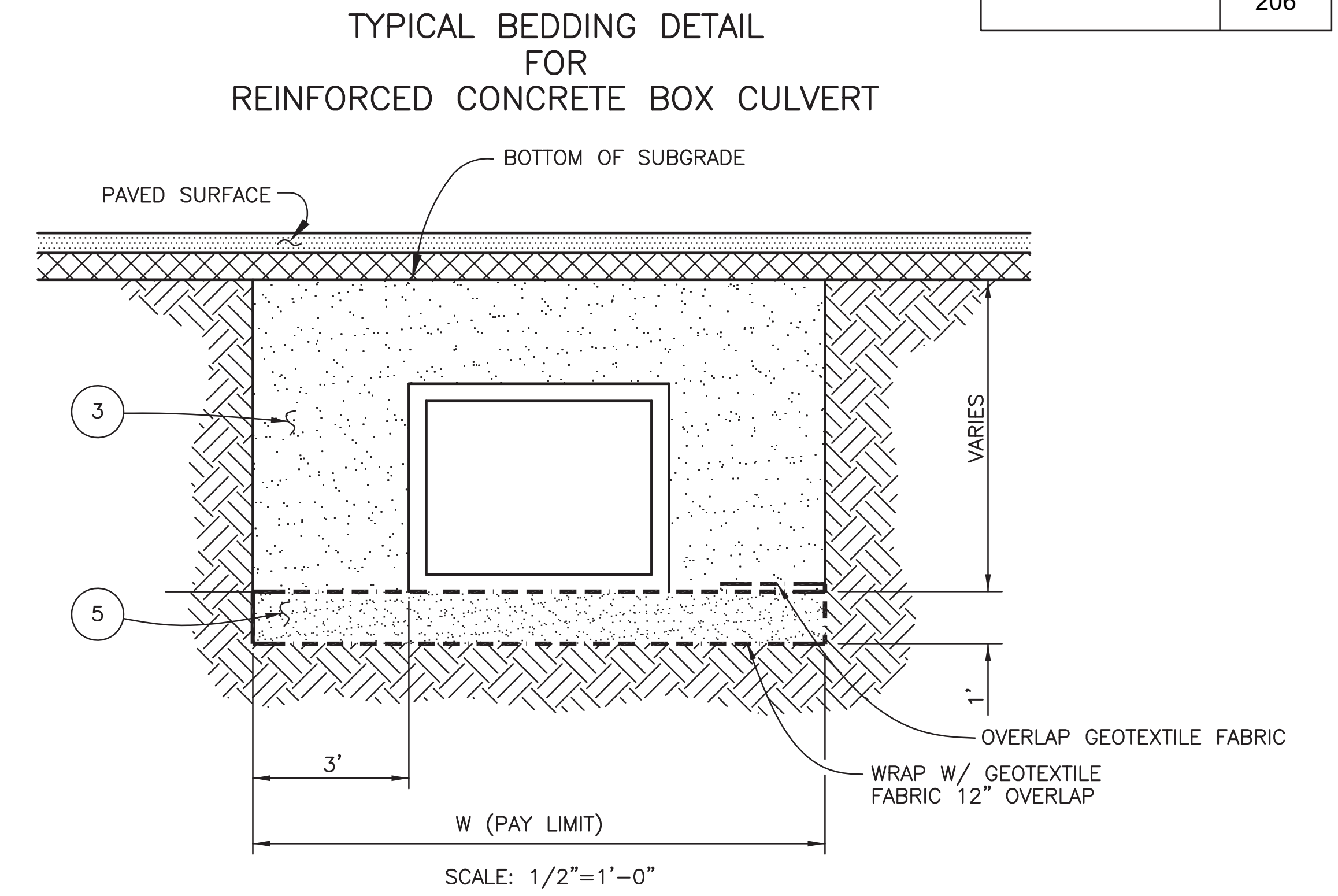
DATE	DESCRIPTION REVISIONS	BY



PIPE UNDER OR WITHIN 5 FEET OF STREETS AND PAVED SURFACES.
SCALE: 1/2"=1'-0"



PIPE UNDER OR WITHIN 5 FEET OF STREETS AND PAVED SURFACES.
SCALE: 1/2"=1'-0"



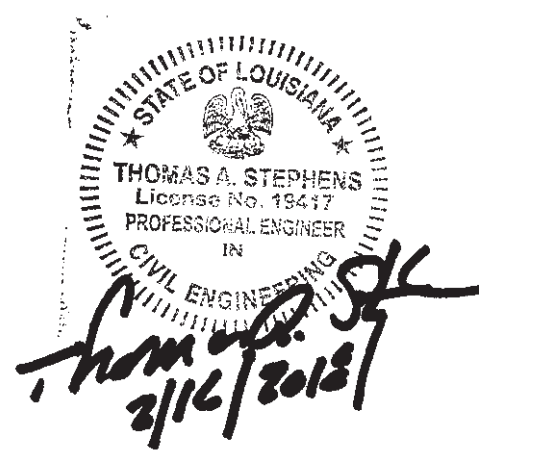
GENERAL NOTES

ALL MATERIALS AND WORK SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF BATON ROUGE AND PARISH OF EAST BATON ROUGE—"STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION".

* BEDDING UNDER PIPE SHALL BE 6" UNLESS OTHERWISE SPECIFIED IN THE PLANS OR SPECIAL PROVISIONS.

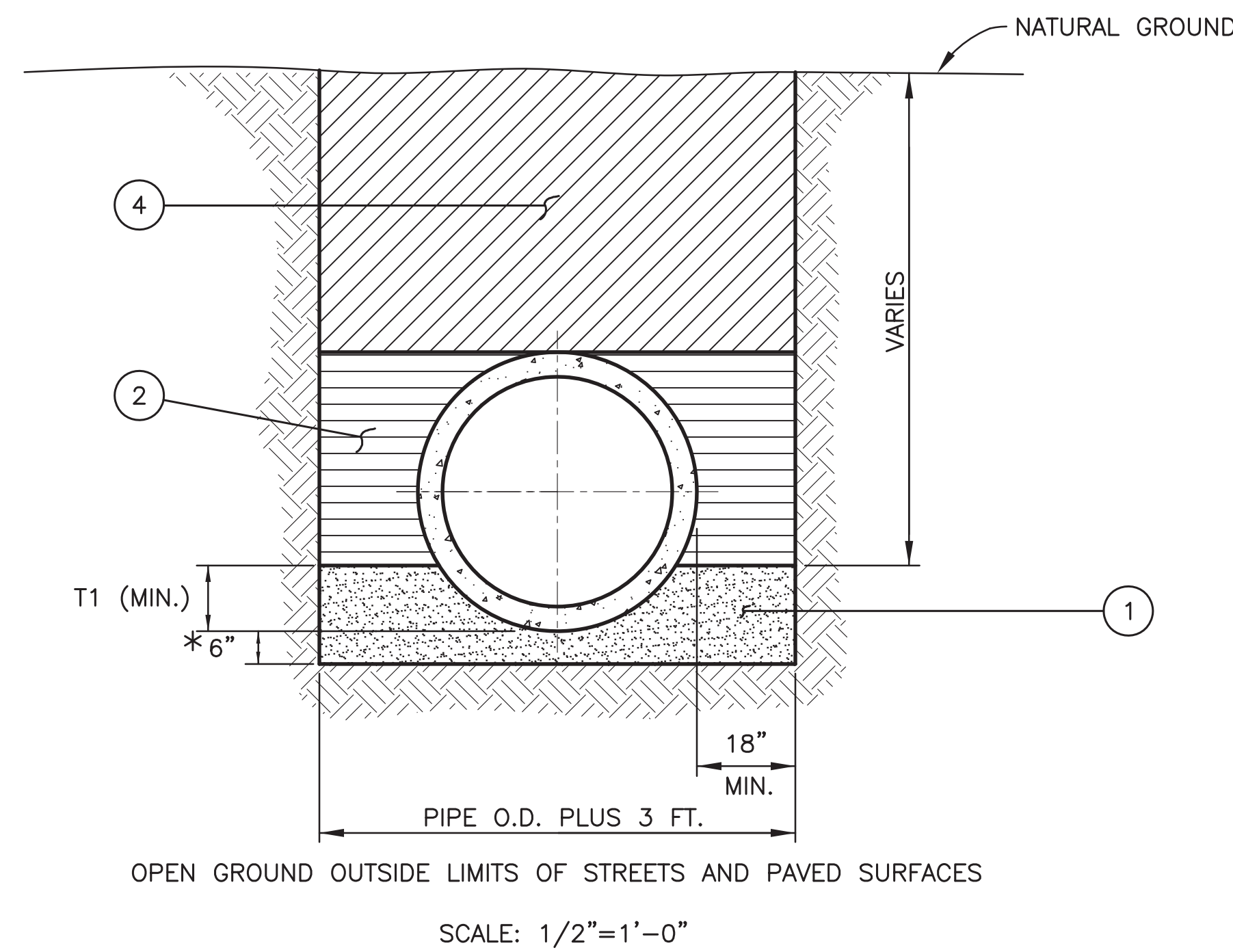
LEGEND

- ① BEDDING MATERIAL COMPACTED TO 95% STANDARD PROCTOR DENSITY. (NO DIRECT PAY).
- ② BACKFILL MATERIAL (QUALITY EXCAVATED OR SELECT MATERIAL OR SAND), COMPACTED TO A DENSITY AT LEAST EQUAL TO SURROUNDING UNDISTURBED SOIL. (NO DIRECT PAY).
- ③ BACKFILL MATERIAL (BACKFILL SAND), COMPACTED TO 95% STANDARD PROCTOR DENSITY. (NO DIRECT PAY).
- ④ BACKFILL MATERIAL (QUALITY EXCAVATED OR SELECT MATERIAL), COMPACTED TO A DENSITY AT LEAST EQUAL TO THE SURROUNDING UNDISTURBED SOIL. (NO DIRECT PAY).
- ⑤ 67 LIMESTONE W/ GEOTEXTILE FABRIC.

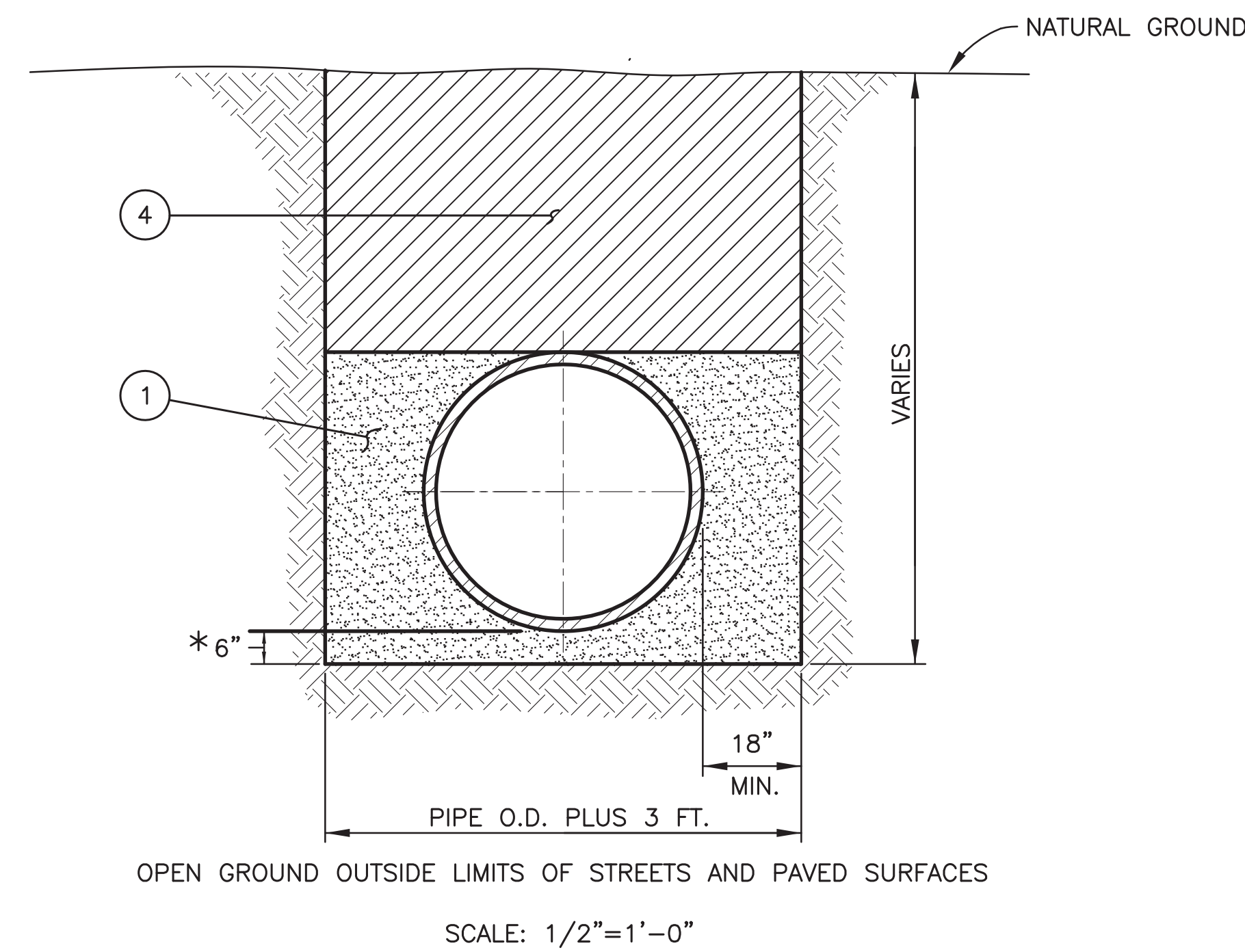


PIPE BEDDING SCHEDULE (RIGID PIPE)

PIPE SIZE	T1 (MIN.)
12"-30"	6"
36"-60"	12"
66"-96"	18"



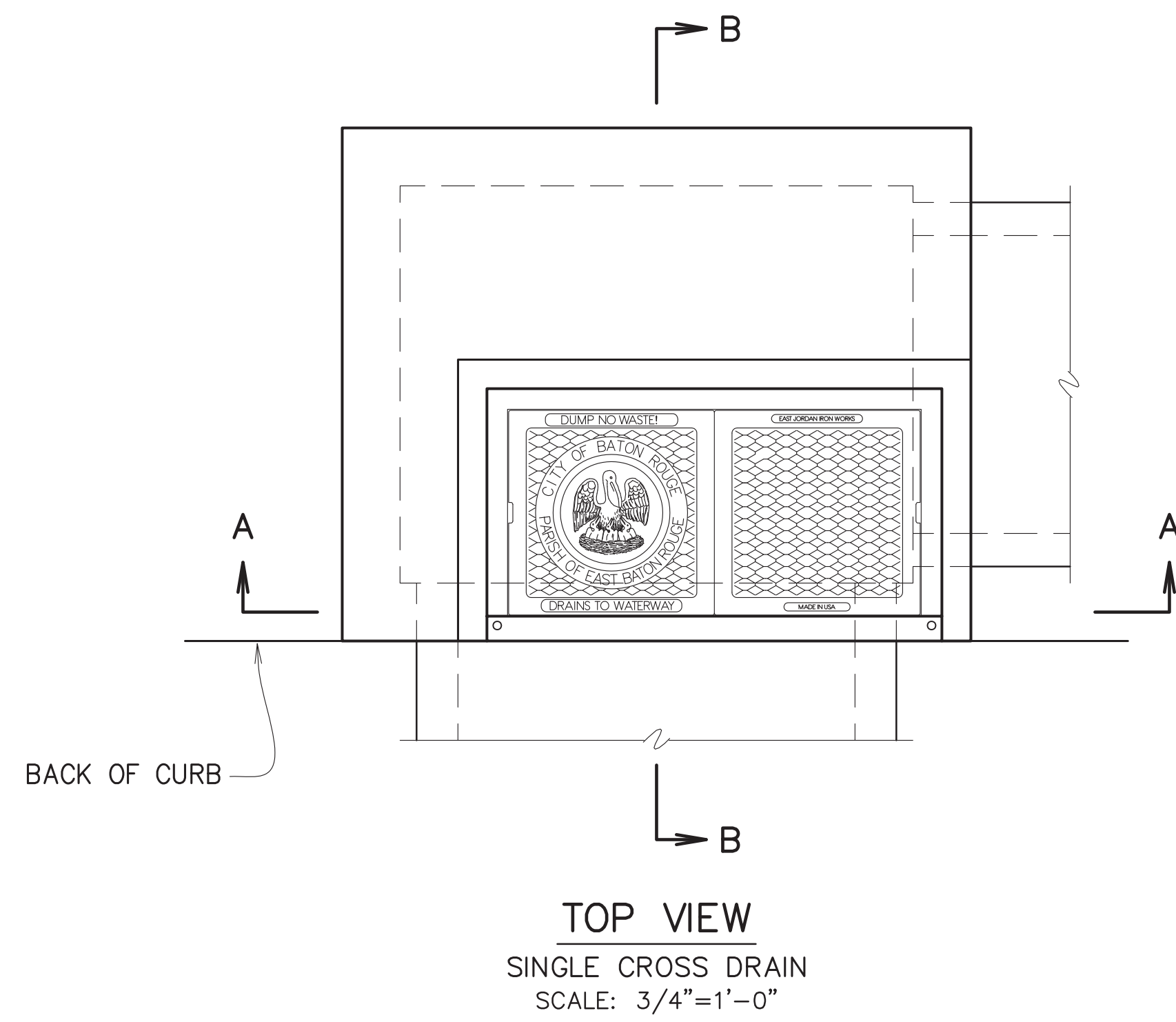
OPEN GROUND OUTSIDE LIMITS OF STREETS AND PAVED SURFACES
SCALE: 1/2"=1'-0"



OPEN GROUND OUTSIDE LIMITS OF STREETS AND PAVED SURFACES
SCALE: 1/2"=1'-0"

DATE	DESCRIPTION	BY
	REVISIONS	

STANDARD PLAN NO. 701-01	DATED February 8, 2008	SHEET NO. 1 OF 1
STANDARD BEDDING AND BACKFILL DETAILS FOR STORM DRAINAGE CONDUIT		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED R. ELLIS	DRAWN G. VANNICE	CHECKED R. ELLIS
		APPROVED T. STEPHENS



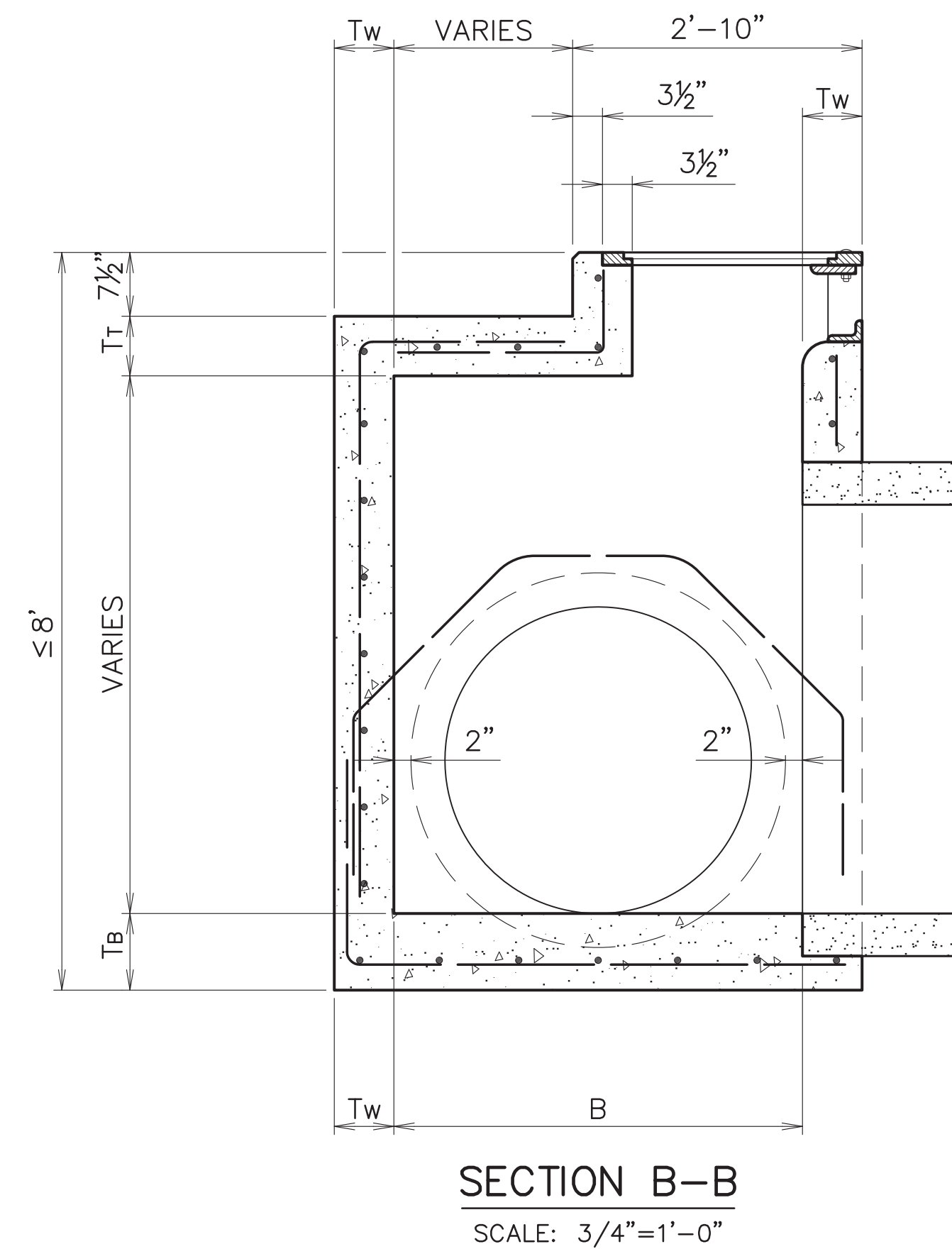
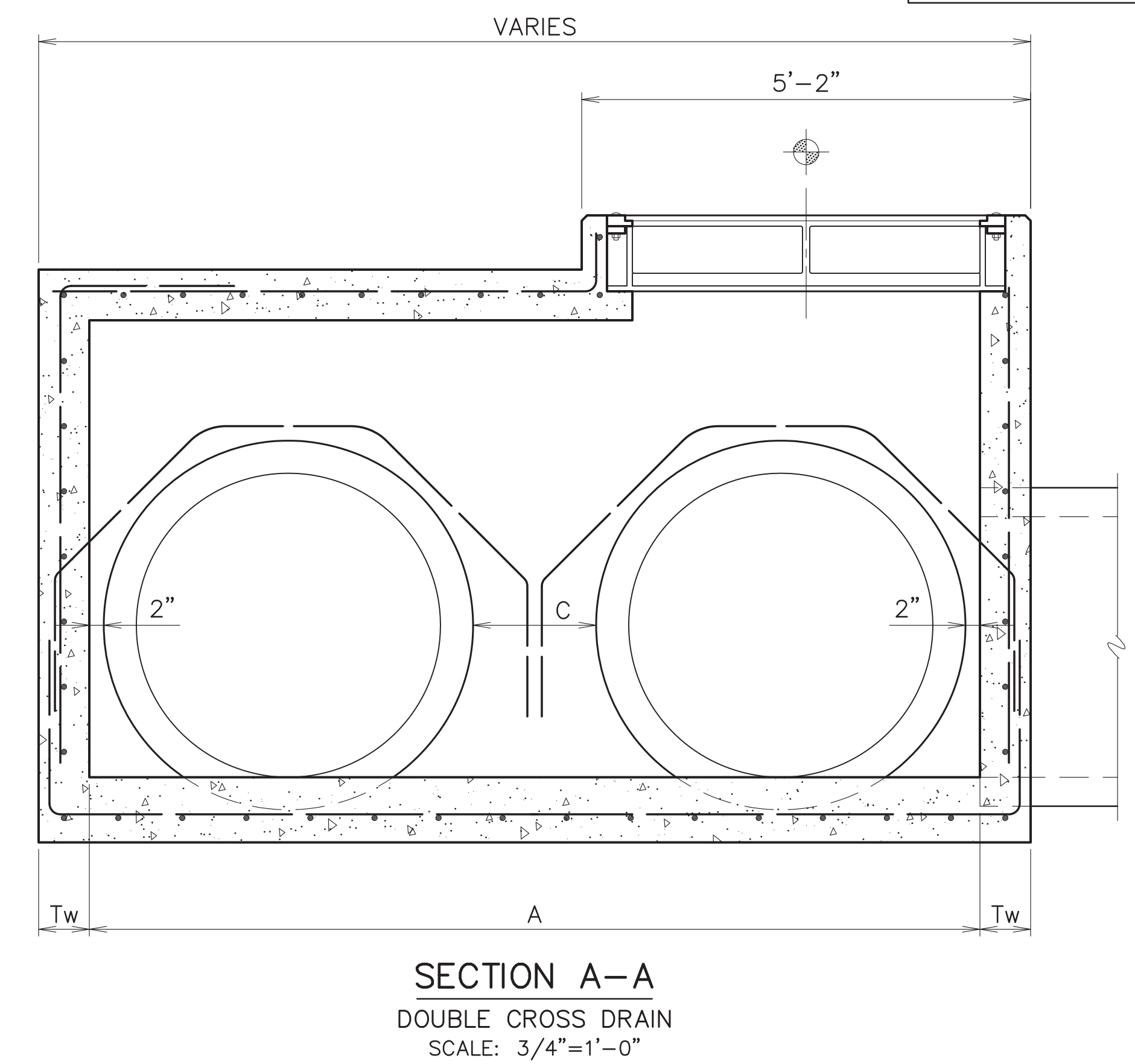
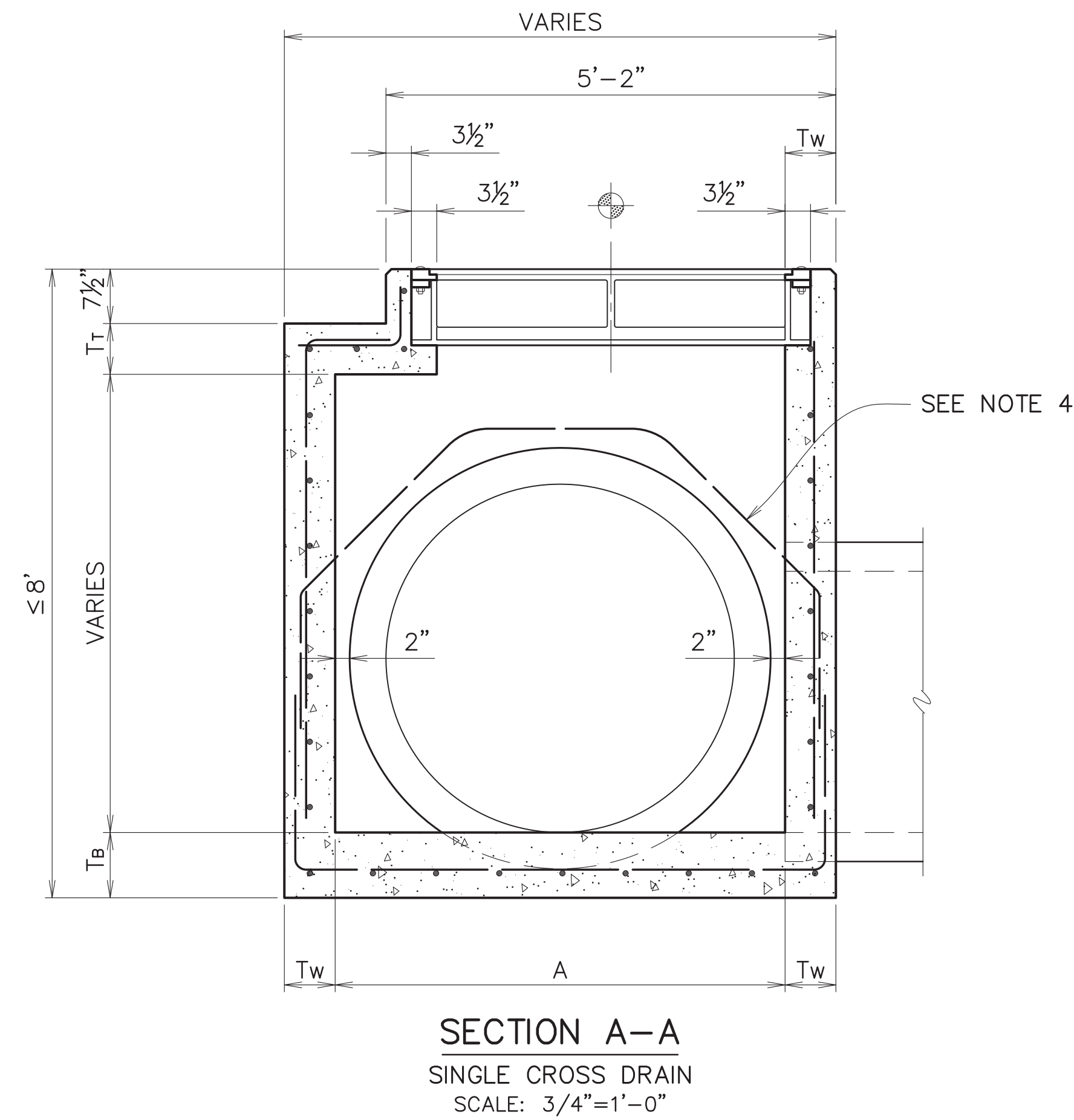
PIPE SIZE		DIMENSION			
ROUND PIPE	ARCH PIPE (ROUND EQUIV.)	A SINGLE PIPE	A DOUBLE PIPE	B	C
15"	-	4'-0"	5'-0"	2'-3"	15"
18"	15"	4'-0"	5'-7"	2'-3"	15"
24"	18"	4'-0"	6'-7"	2'-10"	15"
30"	24"	4'-0"	8'-9"	3'-5"	15"
36"	30"	4'-0"	8'-11"	4'-0"	15"
42"	36"	4'-8"	10'-5"	4'-8"	17"
48"	-	5'-2"	11'-7"	5'-2"	19"
54"	42"	5'-9"	12'-11"	5'-9"	21"
60"	48"	6'-4"	14'-3"	6'-4"	23"
-	54"	6'-8"	15'-0"	6'-8"	24"
72"	60"	7'-6"	16'-8"	7'-6"	24"
84"	72"	8'-10"	20'-0"	8'-10"	36"

■ CENTERED CASTING

NOTE:

- SEE STANDARD PLAN 702-99 FOR FRAME AND COVER DETAILS. TYPE 1 FRAME AND COVER REQUIRED. SINGLE FRAME AND COVER ALLOWED.
- PRECAST CONCRETE INLETS CONFORMING TO STANDARD PLAN 702-97 MAY BE FURNISHED.
- CONCRETE SHALL NOT BE PLACED ABOVE BOTTOM OF PAVEMENT UNTIL PAVING ADJACENT TO INLET HAS BEEN COMPLETED.
- DIAGONAL REINFORCEMENT REQUIRED FOR PIPE LARGER THAN 36". BARS SHALL LAP TO A FULL LENGTH VERTICAL BAR W/18d LAP LENGTH.
- A & B DIMENSIONS MAY BE VARIED FOR SKEWED PIPE.
- SEE STANDARD PLAN 702-96 FOR THICKNESS, REINFORCING STEEL, AND OTHER STRUCTURAL DETAILS.
- SEE STANDARD PLAN 702-98 FOR CURB TRANSITION DETAILS.

⊙ PLAN STATION CALL-OUT



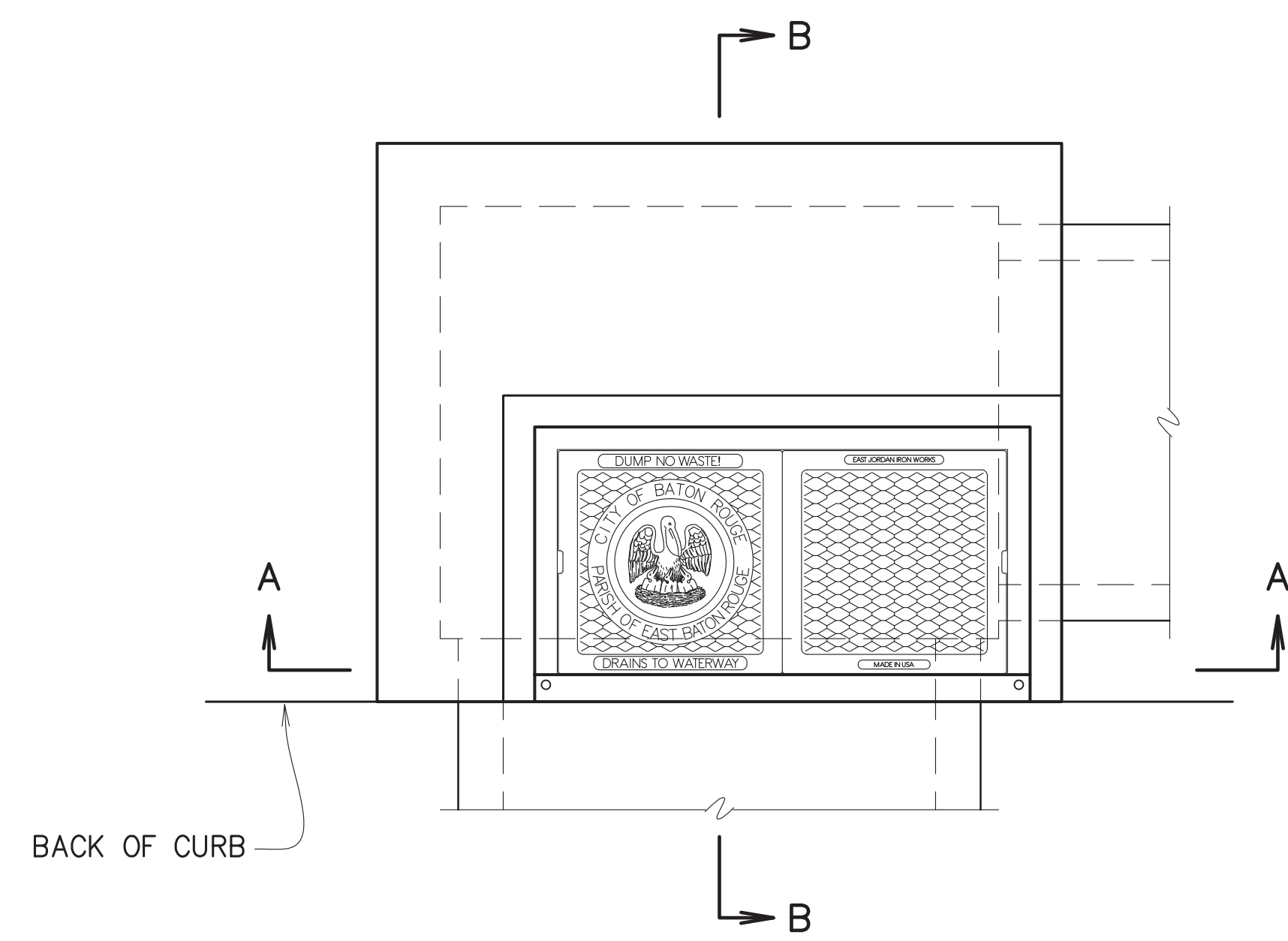
STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 18447
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
11/16/2018

STANDARD PLAN No. 702-01	DATED DEC. 6, 2010	SHT. No. 1 OF 2
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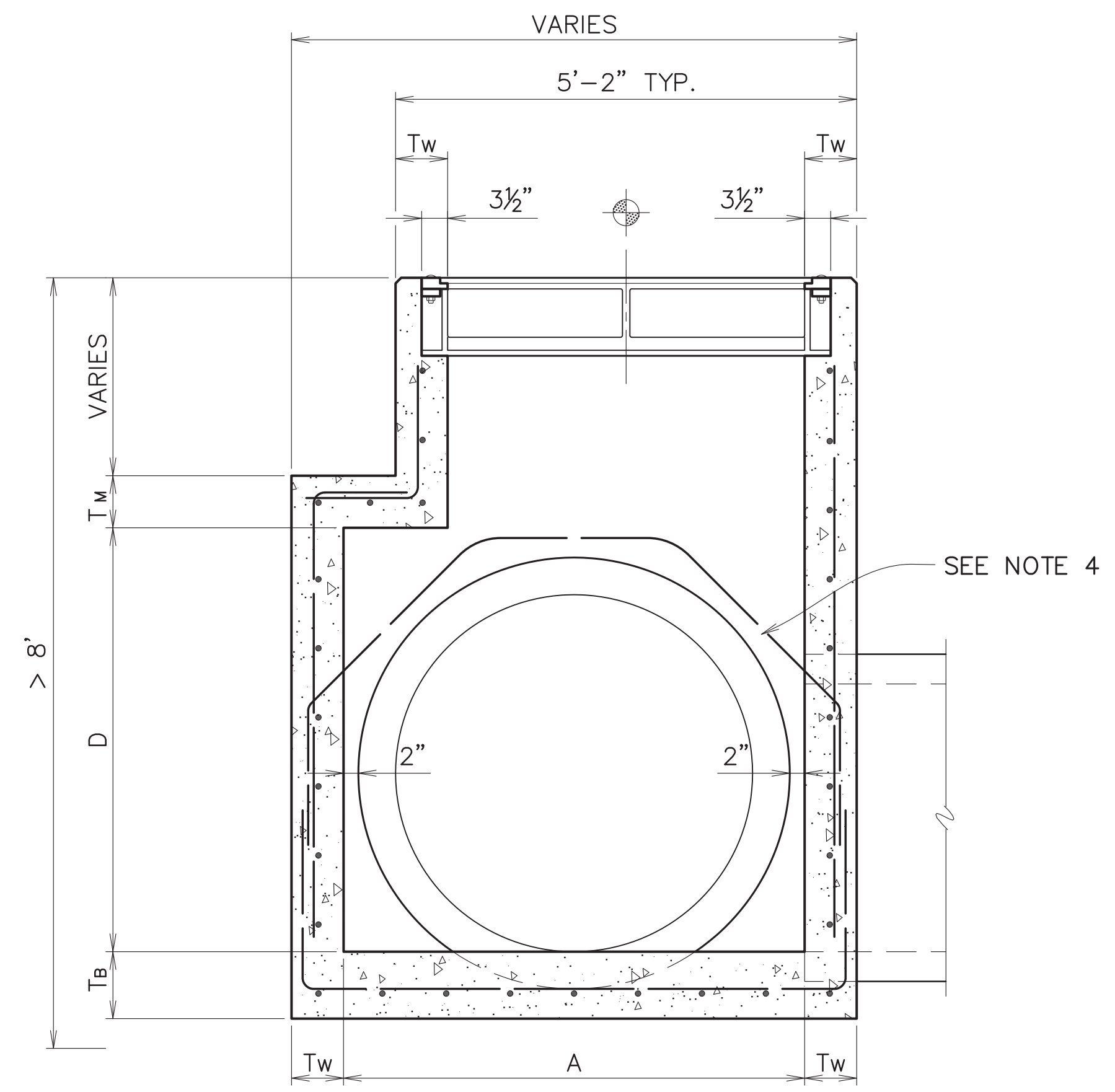
SINGLE CURB INLET
(PIPE BEHIND CURB)
(DEPTHS ≤ 8')

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T. STEPHENS

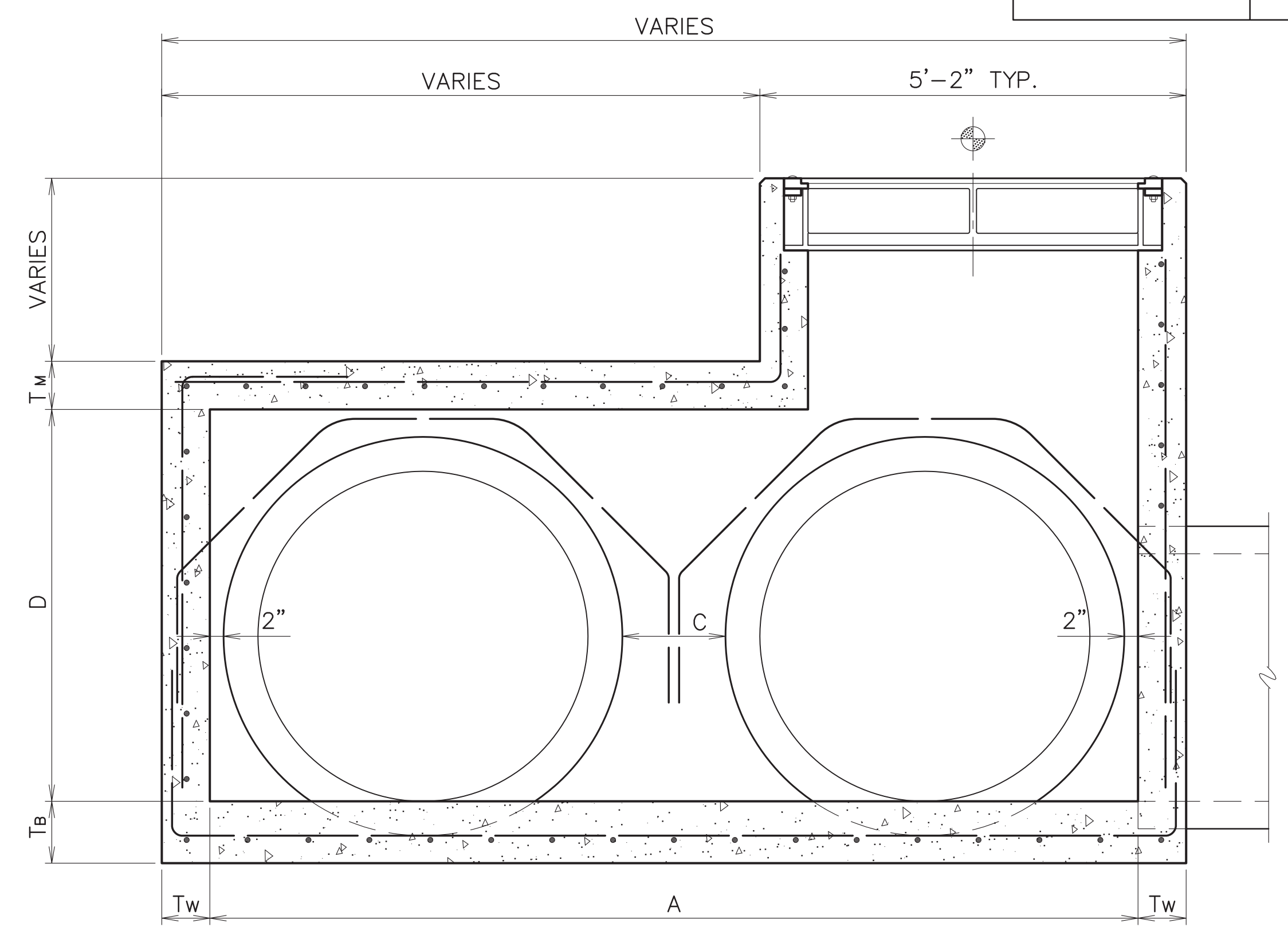
DATE	DESCRIPTION	BY
	REVISION	



TOP VIEW
SINGLE CROSS DRAIN
SCALE: 3/4"=1'-0"



SECTION A-A
SINGLE CROSS DRAIN
SCALE: 3/4"=1'-0"



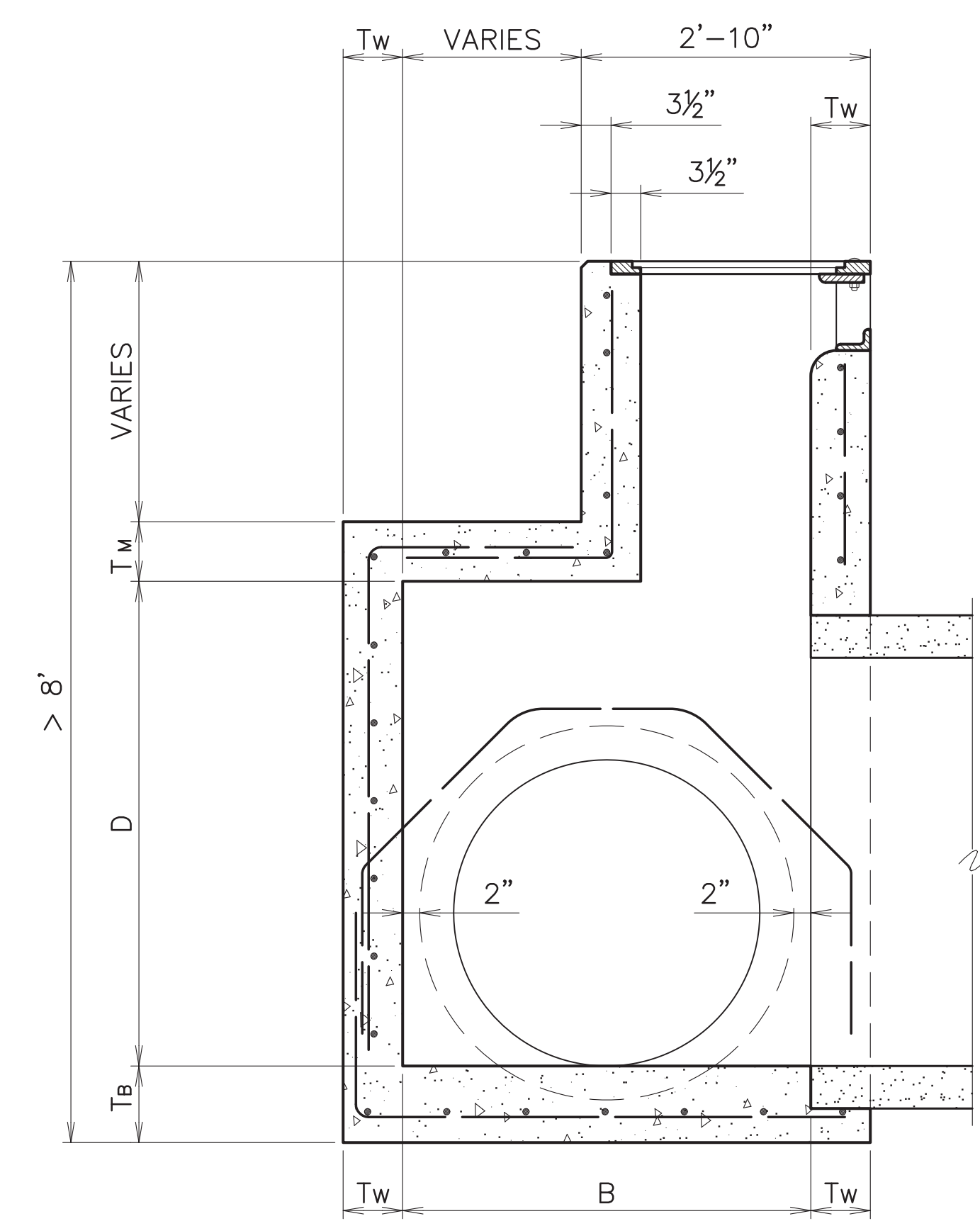
SECTION A-A
DOUBLE CROSS DRAIN
SCALE: 3/4"=1'-0"

PIPE SIZE		DIMENSION					
ROUND PIPE	ARCH PIPE (ROUND EQUIV.)	A SINGLE PIPE	A DOUBLE PIPE	B	C	D ROUND PIPE	D ARCH PIPE
15"	-	4'-0"	5'-0"	2'-3"	15"	2'-0"	2'-0"
18"	15"	4'-0"	5'-7"	2'-3"	15"	2'-0"	2'-0"
24"	18"	4'-0"	6'-7"	2'-10"	15"	2'-7"	2'-0"
30"	24"	4'-0"	8'-9"	3'-5"	15"	3'-2"	2'-2"
36"	30"	4'-0"	8'-11"	4'-0"	15"	3'-8"	2'-6"
42"	36"	4'-8"	10'-5"	4'-8"	17"	4'-3"	2'-11"
48"	-	5'-2"	11'-7"	5'-2"	19"	4'-9"	-
54"	42"	5'-9"	12'-11"	5'-9"	21"	5'-4"	3'-4"
60"	48"	6'-4"	14'-3"	6'-4"	23"	5'-10"	3'-9"
-	54"	6'-8"	15'-0"	6'-8"	24"	-	4'-2"
72"	60"	7'-6"	16'-8"	7'-6"	24"	6'-11"	4'-7"
84"	72"	8'-10"	20'-0"	8'-10"	36"	8'-0"	5'-5"

Centered Casting

- NOTE:**
- SEE STANDARD PLAN 702-99 FOR FRAME AND COVER DETAILS. TYPE 1 FRAME AND COVER REQUIRED. SINGLE FRAME AND COVER ALLOWED.
 - PRECAST CONCRETE INLETS CONFORMING TO STANDARD PLAN 702-97 MAY BE FURNISHED.
 - CONCRETE SHALL NOT BE PLACED ABOVE BOTTOM OF PAVEMENT UNTIL PAVING ADJACENT TO INLET HAS BEEN COMPLETED.
 - DIAGONAL REINFORCEMENT REQUIRED FOR PIPE LARGER THAN 36". BARS SHALL LAP TO A FULL LENGTH VERTICAL BAR W/18d LAP LENGTH.
 - A & B DIMENSIONS MAY BE VARIED FOR SKEWED PIPE.
 - SEE STANDARD PLAN 702-96 FOR THICKNESS, REINFORCING STEEL, AND OTHER STRUCTURAL DETAILS.
 - SEE STANDARD PLAN 702-98 FOR CURB TRANSITION DETAILS.

PLAN STATION CALL-OUT



SECTION B-B
SCALE: 3/4"=1'-0"

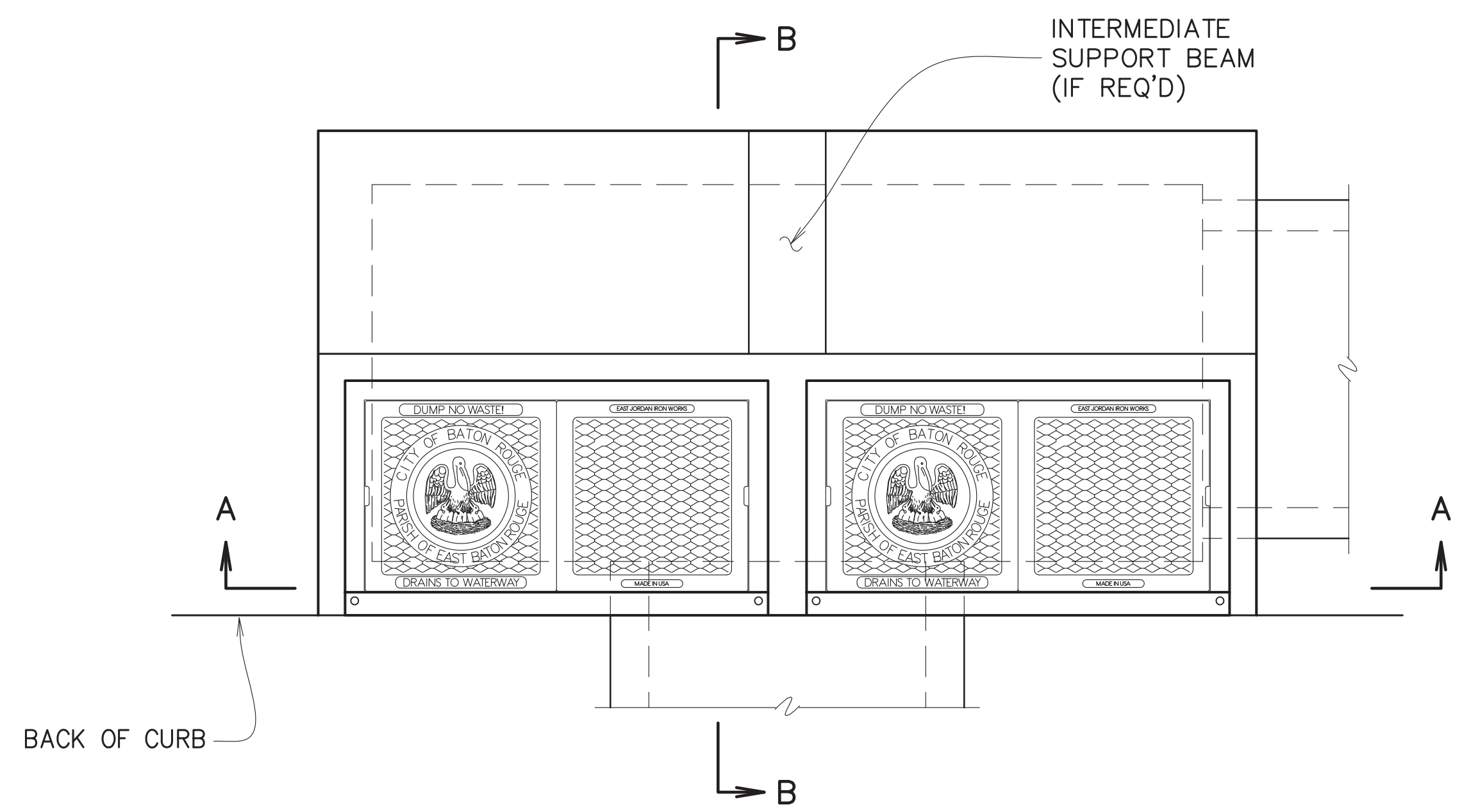
STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 15417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
Thomas A. Stephens
2/16/2018

STANDARD PLAN No. 702-01	DATED DEC. 6, 2010	SHT. No. 2 OF 2
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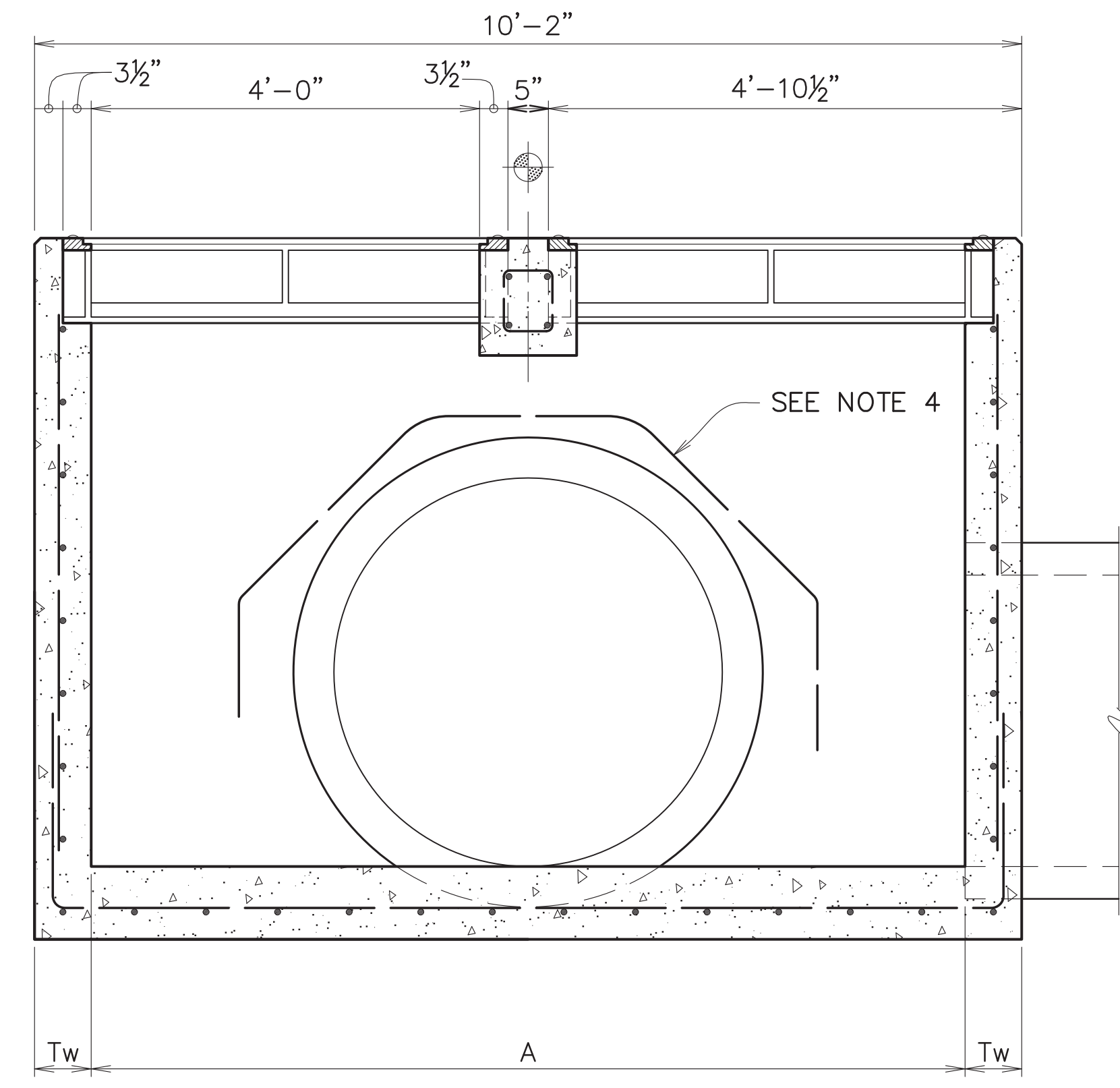
SINGLE CURB INLET
(PIPE BEHIND CURB)
(DEPTHS > 8')

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T. STEPHENS

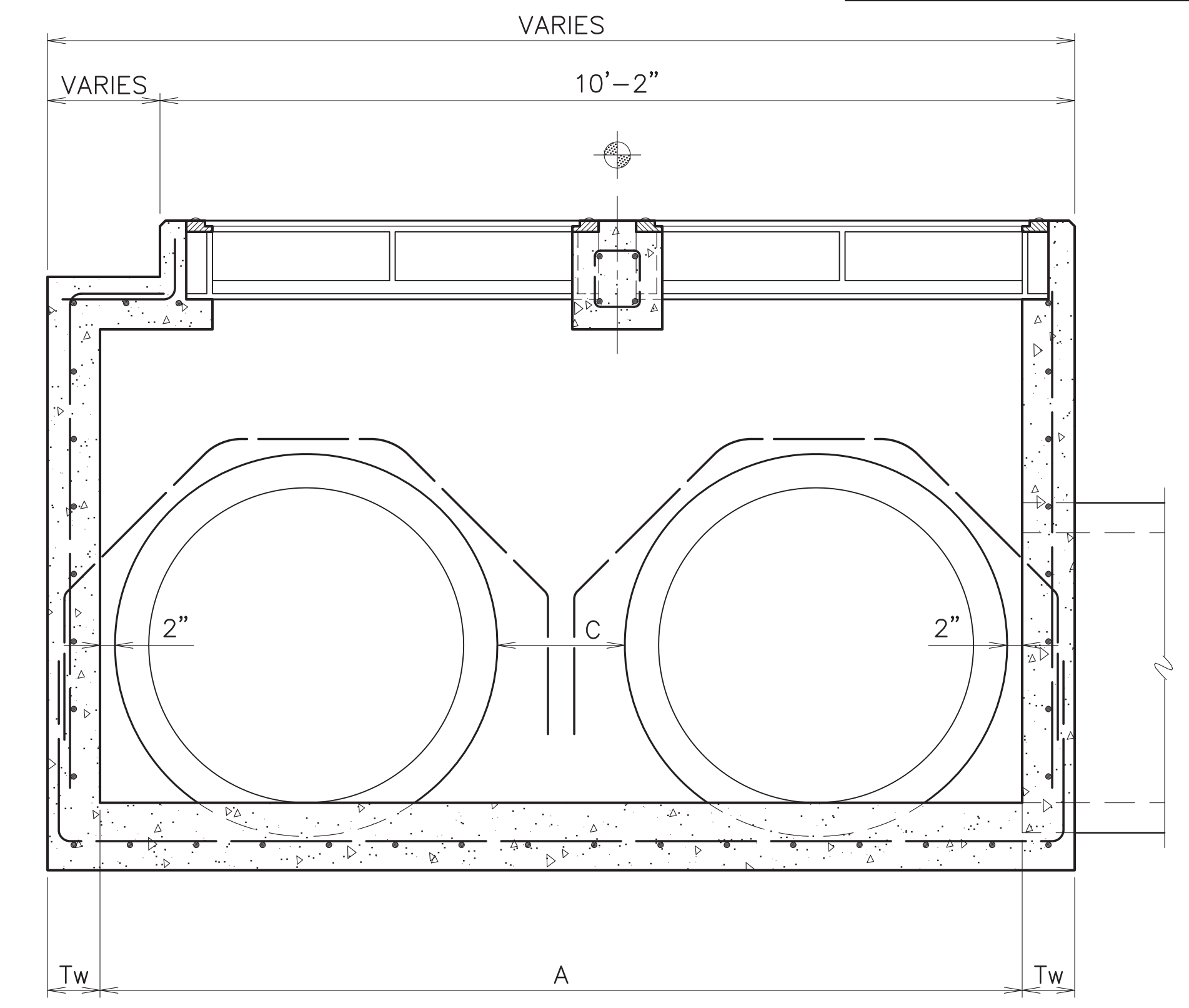
DATE	DESCRIPTION	BY
	REVISION	



TOP VIEW
SINGLE CROSS DRAIN
SCALE: 3/4"=1'-0"



SECTION A-A
SINGLE CROSS DRAIN
SCALE: 3/4"=1'-0"



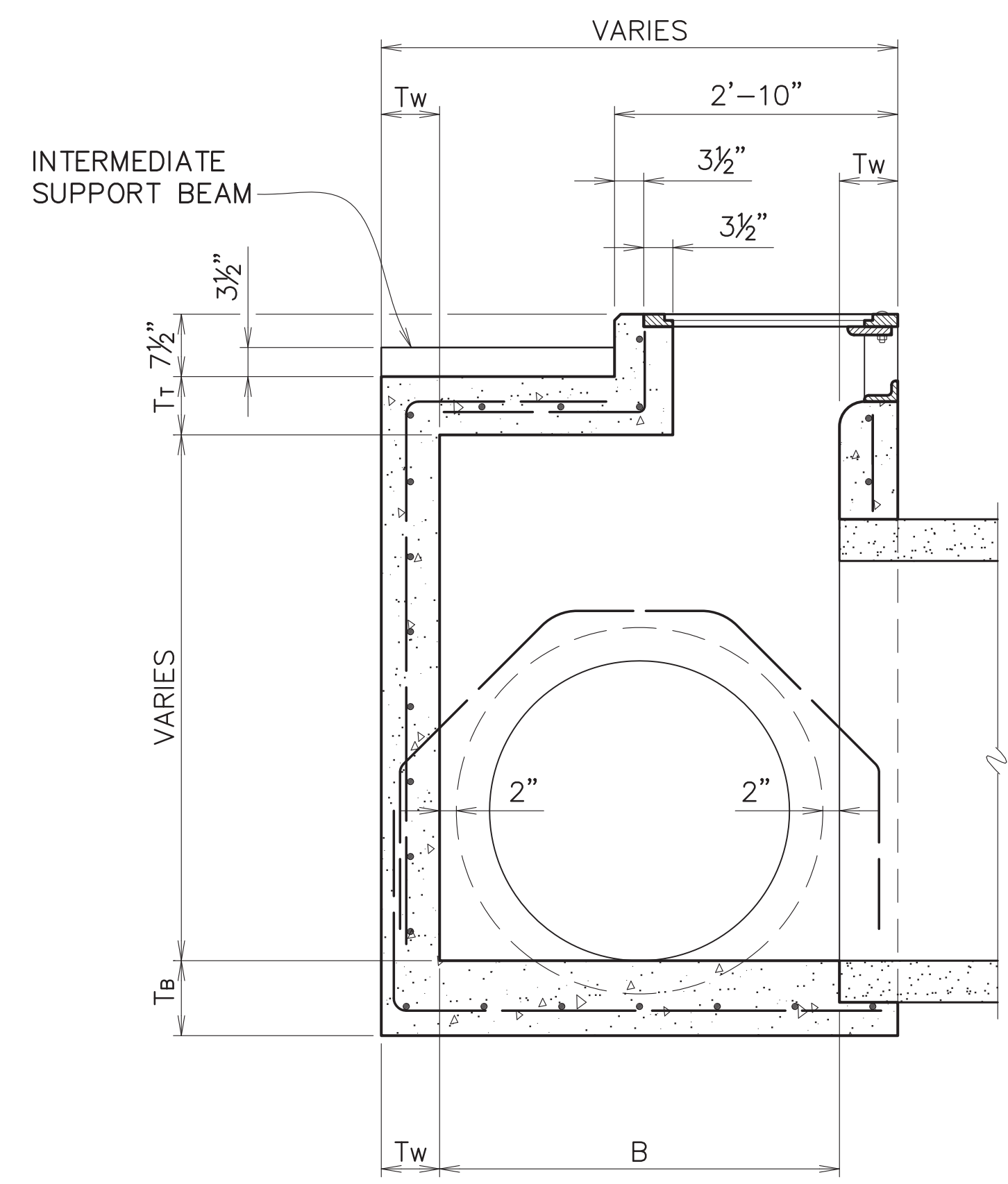
SECTION A-A
DOUBLE CROSS DRAIN
SCALE: 3/4"=1'-0"

PIPE SIZE		DIMENSION			
ROUND PIPE	ARCH PIPE (ROUND EQUIV.)	A SINGLE PIPE	A DOUBLE PIPE	B	C
15"	-	9'-0"	9'-0"	2'-3"	15"
18"	15"	9'-0"	9'-0"	2'-3"	15"
24"	18"	9'-0"	9'-0"	2'-10"	15"
30"	24"	9'-0"	9'-0"	3'-5"	15"
36"	30"	9'-0"	9'-0"	4'-0"	15"
42"	36"	9'-0"	10'-5"	4'-8"	17"
48"	-	9'-0"	11'-7"	5'-2"	19"
54"	42"	9'-0"	12'-11"	5'-9"	21"
60"	48"	9'-0"	14'-3"	6'-4"	23"
-	54"	9'-0"	15'-0"	6'-8"	24"
72"	60"	9'-0"	16'-8"	7'-6"	24"
84"	72"	9'-0"	20'-0"	8'-10"	36"

CENTERED CASTING

- NOTE:**
- SEE STANDARD PLAN 702-99 FOR FRAME AND COVER DETAILS. TYPE 1 FRAME AND COVER REQUIRED. SINGLE FRAME AND COVER ALLOWED.
 - PRECAST CONCRETE INLETS CONFORMING TO STANDARD PLAN 702-97 MAY BE FURNISHED.
 - CONCRETE SHALL NOT BE PLACED ABOVE BOTTOM OF PAVEMENT UNTIL PAVING ADJACENT TO INLET HAS BEEN COMPLETED.
 - DIAGONAL REINFORCEMENT REQUIRED FOR PIPE LARGER THAN 36". BARS SHALL LAP TO A FULL LENGTH VERTICAL BAR W/18d LAP LENGTH.
 - A & B DIMENSIONS MAY BE VARIED FOR SKEWED PIPE.
 - SEE STANDARD PLAN 702-96 FOR THICKNESS, REINFORCING STEEL, AND OTHER STRUCTURAL DETAILS.
 - SEE STANDARD PLAN 702-98 FOR CURB TRANSITION DETAILS.

PLAN STATION CALL-OUT



SECTION B-B
SCALE: 3/4"=1'-0"

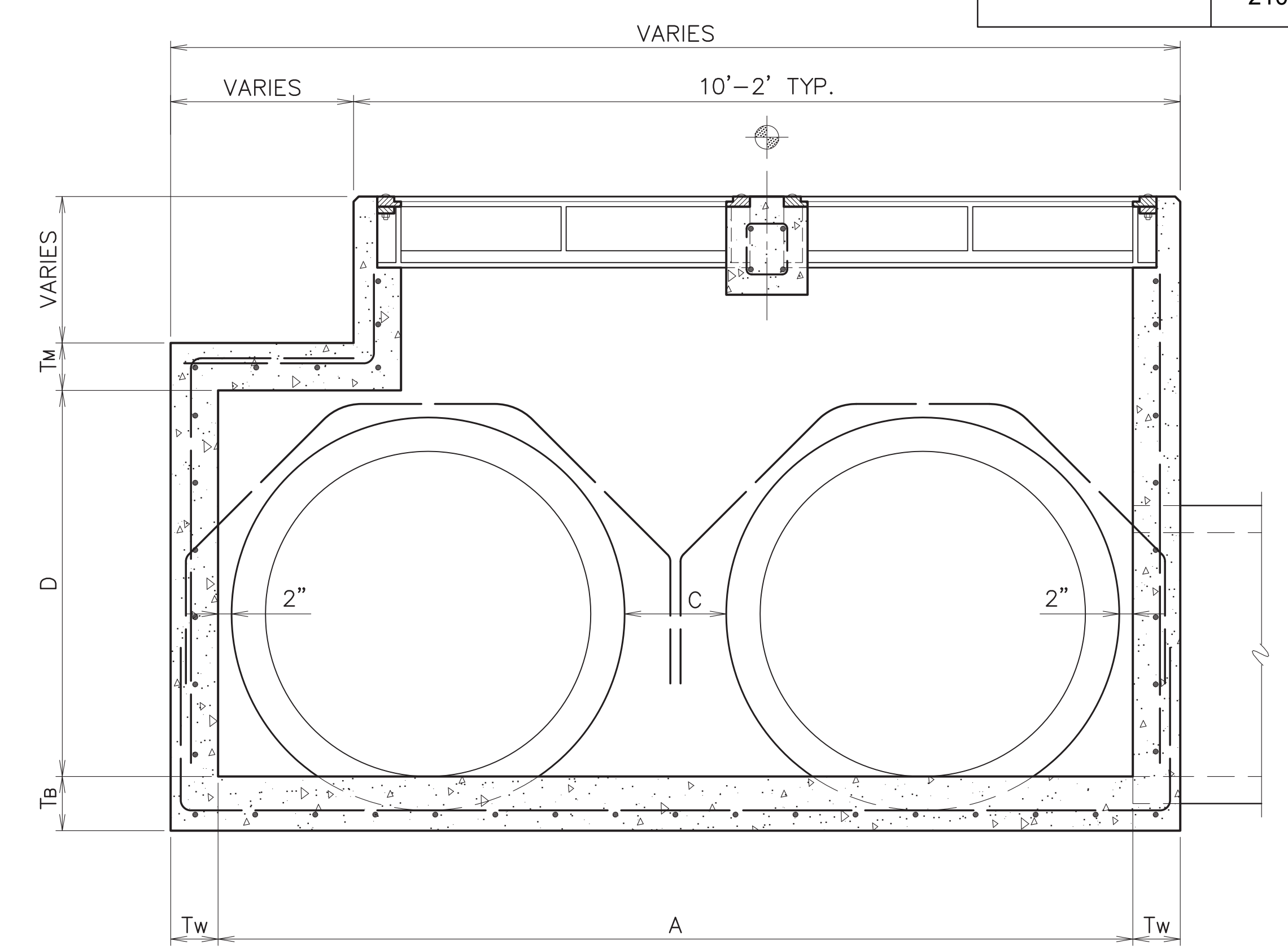
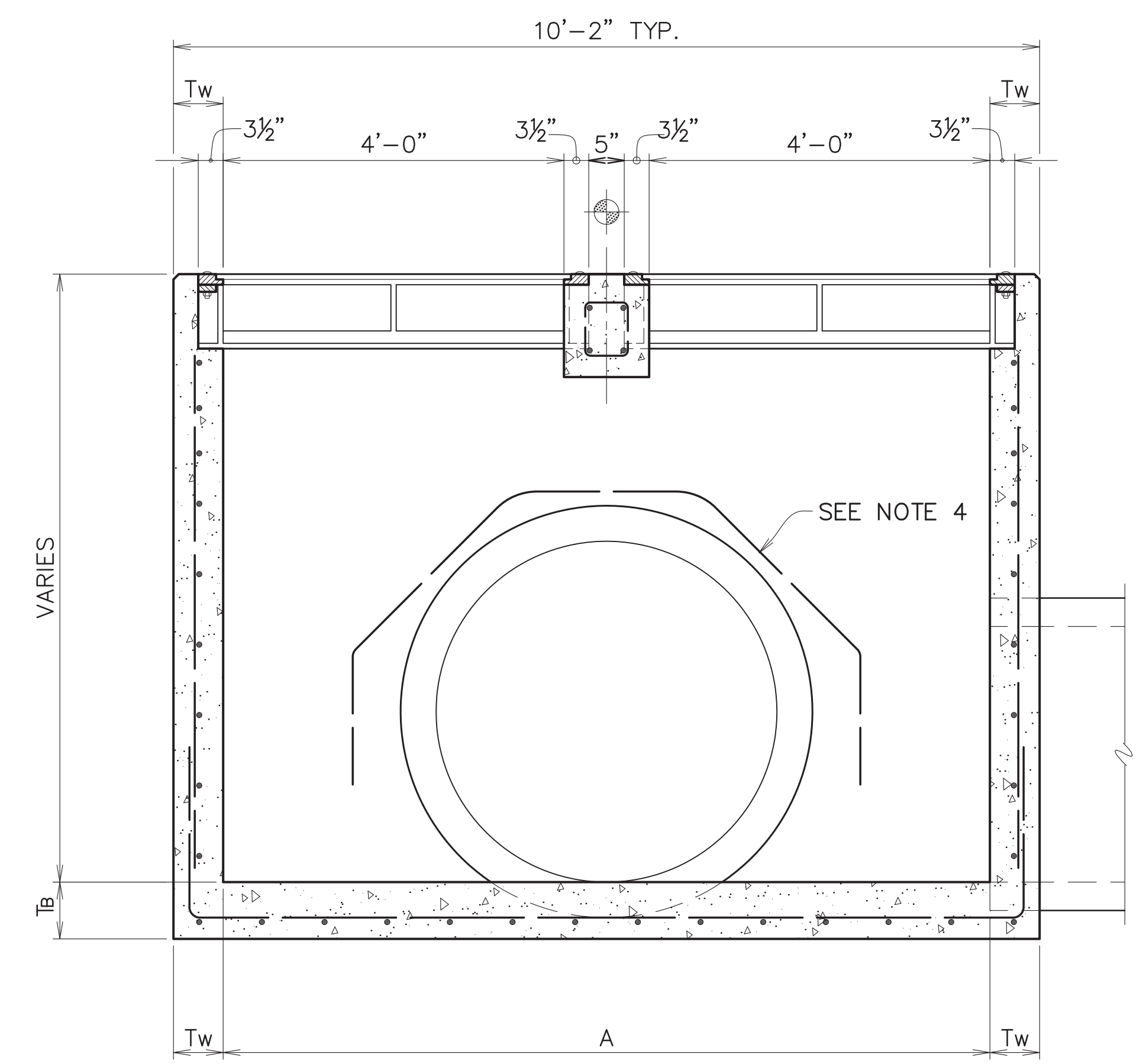
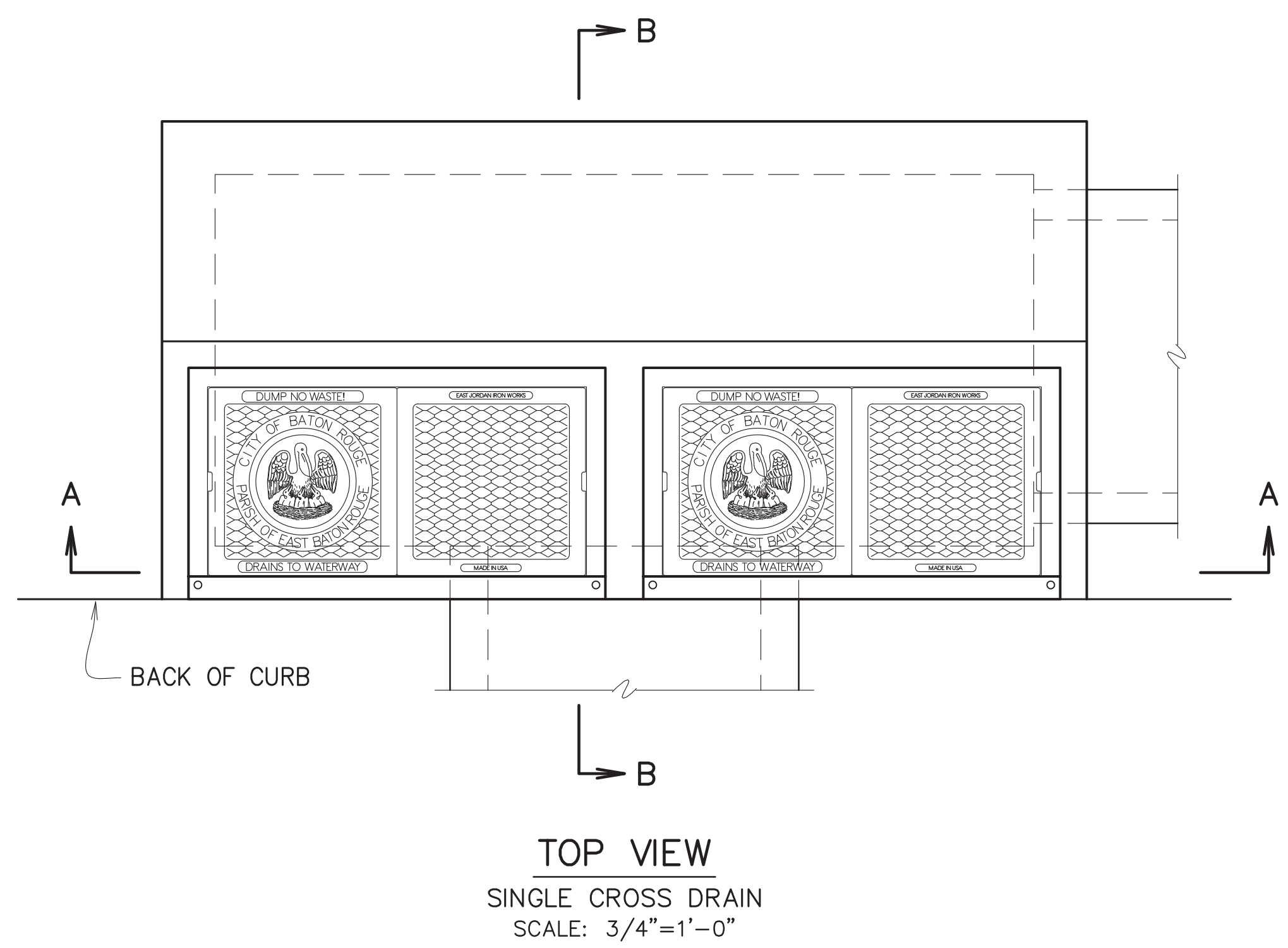
STATE OF LOUISIANA
THOMAS A. STEPHENS
License No. 18417
PROFESSIONAL ENGINEER
CIVIL ENGINEERING
Thomas A. Stephens
2/16/2018

STANDARD PLAN No. 702-02	DATED DEC. 6, 2010	SHT. No. 1 OF 2
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DOUBLE CURB INLET
(PIPE BEHIND CURB)
(DEPTHS ≤ 8')

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T. STEPHENS

DATE	DESCRIPTION	BY
	REVISION	

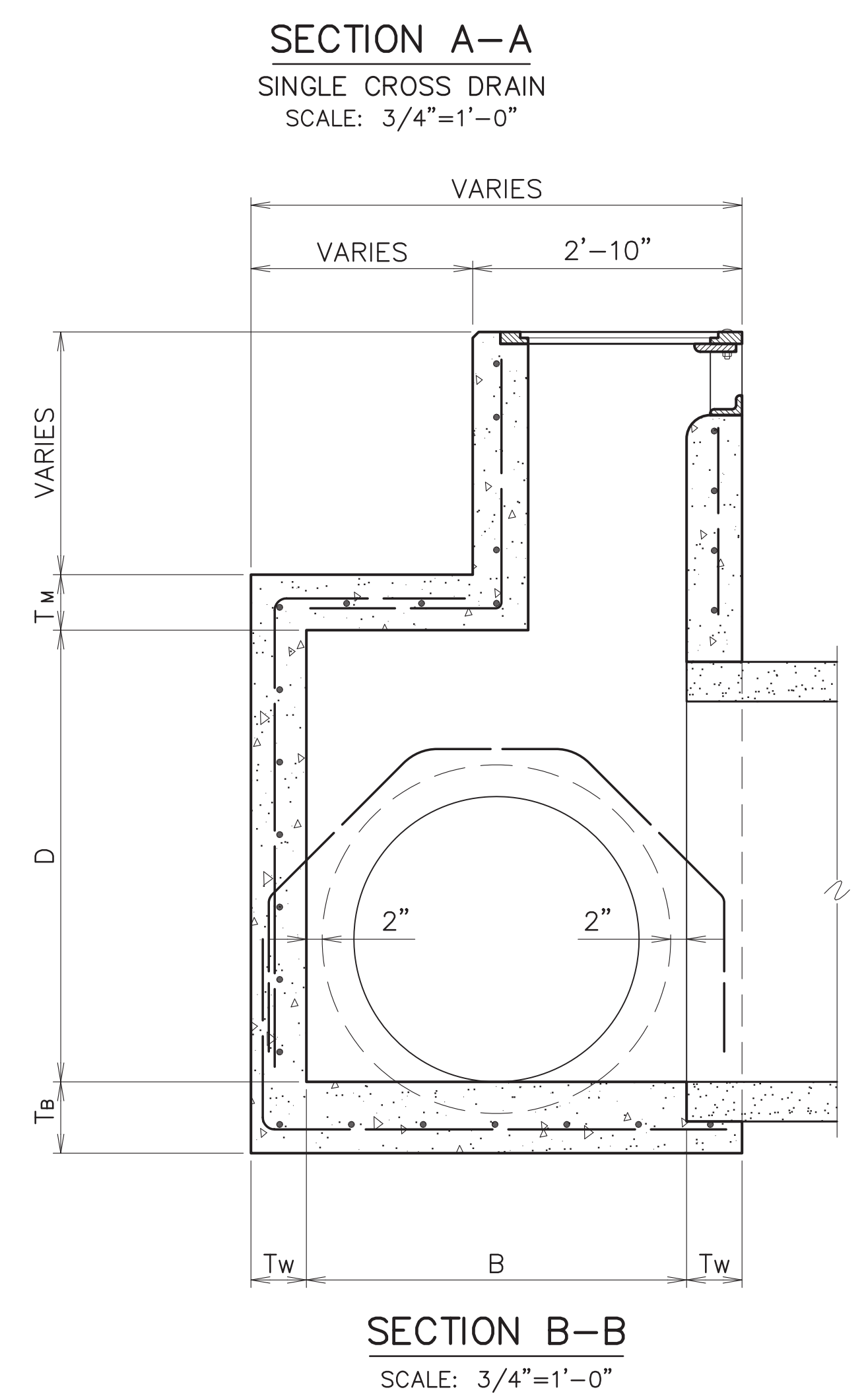


PIPE SIZE		DIMENSION					
ROUND PIPE	ARCH PIPE (ROUND EQUIV.)	A SINGLE PIPE	A DOUBLE PIPE	B	C	D ROUND PIPE	D ARCH PIPE
15"	-	9'-0"	9'-0"	2'-3"	15"	2'-0"	2'-0"
18"	15"	9'-0"	9'-0"	2'-3"	15"	2'-0"	2'-0"
24"	18"	9'-0"	9'-0"	2'-10"	15"	2'-7"	2'-0"
30"	24"	9'-0"	9'-0"	3'-5"	15"	3'-2"	2'-2"
36"	30"	9'-0"	9'-0"	4'-0"	15"	3'-8"	2'-6"
42"	36"	9'-0"	10'-5"	4'-8"	17"	4'-3"	2'-11"
48"	-	9'-0"	11'-7"	5'-2"	19"	4'-9"	-
54"	42"	9'-0"	12'-11"	5'-9"	21"	5'-4"	3'-4"
60"	48"	9'-0"	14'-3"	6'-4"	23"	5'-10"	3'-9"
-	54"	9'-0"	15'-0"	6'-8"	24"	-	4'-2"
72"	60"	9'-0"	16'-8"	7'-6"	24"	6'-11"	4'-7"
84"	72"	9'-0"	20'-0"	8'-10"	36"	8'-0"	5'-5"

■ CENTERED CASTING

- NOTE:**
- SEE STANDARD PLAN 702-99 FOR FRAME AND COVER DETAILS. TYPE 1 FRAME AND COVER REQUIRED. SINGLE FRAME AND COVER ALLOWED.
 - PRECAST CONCRETE INLETS CONFORMING TO STANDARD PLAN 702-97 MAY BE FURNISHED.
 - CONCRETE SHALL NOT BE PLACED ABOVE BOTTOM OF PAVEMENT UNTIL PAVING ADJACENT TO INLET HAS BEEN COMPLETED.
 - DIAGONAL REINFORCEMENT REQUIRED FOR PIPE LARGER THAN 36". BARS SHALL LAP TO A FULL LENGTH VERTICAL BAR W/18d LAP LENGTH.
 - A & B DIMENSIONS MAY BE VARIED FOR SKEWED PIPE.
 - SEE STANDARD PLAN 702-96 FOR THICKNESS, REINFORCING STEEL, AND OTHER STRUCTURAL DETAILS.
 - SEE STANDARD PLAN 702-98 FOR CURB TRANSITION DETAILS.

⊙ PLAN STATION CALL-OUT



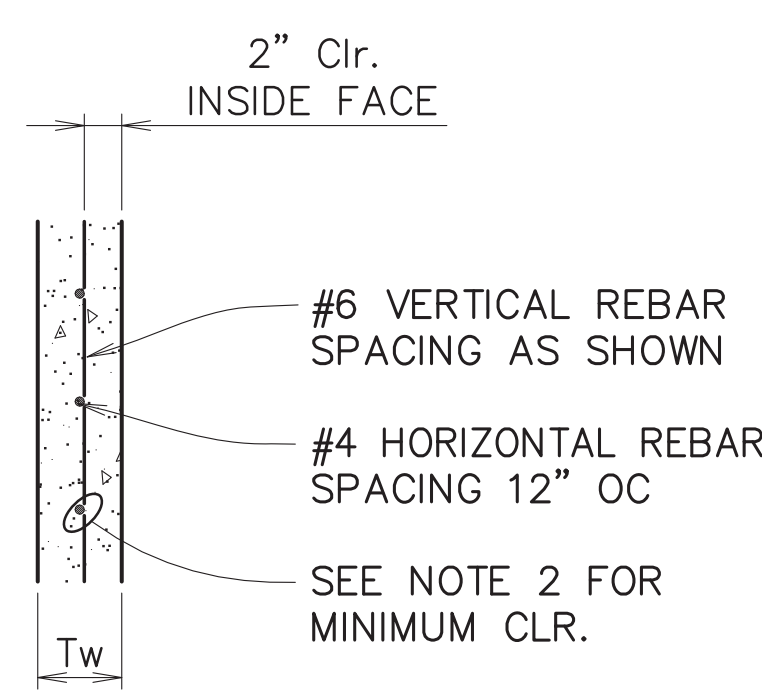
STATE OF LOUISIANA
 THOMAS A. STEPHENS
 LICENSE NO. 12647
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
Thomas A. Stephens
 2/16/2018

STANDARD PLAN No. 702-02	DATED DEC. 6, 2010	SHT. No. 2 OF 2
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DOUBLE CURB INLET
(PIPE BEHIND CURB)
(DEPTHS > 8')

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T. STEPHENS

DATE	DESCRIPTION REVISION	BY



STANDARD WALL DETAIL

SCALE: N.T.S.

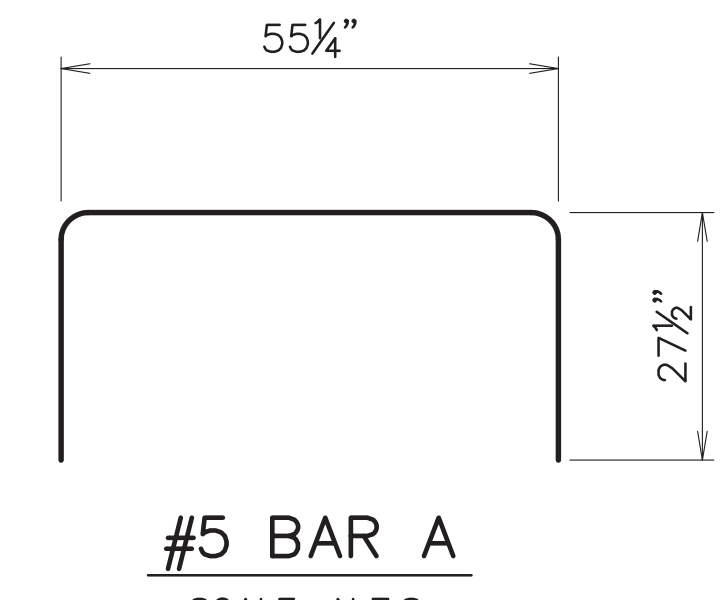
WALL DIMENSIONS

WALL HEIGHT (FT)	"Tw" WALL THICKNESS (IN)	VERT. REBAR SPACING (IN)
0'-4'	6.0"	12"
4'-8'	6.0"	9"
8'-10'	7.0"	9"
10'-12'	7.0"	6"
12'-16'	8.0"	6"
16'-20'	9.0"	6"

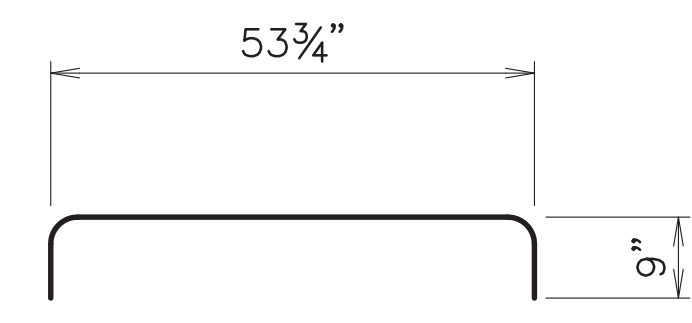
PAVEMENT SLAB DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"Tp" SLAB THICKNESS (IN)	REBAR REQ'D *	INTERMEDIATE SUPPORT BEAM REQ'D (Y OR N)
≤10'	≤4'	7.0"	#5	N
≤10'	4'-6'	8.0"	#5	N
≤10'	6'-8'	10.0"	#6	N
6'-8'	6'-8'	7.0"	#5	Y
8'-10'	8'-10'	8.0"	#5	Y

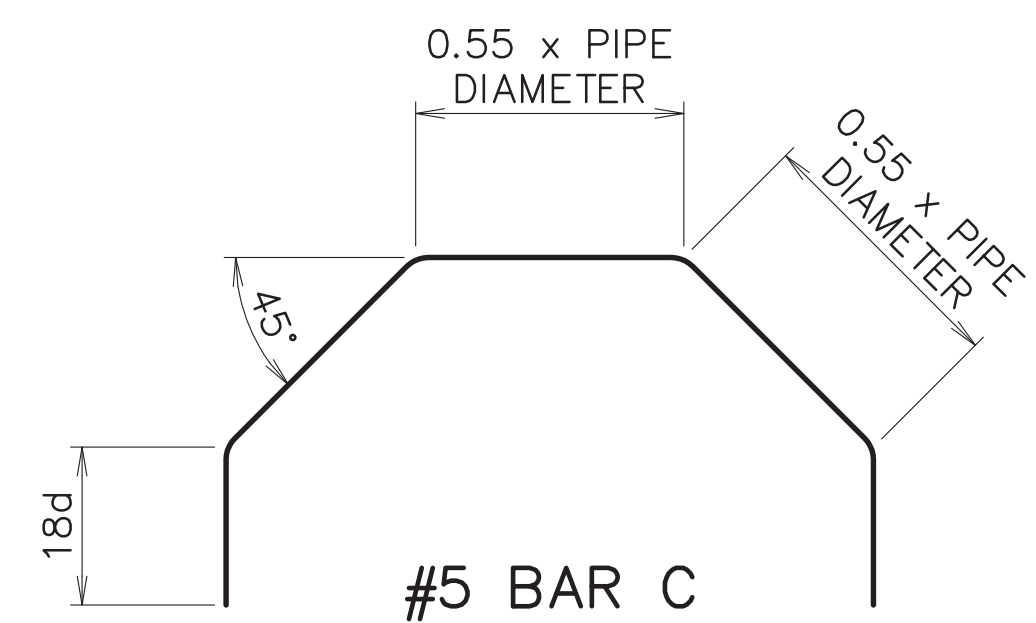
* 9" OC, EW, TB



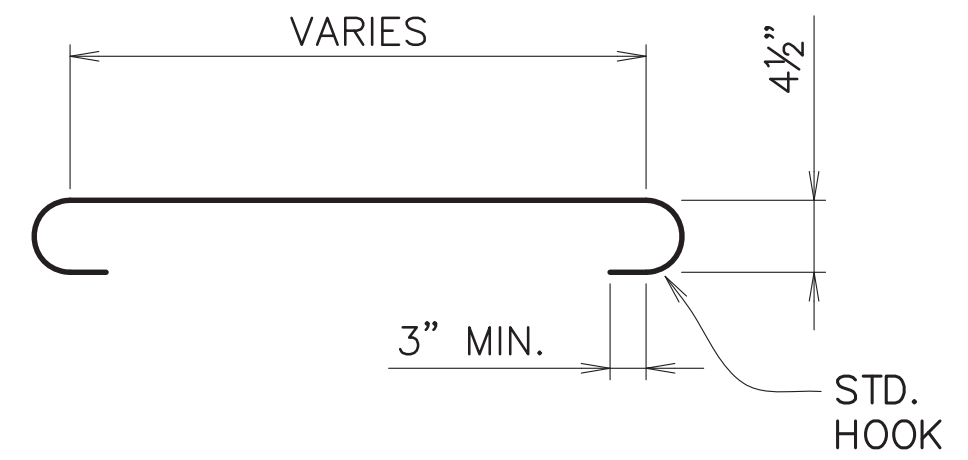
#5 BAR A
SCALE: N.T.S.
2 REQ'D PER FRAME



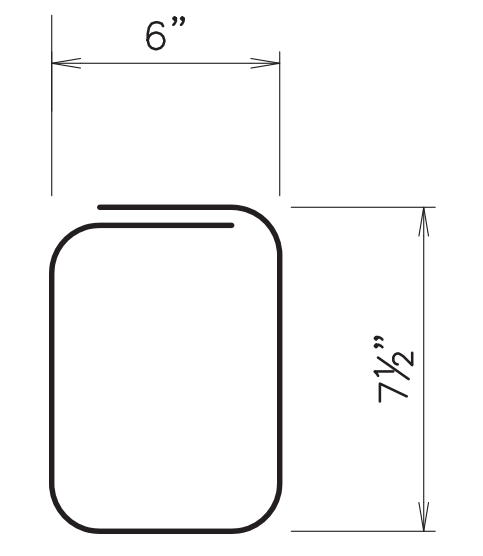
#5 BAR B
SCALE: N.T.S.
1 REQ'D PER FRAME



#5 BAR C
SCALE: N.T.S.
1 REQ'D PER PIPE ENTRANCE ≥ 36"Ø



#5 BAR D
SCALE: N.T.S.
2 REQ'D PER EACH INTERMEDIATE BEAM



#3 BAR J
SCALE: N.T.S.
REQ'D STIRRUPS @ 4" OC

BOTTOM SLAB DIMENSIONS

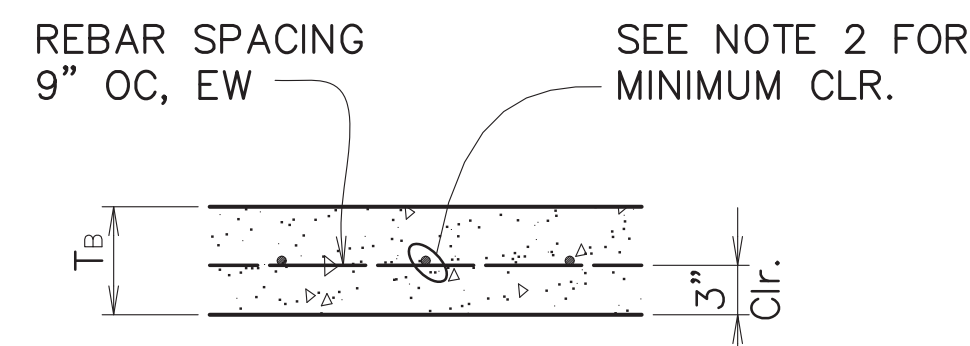
"Tb" SLAB THICKNESS (IN)	"A" OR "B" MAXIMUM WIDTH OF OPENING INSIDE STRUCTURE (FT)	MAXIMUM DEPTH STRUCTURE (FT)	REBAR REQ'D
6.0"	4'	8'	#4
7.0"	6'	12'	#5
8.0"	8'	16'	#5
9.0"	10'	20'	#6

BOTTOM SLAB THICKNESS TO MEET MINIMUM CRITERIA SHOWN FOR OPENING WIDTH AND STRUCTURE DEPTH.

REBAR MINIMUM LAP AND DEVELOPMENT LENGTHS

REBAR SIZE	LAP LENGTH (IN)	DEVELOPMENT LENGTH (IN)
#4	16"	12"
#5	20"	16"
#6	24"	19"

SHOP DRAWING DETAILING REQ'D TO PROVIDE MINIMUM LENGTHS OR ELSE USE STANDARD HOOKS



BOTTOM SLAB DETAIL

SCALE: N.T.S.

NOTE:

- ALL REINFORCING STEEL TO BE DEFORMED GRADE 60 MINIMUM REBAR. STEEL BAR SIZE & SPACING MAY BE ADJUSTED AS LONG AS AREA OF STEEL IS MAINTAINED PER FOOT.
- MINIMUM CONCRETE COVER FOR REBAR STEEL IS TO BE 3" FOR CONCRETE FACES CAST AGAINST EARTH, 2.5" FOR FACES PERMANENTLY EXPOSED TO EARTH AND 2" FOR ALL OTHERS.
- CONCRETE COMPRESSIVE STRENGTH FOR CAST-IN-PLACE STRUCTURES TO BE 4000 PSI AT 28 DAYS MINIMUM.
- SEE SHEET 702-99 FOR FRAME AND COVER DETAILS.
- SLABS MAY BE PRECAST AND DOWELED INTO WALL SECTIONS. (SEE STD. PLAN 702-97)

A=LENGTH INSIDE OPENING MEASURED PARALLEL TO CURB
B=WIDTH INSIDE OPENING MEASURED PERPENDICULAR TO CURB

TOP SLAB DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"Tp" SLAB THICKNESS (IN)	* REBAR REQ'D
≤4'	≤4'	6.0"	#4
4'-6'	4'-6'	6.0"	#5
6'-8'	6'-8'	6.0"	#6
8'-20'	8'-10'	7.0"	#6

* 9" OC, EW, SET 2" CLR. FROM SLAB BOTTOM

MIDDLE SLAB UNDER PAVEMENT DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"Tp" SLAB THICKNESS (IN)	* REBAR REQ'D
≤20'	≤4'	7.0"	#4
≤20'	4'-6'	7.0"	#5
≤20'	6'-8'	8.5"	#6
≤20'	8'-10'	10.0"	#6

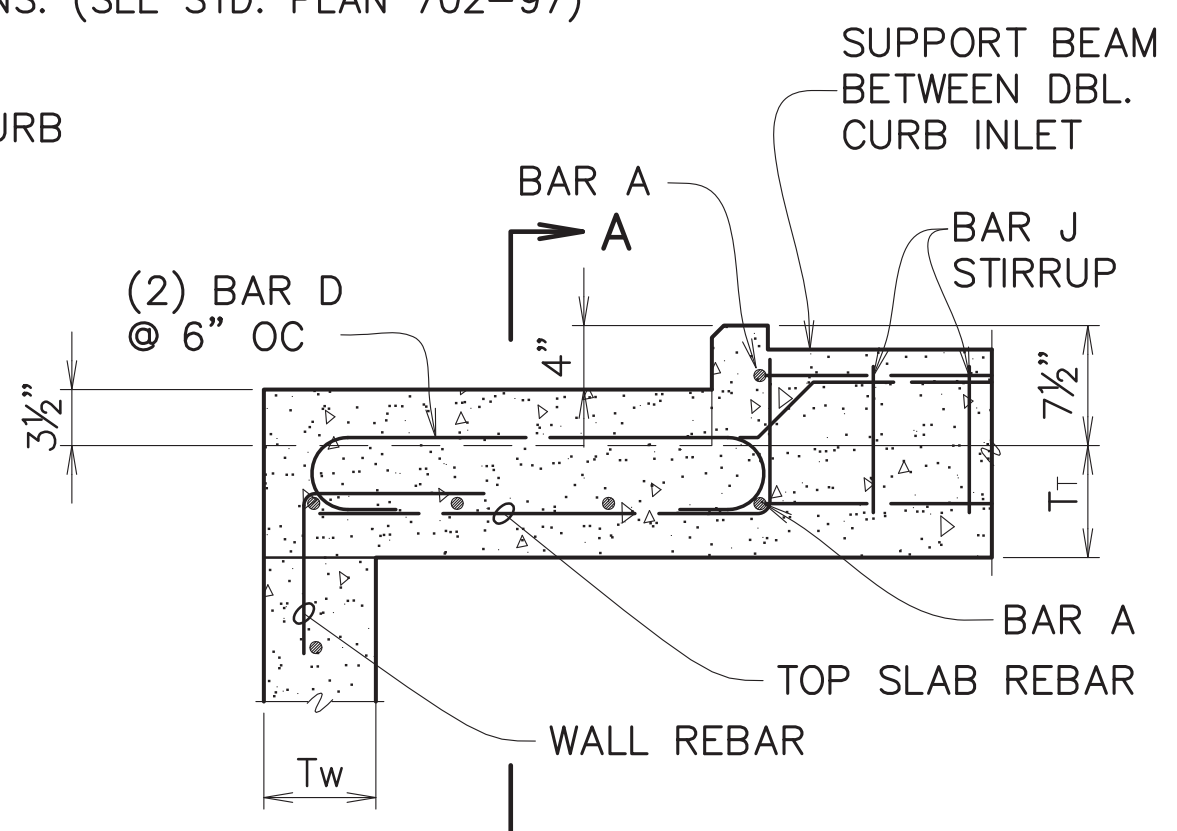
* 9" OC, EW, SET 2" CLR. FROM SLAB BOTTOM

MIDDLE SLAB OUTSIDE PAVEMENT DIMENSIONS

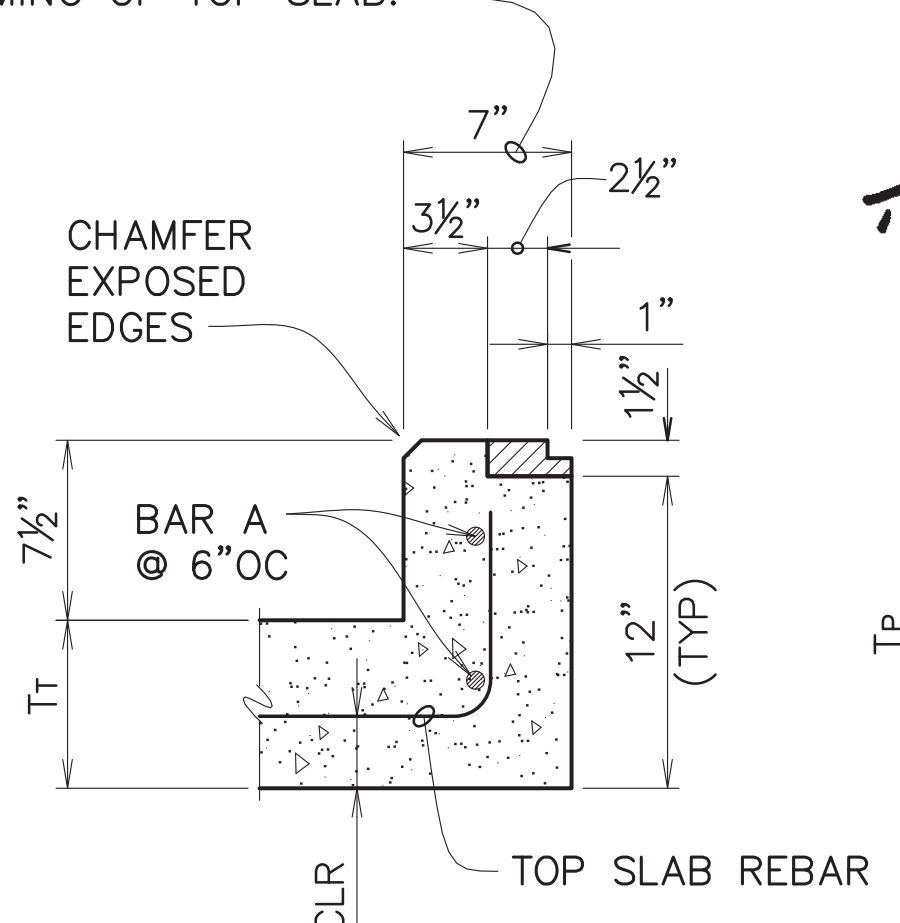
"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"Tp" SLAB THICKNESS (IN)	* REBAR REQ'D
≤20'	≤4'	7.0"	#4
≤20'	4'-6'	7.0"	#5
≤20'	6'-8'	7.0"	#6
≤20'	8'-10'	8.0"	#6

* 9" OC, EW, SET 2" CLR. FROM SLAB BOTTOM

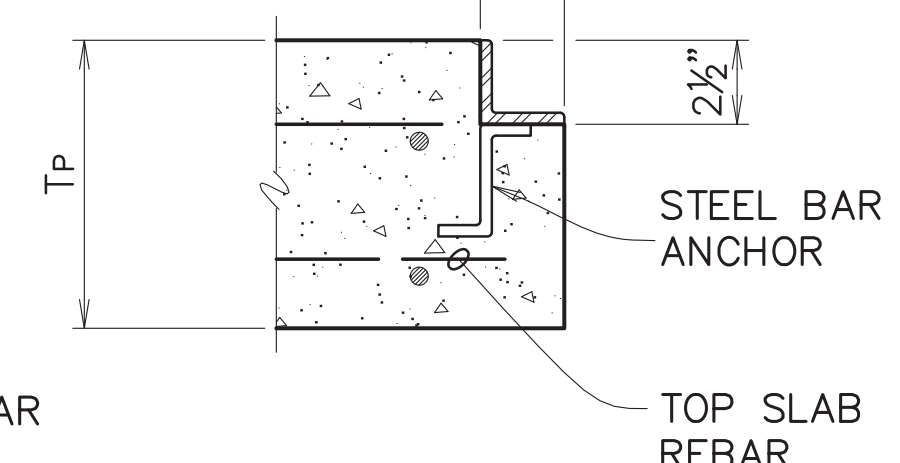
LEDGE WIDTH MAY BE EXTENDED TO MAXIMUM WIDTH OF 1'-2" FOR SMALLER PIPE STRUCTURES TO SIMPLIFY CONSTRUCTION FRAMING OF TOP SLAB.



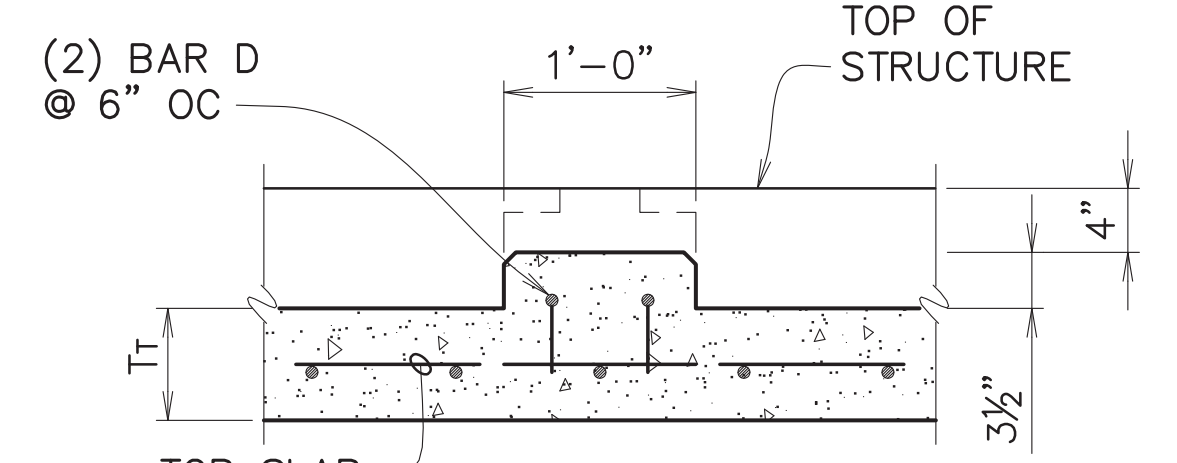
TOP SLAB INTERMEDIATE SUPPORT BEAM FOR DOUBLE CURB INLET
SCALE: N.T.S.



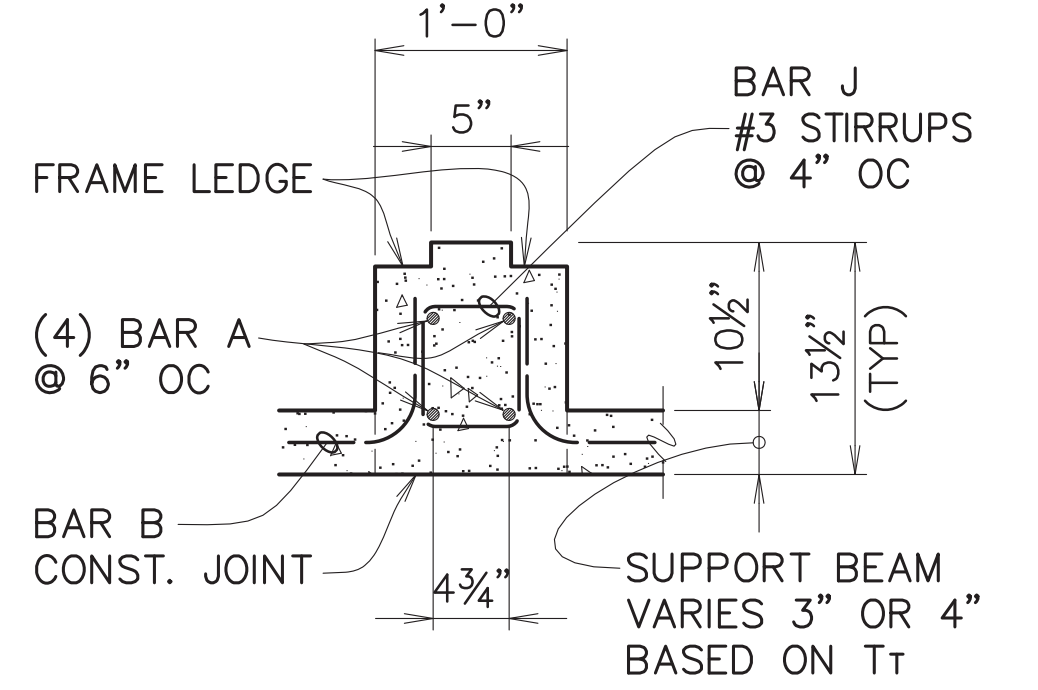
TYPE 1 FRAME SUPPORT DETAIL
SCALE: N.T.S.



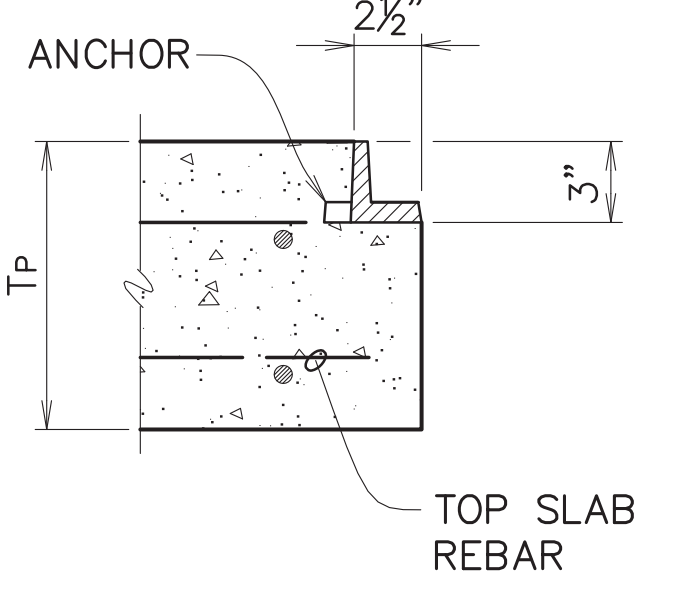
TYPE 2 FRAME IN PAVEMENT SUPPORT DETAIL
SCALE: N.T.S.



SECTION A-A
TOP SLAB INTERMEDIATE SUPPORT BEAM FOR DOUBLE CURB INLET
SCALE: N.T.S.

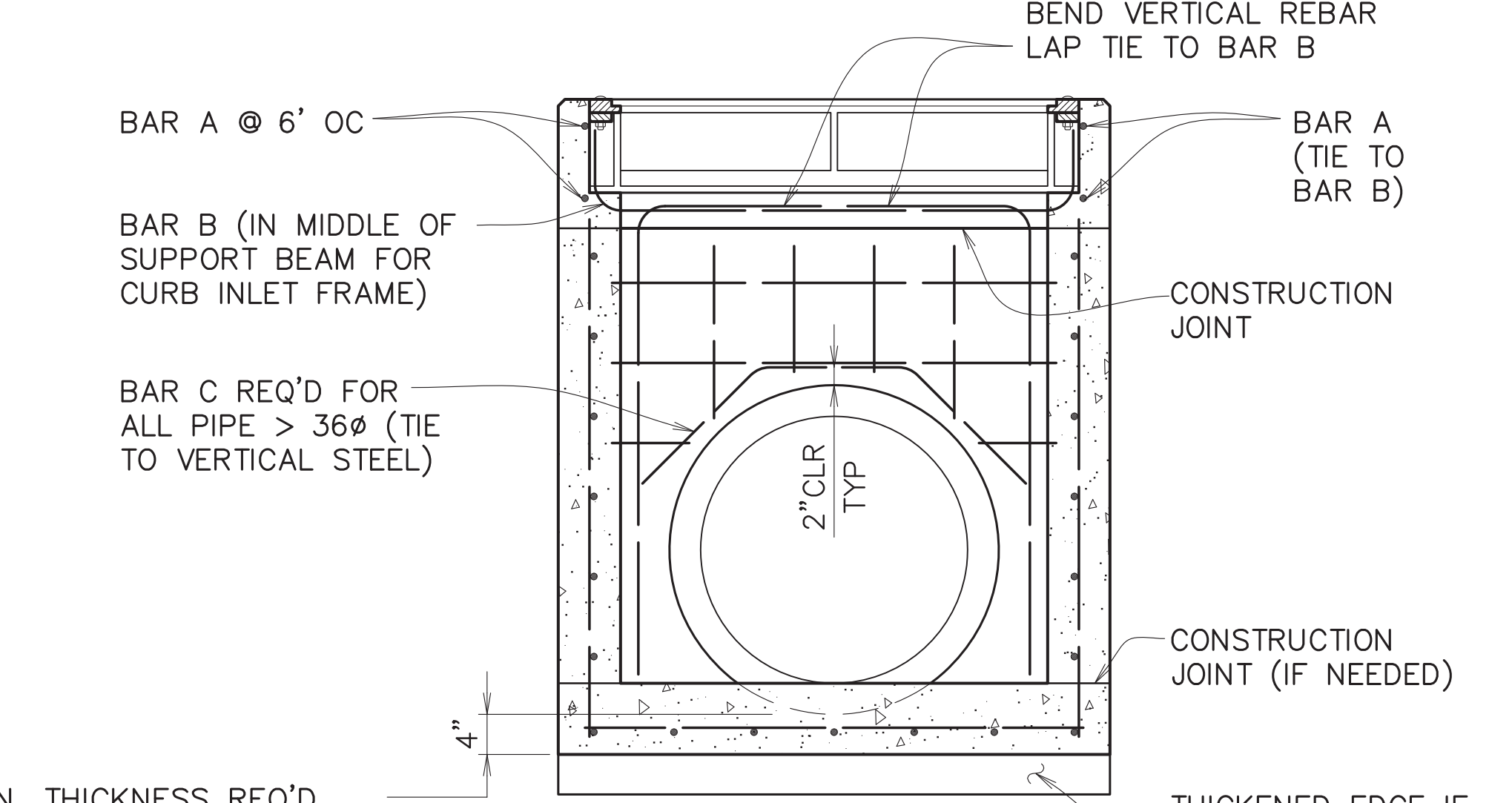


TYPICAL SUPPORT BEAM BETWEEN DOUBLE CURB INLETS
SCALE: N.T.S.

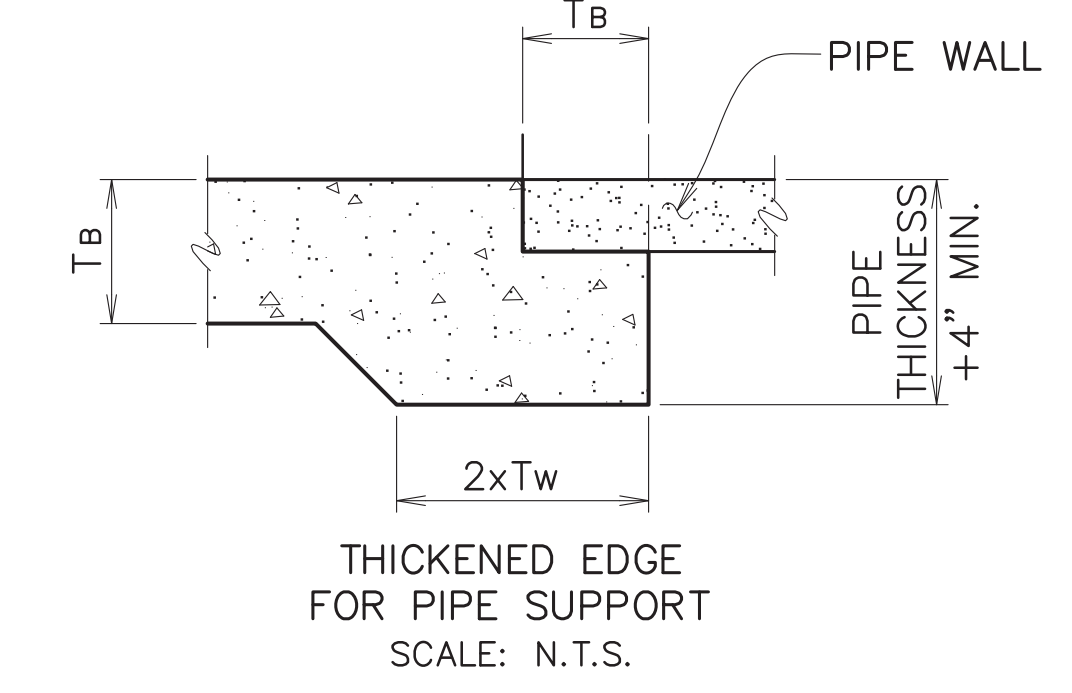


TYPE 3 FRAME IN PAVEMENT SUPPORT DETAIL
SCALE: N.T.S.

4" MIN. THICKNESS REQ'D IN BOTTOM SLAB BELOW PIPE OUTSIDE WALL. IF "Tb" DOES NOT MEET MIN. THICKNESS REQ'D FOR PIPE O.D., PROVIDE THICKENED EDGE WITH MIN. WIDTH OF 2xTw. REINFORCE AS REQ'D. FOR BASE SLAB.



TYPICAL PIPE AND FRAME REINFORCEMENT
SCALE: N.T.S.



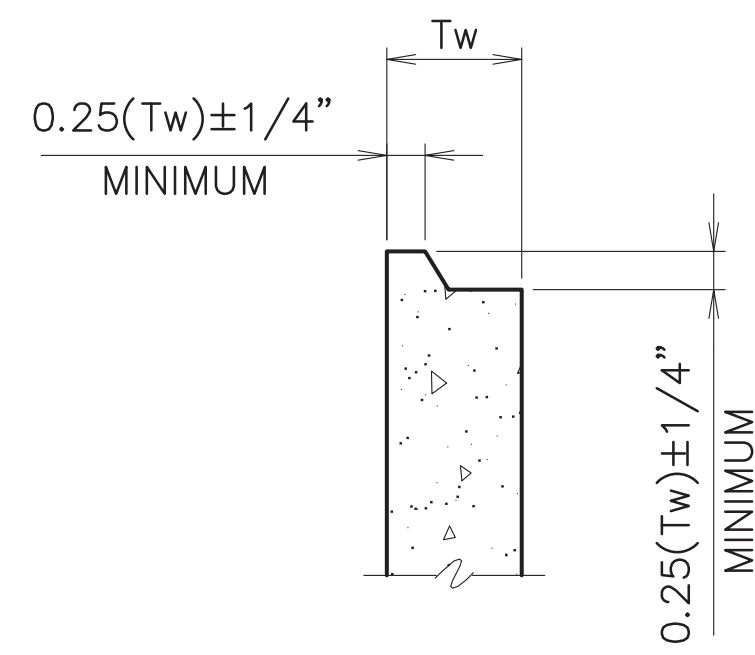
THICKENED EDGE FOR PIPE SUPPORT
SCALE: N.T.S.

STANDARD PLAN No. 702-96	DATED DEC. 6, 2010	SHT. No. 1 OF 1
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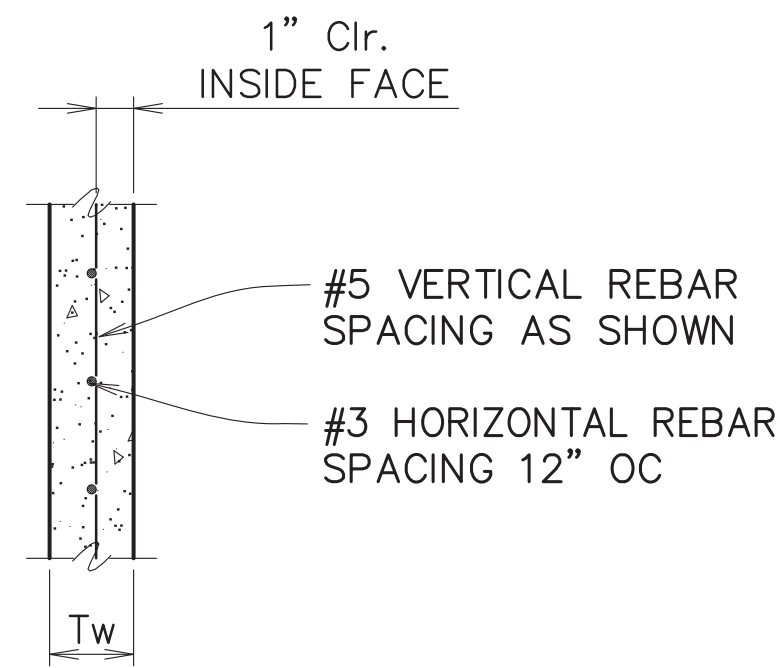
CAST-IN-PLACE DRAINAGE STRUCTURES (STRUCTURAL DETAILS)

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T. STEPHENS

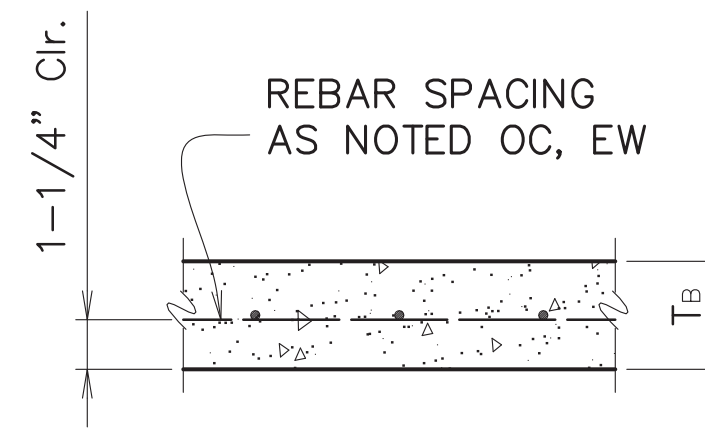
DATE	DESCRIPTION	BY
	REVISION	



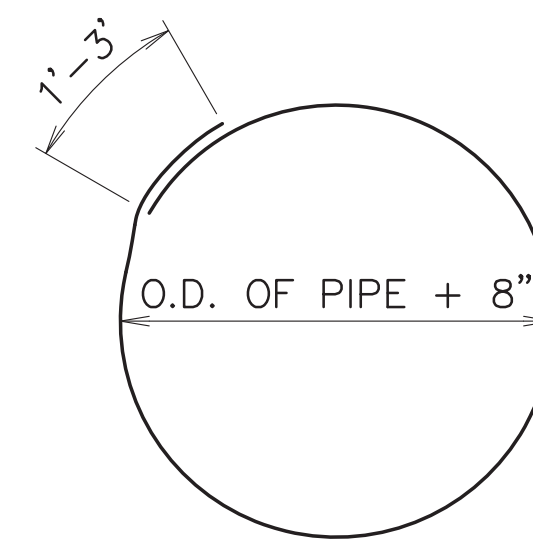
JOINT DETAIL
SCALE: N.T.S.



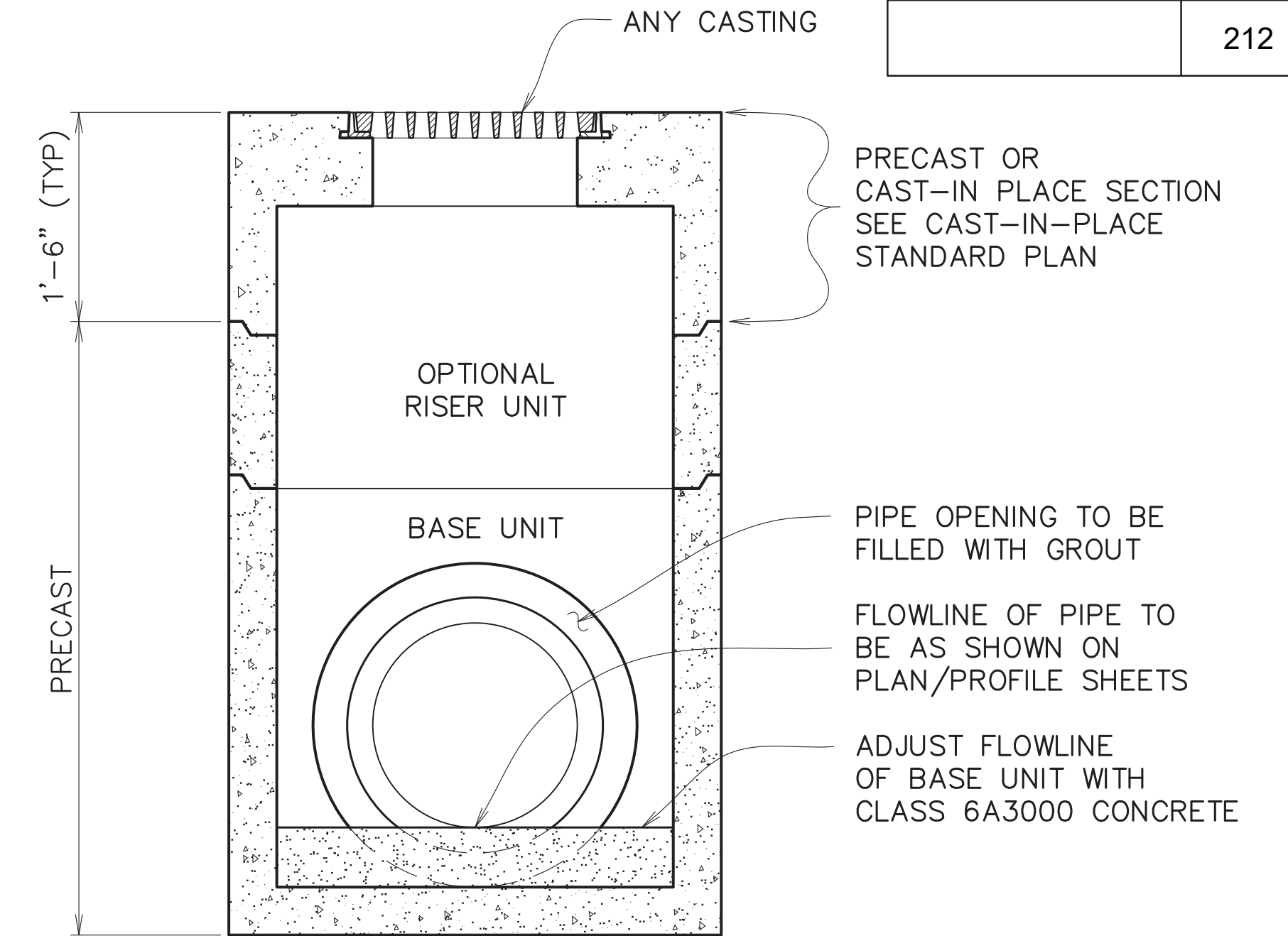
STANDARD PRECAST WALL DETAIL
SCALE: N.T.S.



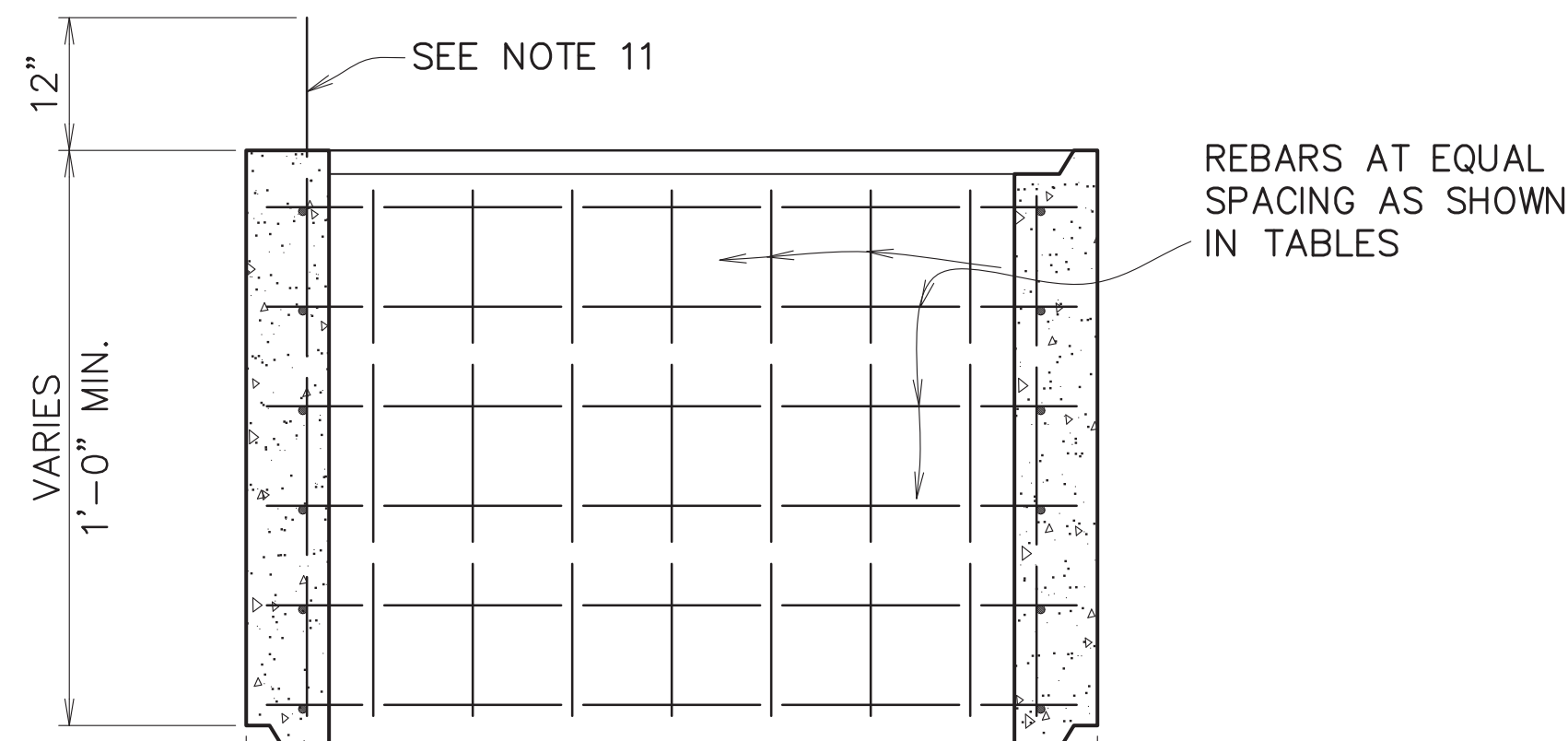
BOTTOM SLAB DETAIL
SCALE: N.T.S.



#4 HOOP
SCALE: N.T.S.



TYPICAL COMPOSITE STRUCTURE
SCALE: N.T.S.



OPTIONAL RISER UNIT
SCALE: N.T.S.

A=LENGTH INSIDE OPENING MEASURED PARALLEL TO CURB
B=WIDTH INSIDE OPENING MEASURED PERPENDICULAR TO CURB

PRECAST TOP SLAB DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"T ₁ " SLAB THICKNESS (IN)	* REBAR REQ'D	* REBAR SPACING
≤ 4'	≤ 4'	4.0"	#4	12"
4'-6'	4'-6'	4.0"	#5	12"
6'-8'	6'-8'	5.0"	#5	8"
8'-20'	8'-10'	5.5"	#5	6"

* AS SHOWN OC, EW, SET 1-1/4" CLR. FROM SLAB BOTTOM

PRECAST MIDDLE SLAB UNDER PAVEMENT DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"T _{MP} " SLAB THICKNESS (IN)	* REBAR REQ'D	* REBAR SPACING
≤ 20'	≤ 4'	5.0"	#4	12"
≤ 20'	4'-6'	6.0"	#5	12"
≤ 20'	6'-8'	7.0"	#5	8"
≤ 20'	8'-10'	8.5"	#5	6"

* AS SHOWN OC, EW, SET 1-1/4" CLR. FROM SLAB BOTTOM

PRECAST MIDDLE SLAB OUTSIDE PAVEMENT DIMENSIONS

"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"T _M " SLAB THICKNESS (IN)	* REBAR REQ'D	* REBAR SPACING
≤ 20'	≤ 4'	5.0"	#4	12"
≤ 20'	4'-6'	5.0"	#5	12"
≤ 20'	6'-8'	6.0"	#5	8"
≤ 20'	8'-10'	6.5"	#5	6"

* AS SHOWN OC, EW, SET 1-1/4" CLR. FROM SLAB BOTTOM

PRECAST BOTTOM SLAB DIMENSIONS

"T _B " SLAB THICKNESS (IN)	"A" OR "B" MAXIMUM WIDTH OF OPENING INSIDE STRUCTURE (FT)	MAXIMUM DEPTH STRUCTURE (FT)	REBAR REQ'D	REBAR SPACING
4.0"	4'	4'	#4	12"
5.0"	4'-6'	8'	#5	12"
6.0"	8'	12'	#5	12"
7.0"	8'	16'	#5	12"
7.5"	10'	20'	#5	6"

BOTTOM SLAB THICKNESS TO MEET MINIMUM CRITERIA SHOWN FOR OPENING WIDTH AND STRUCTURE DEPTH.

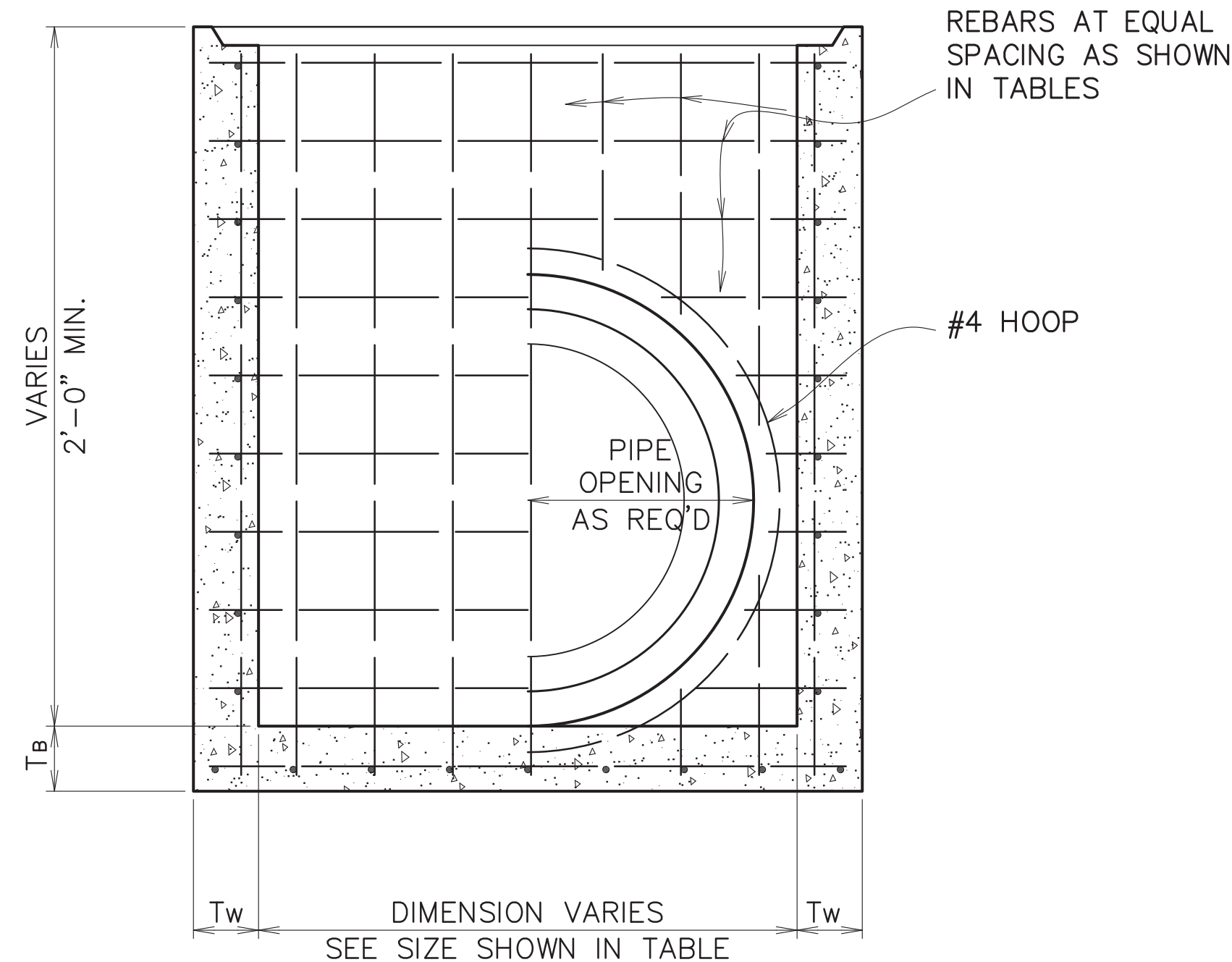
PRECAST PAVEMENT SLAB DIMENSIONS

INTERMEDIATE SUPPORT BEAM REQ'D (Y OR N)	"A" INSIDE LENGTH (FT)	"B" INSIDE WIDTH (FT)	"T _P " SLAB THICKNESS (IN)	REBAR REQ'D *	REBAR SPACING
N	≤ 10'	≤ 4'	6.0"	#5	12"
N	≤ 10'	4'-6'	7.0"	#5	12"
N	≤ 10'	6'-8'	9.0"	#5	8"
Y	6'-10'	6'-10'	6.0"	#5	12"

* AS SHOWN OC, EW, TB

PRECAST WALL DIMENSIONS

WALL HEIGHT (FT)	"T _w " WALL THICKNESS (IN)	VERT. REBAR SPACING (IN)
0'-4'	4.0"	12"
4'-8'	5.0"	12"
8'-10'	6.0"	9"
10'-12'	6.0"	6"
12'-16'	7.0"	4.5"
16'-20'	7.5"	4.5"

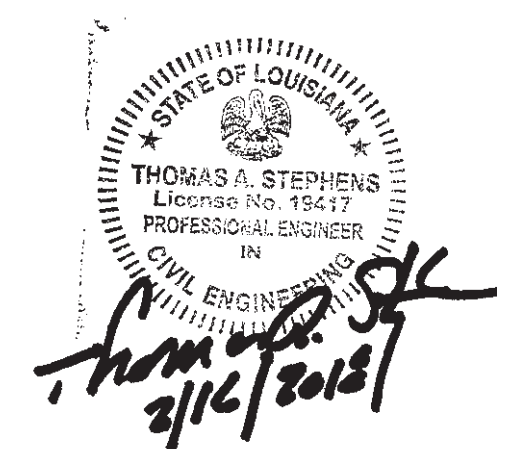


BASE UNIT
SCALE: N.T.S.

NOTE:

- THESE PRECAST UNITS ARE INTENDED TO BE USED AS THE LOWER PORTION OF A COMPOSITE STRUCTURE. STRUCTURAL AND FINISHING DETAILS ARE SHOWN ON OTHER STANDARD PLANS FOR STRUCTURE TYPES.
- ALL REINFORCING STEEL TO BE DEFORMED GRADE 60 MINIMUM REBAR. STEEL BAR SIZE & SPACING MAY BE ADJUSTED AS LONG AS AREA OF STEEL IS MAINTAINED PER FOOT IN ACCORDANCE WITH ASTM C913-08.
- MINIMUM CONCRETE COVER FOR REBAR STEEL IS TO BE 1" FOR PRECAST CONCRETE WALLS AND 1-1/4" FOR OTHER PRECAST MEMBERS.
- CONCRETE COMPRESSIVE STRENGTH FOR PRECAST STRUCTURES TO BE 5000 PSI AT 28 DAYS MINIMUM. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI BEFORE SHIPPING UNITS.
- SEE SHEET 702-99 FOR FRAME AND COVER DETAILS.
- SEE SHEET 702-96 FOR CAST-IN-PLACE STRUCTURAL DETAILS.
- PIPE OPENING TO BE FORMED ONLY WHEN REQUIRED.
- PIPE OPENING TO BE O.D. OF PIPE + 4" ± 1/2".
- ALL PIPE ENDS TO BE SET FLUSH WITH INTERIOR WALLS FACE. PIPE ANNULAR SPACE IS TO BE GROUTED WITH NON-SHRINK GROUT AFTER INSTALLATION. GROUT AS REQUIRED TO CREATE INVERTS.
- JOINTS BETWEEN PRECAST UNITS TO BE SEALED WITH FLEXIBLE PLASTIC GASKET MATERIAL AND WRAPPED WITH A 12" WIDTH OF GEOTEXTILE FABRIC.
- JOINTS BETWEEN CAST-IN-PLACE SECTIONS AND OR PRECAST UNITS TO BE TONGUE AND GROOVE AND SEALED WITH TYPE II GRADE A EPOXY OR FLAT JOINT WITH A MINIMUM OF 12" OF No. 4 BARS AT 18" CTRS. (MAX.)
- PRECAST CONCRETE INLETS CONFORMING TO STANDARD PLANS MAY BE FURNISHED. LEDGE WIDTH MAY BE REDUCED BY 1" AROUND INLET FRAMES TO 2-1/2". SUPPORT BEAM BETWEEN DOUBLE RETICULINE GRATE INLETS MAY BE REDUCED BY 2" DEPTH TO FORM 10"x10" BEAM.

- PRECAST UNITS SHALL CONFORM TO SECTION 1017 OF THE STANDARD SPECIFICATIONS.
- ALL PRECAST UNITS TO BE EQUIPPED WITH AT LEAST 2 COMMERCIALY MANUFACTURED EMBEDDED INSERTS RATED FOR THE STRUCTURE'S LIFT LOAD IN COMPLIANCE WITH APPLICABLE ANSI AND OSHA STANDARDS (MINIMUM SAFETY FACTOR OF 4). EMBEDDED INSERTS TO CONSTRUCTED OF GALVANIZED STEEL OR CORROSION RESISTANT MATERIALS AND INSTALLED BY PRECAST MANUFACTURER IN ACCORDANCE WITH SUPPLIERS INSTRUCTIONS. NO LIFT INSERTS SHALL REMAIN EXPOSED ON VISIBLE SURFACES AFTER THE STRUCTURE IS INSTALLED. NO LIFTING WITH CHAINS WRAPPED AROUND STRUCTURE IS PERMITTED.
- PRECASTERS ARE REQUIRED TO BE NPCA CERTIFIED.
- INSTALLATION OF PRECAST STRUCTURES ARE TO BE PER MANUFACTURER'S INSTRUCTIONS. ANY MODIFICATIONS TO STRUCTURES IN FIELD SHALL REQUIRE PRECASTER'S WRITTEN APPROVAL.
- MINIMUM THICKNESS OF STRUCTURAL ELEMENTS INSTALLED IN OR UNDER PAVEMENT SHALL BE 6".

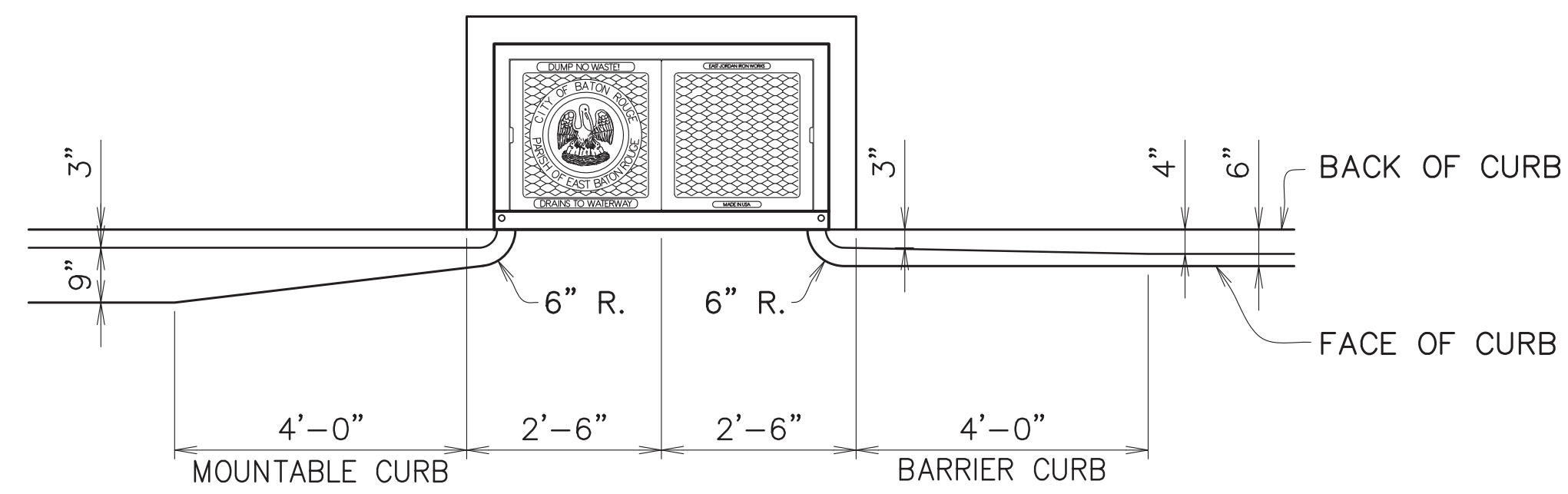


STANDARD PLAN No. 702-97	DATED DEC. 6, 2010	SHT. No. 1 OF 1
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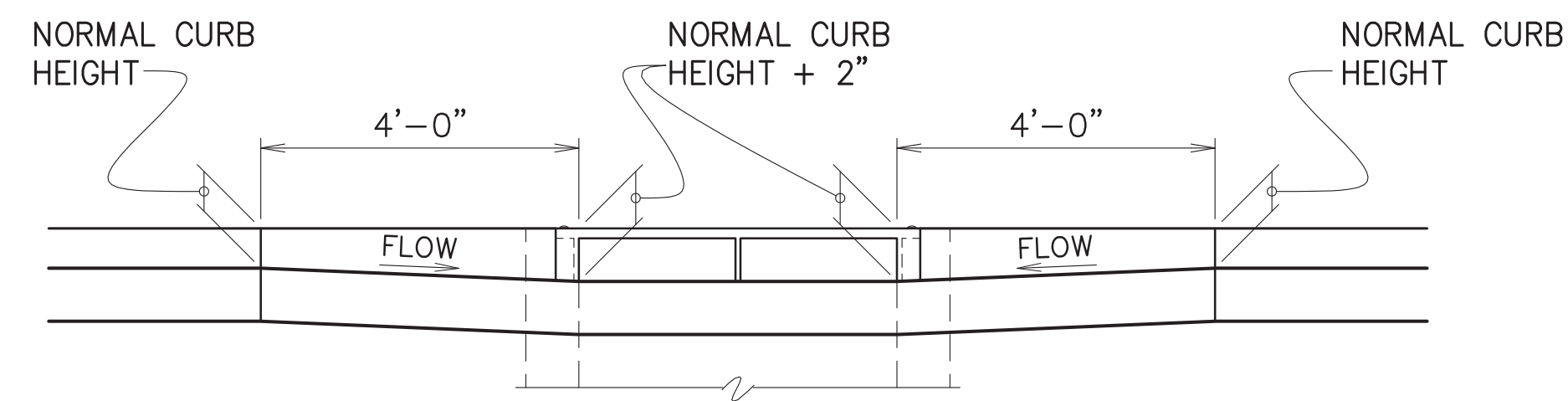
PRECAST DRAINAGE STRUCTURE (STRUCTURAL DETAILS)

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T. STEPHENS

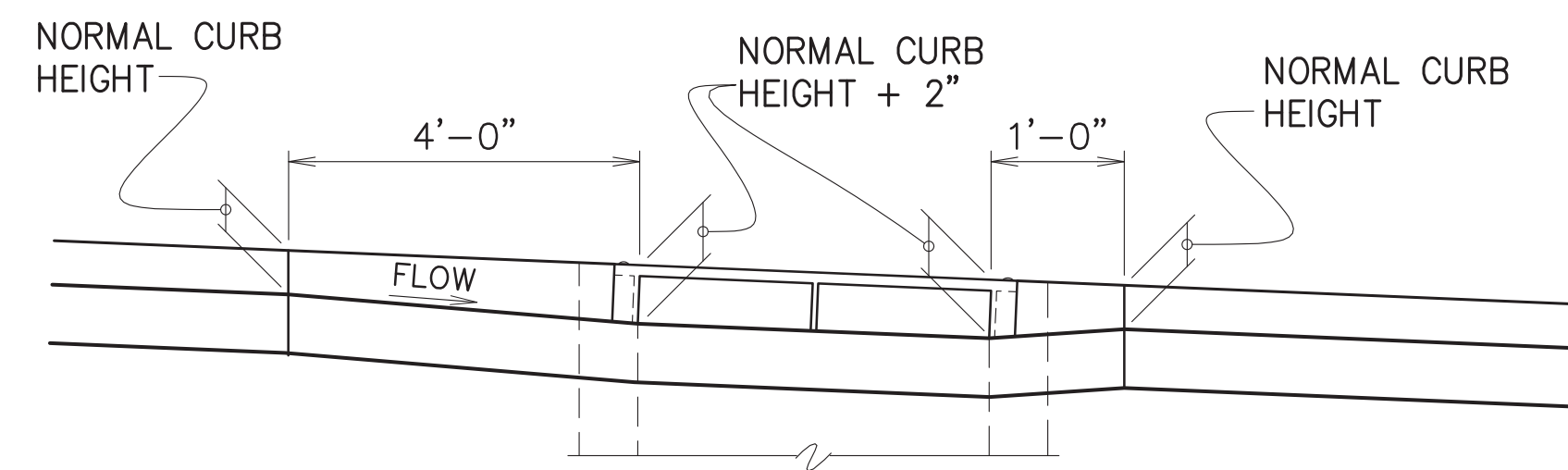
DATE	NOTE #15 REVISION	DESCRIPTION	BY
02/10/2012			g.c.



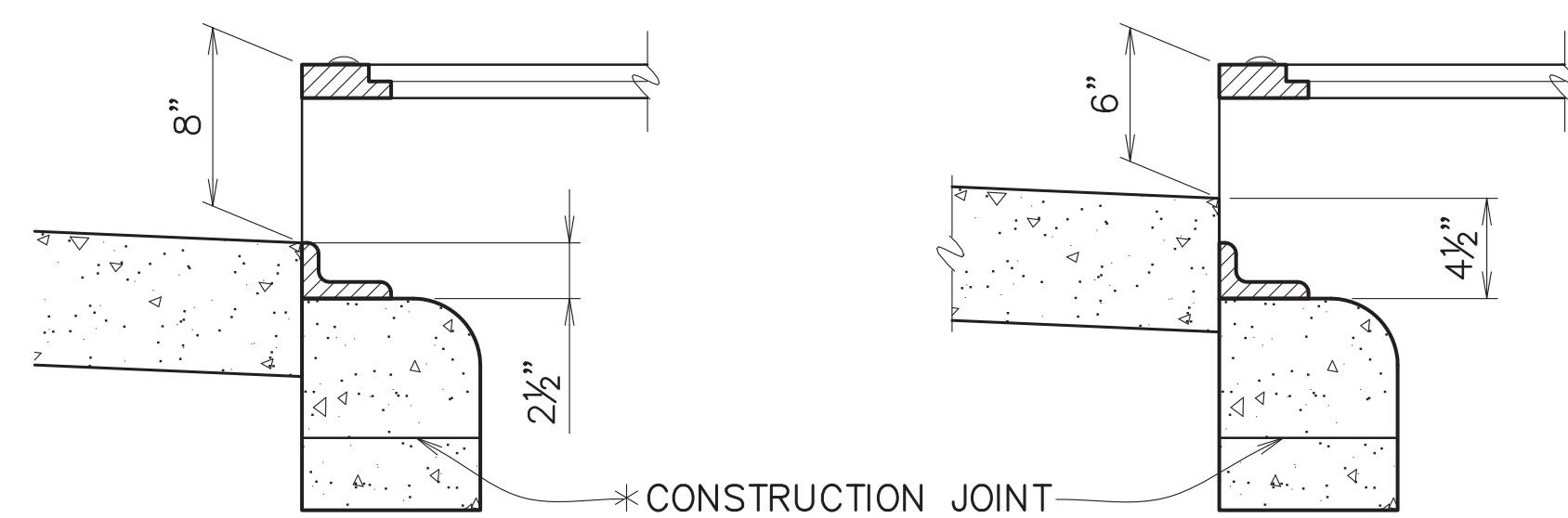
PLAN
TRANSITION IN CURB WIDTH
SCALE: 1/2"=1'-0"



TRANSITION IN CURB HEIGHT
CURB INLET @ LOW POINT



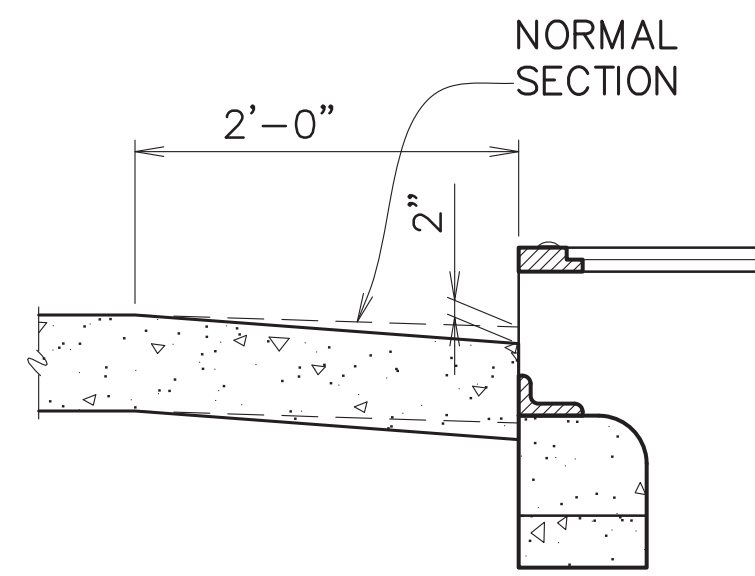
TRANSITION IN CURB HEIGHT
CURB INLET ON GRADE



WHEN USED WITH
6" BARRIER CURB

WHEN USED WITH
4" MOUNTABLE CURB

INLET CONFIGURATION
SCALE: 1-1/2"=1'-0"



SECTION
SHOWING PAVEMENT SUMP
SCALE: 1"=1'-0"

STATE OF LOUISIANA
THOMAS A. STEPHENS
LICENSE NO. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
THAS
2/16/2013

STANDARD PLAN No. 702-98	DATED DEC. 6, 2010	SHT. No. 1 OF 1
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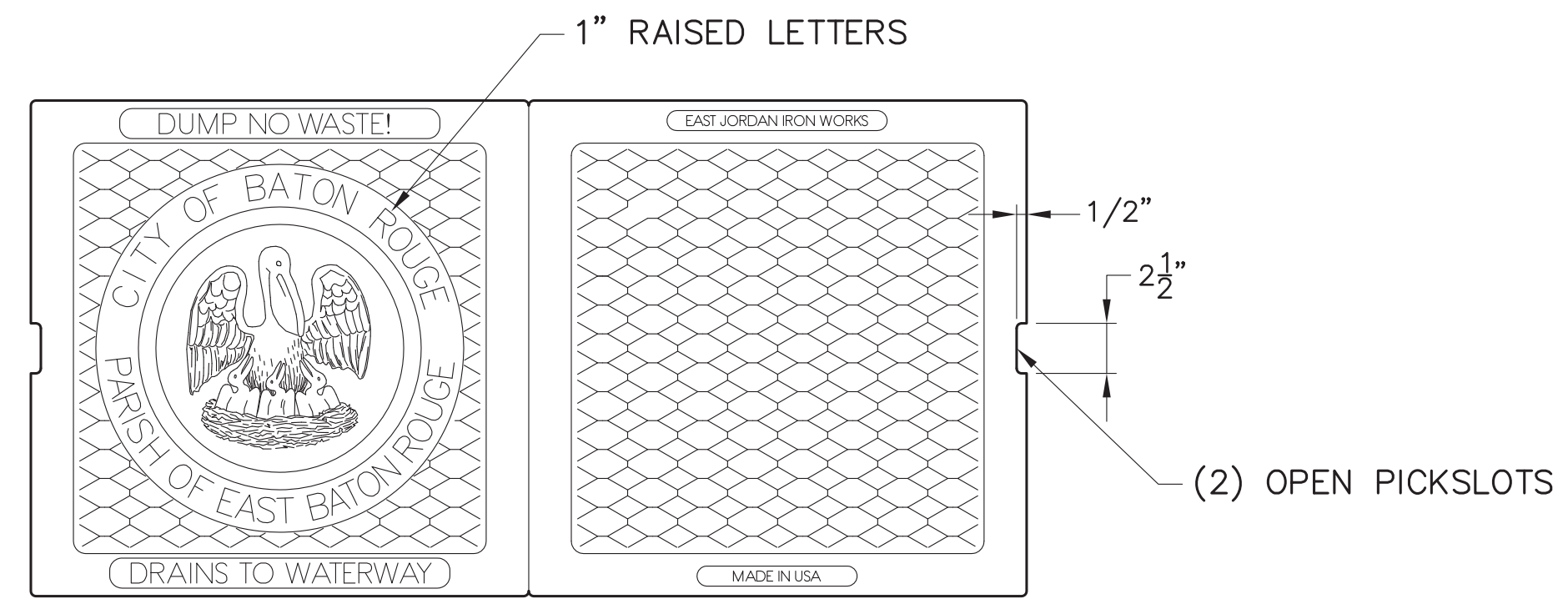
**DRAINAGE STRUCTURES
CURB TRANSITION DETAILS**

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T. STEPHENS

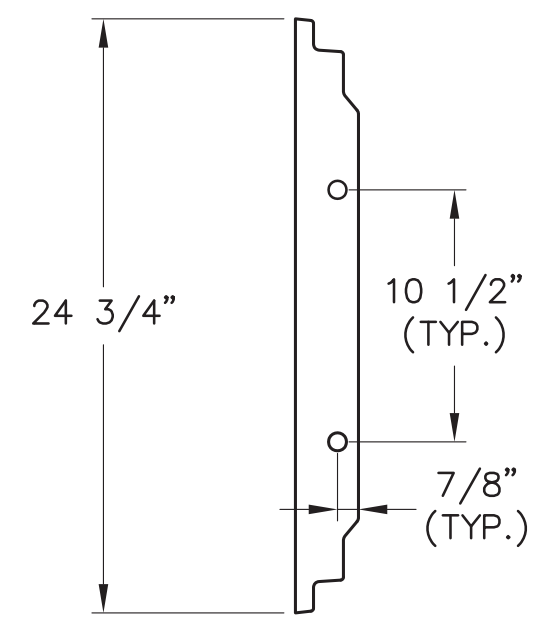
DATE	DESCRIPTION	BY
	REVISION	

* NOTE:
THE BASIN SHALL NOT BE CONSTRUCTED ABOVE BOTTOM OF PAVEMENT ELEVATION UNTIL THE PAVING ADJACENT TO THE BASIN IS IN PLACE.

PROJECT NO.	SHEET
	214

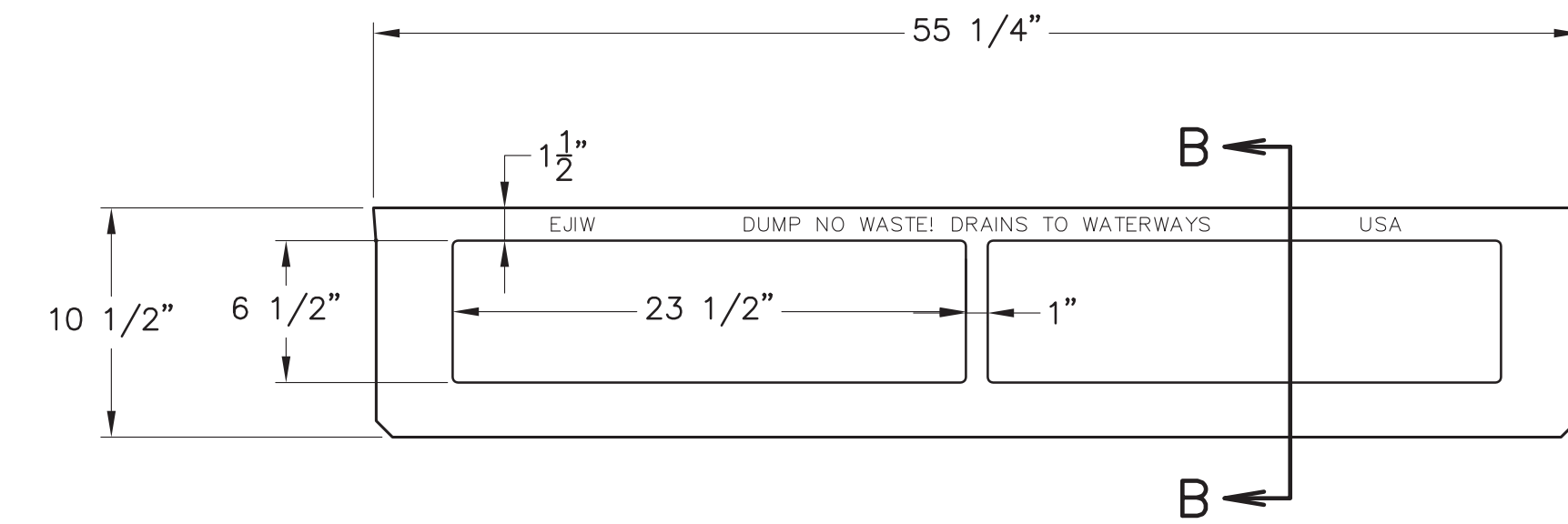


PLAN OF DUCTILE IRON COVER
SCALE: 1 1/2"=1'-0"

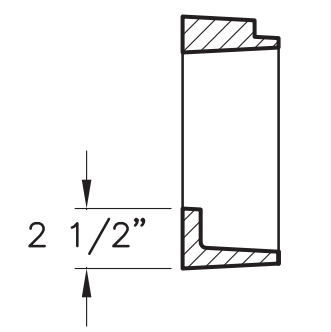


SIDE VIEW

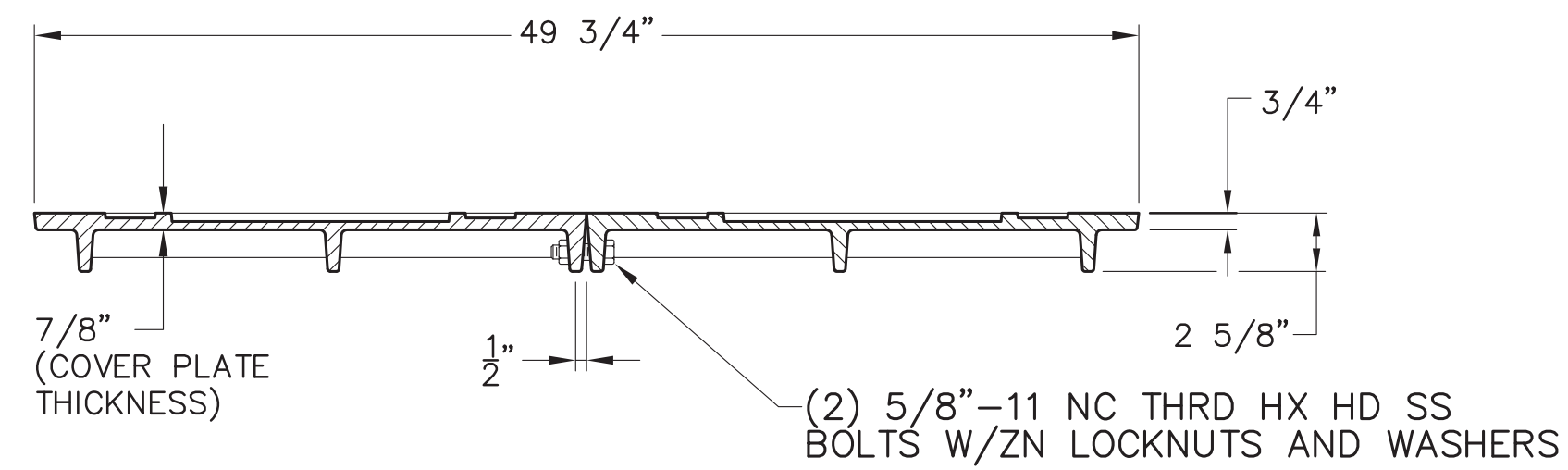
EJIW PRODUCT #44302030
USF 5188 (ITEM 8070063)
OR APPROVED EQUAL



FRONT VIEW

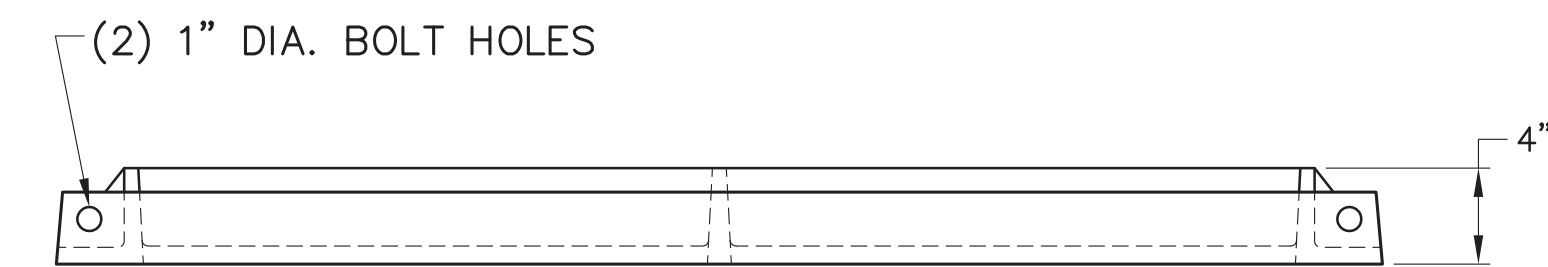


SECTION B-B

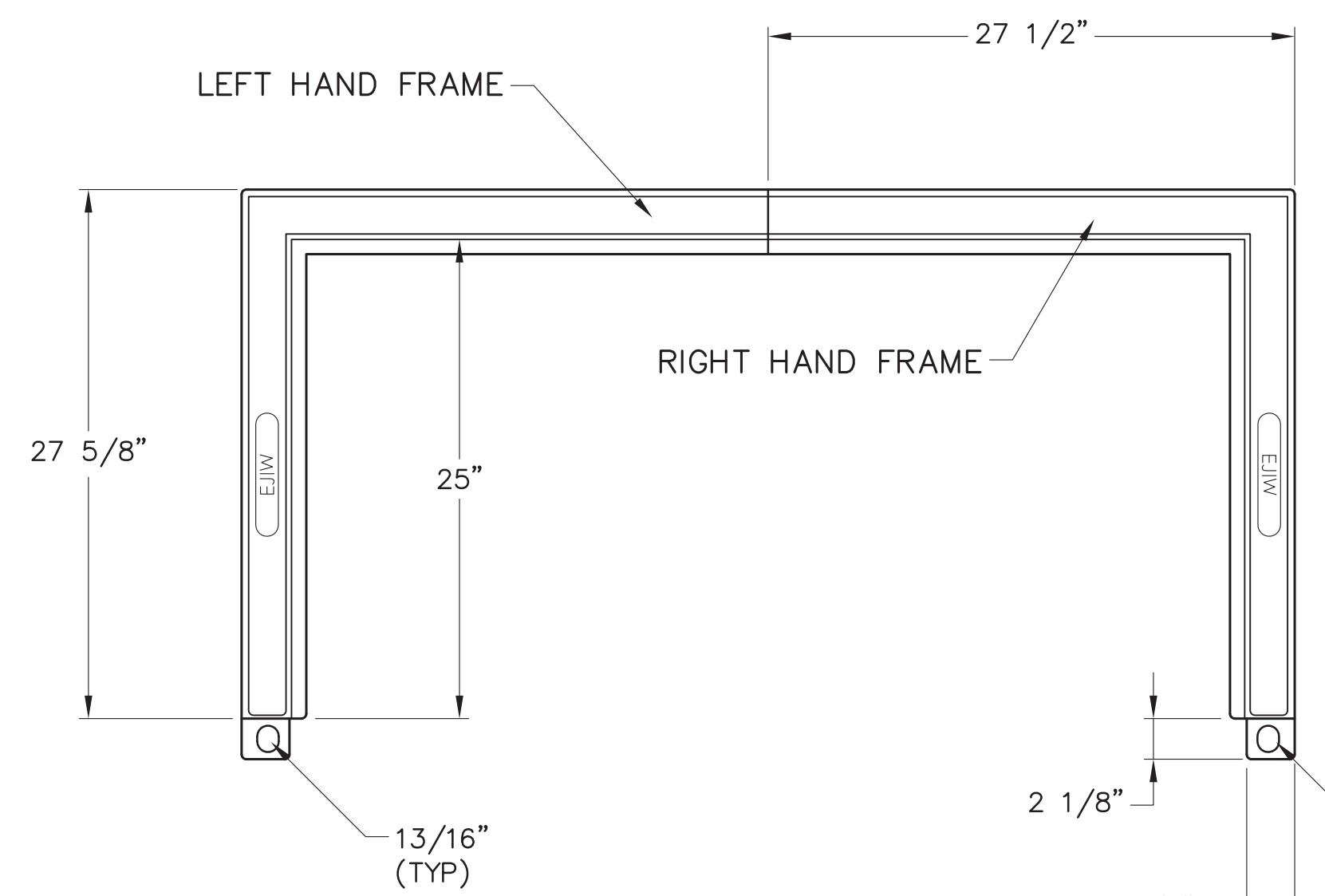


FRONT VIEW

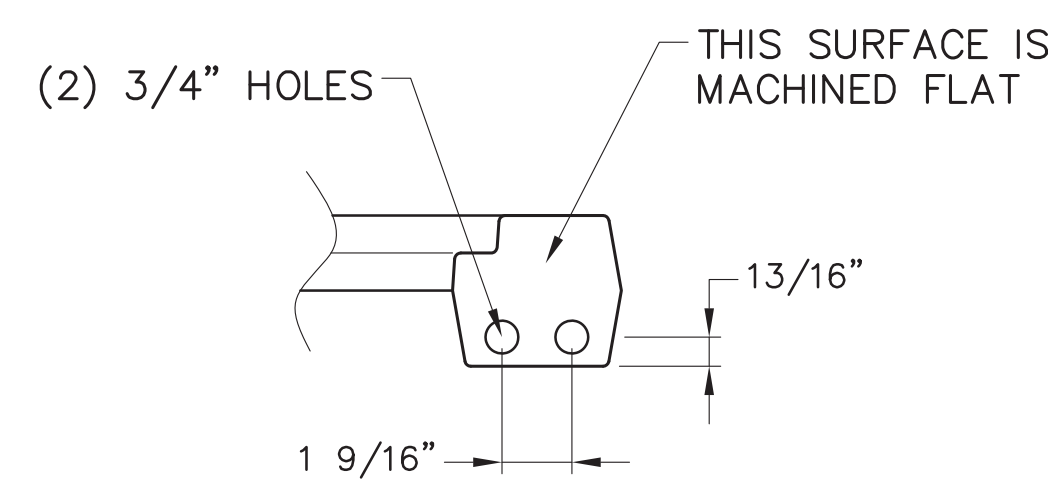
EJIW PRODUCT #44300209
USF 5188 (ITEM 8015665 & 8015666)
OR APPROVED EQUAL



TOP VIEW

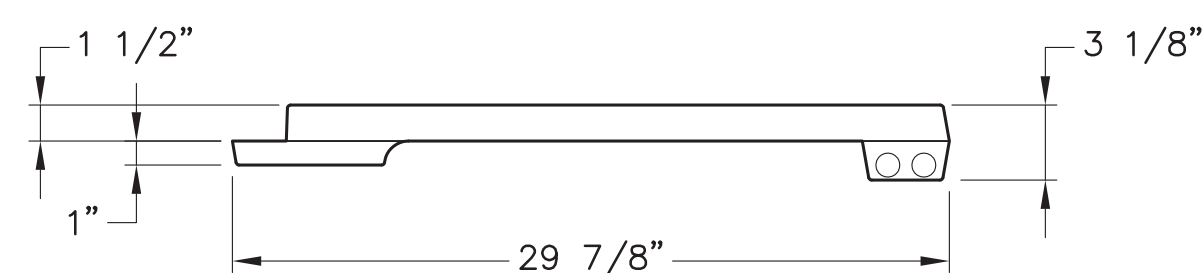
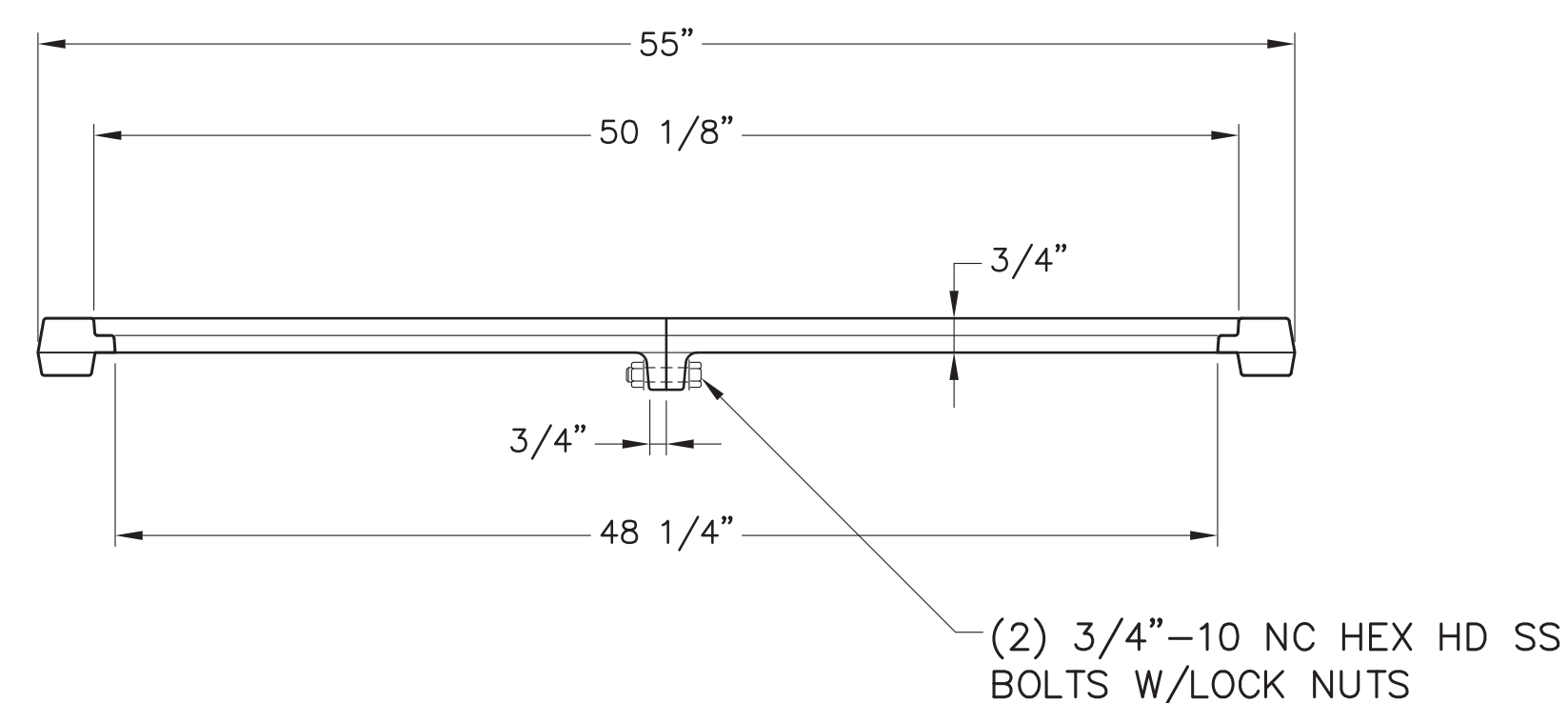


FRAME ASSEMBLY
SCALE: 1 1/2"=1'-0"



BOLT FLANGE DETAIL
(TYP, BOTH HALVES)

EJIW PRODUCT #44300016
USF 5188 (ITEM 8060020)
OR APPROVED EQUAL



* NOTES: WEIGHT OF DUCTILE IRON COVER = 314 LBS.
WEIGHT OF DUCTILE IRON FRAME = 128 LBS.
WEIGHT OF GREY IRON GRATE = 140 LBS.
* (WEIGHTS SHOWN ARE FOR EJIW PRODUCTS.
WEIGHTS OF APPROVED EQUAL PRODUCTS MAY VARY.)

GENERAL NOTE:

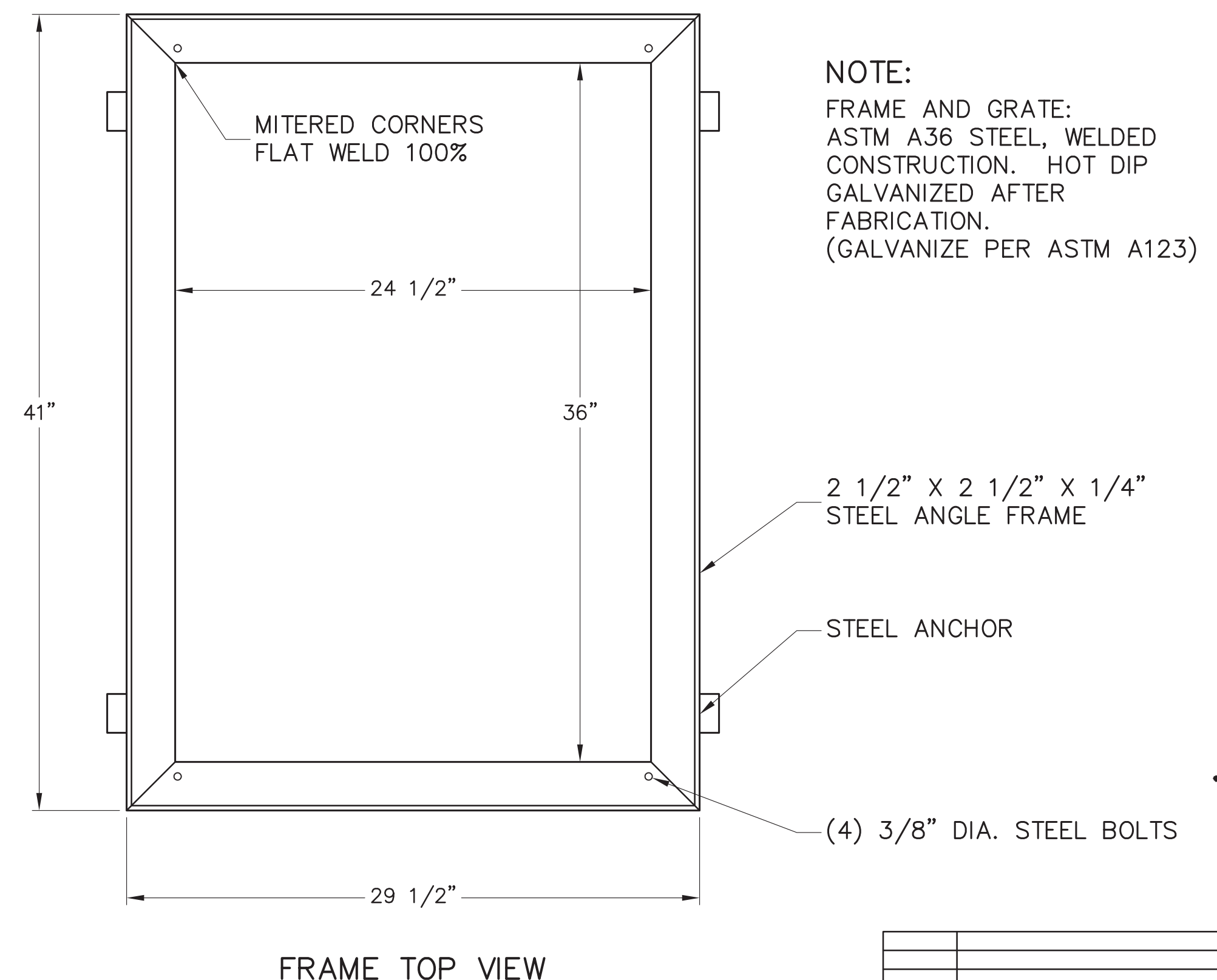
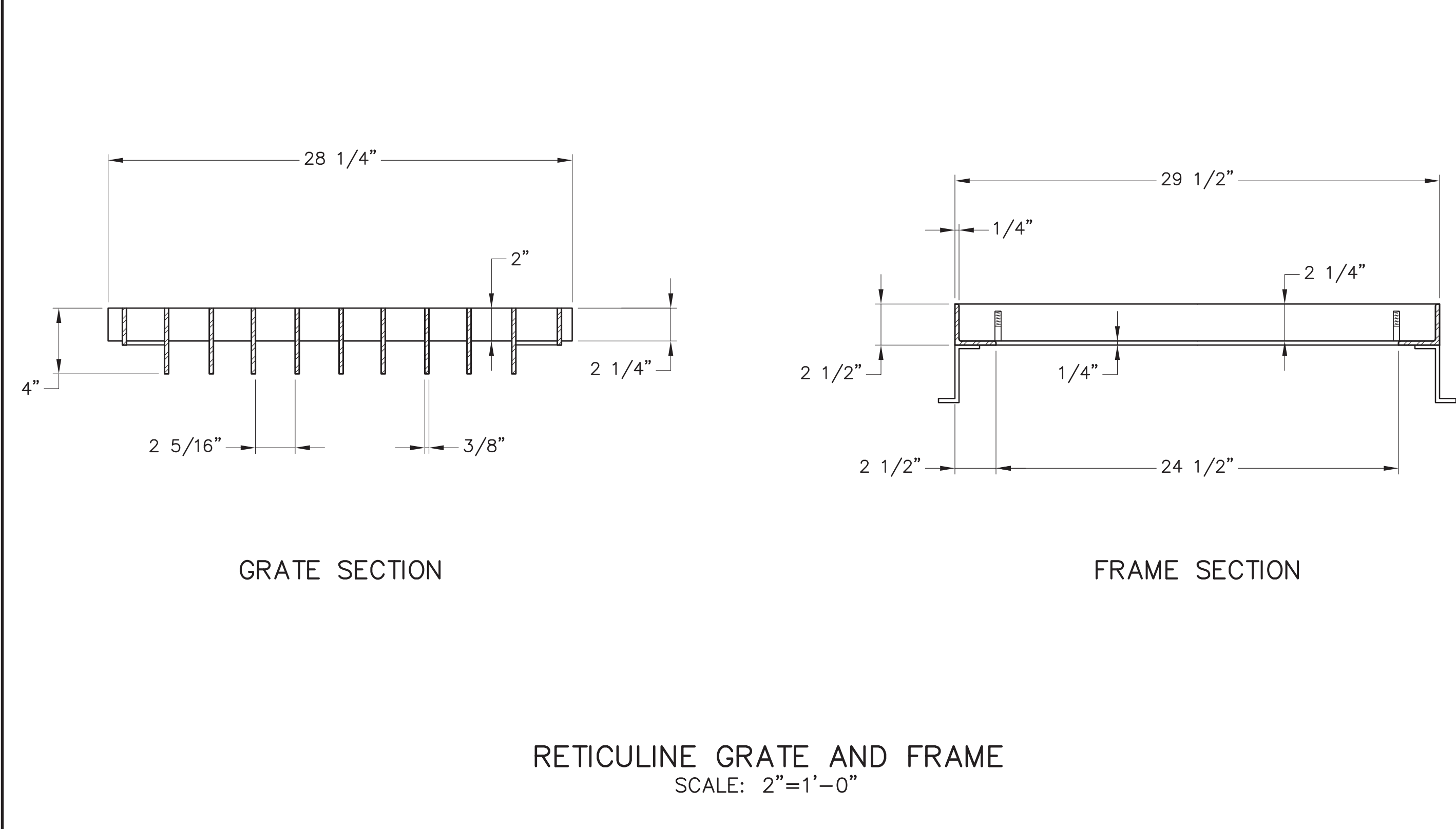
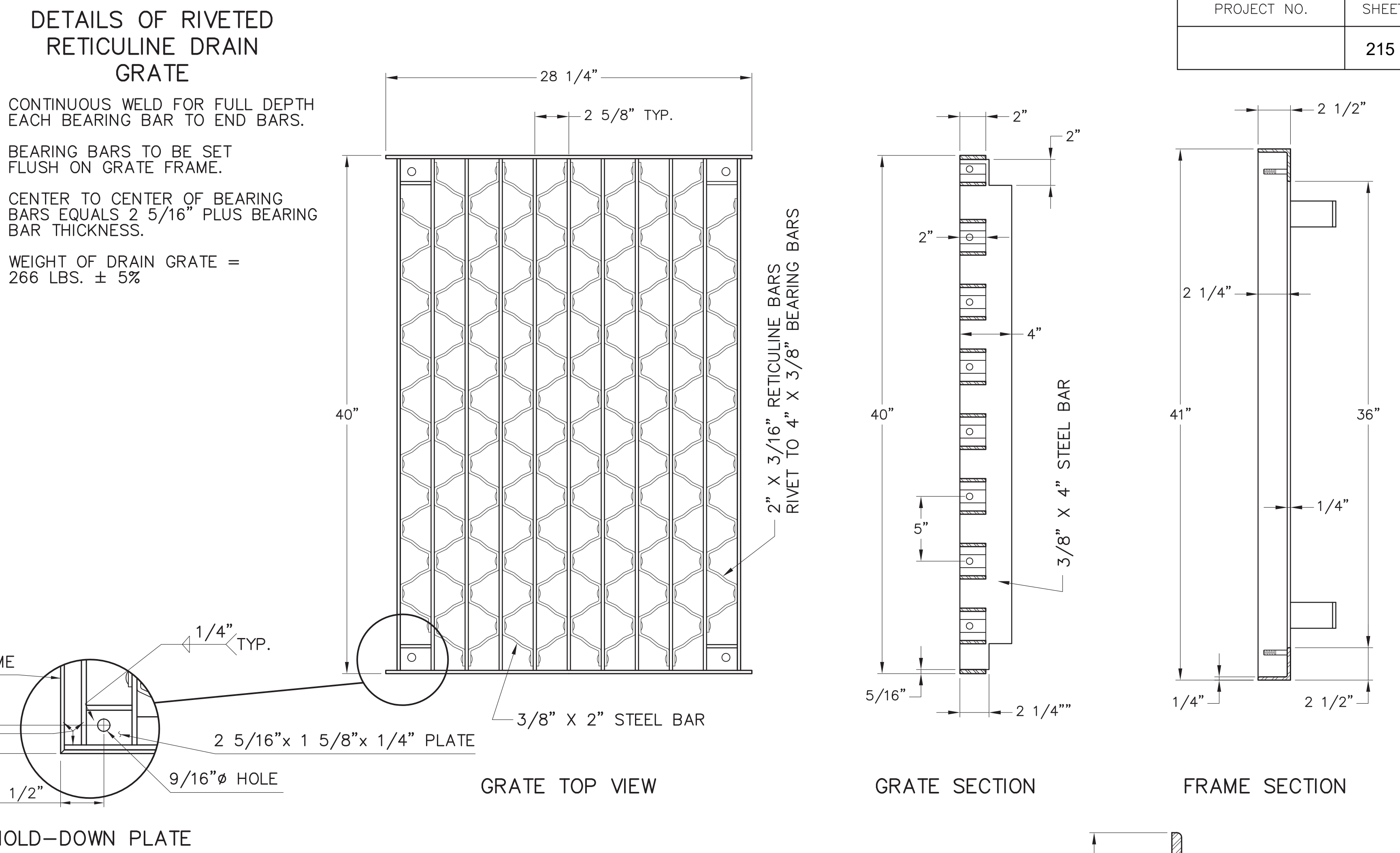
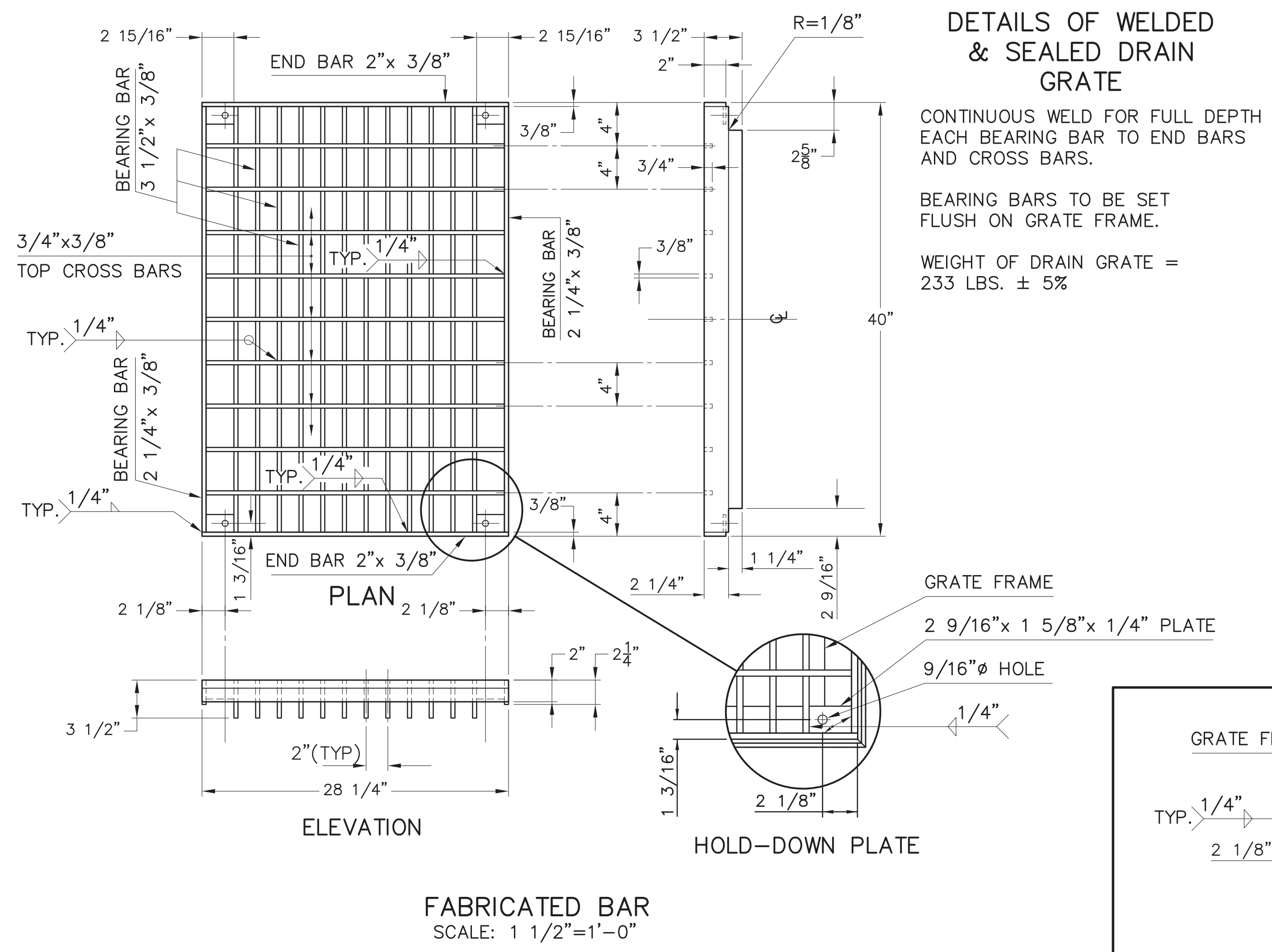
ALL CAST IRON FRAME, GRATES, AND COVERS SHALL BE TRAFFIC BEARING AND BE OF DOMESTIC ORIGIN OR COMPLY WITH SECTION 6-11. FRAME, GRATES, AND COVERS SHALL MEET OR EXCEED ALL REQUIREMENTS OF THE AASHTO DESIGNATION: M306 STANDARD SPECIFICATION FOR DRAINAGE, SEWER, UTILITY, AND RELATED CASTINGS.



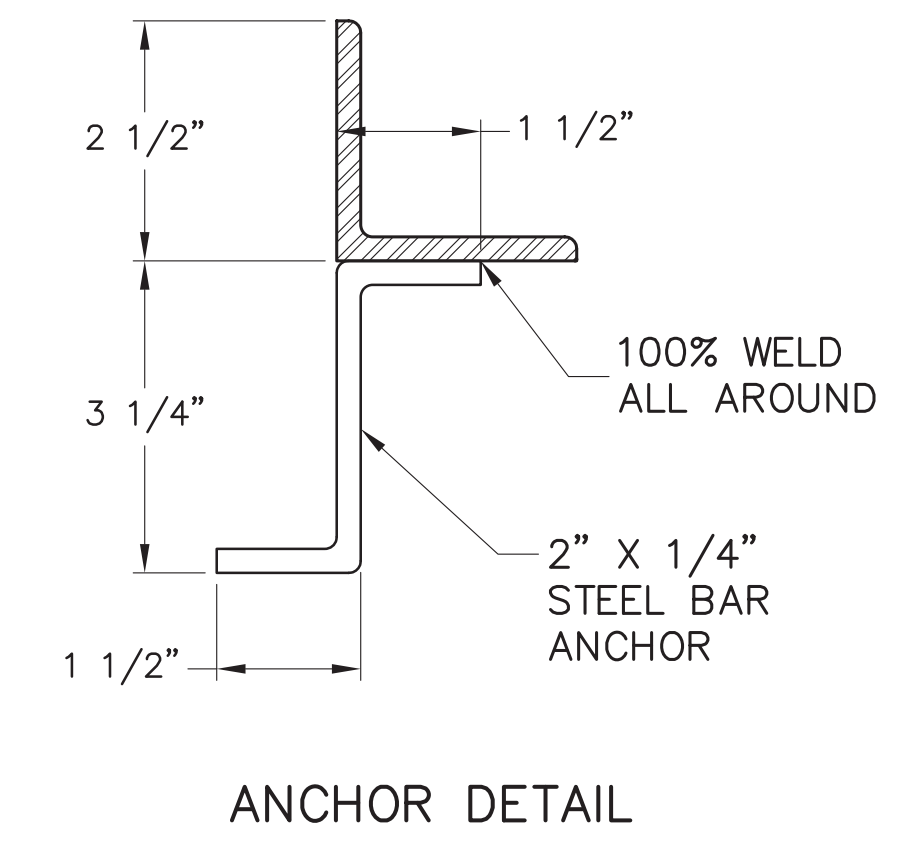
3/25/12	UPDATE USF PRODUCT NUMBER.	G. L. P.
12/08/10	ADD NOTES FOR PRODUCT HEIGHTS.	G. L. P.
3/17/10	ADD USF PRODUCT NUMBER.	G. L. P.
DATE	DESCRIPTION	BY
	REVISION	

STANDARD PLAN No. 702-99	DATED AUGUST 11, 2008	SHT. No. 1 OF 3
FRAMES, GRATES AND COVERS FOR INLETS AND MANHOLES (TYPE 1)		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED G. CHENG	DRAWN G. VANNICE	CHECKED G. CHENG
		APPROVED T. STEPHENS

PROJECT NO.	SHEET
	215



NOTE:
 FRAME AND GRATE:
 ASTM A36 STEEL, WELDED
 CONSTRUCTION. HOT DIP
 GALVANIZED AFTER
 FABRICATION.
 (GALVANIZE PER ASTM A123)



EJIW PRODUCT #44863061
 USF 6672-6673
 OR APPROVED EQUAL

STANDARD PLAN No.	DATED	SHT. No.
702-99	AUGUST 11, 2008	2 OF 3

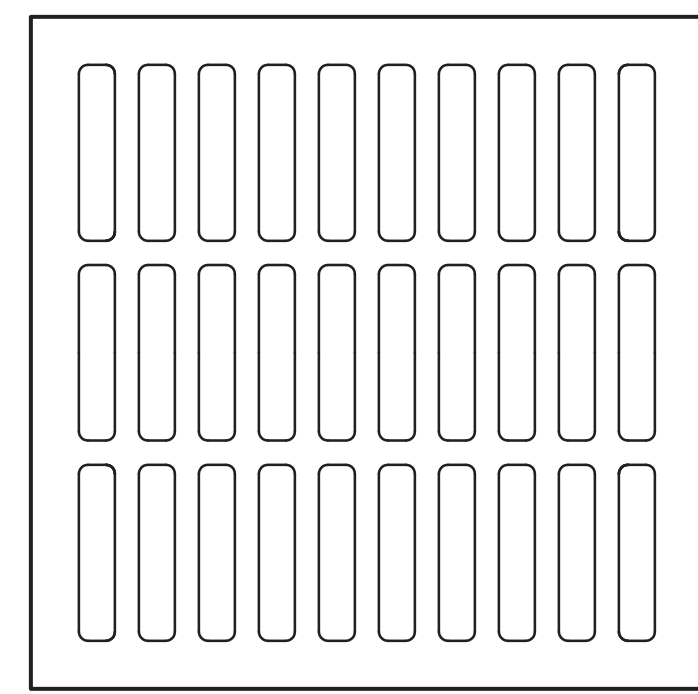
FRAMES, GRATES AND COVERS
 FOR INLETS AND MANHOLES
 (TYPE 2)

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

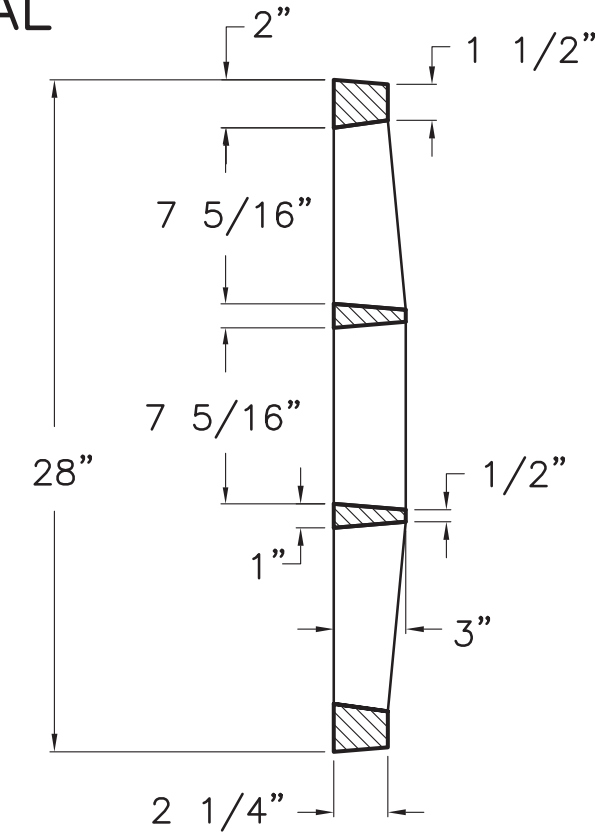
THOMAS A. STEPHENS
 License No. 15417
 PROFESSIONAL ENGINEER
 IN
 CIVIL ENGINEERING
 2/16/2018

3/28/12	ADD USF PRODUCT NUMBER.	G. L. P.
DATE	DESCRIPTION	BY
	REVISION	

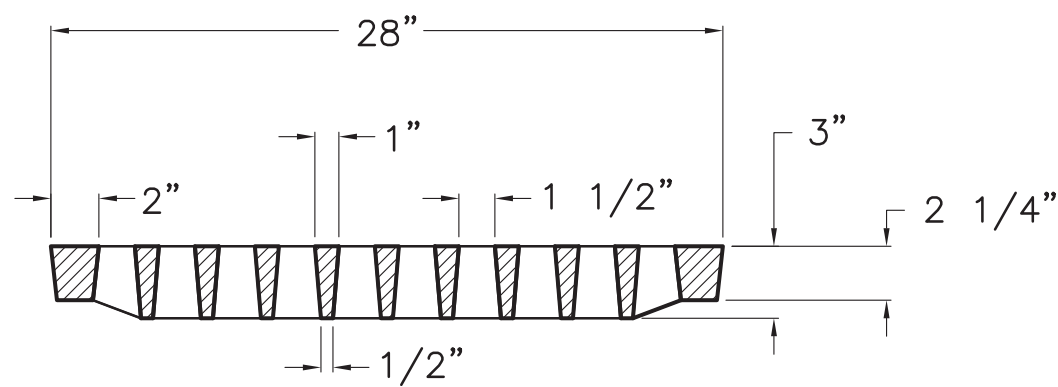
EJIW PRODUCT #45775030, USF 6278
OR APPROVED EQUAL



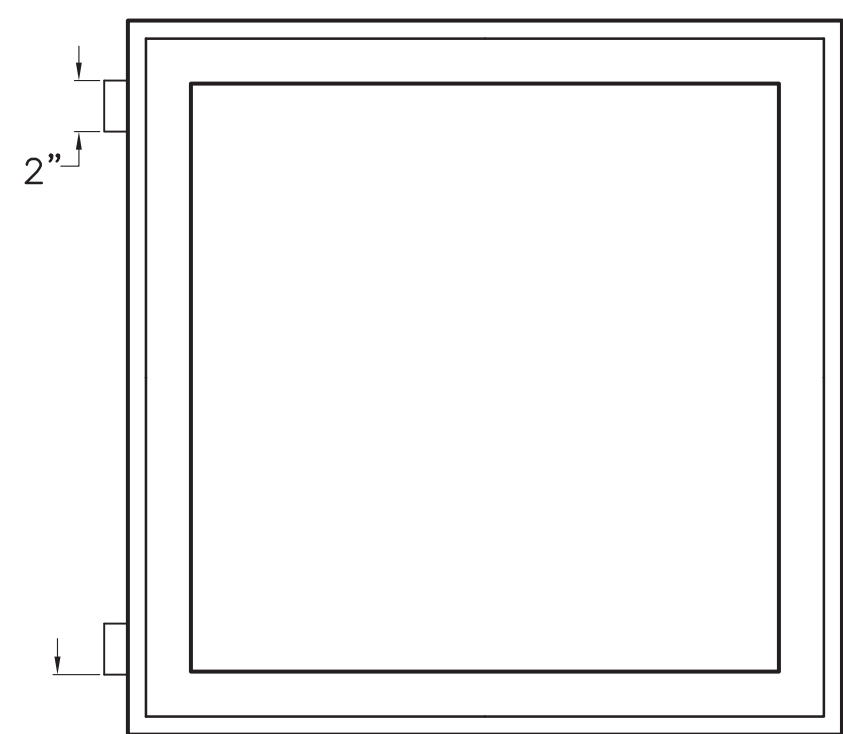
GRATE TOP VIEW



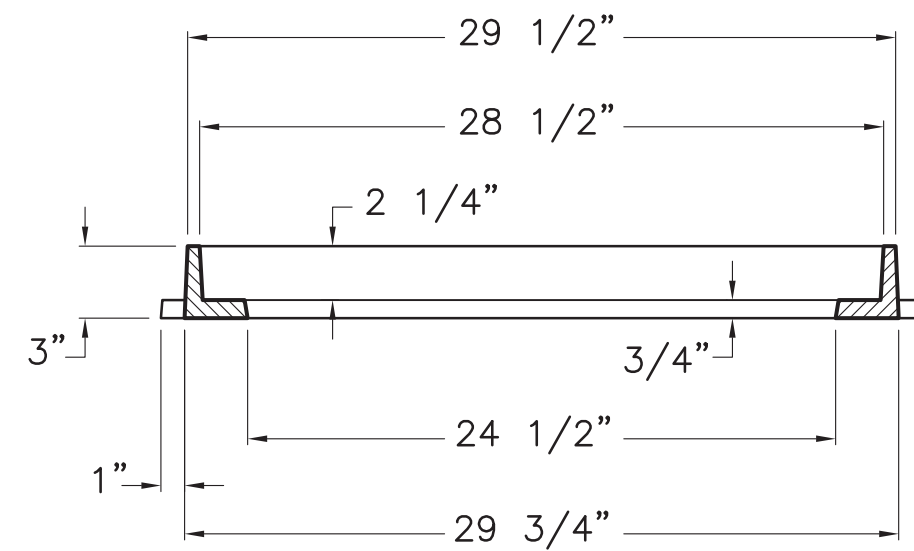
GRATE SECTION



GRATE SECTION



FRAME TOP VIEW

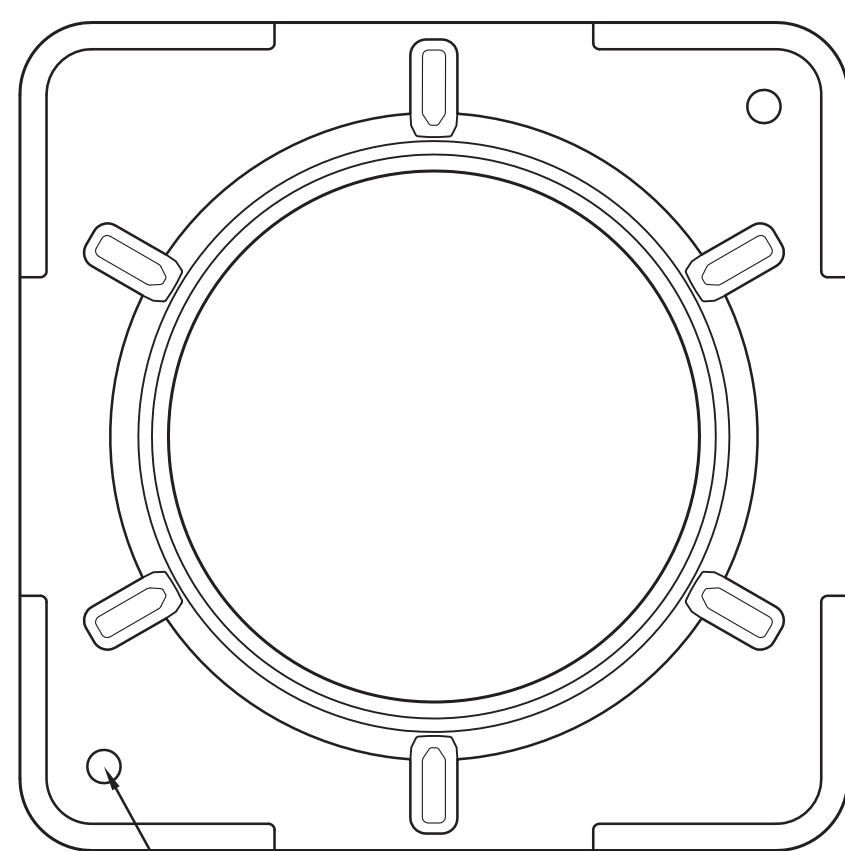


FRAME SECTION

"TYPE 3"
SCALE: 1-1/2"=1'-0"

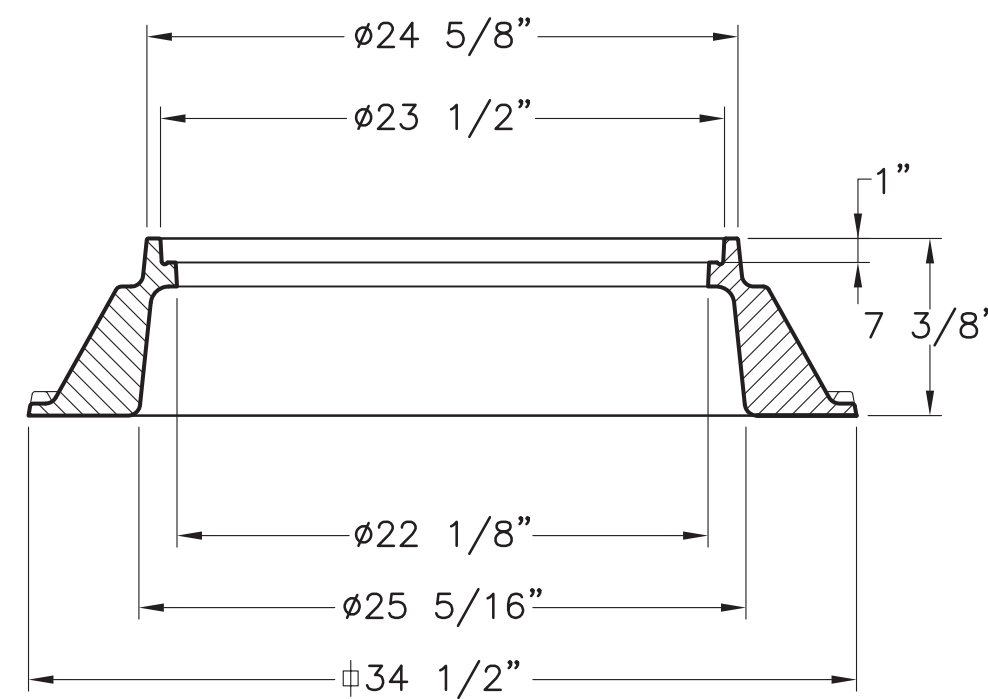
EJIW PRODUCT #45775010
USF 4650
OR APPROVED EQUAL

EJIW PRODUCT #41301211, USF 678 BZ
OR APPROVED EQUAL



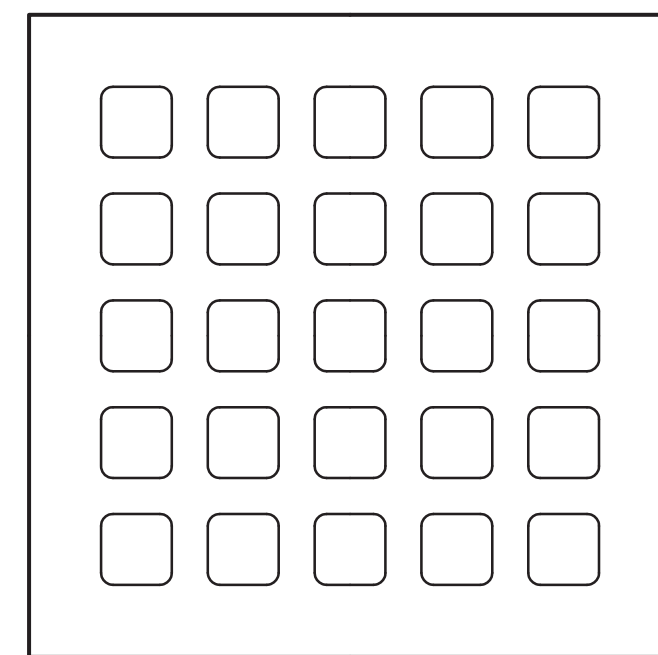
(2) 1" DIA.
HANDLING HOLES

"TYPE 9"
SCALE: 1-1/2"=1'-0"

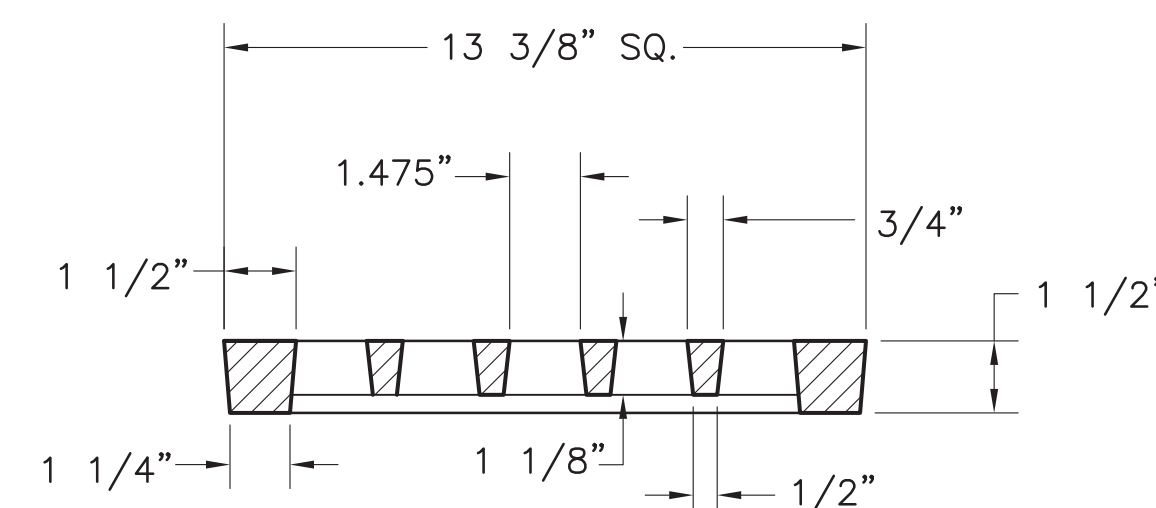


NOTE:
FRAME TO BE USED WITH TYPE 7 COVER.

EJIW PRODUCT #45913130, USF 6279
OR APPROVED EQUAL



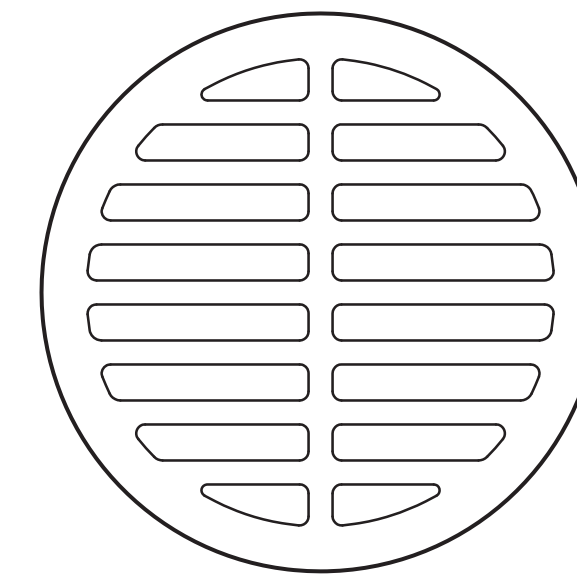
GRATE TOP VIEW



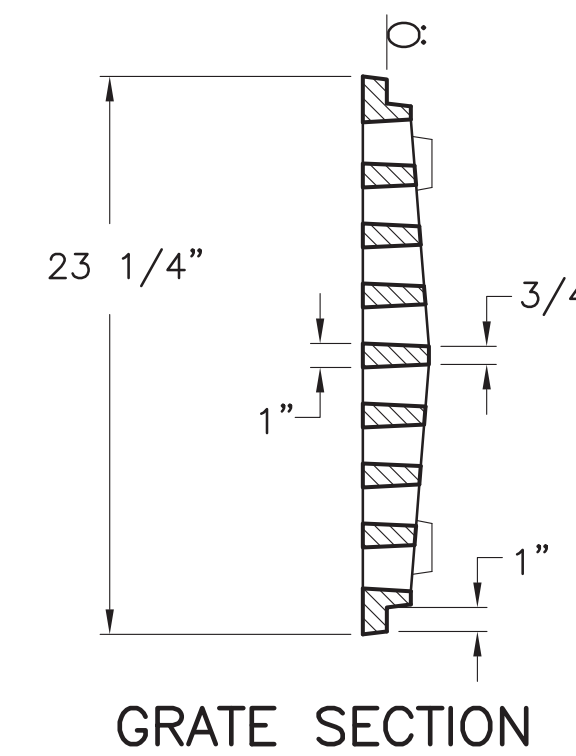
GRATE SECTION

"TYPE 4"
SCALE: 3"=1'-0"
DETAILS OF CAST IRON GRATE
WEIGHT OF CASTING = 38 LBS.

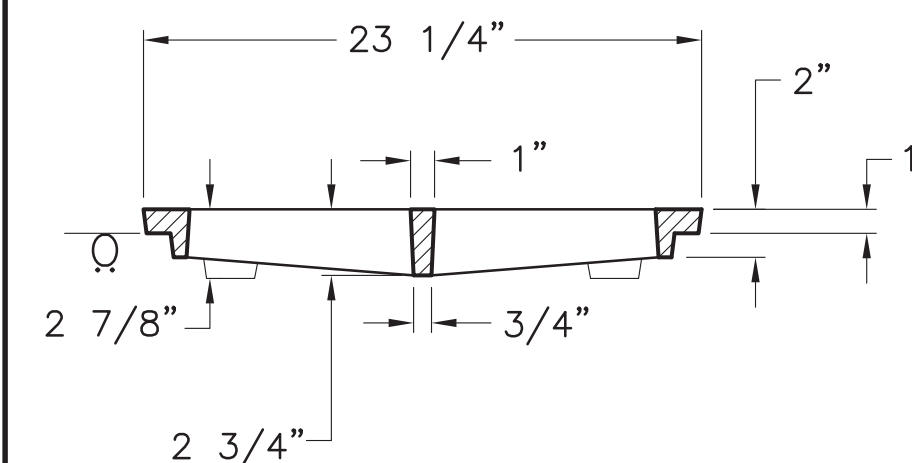
EJIW PRODUCT #43501030, USF 5685
OR APPROVED EQUAL



GRATE TOP VIEW

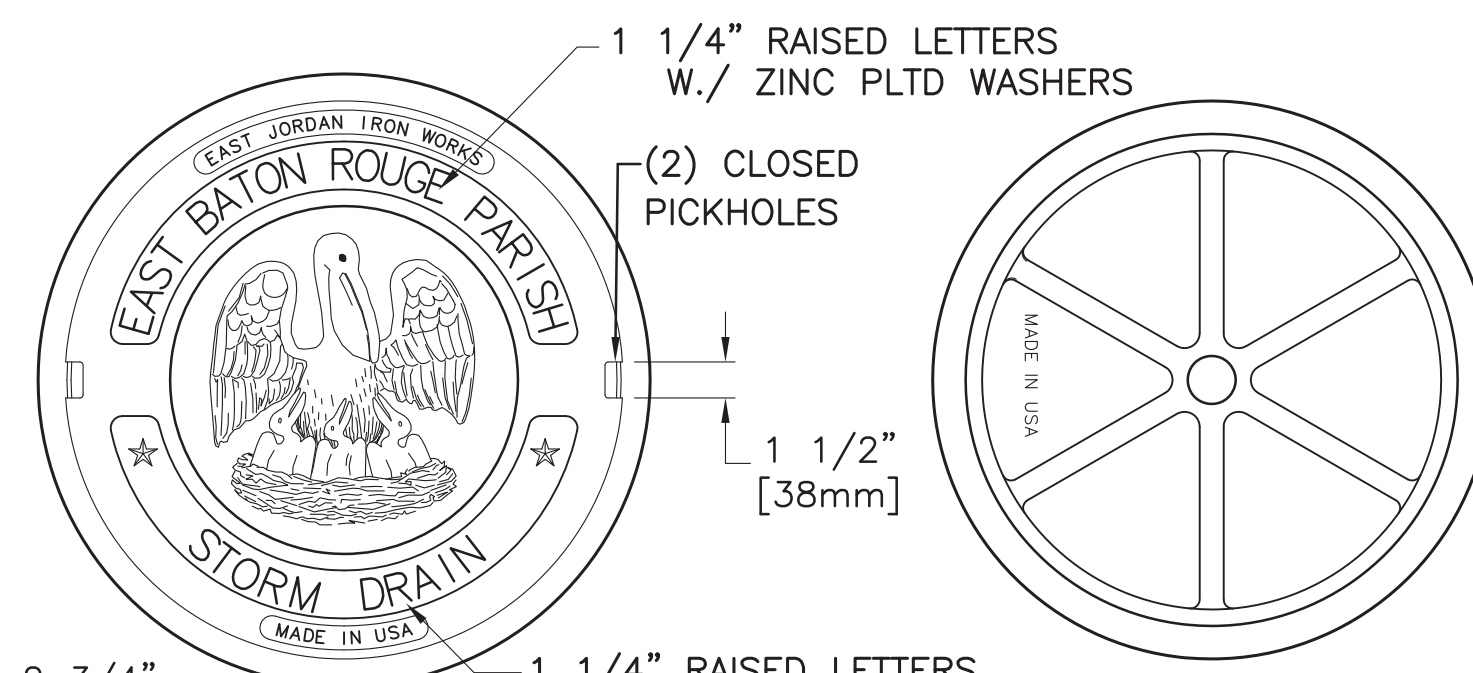


GRATE SECTION

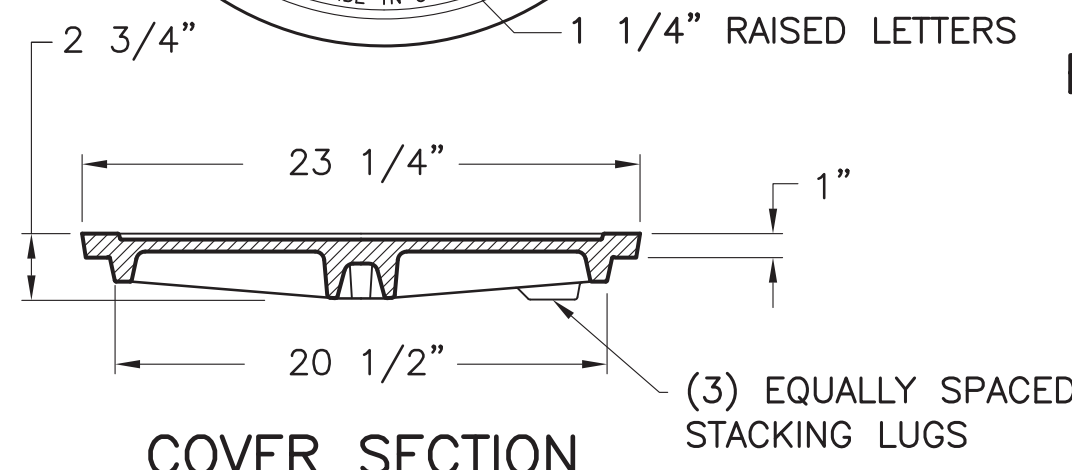


GRATE SECTION

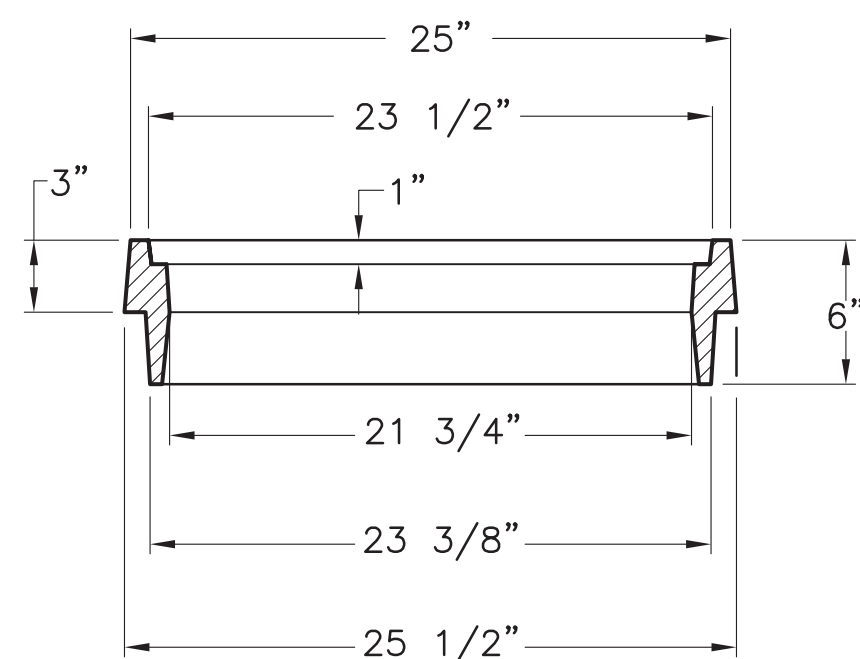
"TYPE 5"
SCALE: 1-1/2"=1'-0"



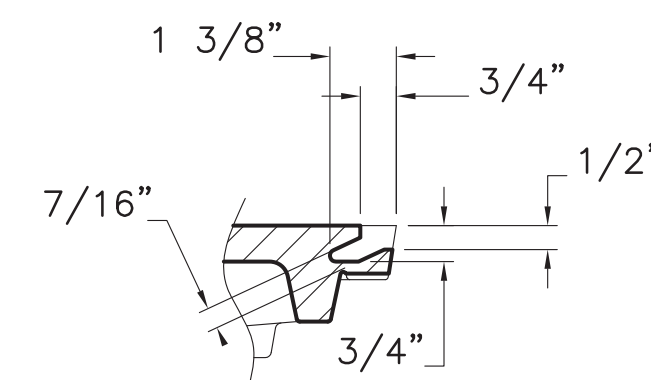
BOTTOM VIEW
OF COVER



COVER SECTION



RING SECTION



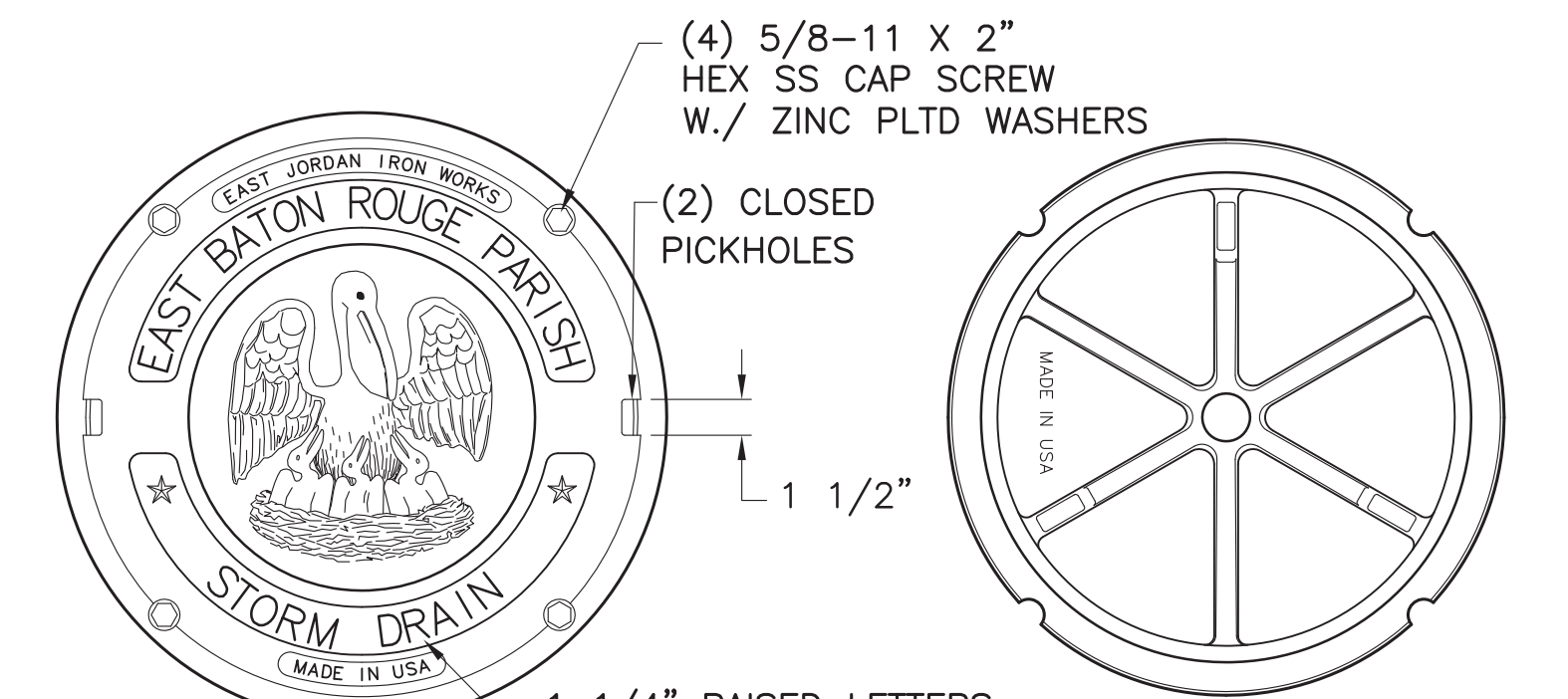
PICKHOLE DETAIL

EJIW PRODUCT #41886010
USF 1346 BZ
OR APPROVED EQUAL

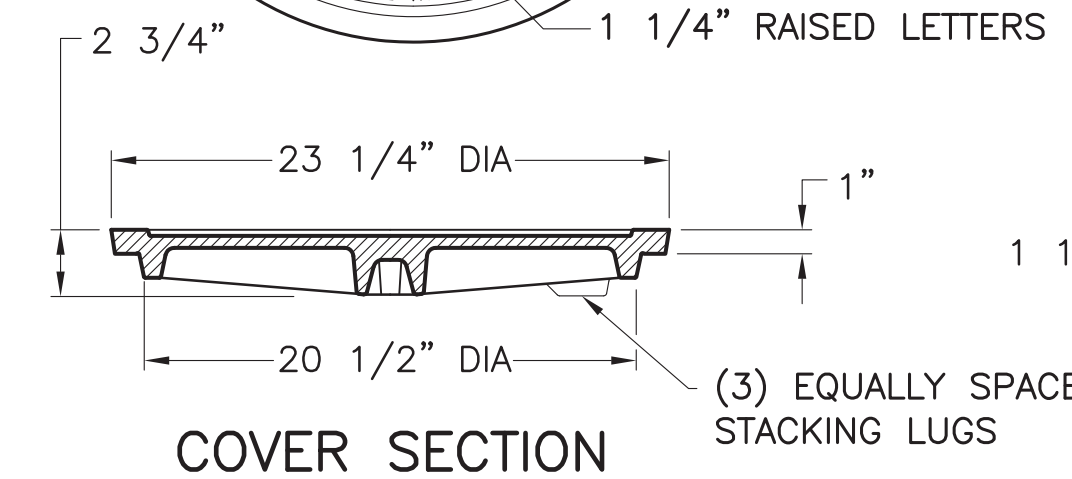
"TYPE 7"
SCALE: 1-1/2"=1'-0"

EJIW PRODUCT #41886007
USF 1346 BZ BLT
OR APPROVED EQUAL

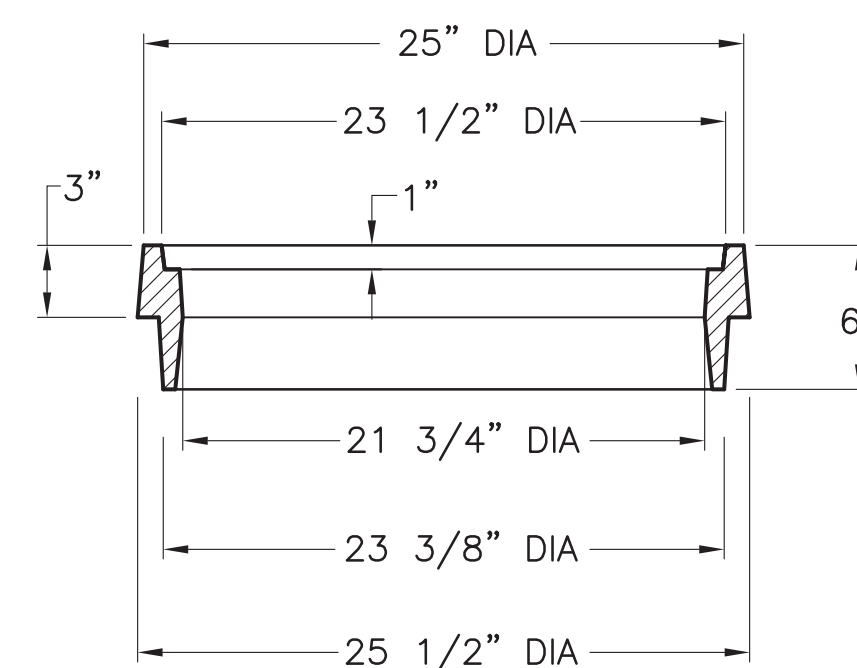
PROJECT NO.	SHEET
	216



BOTTOM VIEW
OF COVER

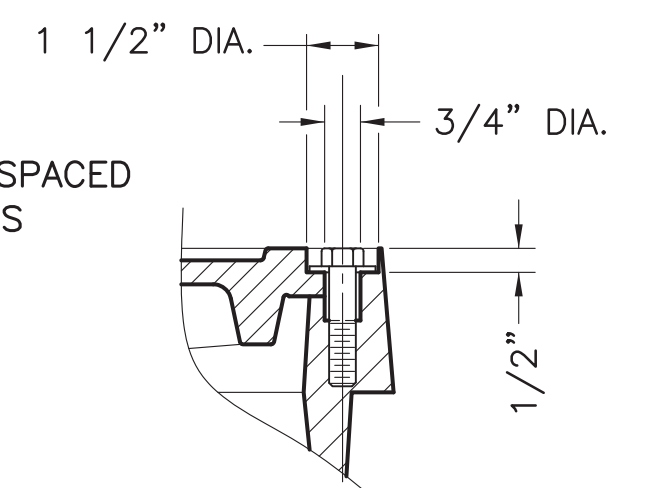


COVER SECTION

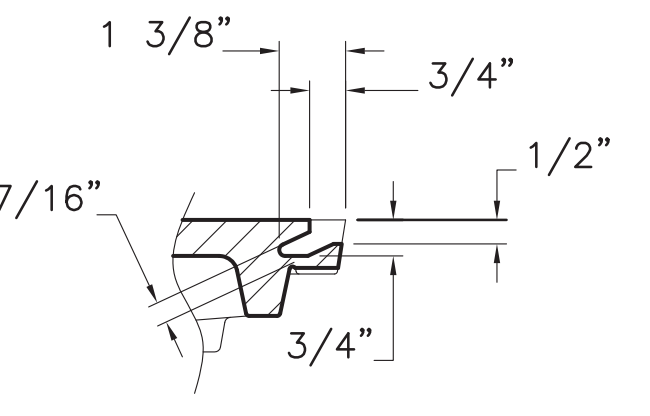


RING SECTION

"TYPE 6"
SCALE: 1-1/2"=1'-0"

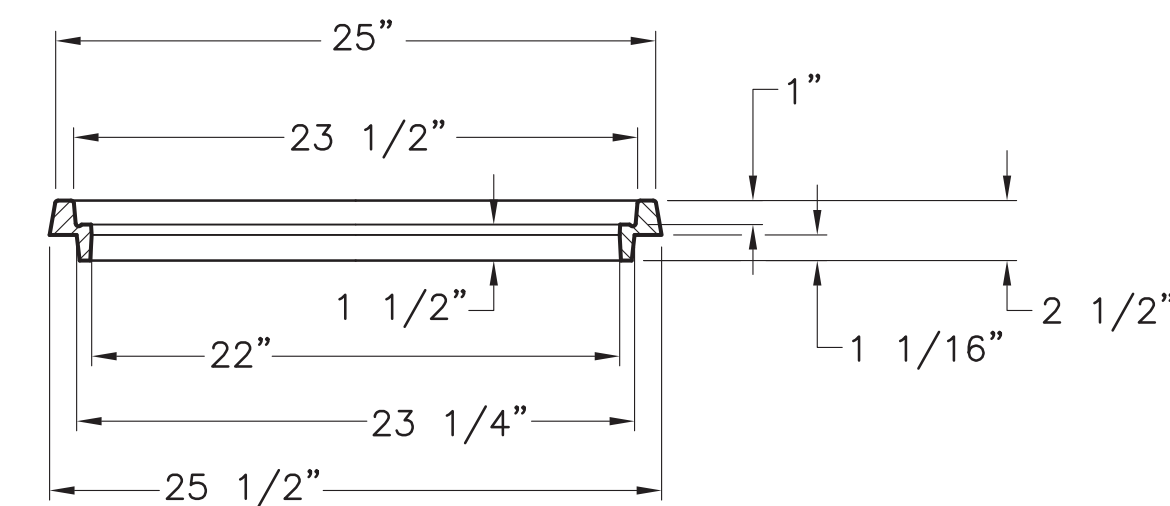


BOLT DETAIL



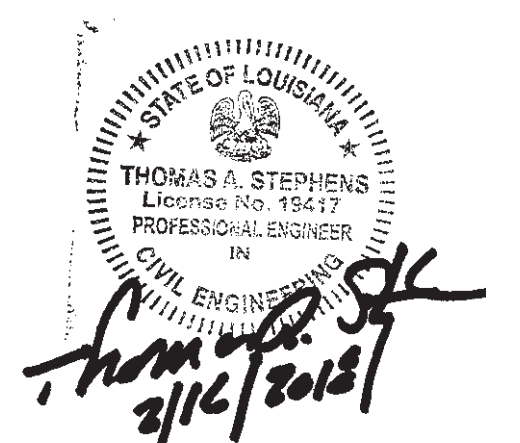
PICKHOLE DETAIL

EJIW PRODUCT #41901110
USF 2337
OR APPROVED EQUAL



RING SECTION

"TYPE 8"
DETAILS OF MANHOLE
ADJUSTMENT RING
SCALE: 1 1/2"=1'-0"



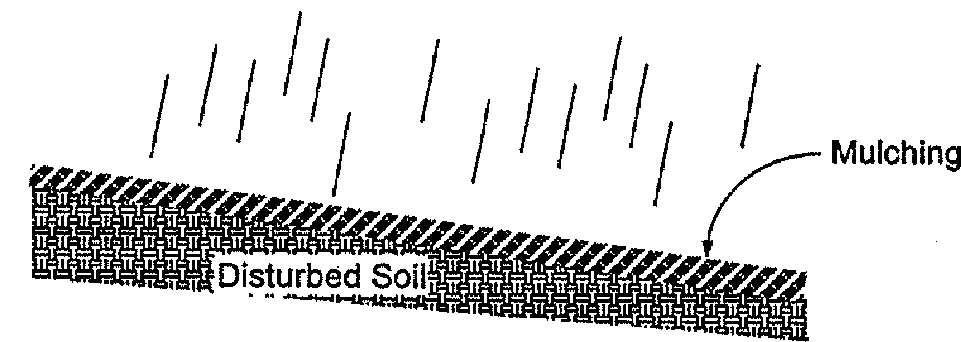
STANDARD PLAN No. 702-99	DATED AUGUST 11, 2008	SHT. No. 3 OF 3
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FRAMES, GRATES AND COVERS
FOR INLETS AND MANHOLES

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED G. CHENG	DRAWN G. VANNICE	CHECKED G. CHENG	APPROVED T. STEPHENS

3/28/12	ADD USF PRODUCT NUMBER	G. L. P.
DATE	DESCRIPTION	BY
	REVISION	

Mulching



- Applications**
- Perimeter Control
 - Slope Protection
 - Sediment Trapping
 - Channel Protection
 - Temporary Stabilization
 - Permanent Stabilization
 - Waste Management
 - Housekeeping Practices

DESCRIPTION
Mulching is the application of a layer of chopped straw, hay or other material which is spread uniformly over barren areas to reduce the effects of erosion from rainfall. Types of mulch include organic materials, straw, wood chips, bark or other fibers. Mulch also comes in prepackaged forms, using straw, hay or other material with organic and inorganic binding systems.

PRIMARY USE
Mulch is used to temporarily and/or permanently stabilize clear or freshly seeded areas. It protects the soil from erosion and moisture loss by lessening the effects of wind, water, and sunlight. It also decreases the velocity of sheet flow, thereby reducing the volume of sediment-laden water flow leaving the mulched area.

APPLICATIONS
Mulch may be used on any construction-related disturbed area for surface protection including:

- Freshly seeded or planted areas.
- Areas at risk due to the time period being unsuitable for growing vegetation.
- Areas that are not conducive to seeding or planting.

DESIGN CRITERIA
Mulch may be used by itself or in combination with netting or other anchors to promote soil stabilization.

Several manufacturers provide an organic mulch with an attached netting to simplify installation. Installation should adhere to manufacturer's specifications and requirements.

- Choice of mulch depends largely on slope, climate, and soil type in addition to availability of different materials. Straw and hay are the recommended choices due to their availability and biodegradability.
- Mulch should be applied in an even and uniform manner where concentrated water flow is negligible.

- Targeted Constituents**
- Sediment
 - Nutrients
 - Toxic Materials
 - Oil & Grease
 - Floatable Materials
 - Other Construction Wastes

- Implementation Requirements**
- Capital Costs
 - Maintenance
 - Training
 - Suitability for Slopes >5%

- Legend**
- Significant Impact
 - Medium Impact
 - Low Impact
 - ? Unknown or Questionable Impact

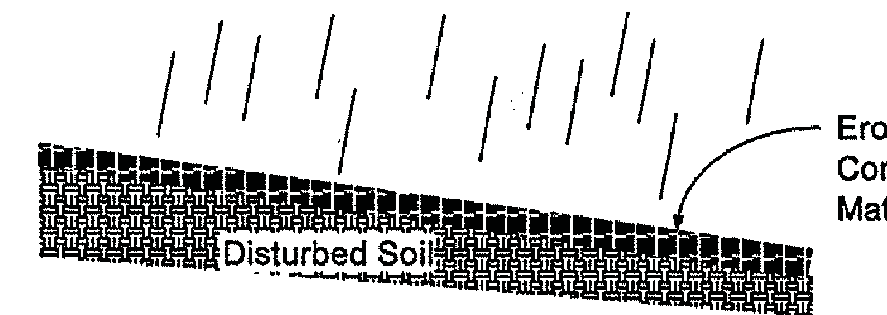
BMP

1

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Erosion Control Mats



- Applications**
- Perimeter Control
 - Slope Protection
 - Sediment Trapping
 - Channel Protection
 - Temporary Stabilization
 - Permanent Stabilization
 - Waste Management
 - Housekeeping Practices

DESCRIPTION
An erosion control mat (ECM) is a geomembrane or biodegradable fabric placed over disturbed areas to limit the effects of erosion due to rainfall impact and runoff across barren soil. Erosion control mats are manufactured by a wide variety of vendors addressing a wide variety of conditions such as vegetation establishment, protection from heavy rainfall, and high velocity flow. Types of matting include organic (jute, straw) and synthetic (plastic and glass fiber) materials.

PRIMARY USE
Mats can provide both temporary and/or permanent stabilization for disturbed soil or barren areas. It is used for difficult to stabilize areas such as steep slopes, temporary or permanent drainage swales, embankments or high traffic (pedestrian) areas. Some mats are reusable, reducing the initial cost of the installation.

APPLICATIONS
Mats can be used on any construction-related disturbed area, but are particularly effective for erosion control of fine grained soils, and on short, steep slopes (such as stream banks) where erosion is high and growth of vegetation is slow.

DESIGN CRITERIA
A mat may be used by itself or in combination with netting or other anchors to promote soil stabilization. Choice of matting depends largely on slope, climate, soil type, and durability. Mats are usually installed according to the manufacturer's recommended guidelines. After appropriate installation, the matting should be checked for: uniform contact with the soil; security of the lap joints; and flushness of the staples with the ground.

Manufacturers information will verify acceptable applications for a particular product.

LIMITATIONS
Although matting is highly effective in controlling erosion, it may be less cost-effective than other BMPs for erosion control and it may require a

- Targeted Constituents**
- Sediment
 - Nutrients
 - Toxic Materials
 - Oil & Grease
 - Floatable Materials
 - Other Construction Wastes

- Implementation Requirements**
- Capital Costs
 - Maintenance
 - Training
 - Suitability for Slopes >5%

- Legend**
- Significant Impact
 - Medium Impact
 - Low Impact
 - ? Unknown or Questionable Impact

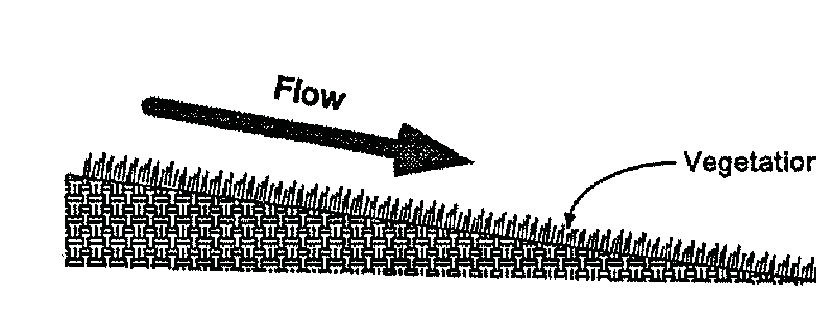
BMP

2

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Vegetation



- Applications**
- Perimeter Control
 - Slope Protection
 - Sediment Trapping
 - Channel Protection
 - Temporary Stabilization
 - Permanent Stabilization
 - Waste Management
 - Housekeeping Practices

DESCRIPTION
Vegetation, as a Best Management Practice, is the sowing of annual grasses, small grains or legumes to provide interim and permanent vegetative stabilization for disturbed areas. Unless otherwise specified, Bermuda Grass is to be used for permanent seeding. Temporary stabilization may be achieved during winter by seeding with Rye Grass.

PRIMARY USE
Vegetation is used as a temporary or permanent stabilization technique for areas disturbed by construction but not protected by pavement, building or other structures. As a temporary control, vegetation is used to stabilize stockpiles and barren areas which are inactive for long periods of time. As a permanent control, grasses and other vegetation provide good protection for the soil along with some filtering for overland runoff. Subjected to acceptable runoff velocities, vegetation can provide a good method of permanent storm water management as well as a visual amenity to the site.

Other BMPs may be required to assist in the establishment of vegetation. These other techniques include erosion control matting, swales and dikes to direct flow around newly seeded areas and proper grading to limit runoff velocities during construction.

APPLICATIONS
Vegetative techniques can and should apply to every construction project with few exceptions. Vegetation effectively reduces erosion in swales, stock piles, berms, mild to medium slopes and along roadways. Vegetative strips can provide some protection when used as a perimeter control for utility and site development construction.

In many cases, the initial cost of temporary seeding may be high compared to tarps or covers for stockpiles or other barren areas subject to erosion yet inactive. This initial cost should be weighed with the amount of time the area is to remain inactive, since maintenance cost for vegetated areas is much less than most structural controls.

- Targeted Constituents**
- Sediment
 - Nutrients
 - Toxic Materials
 - Oil & Grease
 - Floatable Materials
 - Other Construction Wastes

- Implementation Requirements**
- Capital Costs
 - Maintenance
 - Training
 - Suitability for Slopes >5%

- Legend**
- Significant Impact
 - Medium Impact
 - Low Impact
 - ? Unknown or Questionable Impact

BMP

3

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Mulching

- Application of straw or hay mulch should be approximately 2 tons dry per acre spread uniformly across the disturbed area. Other material should be applied such that 25% of the soil is visible through the mulch.
- For areas using straw mulch and the slope is greater than 3-5%, anchoring of the mulch with a Krimper Tool is required.

LIMITATIONS
Mulches are subject to removal by wind or water under severe climatic conditions. Mulches lower the soil temperature which may result in longer seed germination periods.

MAINTENANCE REQUIREMENTS
Mulched areas must be inspected on a weekly basis, and after significant (>0.5 inch) rainfall, for thin or bare spots caused by natural decomposition or weather related events. Mulch in high traffic areas should be replaced on a regular basis to maintain uniform protection.

BMP

1

Department of Public Works

Erosion Control Mats

contractor with considerable mat installation experience for installation.

MAINTENANCE REQUIREMENTS
Matted areas must be inspected on a weekly basis, and after significant (>0.5 inch) rainfall, for bare spots caused by weather related events. Missing or loosened matting must be replaced or re-anchored.

BMP

2

Department of Public Works

Vegetation

- DESIGN CRITERIA**
- Surface Preparation**
- Interim or final grading must be completed prior to seeding, minimizing all steep slopes.
 - Install all necessary erosion structures such as dikes, swales, diversions, etc., prior to seeding.
 - Groove or furrow slopes steeper than 3:1 on the contour line before seeding.
 - Provide 4-6 inches of topsoil over unsuitable soils.
 - Seed-bed should be well pulverized, loose and uniform.

- Plant Selection, Fertilization and Seeding**
- Use only high quality, USDA certified seed.
 - For permanent vegetative cover during the period from March to August (inclusive) use hulled Bermuda Grass applied at 10 - 12 pounds per acre.
 - For permanent vegetative cover during the period from September to February (inclusive) use unhulled Bermuda Grass applied at 15 - 20 pounds per acre.
 - For temporary stabilization on disturbed areas or stockpiles, use Rye Grass seed applied at 40 - 50 pounds per acre.
 - Fertilizer shall be applied according to the manufacturer's recommendation with proper spreader equipment. Typical application rate for 10-10-10 grade fertilizer is 700-1000 pounds per acre. DO NOT OVER APPLY FERTILIZER.
 - If hydro-seeding is used, do not mix seed and fertilizer more than 30 minutes before application.
 - Evenly apply seed using cyclone seeder, seed drill, cultipacker or hydroseeder.
 - Provide adequate water to aid in establishment of vegetation.
 - Use appropriate mulching techniques where necessary.

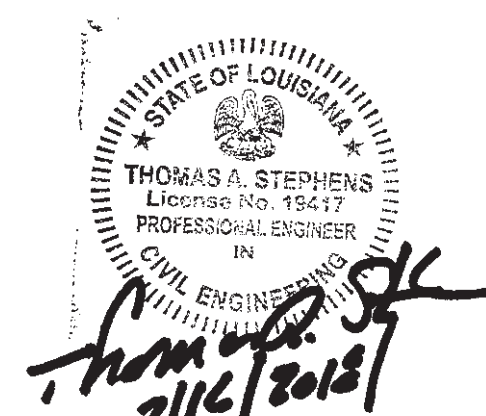
LIMITATIONS
Vegetation is not appropriate for areas subjected to heavy pedestrian or vehicular traffic. As a temporary technique, vegetation may be costly when compared to other techniques. Vegetation is not appropriate for rock, gravel or coarse grained soils unless 4 to 6 inches of topsoil is applied.

MAINTENANCE REQUIREMENTS
Protect newly seeded areas from excessive runoff and traffic until vegetation is established (mulching may be necessary). A watering and fertilizing schedule will be required as part of the SWPPP to assist in the establishment of the vegetation.

BMP

3

Department of Public Works



STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 1 OF 11
STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED G. CHENG	DRAWN G. VANNICE	CHECKED G. CHENG
APPROVED T. STEPHENS		BY

DATE	DESCRIPTION	BY

Silt Fence

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- ? Unknown or Questionable Impact

BMP

4

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
A silt fence consists of geotextile fabric supported by poultry netting or other backing stretched between either wooden or metal posts with the lower edge of the fabric securely embedded in the soil. The fence is typically located downstream of disturbed areas to intercept runoff in the form of sheet flow. Silt fence provides both filtration and time for sedimentation to reduce sediment and it reduces the velocity of the runoff. Properly designed silt fence is economical since it can be re-located during construction and re-used on other projects.

PRIMARY USE
Silt fence is normally used as perimeter control located downstream of disturbed areas. It is only feasible for non-concentrated, sheet flow conditions.

APPLICATIONS
Silt fence is an economical means to treat overland, non-concentrated flows for all types of projects. Silt fences are used as perimeter control devices for both site developments and linear (roadway) type projects. They are most effective with coarse to silty soil types. Due to the potential of clogging, silt fence should not be used with clay soil types.

In order to reduce the length of silt fence, it should be placed adjacent to the down slope side of the construction activities.

DESIGN CRITERIA

- Fences are to be constructed along a line of constant elevation (along a contour line) where possible.
- Maximum slope adjacent to the fence is 1:1.
- Maximum distance of flow to silt fence should be 200 feet or less.
- Maximum concentrated flow to silt fence shall be 1 CFS per 20 feet of fence.
- If 50% or less of soil, by weight, passes the U.S. Standard sieve No. 200, select the equivalent opening size (E.O.S.) to retain 85% of the soil.
- Maximum equivalent opening size shall be 70 (#70 sieve).

Straw Bale Dike

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- ? Unknown or Questionable Impact

BMP

5

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
A straw bale dike is a temporary barrier constructed of straw bales anchored with wood posts, that is used to intercept sediment-laden runoff generated by small disturbed areas. The straw bales can serve as both a filtration device and a dam/dike device to treat and redirect flow. Bales can consist of hay or straw in which straw is defined as best quality straw from wheat, oats or barley, free of weed and grass seed and hay is defined as straw which includes weed and grass seed.

PRIMARY USE
A straw bale dike is used to trap sediment-laden storm runoff from small drainage areas with relatively level grades, allowing for reduction of velocity thereby causing sediment to settle out.

APPLICATIONS
Straw bale dikes are used to treat flow after it leaves a disturbed area on a relatively small (<1 acre) site. Due to the limited life of the straw bale, it is cost effective for small projects of a short duration. The limited weight and strength of the straw bale makes it suitable for small, flat (< 2 percent slope) contributing drainage areas. Due to the problems with straw degradation and the lack of uniform quality in straw bales, their use is discouraged except for small residential applications.

Straw bales can also be used as check dams (see Check Dam BMP S-7) for small watercourses such as interceptor swales and borrow ditches. Due to the problems in securely anchoring the bales, only small watercourses can effectively use straw bale check dams.

DESIGN CRITERIA

- Straw bale dikes are to be constructed along a line of constant elevation (along a contour line).
- Straw bale dikes are suitable only for treating sheet flows across grades of 2% or flatter.
- Maximum contributing drainage area shall be 0.25 acre per 100 linear feet of dike.
- Maximum distance of flow to dike should be 100 feet or less.

Triangular Sediment Filter Dike

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- ? Unknown or Questionable Impact

BMP

6

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
A Triangular Sediment Filter Dike is a self contained silt fence consisting of filter fabric wrapped around welded wire fabric shaped into a triangular cross section. While similar in use to a silt fence, the dike is reusable, sturdier, transportable and can be used on paved areas or in situations where it is impractical to install embedded posts for support.

PRIMARY USE
Triangular filter dikes are used in place of silt fence, treating sediment flow at the perimeter of construction areas and at the perimeter of the site. Also, the dikes can serve as stream protection devices by preventing sediment from entering the streams or as check dams in small swales.

Triangular sediment filter dikes are especially useful for construction areas surrounded by pavement, such as roadways, taxiways, ramps, etc., where silt fence or hay bale installation is impractical. Since they can be anchored without penetration, pavement damage can be minimized.

APPLICATIONS
Triangular dikes are used to provide perimeter control by detaining sediment on a disturbed site with drainage that would otherwise flow onto adjacent areas. Triangular dikes also serve as sediment trapping devices when used in areas of sheet flow across disturbed areas or are placed along stream banks to prevent sediment-laden sheet flow from entering the stream. The dikes can be subjected to more concentrated flows and a higher flowrate than silt fence.

DESIGN CRITERIA

- Dikes are to be installed along a line of constant elevation (along a contour line).
- Maximum slope perpendicular to the dike is 1:1.
- Maximum drainage flow to the dike shall be 11 CFS per 100 linear feet of dike.
- Maximum distance of flow to dike should be 200 feet or less.
- Maximum concentrated flow to dike shall be 1 CFS.

Silt Fence

- Minimum equivalent opening size shall be 100 (#100 sieve).
- If 85% or more of soil, by weight, passes the U.S. Standard sieve No. 200, silt fences shall not be used due to potential clogging.
- Sufficient room for the operation of sediment removal equipment shall be provided between the silt fence and other obstructions in order to properly maintain the fence.
- The ends of the fence shall be turned upstream to prevent bypass of stormwater.

LIMITATIONS
Minor ponding will likely occur at the upstream side of the silt fence resulting in minor localized flooding.

Fences which are constructed in swales or low areas subject to concentrated flow may be overtopped resulting in failure of the filter fence. Silt fences subject to areas of concentrated flow (waterways with flows > 1 cfs) are not acceptable.

Silt fence can interfere with construction operations, therefore planning of access routes onto the site is critical.

Silt fence can fail structurally under heavy storm flows, creating maintenance problems and reducing the effectiveness of the system.

MAINTENANCE REQUIREMENTS
Inspections should be made on a weekly basis, especially after large storm events. If the fabric becomes clogged, it should be cleaned or if necessary, replaced.

Sediment should be removed when it reaches approximately one-half the height of the fence.

BMP

4

Department of Public Works

Straw Bale Dike

- Dimensions for individual bales shall be 30 inches minimum length, 18 inches minimum height, 24 inches minimum width and shall weigh no less than 50 pounds when dry.
- Each straw bale shall be placed into an excavated trench having a depth of 4 inches and a width just wide enough to accommodate the bales themselves.
- Straw bales shall be installed in such a way that there is no space between bales.
- Individual bales shall be held in place by at least two wood stakes driven a minimum distance of 6 inches below the 4" excavated trench to undisturbed ground, with the first stake driven at an angle toward the previously installed bale.
- The ends of the dike shall be turned upgrade to prevent bypass of stormwater.
- Place bales on sides such that bindings are not buried.

LIMITATIONS
Due to a short effective life caused by biological decomposition, straw bales must be replaced after a period of no more than 3 months. During the wet and warm seasons, however, they must be replaced more frequently as is determined by periodic inspections for structural integrity.

Straw bale dikes are not recommended for use with concentrated flows of any kind except for small check flows in which they can serve as a check dam.

The effectiveness of straw bales in reducing sediment is very limited. Improperly maintained, straw bales can have a negative impact on the water quality of the runoff.

MAINTENANCE REQUIREMENTS
Straw bales shall be replaced if there are signs of degradation such as straw located downstream from the bales, structural deficiencies due to rotting straw in the bale or other signs of deterioration. Sediment should be removed from behind the bales when it reaches a depth of approximately 6 inches.

BMP

5

Department of Public Works

Triangular Sediment Filter Dike

- If 50% or less of soil, by weight, passes the U.S. Standard sieve No. 200, select the equivalent opening size (E.O.S.) to retain 85% of the soil.
- Maximum equivalent opening size shall be 70 (#70 sieve).
- Minimum equivalent opening size shall be 100 (#100 sieve).
- If 85% or more of soil, by weight, passes the U.S. Standard sieve No. 200, triangular sediment dike shall not be used due to clogging.
- Sufficient room for the operation of sediment removal equipment shall be provided between the dike and other obstructions in order to properly remove sediment.
- The ends of the dike shall be turned upgrade to prevent bypass of stormwater.

LIMITATIONS
Ponding will likely occur directly adjacent to the dike which may possibly cause flooding.

Triangular sediment filter dikes are not effective for conditions which include substantial concentrated flows or when they are not constructed along a contour line due to the potential for flow concentration and overtopping.

MAINTENANCE REQUIREMENTS
Inspections should be made on a weekly basis, especially after large (> 0.5 inches) storm events. If the fabric becomes clogged, it should be cleaned or if necessary, replaced.

Sediment should be removed when it reaches approximately 6 inches in depth. In addition, inspections should be made on a regular basis to check the structural integrity of the dike. If structural deficiencies are found, the dike should be immediately repaired or replaced.

As with silt fence, integrity of the filter fabric is important to the effectiveness of the dike. Overlap between dike sections must be checked on a regular basis and repaired if deficient.

BMP

6

Department of Public Works

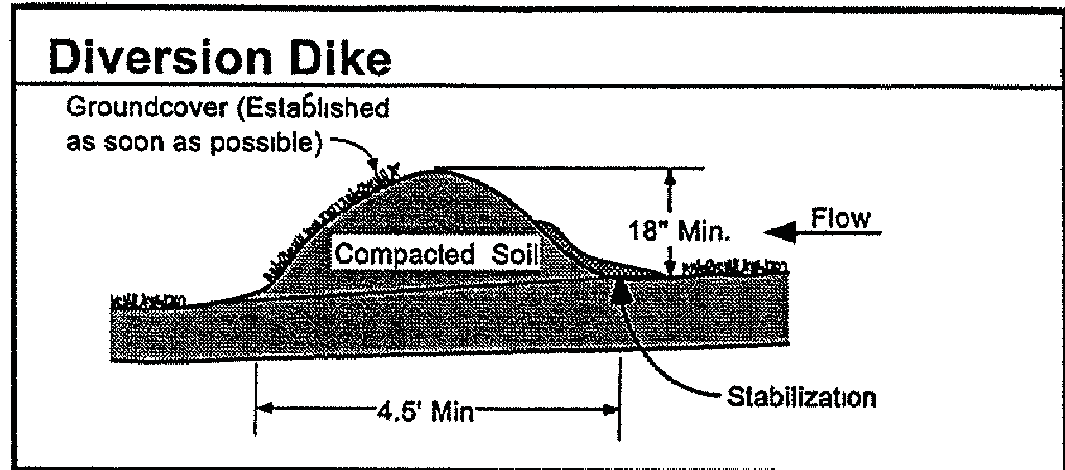
STATE OF LOUISIANA
THOMAS A. STEPHENS
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PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
3/16/2018

STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 2 OF 11
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STORM WATER POLLUTION
PREVENTION PLAN
BEST MANAGEMENT PRACTICES

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS



DESCRIPTION
A diversion dike is a compacted soil mound which redirects runoff to a desired location. The dike is typically stabilized with natural grass for low velocities or with stone or erosion control mats for higher velocities.

PRIMARY USE
The diversion dike is normally used to intercept offsite flow upstream of the construction area and direct the flow around the disturbed soils. It can also be used downstream of the construction area to direct flow into a sediment reduction device such as a sediment basin or protected inlet. The diversion dike serves the same purpose and, based on the topography of the site, can be used in combination with an interceptor swale.

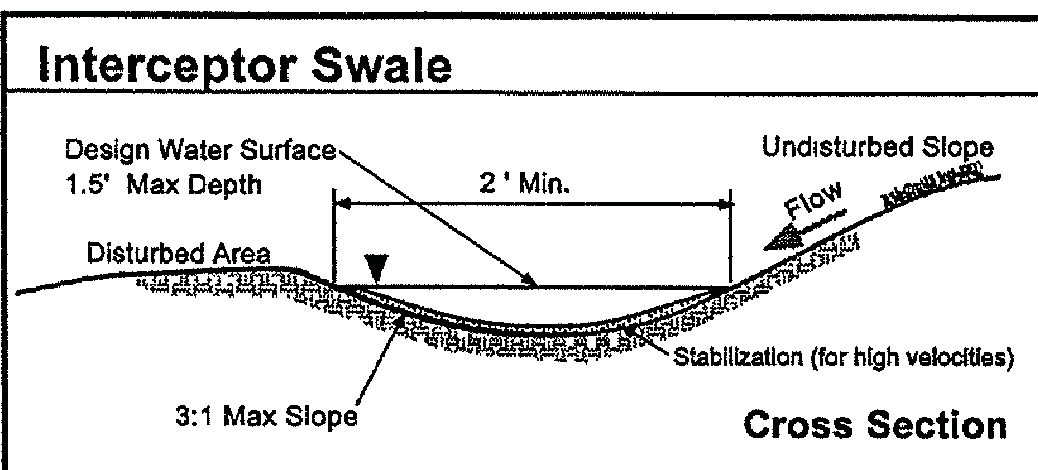
APPLICATIONS
By intercepting runoff before it has the chance to cause erosion, diversion dikes are very effective in reducing erosion at a reasonable cost. They are applicable to a large variety of projects including site developments and linear projects such as roadways and pipeline construction. Diversion dikes are normally used as perimeter controls for construction sites with large amounts of offsite flow from neighboring properties. Used in combination with swales, the diversion dike can be quickly installed with a minimum of equipment and cost, using the swale excavation as the dike. No sediment removal technique is required if the dike is properly stabilized and the runoff is intercepted prior to crossing disturbed areas.

Significant savings in structural controls can be realized by using diversion dikes to direct sheet flow to a central area such as a sediment basin or other sediment reduction structure if the runoff crosses disturbed areas.

DESIGN CRITERIA

- The maximum contributing drainage area should be 10 acres or less.
- Maximum depth of flow at the dike shall be 1 foot for 2 year design storm.
- The maximum width of the flow at the dike shall be 20 feet.
- Side slopes of the diversion dike shall be 3:1 or flatter.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices
Targeted Constituents
● Sediment
○ Nutrients
○ Toxic Materials
○ Oil & Grease
● Floatable Materials
○ Other Construction Wastes
Implementation Requirements
● Capital Costs
● Maintenance
○ Training
● Suitability for Slopes >5%
Legend
● Significant Impact
○ Medium Impact
○ Low Impact
? Unknown or Questionable Impact
BMP
7
City of Baton Rouge Parish of East Baton Rouge
Department of Public Works



DESCRIPTION
An interceptor swale is a small v-shaped or parabolic channel which collects runoff and directs it to a desired location. It can either have a natural grass lining or depending on slope and design velocity, a protective lining of erosion matting, stone or concrete.

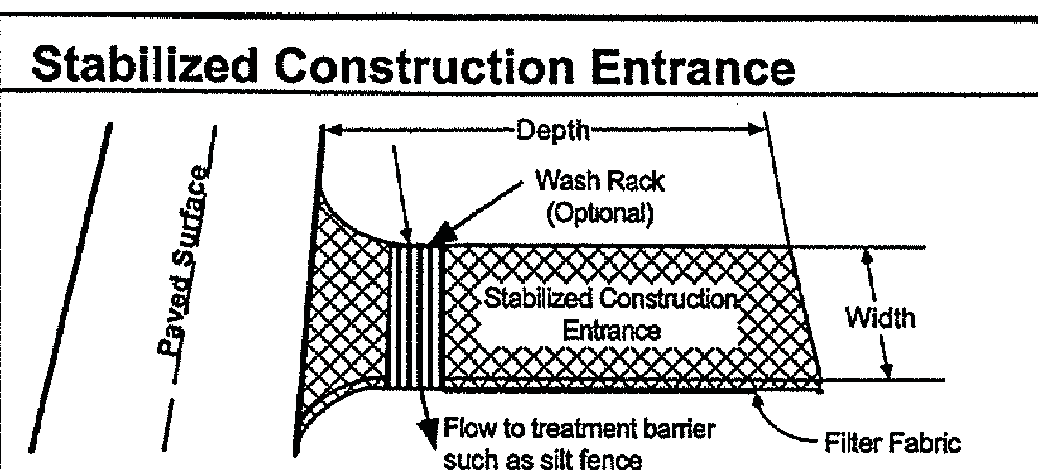
PRIMARY USE
The interceptor swale can either be used to direct sediment laden flow from disturbed areas into a controlled outlet or to direct "clean" runoff around disturbed areas. Since the swale is easy to install during early grading operations, it can serve as the first line of defense in reducing runoff across disturbed areas. As a method of reducing runoff across the disturbed construction area, it reduces the requirements of structural measures to capture sediment from runoff since the flow is reduced. By intercepting sediment laden flow downstream of the disturbed area, runoff can be directed into a sediment basin or other BMP for sedimentation as opposed to long runs of silt fence, straw bales or other filtration method.

Based on site topography, swales can be effectively used in combination with diversion dikes.

APPLICATIONS
Common applications for interceptor swales include roadway projects, site development projects with substantial offsite flow impacting the site and sites with a large area(s) of disturbance. It can be used in conjunction with diversion dikes to intercept flows. Temporary swales can be used throughout the project to direct flows away from staging, storage and fueling areas along with specific areas of construction. Note that runoff which crosses disturbed areas or is directed into unstabilized swales must be routed into a treatment BMP such as a sediment basin.

Grass lined swales are an effective permanent stabilization technique. The grass effectively filters both sediment and other pollutants while reducing velocity.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices
Targeted Constituents
● Sediment
○ Nutrients
○ Toxic Materials
○ Oil & Grease
● Floatable Materials
○ Other Construction Wastes
Implementation Requirements
● Capital Costs
● Maintenance
○ Training
● Suitability for Slopes >5%
Legend
● Significant Impact
○ Medium Impact
○ Low Impact
? Unknown or Questionable Impact
BMP
8
City of Baton Rouge Parish of East Baton Rouge
Department of Public Works



DESCRIPTION
A stabilized construction entrance consists of a pad consisting of gravel, crushed stone, recycled concrete or other rock like material on top of geotextile filter cloth to facilitate the wash down and removal of sediment and other debris from construction equipment prior to exiting the construction site. For added effectiveness, a wash rack area can be incorporated into the design to further reduce sediment tracking. For long term projects, cattle guards or other type of permanent rack system can be used in conjunction with a wash rack. This directly addresses the problem of silt and mud deposition in roadways used for construction site access.

PRIMARY USE
Stabilized construction entrances are used primarily for sites in which significant truck traffic occurs on a daily basis. It reduces the need to remove sediment from streets. If used properly, it also directs the majority of traffic to a single location, reducing the number and quantity of disturbed areas on the site and providing protection for other structural controls through traffic control.

APPLICATIONS
Stabilized construction entrances are a required part of the erosion control plan for all site developments larger than 5 acres and a recommended practice for all construction sites. It is not suitable for long, linear projects. If possible, small entrances should be incorporated into small lot construction due to the large percentage of disturbed area on the site and the high potential for offsite tracking of silt and mud.

DESIGN CRITERIA

- Stabilized construction entrances are to be constructed such that drainage across the entrance is directed to a controlled, stabilized outlet on site with provisions for storage.
- The entrance must be properly graded so that storm water is not allowed to leave the site and enter roadways.
- Minimum width of entrance shall be 15 feet, but in no case shall the width be less than that of the entry way to be used.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices
Targeted Constituents
● Sediment
○ Nutrients
○ Toxic Materials
○ Oil & Grease
● Floatable Materials
○ Other Construction Wastes
Implementation Requirements
● Capital Costs
● Maintenance
○ Training
○ Suitability for Slopes >5%
Legend
● Significant Impact
○ Medium Impact
○ Low Impact
? Unknown or Questionable Impact
BMP
9
City of Baton Rouge Parish of East Baton Rouge
Department of Public Works

DESIGN CRITERIA

- Minimum width of the embankment at the top shall be 2 feet.
- Minimum embankment height shall be 18 inches as measured from the toe of slope on the upgrade side of the berm.
- For velocities less than 6 feet per second, the minimum stabilization for the dike and adjacent flow areas is grass, erosion control mats or mulch. For velocities greater than 6 feet per second, stone stabilization or high velocity erosion control mats should be used. Velocities greater than 8 feet per second must be approved by the local jurisdiction.
- The dikes shall remain in place until all disturbed areas which are protected by the dike are permanently stabilized unless other controls are put into place to protect the disturbed area.
- Flow line at dike shall have a positive grade to drain to a controlled outlet.

LIMITATIONS
Compacted earth dikes require stabilization immediately upon placement so as not to contribute to the problem they are addressing.

The diversion dikes can be a hindrance to construction equipment moving on the site, therefore their locations must be carefully planned prior to installation.

MAINTENANCE REQUIREMENTS
Dikes must be inspected on a weekly basis and after each significant (>0.5 inch) rainfall to determine if silt is building up behind the dike, or if erosion is occurring on the face of the dike. Silt shall be removed in a timely manner. If erosion is occurring on the face of the dike, the slopes of the face shall either be stabilized through mulch or seeding or the slopes of the face shall be reduced.

BMP
7
Department of Public Works

DESIGN CRITERIA

- Maximum depth of flow in the swale shall be 1.5 feet based on a 2 year design storm peak flow. Positive overflow must be provided to accommodate larger storms.
- Side slopes of the swale shall be 3:1 or flatter.
- Minimum design channel freeboard shall be 6 inches.
- The minimum required channel stabilization for grades less than 2 percent and velocities less than 6 feet per second may be grass, erosion control mats or mulching. For grades in excess of 2 percent, or velocities exceeding 6 feet per second, stabilization in the form of high velocity erosion mats, a three inch layer of crushed stone or rip rap is required. Velocities greater than 8 feet per second will require approval by the PROGRAM MANAGER.
- Check dams can be used to reduce velocities in steep swales. See check dam BMP fact sheet for design criteria.
- Interceptor swales must be designed for flow capacity based on Manning's Equation to ensure a proper channel section. Alternate channel sections may be used when properly designed and accepted.
- Consideration must be given to the possible impact that any swale may have on upstream or downstream conditions.
- Swales must maintain positive grade to an acceptable outlet.

LIMITATIONS
Interceptor swales must be stabilized quickly upon excavation so as not to contribute to the erosion problem they are addressing.

Swales may be unsuitable to the site conditions (too flat or steep).

Limited flow capacity for temporary swales. For permanent swales, the 1.5 feet maximum depth can be increased as long

MAINTENANCE REQUIREMENTS
Inspection must be made weekly and after each significant (0.5" or greater) rain event to locate and repair any damage to the channel or to clear debris or other obstructions so as not to diminish flow capacity. Damage from storms or normal construction activities such as tire ruts or disturbance of swale stabilization shall be repaired as soon as practical.

BMP
8
Department of Public Works

DESIGN CRITERIA

- Minimum depth of entrance shall be 8 inches for the entire length of the control.
- Minimum dimensions for the entrance shall be as follows:

Tract Area	Avg. Lot Depth	Min. Width of Entrance	Min. Depth of Entrance
< 1 Acre	100 feet	15 feet	20 feet
< 5 Acres	200 feet	20 feet	30 feet
< 10 Acres	> 200 feet	20 feet	40 feet
> 10 Acres	> 200 feet	25 feet	50 feet

LIMITATIONS
Selection of the construction entrance location is critical in that to be effective, it must be used exclusively.

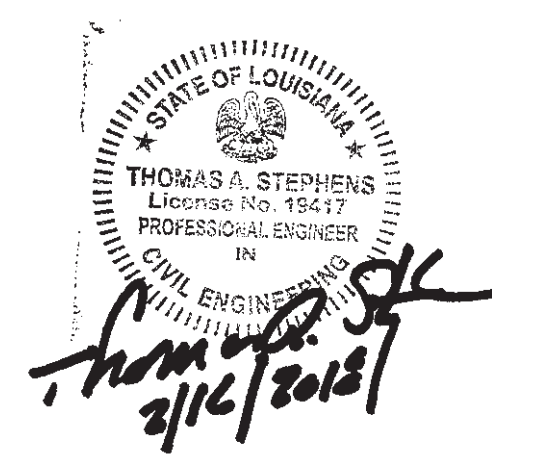
Stabilized entrances are rather expensive considering that it must be installed in combination with one or more other sediment control techniques, but it may be cost effective compared to labor intensive street cleaning.

MAINTENANCE REQUIREMENTS
Inspections should be made on a regular basis and after large storm events in order to ascertain whether or not sediment and pollution are being effectively detained on site.

When sediment has substantially clogged the void area between the rocks, the aggregate mat must be washed down or replaced.

Periodic re-grading and top dressing with additional stone must be done to keep the efficiency of the entrance from diminishing.

BMP
9
Department of Public Works



STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 3 OF 11
STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED G. CHENG	DRAWN G. VANNICE	CHECKED G. CHENG
		APPROVED T. STEPHENS

DATE	DESCRIPTION	BY
	REVISIONS	

Check Dams

Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents
 Sediment
 Nutrients
 Toxic Materials
 Oil & Grease
 Floatable Materials
 Other Construction Wastes

Implementation Requirements
 Capital Costs
 Maintenance
 Training
 Suitability for Slopes >6%

Legend
 Significant Impact
 Medium Impact
 Low Impact
 Unknown or Questionable Impact

BMP
 10

City of Baton Rouge
 Parish of East Baton Rouge
 Department of Public Works

DESCRIPTION
 Check dams are small barriers consisting of straw bales, rock, or earth berms placed across a drainage swale or ditch. They reduce the velocity of small concentrated flows, provide a limited barrier for sediment and help disperse concentrated flows, reducing potential erosion.

PRIMARY USE
 Check dams are used for long drainage swales or ditches in which permanent vegetation may not be established and erosive velocities are present. They are typically used in conjunction with other techniques such as inlet protection, rip rap or other sediment reduction techniques. Check dams provide limited treatment. They are more useful in reducing flow to acceptable levels for other techniques.

APPLICATIONS
 Check dams are typically used early in construction in swales for long linear projects such as roadways. They can also be used in short swales with a steep slope to reduce unacceptable velocities.

DESIGN CRITERIA
 - Check dams should be placed at a distance and height to allow small pools to form between each one. Typically, dam height should be between 18" and 36". Dams should be spaced such that the top of the downstream dam should be at the same elevation as the toe of the upstream dam.
 - See design criteria for straw bales, sand bag berms, etc. for specific criteria. Maximum allowable flow shall be based on the specific technique utilized and the velocity of flow.
 - Major flows (greater than 2 year design storm) must pass the check dam without causing excessive upstream flooding.
 - Check dams should be used in conjunction with other sediment reduction techniques prior to releasing flow offsite.

Dust Control BMP

Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents
 Sediment
 Nutrients
 Toxic Materials
 Oil & Grease
 Floatable Materials
 Other Construction Wastes

Implementation Requirements
 Capital Costs
 Maintenance
 Training
 Suitability for Slopes >6%

Legend
 Significant Impact
 Medium Impact
 Low Impact
 Unknown or Questionable Impact

BMP
 11

City of Baton Rouge
 Parish of East Baton Rouge
 Department of Public Works

DESCRIPTION
 Dust control measures are used to stabilize soil from wind erosion, and reduce dust generated by construction activities. Dust which settles on surfaces both on-site and off-site may be washed by storm water into waterways.

APPLICATIONS
 - Clearing and grading activities
 - Construction vehicles traffic on unpaved roads
 - Drilling and blasting activities
 - Sediment tracking onto paved roads
 - Soil and debris storage piles
 - Batch drop from front end loaders
 - Areas with unstabilized soil

DESIGN CRITERIA
 - Schedule construction activities to minimize the area where, and time period when soils are exposed.
 - Quickly stabilize exposed soils using vegetation, mulching, spray-on adhesives, calcium chloride, sprinkling, and stone/gravel layering. Identify and stabilize key access points prior to commencement of construction.
 - Minimizing the impact of dust by anticipating the direction of prevailing winds.
 - Direct most construction traffic to stabilize roadways within the project site.

LIMITATIONS
 - Watering prevents dust only for a short period and should be applied daily (or more often) to be effective. Overwatering may cause a contaminated erosion.
 - Oils should not be used for dust control because it may migrate into drainage way and/or seep into the soil.
 - Certain chemically-treated subgrades may make soil water repellent, increasing runoff.

Inlet Protection

Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents
 Sediment
 Nutrients
 Toxic Materials
 Oil & Grease
 Floatable Materials
 Other Construction Wastes

Implementation Requirements
 Capital Costs
 Maintenance
 Training
 Suitability for Slopes >6%

Legend
 Significant Impact
 Medium Impact
 Low Impact
 Unknown or Questionable Impact

BMP
 12

City of Baton Rouge
 Parish of East Baton Rouge
 Department of Public Works

DESCRIPTION
 Inlet protection consists of a variety of methods of intercepting sediment at low point inlets through the use of stone, filter fabric and other materials. This is normally located at the inlet, providing either detention or filtration to reduce sediment and floatable materials in storm water.

PRIMARY USE
 Inlet protection is normally used as a secondary defense in site erosion control. It is normally used in new developments that include new inlets or roads with new curb inlets or during major repairs to existing roadways. Inlet protection has limited use in developed areas due to the potential for flooding, traffic safety and pedestrian safety and maintenance problems. Inlet protection can reduce sediment in storm sewer system by serving as a back up system to onsite controls or by reducing sediment loads from controls with limited effectiveness such as straw bale dikes.

APPLICATIONS
 Different variations are used for different conditions as follows:
 - Filter barrier protection (similar to a silt fence barrier around the inlet) is appropriate when the drainage area is less than one acre and the basin slope is less than five (5) percent. This type of protection is not applicable in paved areas.
 - Block and gravel (crushed stone, recycled concrete is also appropriate) protection is used when flows exceed 0.5 c.f.s. and it is necessary to allow for overtopping to prevent flooding
 - Wire mesh and gravel protection (crushed stone, recycled concrete is also appropriate) is used when flows exceed 0.5 c.f.s. and construction traffic may occur over the inlet. This form of protection may be used with both curb and drop inlets

Check Dams

LIMITATIONS
 Minor ponding will occur upstream of the check dams.
 For heavy flows or high velocity flows, extensive maintenance or replacement of the dams will be required.
 Check dams are not a total treatment technique.

MAINTENANCE REQUIREMENTS
 Maintenance of the dams should adhere to the maintenance requirements of the management practice used for the dam.

BMP
 10

Department of Public Works

Dust Control BMP

MAINTENANCE REQUIREMENTS
 Most dust control measures require frequent, often daily, attention.

ADDITIONAL INFORMATION
 Dust control BMP's generally stabilize exposed dust particles. For heavily traveled and disturbed areas, wet suppression (watering), chemical dust suppression, gravel or asphalt surfacing, temporary gravel construction entrances, equipment wash-out areas, and haul truck covers can be employed as dust control applications. Permanent or temporary vegetation and mulching and fences can be employed for areas of occasional or no construction traffic. Preventive measures would include minimizing surface areas to be disturbed.

Many of the reasonably available control measures for controlling dust from construction sites can also be implemented as BMPs for storm water pollution prevention. Those BMPs include:

- Pave, vegetate, or chemically stabilize access points where unpaved traffic surfaces adjoin paved roads.
- Provide covers for haul truck transporting materials that contribute to dust.
- Provide suppression or chemical stabilization of exposed soils.
- Provide for rapid clean-up of sediments deposited on paved roads. Furnish stabilized construction road entrances and vehicle wash down areas.
- Stabilize unpaved haul roads, parking and staging areas. Reduce speed and trips on unpaved roads.
- Implement dust control measures for material stockpiles.
- Prevent drainage of sediment laden storm water onto paved surfaces.
- Stabilize abandoned construction sites using vegetation or chemical stabilization methods.
- Limit the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

For the chemical stabilization, there are many products available as dust palliatives for chemically stabilizing gravel roadways and stockpiles.

In addition, there are many other BMPs identified in this

- Seeding and Plantings
- Stabilized Construction Entrances
- Construction Road Stabilization
- Mulching

BMP
 11

Department of Public Works

Inlet Protection

Excavated impoundment protection around a drop inlet may be used for protection against sediment entering a storm drain system. With this method, it is necessary to install weep holes to allow the impoundment to drain completely. The impoundment shall be sized such that the volume of excavation shall be equal to 1800 to 3600 cubic feet per acre of contributing drainage area entering the inlet for full effectiveness. Smaller volumes can be used for reduced effectiveness.

DESIGN CRITERIA

- Filter fabric protection shall be designed and maintained in a manner similar to silt fence.
- Maximum depth of flow shall be eight (8) inches or less depending on vehicular and pedestrian traffic.
- Positive drainage is critical in the design of inlet protection. If overflow is not provided for at the inlet, flows which exceed the capacity of the inlet protection system shall be routed through established swales, streets or other watercourses to minimize damage due to ponding and to provide for public safety.

LIMITATIONS
 Ponding will occur at the inlet with possible flooding as a result.

Inlet protection is only viable at low point inlets. Inlets which are on a slope cannot be effectively protected because stormwater will bypass the inlet and continue downstream, causing an overload condition at inlets beyond.

MAINTENANCE REQUIREMENTS
 Inspections should be made on a weekly basis, especially after large (> 0.5 inches) storm events. When silt fence is used and the fabric becomes clogged, it should be cleaned or if necessary, replaced. Also, sediment should be removed when it reaches approximately one-half the height of the fence. If a sump is used, sediment should be removed when the volume of the basin is reduced by 50%.

For systems using stone filters, when the stone filter becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced. Since cleaning of gravel at a construction site may be difficult, an alternative approach would be to use the clogged stone as fill material and put new stone around the inlet.

BMP
 12

Department of Public Works

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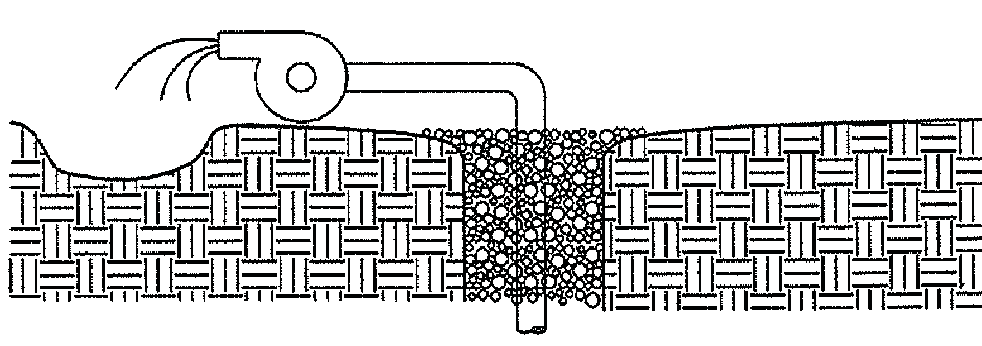
STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 4 OF 11
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STORM WATER POLLUTION
 PREVENTION PLAN
 BEST MANAGEMENT PRACTICES

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE				
DESIGNED	DRAWN	CHECKED	APPROVED	
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS	

DATE	DESCRIPTION	BY

Dewatering Operations



Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents
 Sediment
 Nutrients
 Toxic Materials
 Oil & Grease
 Floatable Materials
 Other Construction Wastes

Implementation Requirements
 Capital Costs
 Maintenance
 Training
 Suitability for Slopes >5%

Legend
 Significant Impact
 Medium Impact
 Low Impact
 ? Unknown or Questionable Impact

BMP
 13

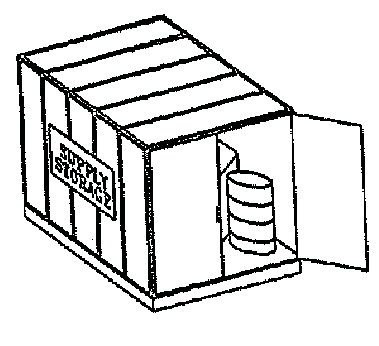
City of Baton Rouge
 Parish of East Baton Rouge
 Department of Public Works

DESCRIPTION
 Prevent or reduce the discharge of pollutants to storm water from dewatering operations by using sediment controls and by testing the water for contamination.

APPLICATIONS
 There are two general classes of pollutants that may result from dewatering operations: sediment, and toxics and petroleum products. A high sediment content in dewatering discharges is common because of the nature of the operation. On the other hand, toxics and petroleum products are not commonly found in dewatering discharges unless, the site or surrounding area has been used for light or heavy industrial activities, or the area has a history of groundwater contamination.

DESIGN CRITERIA
 - Use sediment controls to remove sediment from water generated from dewatering.
 - Use filtration to remove sediment from a sediment trap or basin. Filtration can be achieved with:
 - Sump pit and a standpipe in the center with holes and wrapped in filter fabric. The standpipe is surrounded by stones which filter the water as it collects in the pit before being pumped out;
 - Floating suction hose allowing cleaner surface water to be pumped out; or
 - Standpipe in the sediment basin with slits and wrapped in filter fabric to remove sediments.
 - Toxics and Petroleum Products:
 - In areas suspected of having groundwater contamination, protect yourself early in the excavation process by sampling and having the water tested at a certified laboratory. Check with the Louisiana Department of Environmental Quality and the PROGRAM MANAGER for their requirements, including additional water quality tests and disposal options.

Material Delivery And Storage



Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents
 Sediment
 Nutrients
 Toxic Materials
 Oil & Grease
 Floatable Materials
 Other Construction Wastes

Implementation Requirements
 Capital Costs
 Maintenance
 Training
 Suitability for Slopes >5%

Legend
 Significant Impact
 Medium Impact
 Low Impact
 ? Unknown or Questionable Impact

BMP
 14

City of Baton Rouge
 Parish of East Baton Rouge
 Department of Public Works

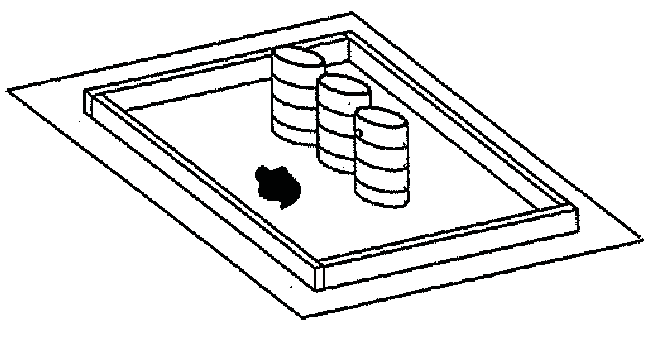
DESCRIPTION
 Prevent or reduce the discharge of pollutants to storm water from material delivery and storage by minimizing the storage of hazardous materials on-site, storing materials in a designated area, installing secondary containment, conducting regular inspection, and training employees and subcontractors.

This best management practice covers only material delivery and storage. For information on wastes, see the waste management BMPs.

APPLICATIONS
 The following materials are commonly stored on construction sites:
 - Pesticides and herbicides.
 - Fertilizers.
 - Detergents.
 - Petroleum products such as fuel, oil, and grease.
 - Other hazardous chemicals such as acids, lime, glues, paints, solvents, and curing compounds.
 Storage of these materials on-site can pose the following risks:
 - Storm water contamination.
 - Injury to workers or visitors.
 - Groundwater contamination.
 - Soil contamination.

DESIGN CRITERIA
 - Designate an area of the construction site for material delivery and storage.
 - Place near the construction entrance, away from waterways
 - Avoid transport near drainage paths or waterways
 - Surround with earth berms

Spill Prevention And Control



Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents
 Sediment
 Nutrients
 Toxic Materials
 Oil & Grease
 Floatable Materials
 Other Construction Wastes

Implementation Requirements
 Capital Costs
 Maintenance
 Training
 Suitability for Slopes >5%

Legend
 Significant Impact
 Medium Impact
 Low Impact
 ? Unknown or Questionable Impact

BMP
 15

City of Baton Rouge
 Parish of East Baton Rouge
 Department of Public Works

DESCRIPTION
 Prevent or reduce the discharge of pollutants to storm water from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

This best management practice covers only spill prevention and control. However, Material Delivery and Storage and Material Use, also contain useful information, particularly on spill prevention. For information on wastes, see the waste management BMPs.

APPLICATIONS
 The following steps will help reduce the storm water impacts of leaks and spills:
General Measures
 - Hazardous materials and wastes should be stored in covered containers and protected from vandalism.
 - Place a stockpile of spill cleanup materials where it will be readily accessible.
 - Train employees in spill prevention and cleanup.
Cleanup
 - Clean up leaks and spills immediately.
 - On paved surfaces, clean up spills with as little water as possible. Use a rag for small spills, mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be sent to either a certified laundry (rags) or disposed of as hazardous waste.
 - Never down or bury dry materials spills. Sweep up or excavate the material and dispose of properly. See the waste management BMPs

Dewatering Operations

- Contaminated water can be expensive to treat and/or dispose of properly. However, addressing the problem before construction is much less expensive than after the structures are in place.

LIMITATIONS
 The presence of contaminated water may indicate contaminated soil as well. If contaminated water is discovered or suspected, the CONTRACTOR shall stop dewatering and immediately notify the PROGRAM MANAGER.

MAINTENANCE REQUIREMENTS
 Maintain sediment controls and filters in good working order.
 Inspect excavated areas daily for signs of contaminated water as evidenced by discoloration, oily sheen, or odors.

BMP
 13

Department of Public Works

Material Delivery And Storage

- Storage of reactive, ignitable, or flammable liquids must comply with the local fire codes and BTR Airport Rescue and Fire Fighting (ARFF) regulations. Contact ARFF, Captain Milton Thomas (504-355-2088), to review site materials, quantities, and proposed storage area to determine specific requirements. See the Flammable and Combustible Liquid Code NFPA30.

- Keep an accurate, up-to-date inventory in your SWPPP of the materials delivered and stored on-site.

- Keep your inventory down. Store only the amount you need, for only as long as you need it.

- Store as few hazardous materials on-site as possible.

- Handle hazardous materials as infrequently as possible.

- Designate a secure material storage area away from drainage courses and near the site entrance.

- Whenever possible, store materials in a covered area with secondary containment such as an earthen dike, horse trough, or even kid's wading pool for non-reactive materials such as detergents, oil, grease and paints. Small amounts of material may be secondarily contained in "busboy" trays or concrete mixing trays.

- Do not store chemicals, drums, or bagged materials directly on the ground. Place these items in secondary containment.

- If drums must be kept uncovered, store them at a slight angle to reduce ponding or rainwater on the lids and to reduce corrosion.

- Try to keep chemicals in their original containers, and keep them well labeled.

- Train employees and subcontractors.

- Employees trained in emergency spill cleanup procedures should be present when dangerous materials or liquid chemicals are unloaded.

LIMITATIONS
 Storage sheds often must meet building and fire code requirements.

MAINTENANCE REQUIREMENTS
 Keep the designated storage area clean and well organized.
 Conduct routine weekly inspections and check for external corrosion of material containers.
 Keep an ample supply of spill cleanup materials near the storage area.

BMP
 14

Department of Public Works

Spill Prevention And Control

Reporting
 - Immediately report spills to the BTR Airport Rescue & Fire Fighting Unit (504-355-2088). Federal regulations require that any oil spill into a water body or onto an adjoining shoreline be reported to the National Response center (NRC) at 800-424-8802 (24 hour).

Vehicle and Equipment Maintenance
 - If maintenance must occur on-site, use a designated area, located away from drainage courses, prevent the runoff of storm water and the runoff of spills.
 - Regularly inspect on-site vehicles and equipment for leaks, and repair immediately.
 - Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment on-site.
 - Always use secondary containment, such as a drain pan or deep cloth, to catch spills or leaks when removing or changing fluids.
 - Place drip pans or absorbent materials under equipment when not in use.
 - Use adsorbent materials on small spills rather than hosing down or burying the spill. Remove the adsorbent materials promptly and dispose of properly.
 - Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
 - Oil filters disposed of in trash cans or dumpsters can leak oil and contaminate storm water. Place the oil filter in a funnel over a water oil recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask your oil supplier or recycler about recycling oil filters.
 - Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling
 - If fueling must occur on-site, use designated areas, located away from drainage courses, to prevent the runoff of storm water and the runoff of spills.
 - Discourage "topping-off" of fuel tanks.
 - Always use secondary containment, such as a drain pan, when fueling to catch spills/leaks.

LIMITATIONS
 If necessary, use a private spill cleanup company.

MAINTENANCE REQUIREMENTS
 Keep ample supplies of spill control and cleanup materials on-site, near storage, unloading, and maintenance areas.

Update your spill cleanup materials as changes occur in the types of chemicals on-site.

BMP
 15

Department of Public Works

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 2/16/2008

STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 5 OF 11
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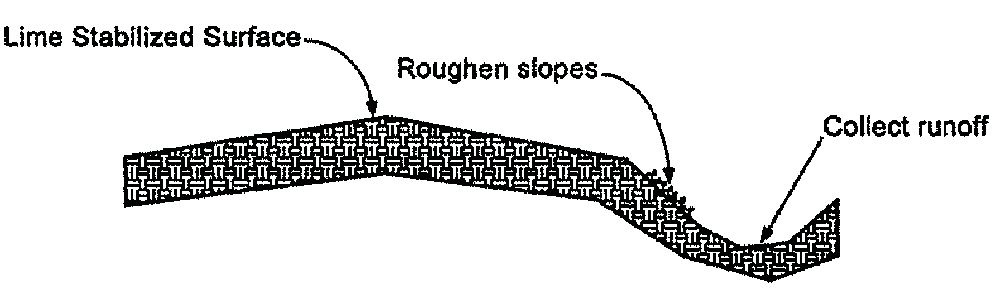
STORM WATER POLLUTION
 PREVENTION PLAN
 BEST MANAGEMENT PRACTICES

ENGINEERING DIVISION
 DEPARTMENT OF PUBLIC WORKS
 CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

DATE	DESCRIPTION	BY

Lime Stabilization BMP



Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents
 Sediment
 Nutrients
 Toxic Materials
 Oil & Grease
 Floatable Materials
 Other Construction Wastes

Implementation Requirements
 Capital Costs
 Maintenance
 Training
 Suitability for Slopes >5%

Legend
 Significant Impact
 Medium Impact
 Low Impact
 Unknown or Questionable Impact

BMP
16

City of Baton Rouge
 Parish of East Baton Rouge
 Department of Public Works

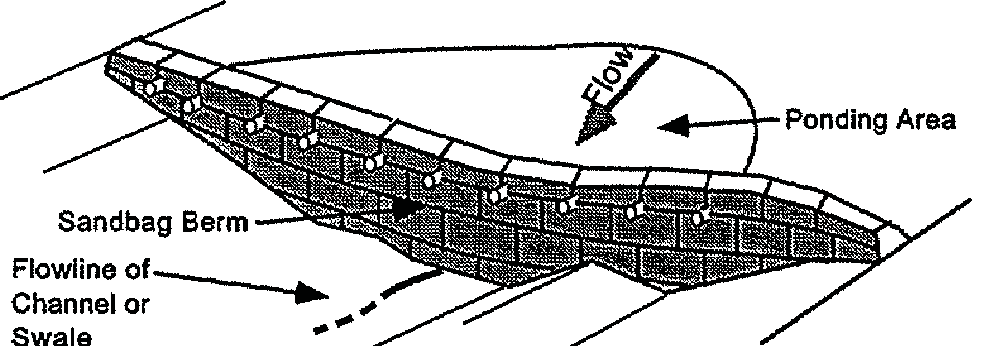
DESCRIPTION
 Lime stabilization is used extensively in some areas to stabilize pavement subbases for roadways, parking lots and other paved surfaces. Hydrated lime is applied to the soil and mixed through disk and other techniques, then allowed to cure. This practice will reduce the potential for runoff to carry lime offsite, where it may impact aquatic life through changing the pH balance of streams, ponds and other water bodies.

PRIMARY USE
 This BMP consists of a series of techniques that should be implemented when lime is required for soil stabilization.

APPLICATIONS
 Each of the techniques listed can be used under a variety of conditions. The engineer should determine the applicability of the technique based on site conditions such as available open space, quantity of area to be stabilized, proximity of nearby water courses and other BMPs employed at the site. The use of diversion dikes and interceptor swales (see appropriate in conjunction with these techniques to reduce the impact of the lime.

DESIGN CRITERIA
 - The contractor shall limit lime operations to that which can be thoroughly mixed and compacted by the end of each work day.
 - No traffic other than water trucks and mixing equipment shall be allowed to pass over the spread lime until after completion of mixing.
 - Areas adjacent and downstream of stabilized areas shall be roughened to intercept lime from runoff and reduce runoff velocity.
 - Geotextile fabrics such as those used for silt fences should not be used to address lime since the grain size of lime is significantly smaller than the equivalent opening size of the fabric.
 - For areas which phasing of lime operations is impractical, use of a curing seal such as Liquid Asphalt, Grade MC-250 or MC-800 applied at a rate of 0.15 gallons per square yard of surface can be used to protect the base.

Sand Bag Berm



Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents
 Sediment
 Nutrients
 Toxic Materials
 Oil & Grease
 Floatable Materials
 Other Construction Wastes

Implementation Requirements
 Capital Costs
 Maintenance
 Training
 Suitability for Slopes >5%

Legend
 Significant Impact
 Medium Impact
 Low Impact
 Unknown or Questionable Impact

BMP
17

City of Baton Rouge
 Parish of East Baton Rouge
 Department of Public Works

DESCRIPTION
 Sandbag berms consist of stacked sandbags installed across a watercourse to direct flow around construction or to allow sedimentation to occur for flows downstream of disturbed areas. There are overflow pipes located in the top of the berm to allow controlled outflow of water after sedimentation has occurred.

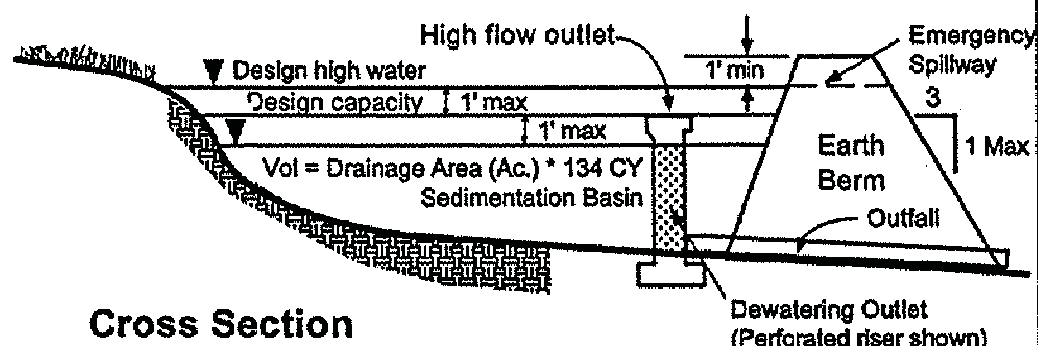
PRIMARY USE
 A sandbag berm is a temporary sediment control method that addresses the problem of construction in creeks, channels and other watercourses which carry a constant flow and is subjected to high, concentrated flows. A sandbag berm can also be used to create a small sedimentation pond prior to the completion of a permanent detention basin.

Sandbag berms can be used as check dams in temporary swales or borrow ditches.

Sandbag berms are not recommended for typical perimeter controls where sheet flow is prevalent.

APPLICATIONS
 During utility or any type of construction in channels or stream beds, sandbag berms can be used as check dams across channels, serve as a barrier for utility trenches or even provide a temporary channel crossing for construction equipment without seriously affecting stream conditions. Sandbag berms can also be installed parallel to a roadway, providing a corridor of sediment control similar to that provided by a silt fence or hay bales with the exception that a sand bag dike is capable of controlling much higher flows and is much more durable. For site construction sandbag berms can be used to divert or direct flow or create a temporary sediment basin with the added dimension of being able to be moved to accommodate changes in construction much more easily than compacted earth berms.

Sediment Basin



Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents
 Sediment
 Nutrients
 Toxic Materials
 Oil & Grease
 Floatable Materials
 Other Construction Wastes

Implementation Requirements
 Capital Costs
 Maintenance
 Training
 Suitability for Slopes >5%

Legend
 Significant Impact
 Medium Impact
 Low Impact
 Unknown or Questionable Impact

BMP
18

City of Baton Rouge
 Parish of East Baton Rouge
 Department of Public Works

DESCRIPTION
 A sediment basin is a pond area with a controlled outlet in which sediment-laden runoff is directed to allow settling of suspended sediment from the runoff. It provides treatment for the runoff as well as detention and controlled release of runoff, minimizing flood impacts downstream.

PRIMARY USE
 Sediment basins should be used for all sites with adequate open space to site the basin and the ability to direct a majority of the site drainage into the basin. For sites with disturbed areas of 10 acres and larger that are part of a common drainage area, sediment basins are required as either temporary or permanent controls unless specific site conditions limit their use.

APPLICATIONS
 Sediment basins serve as treatment devices which can be used on a variety of project types. It is normally used in site development projects in which large areas of land are available for the basin, a stream or drainage way crosses the site, or a specific water feature is planned for the site. Sediment basins are highly effective at reducing sediment and other pollutants for design storm conditions. It also reduces maintenance requirements due to the central location of the sediment and minimal structural requirements of the basin.

DESIGN CRITERIA
 - Maximum drainage area contributing to the basin should be 10 acres or less. Larger sediment basins will require specific measures to address the potential for overtopping of the basin and possible failure of the berm.
 - Minimum capacity of the basin shall be 3600 cubic feet per disturbed acre of contributing drainage area.
 - Deposited sediment shall be removed when the storage capacity of the basin has been depleted by 20%.
 - Minimum width of the embankment at the top shall be 8 feet.
 - Minimum embankment slope shall be 3:1.
 - Maximum embankment height shall be 6 feet as measured from the toe of slope on the downstream side.

Lime Stabilization BMP

Use of sediment basins with a significant (>36 hour) drawdown time is encouraged for large stabilized areas (see Sediment Basin BMP).

LIMITATIONS
 These techniques are part of an overall plan to reduce pollutants from an active construction site. In the case of pollution due to lime, prevention of contamination is the only effective method to address this pollutant. Proper application and mixing along with avoiding applications when there is a significant probability of rain will reduce lime runoff.

MAINTENANCE REQUIREMENTS
 None.

BMP
16

Department of Public Works

Sand Bag Berm

DESIGN CRITERIA
 - Berms are to be constructed along a line of constant elevation (a contour line) for use as perimeter control devices.
 - Maximum flow through rate shall be 0.1 CFS per square foot of berm surface.
 - Minimum height shall be 18 inches.
 - Minimum width of the berm shall be 18 inches at the top and 54 inches measured at the bottom.
 - Maximum side slopes shall be 2:1.
 - Maximum design freeboard shall be 0.3 feet.
 - Sandbags shall be consist of jute, polypropylene, polyethylene or polyamide woven fabric. Jute shall be composed of a uniform weave of undyed and unbleached single jute yarn weighing an average of 1.2 pounds per linear yard of cloth with approximately 78 warp ends per width of cloth. Polypropylene, polyethylene or polyamide woven fabric shall have a minimum unit weight of 4 ounces per square yard, a mullen burst strength of 300 psi minimum and ultraviolet stability exceeding 70 percent, and shall be filled with coarse sand or pea gravel.
 - 4" diameter Schedule 40 or greater PVC pipe segments approximately 24 inches in length shall be used immediately below the top layer of sandbags to allow for flow through the berm.
 - For severe velocities or high flows, woven wire mesh can be used to maintain the integrity of the berm.
 - Sufficient room for the operation of sediment removal equipment shall be provided between the berm and other obstructions in order to properly remove sediment.
 - The ends of the berm shall be turned up or shall tie into natural grades to prevent bypass of stormwater.
 - In channel applications, the center of the berm must be lower than the outside ends to prevent bypass around the berm.

LIMITATIONS
 Sandbag berms are a costly, labor intensive technique which is suitable only for areas subjected to high concentrated flows. The permeability of the berms makes it unsuitable for low flow, perimeter conditions.

Ponding will occur directly upstream from the berm creating the possibility of a flooding concern which should be considered prior to its placement.

For sandbag berms located in high flow areas such as creeks, the potential for berm damage during high flows increases the requirement for maintenance.

MAINTENANCE REQUIREMENTS
 Inspections should be made on a daily basis and after each significant (>0.5 inches) rain event. The sandbags shall be reshaped or replaced as needed during the inspection. Silt should be removed when it reaches a depth of six (6) inches. In addition, weekly inspections should be made on the PVC pipe segments to assure clear flow.

BMP
17

Department of Public Works

Sediment Basin

the toe of slope on the downstream side.

The basin outlet shall be designed to accommodate a 10 year design storm without causing damage to the containment structure.

Minimum outlet capacity shall be 0.2 CFS per acre of contributing drainage area.

The sediment basin shall have a minimum design dewatering time of 36 hours.

The basin must be laid out such that the effective flow length of the basin should be at least twice the effective flow width.

The outlet of the outfall pipe shall be stabilized with rip rap or other form of stabilization with design flows and velocities based on 25 year design storm peak flows. For velocities in excess of 5 feet per second, velocity dissipation measures should be used to reduce outfall velocities.

LIMITATIONS
 Sediment basins can be rather large depending on site conditions, requiring the use of expensive development area and comprehensive planning for construction phasing prior to implementation.

Storm events which exceed the design storm event can cause damage to the spillway structure of the basin and may impact downstream concerns.

MAINTENANCE REQUIREMENTS
 Sediment shall be removed and the basin shall be regraded to its original dimensions at such point that the capacity of the impoundment has been reduced to 20% of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas which are protected from erosion.

The basin outlet structure and emergency spillway (if present) should be checked frequently and after each major rain event to check for damage and to insure that obstructions are not diminishing the effectiveness of the structures.

BMP
18

Department of Public Works

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STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 6 OF 11
STORM WATER POLLUTION PREVENTION PLAN BEST MANAGEMENT PRACTICES		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED G. CHENG	DRAWN G. VANNICE	CHECKED G. CHENG
		APPROVED T. STEPHENS

DATE	DESCRIPTION	BY
	REVISIONS	

Stone Outlet Sediment Trap

Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- ? Unknown or Questionable Impact

BMP
19

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
 A stone outlet sediment trap is a small ponding area formed by placing a stone embankment or gabion core with an integral stone filter outlet across a drainage swale for the purpose of detaining sediment-laden runoff generated by construction activities. The sediment trap detains runoff long enough to allow most of the suspended sediment to settle while still allowing for diffused flow of runoff.

PRIMARY USE
 A sediment trap is used in situations where flows are concentrated in a drainage swale or channel. The sediment trap reduces velocities and allows for settling of sediment while allowing the area behind the trap to de-water. This is normally used for long term (18 months or less) applications in which a sediment basin is not feasible due to site or construction method restrictions. The use of a gabion core as opposed to a dewatering the area as necessary.

APPLICATIONS
 Temporary stone outlet sediment traps are installed at locations where concentrated flows require a protected outlet to contain sediment or spread flow prior to discharge.

DESIGN CRITERIA

- Maximum drainage area contributing to the trap shall be 3 acres. For larger drainage areas, a sediment basin should be used.
- The minimum length of the crest, in feet, of the stone outlet shall be equal to 6 times the size (acres) of the contributing drainage area.
- Deposited sediment shall be removed when the depth of sediment is equal to one-third of the height of the outlet structure as measured from the original toe of slope to the crest of the outlet, or has reached a depth of one foot, whichever is less.
- Minimum width of the embankment at the top shall be 3 feet.
- Minimum embankment slope shall be 3:1.

Vehicle And Equipment Cleaning

Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- ? Unknown or Questionable Impact

BMP
20

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
 Prevent or reduce the discharge of pollutants to storm water from vehicle and equipment cleaning by using off-site facilities, washing in designated areas only, discharges to the storm drain by infiltrating or recycling the wash water and training employees and subcontractors.

APPLICATIONS
 Washing vehicles and equipment outdoors or in areas where wash water

DESIGN CRITERIA

- Use off-site commercial washing businesses as much as possible. For operations involving a large number of vehicles or pieces of equipment, consider conducting this work at an off-site commercial business equipped to handle and dispose of the wash waters properly. Performing this work off-site can also be economical by eliminating the need for a separate washing operation at your site.
- If washing must occur on-site, use designated, bermed wash areas to prevent wash water contact with storm water, creeks, rivers, and other water bodies.
- Use as little water as possible to avoid having to install erosion and sediment controls for the wash area.
- Use phosphate-free, biodegradable soaps.
- Educate employees and subcontractors on pollution prevention measures.
- Do not permit steam cleaning on-site. Steam cleaning can generate significant pollutant concentrations leading to potential storm water and groundwater contamination.
- In construction areas where truck tires collect mud, provide a cleaning area for removing soil before truck leaves site. Truck tires cleaning area should not be directly adjacent to drainage conveyances. A vegetated buffer area should be located downstream of the tire wash. For heavy use of tire wash area, silt fencing, or sediment trapping may be necessary.

Vehicle And Equipment Fueling

Applications
 Perimeter Control
 Slope Protection
 Sediment Trapping
 Channel Protection
 Temporary Stabilization
 Permanent Stabilization
 Waste Management
 Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- ? Unknown or Questionable Impact

BMP
21

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

DESCRIPTION
 Prevent fuel spills and leaks, and reduce their impacts to storm water by using off-site facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors.

APPLICATIONS
 Fueling vehicles and equipment outdoors or in areas where wash water flows onto the ground can pollute storm water.

DESIGN CRITERIA

- Use of off-site fueling stations as much as possible. If you fuel a large number of vehicles or pieces of equipment, consider using an off-site fueling station equipped to handle fuel and spills properly. Performing this work off-site can also be economical by eliminating the need for a separate fueling area at your site.
- If fueling must occur on-site, use designated areas, located away from drainage course to prevent the runoff of storm water and the runoff of spills.
- Discourage "topping-off" of fuel tanks.
- Always use secondary containment, such as a drain pan, when fueling to catch spills/leaks.
- Place a stockpile of spill cleanup materials where it will be readily accessible.
- Use adsorbent materials on small spills rather than hosing down or burying the spill. Remove the adsorbent materials promptly and dispose of properly.
- Carry out all Federal and State requirements regarding stationary above ground storage tanks.
- Do not use mobile fueling of mobile construction equipment around the site; rather, transport the equipment to designated fueling areas. With the exception of tracked equipment such as bulldozers and perhaps small forklifts, most vehicles should be able to travel to a designated area with little lost time.

Stone Outlet Sediment Trap

- Maximum embankment height shall be 2 feet as measured from the toe of slope to the crest of the stone outlet. The height of the compacted earth embankment shall be one foot higher than the crest of the outlet.
- The maximum allowable flow-through rate shall be 0.1 CFS per square foot of the frontal area of the outlet structure.
- The effective life of the stone outlet sediment trap is approximately 18 months.

LIMITATIONS
 Limited applications due to cost of construction, availability of materials, and the amount of land required.

Can cause minor flooding upstream of dam, impacting construction operations.

This technique serves as a temporary measure during construction. It should not be used for more than 18 months due to reduced efficiency.

MAINTENANCE REQUIREMENTS
 Sediment shall be removed and the area directly behind the berm shall be regraded to its original dimensions at such point when the capacity of the impoundment has been reduced to one-half of its original storage capacity. The removed sediment shall be stockpiled or redistributed in areas which are protected from erosion.

The stone outlet structure should be inspected frequently and after each major rain event to check for clogging of the void spaces between stones. If the aggregate appears to be silted in such that efficiency is diminished, the stone should be replaced.

BMP
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Department of Public Works

Vehicle And Equipment Cleaning

LIMITATIONS
 Even phosphate-free, biodegradable soaps have been shown to degrade.

Sending vehicles/equipment off-site should be done in conjunction with Entrance BMP.

MAINTENANCE REQUIREMENTS
 Minimal.

BMP
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Department of Public Works

Vehicle And Equipment Fueling

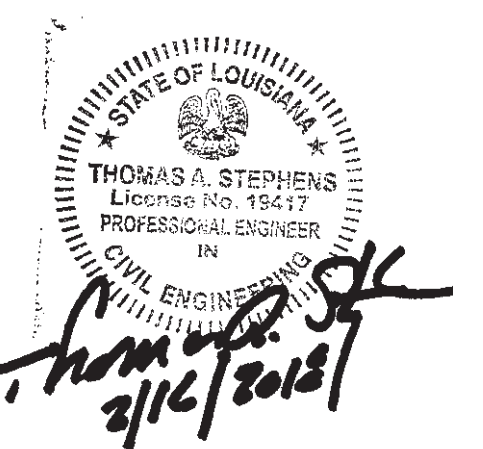
- Train employees and subcontractors in proper fueling and cleanup procedures.

LIMITATIONS
 Sending vehicles/equipment off-site should be done in conjunction with Stabilized Construction Entrance BMP.

MAINTENANCE REQUIREMENTS
 Keep ample supplies of spill cleanup materials on-site. Inspect fueling areas and storage tanks on a regular schedule.

BMP
21

Department of Public Works



STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 7 OF 11
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STORM WATER POLLUTION PREVENTION PLAN
BEST MANAGEMENT PRACTICES

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

Solid Waste Management

DESCRIPTION
Large volumes of solid waste are often generated at construction sites including: packaging, pallets, wood waste, concrete waste, soil, electrical wiring, cuttings, and a variety of other materials. The solid waste management practice lists techniques to minimize the potential of storm water contamination from solid waste through appropriate storage and disposal practices.

PRIMARY USE
These practices should be a part of all construction practices. By limiting the trash and debris on site, storm water quality is improved along with reduced clean up requirements at the completion of the project.

APPLICATIONS
The solid waste management practice for construction sites is based on proper storage and disposal practices by construction workers and supervisors. Key elements of the program are education and modification of improper disposal habits. Cooperation and vigilance is required on the part of supervisors and workers to ensure that the recommendations and procedures are followed. Following are lists describing the targeted materials and recommended procedures:

Targeted Solid Waste Materials

- Paper and cardboard containers
- Plastic packaging
- Styrofoam packing and forms
- Insulation materials (non-hazardous)
- Wood pallets
- Wood cuttings
- Pipe and electrical cuttings
- Concrete, brick, and mortar waste
- Shingle cuttings and waste
- Roofing tar
- Steel (cuttings, nails, rust residue)
- Gypsum board cuttings and waste
- Sheathing cuttings and waste
- Miscellaneous cutting and waste
- Food waste
- Demolition waste

Storage Procedures

- Wherever possible, minimize production of solid waste materials.
- Designate a foreman or supervisor to oversee and enforce proper solid waste procedures.
- Instruct construction workers in proper solid waste procedures.
- Segregate potentially hazardous waste from non-hazardous construction site debris.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization

Waste Management

Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- Unknown or Questionable Impact

BMP
22

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Hazardous Waste Management

DESCRIPTION
The hazardous waste management BMP addresses the problem of storm water polluted with hazardous waste through spills or other forms of contact. The objective of the Management Program is to minimize the potential of stormwater contamination from common construction site hazardous wastes through appropriate recognition, handling, storage and disposal practices.

It is not the intent of this Management Program to supersede or replace normal site assessment and remediation procedures. Significant spills and/or contamination warrant immediate response by trained professionals. Suspected job-site contamination should be immediately reported to regulatory authorities and protective actions taken. The General Permit requires reporting of significant spills to the National Response Center (NRC) at (800) 424-8802.

PRIMARY USE
These management practices along with applicable OSHA and EPA guidelines should be incorporated at all construction sites which use or generate hazardous wastes. Many wastes such as fuel, oil, grease, fertilizer and pesticide are present at most construction sites.

INSTALLATION, APPLICATION AND DISPOSAL CRITERIA
The hazardous waste management techniques presented here are based on proper recognition, handling, and disposal practices by construction workers and supervisors. Key elements of the management program are education, proper disposal practices, as well as provisions for safe storage and disposal. Following are lists describing the targeted materials and recommended procedures:

Targeted Hazardous Waste Materials

- Paints
- Solvents
- Stains
- Wood preservatives
- Cutting oils
- Greases
- Roofing tar
- Pesticides
- Fuels & lube oils
- Lead based paints (Demolition)

Storage Procedures

- Wherever possible, minimize use of hazardous materials.
- Minimize generation of hazardous wastes on the job-site.
- Segregate potentially hazardous waste from non-hazardous construction site debris.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization

Waste Management

Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- Unknown or Questionable Impact

BMP
23

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Concrete Waste Management

DESCRIPTION
Concrete waste at construction sites comes in two forms; 1) excess fresh concrete mix including truck and equipment washing, and 2) concrete dust and concrete debris resulting from demolition. Both forms have the potential to impact water quality through storm water runoff contact with the waste.

PRIMARY USE
Concrete waste is present at most construction sites. This BMP should be utilized at sites in which concrete waste is present.

APPLICATIONS
A number of water quality parameters can be affected by introduction of concrete - especially fresh concrete. Concrete affects the pH of runoff, causing significant chemical changes in water bodies and harming aquatic life. Suspended solids in the form of both cement and aggregate dust are also generated from both fresh and demolished concrete waste.

Current Unacceptable Waste Concrete Disposal Practices

- Dumping in vacant areas on the job-site
- Illicit dumping off-jobsite
- Dumping into ditches or drainage facilities

Recommended Disposal Practices

- Avoid unacceptable disposal practices listed above.
- Develop pre-determined, safe concrete disposal areas.
- Provide a washout area with a minimum of 6 cubic feet of containment area volume for every 10 cubic yards of concrete poured.
- Never dump waste concrete illicitly or without property owners knowledge and consent.
- Treat runoff from storage areas through the use of structural controls as required.

Education

- Drivers and equipment operators should be instructed on proper disposal and equipment washing practices (see above).
- Supervisors must be made aware of the potential environmental consequences of improperly handled concrete waste.

Enforcement

- The construction site manager or foreman must ensure that employees and pre-mix companies follow proper procedures for concrete disposal and equipment washing.
- Employees violating disposal or equipment cleaning directives must be re-educated or disciplined if necessary.

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization

Waste Management

Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- Unknown or Questionable Impact

BMP
24

City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Solid Waste Management

- Keep solid waste materials under cover in either a closed dumpster or other enclosed trash container that limits contact with rain and runoff.
- Store waste materials away from drainage ditches, swales and catch basins.
- Do not allow trash containers to overflow.
- Do not allow waste materials to accumulate on the ground.
- Prohibit littering by workers and visitors.
- Police site daily for litter and debris.
- Enforce solid waste handling and storage procedures.

Disposal Procedures

- If feasible, segregate recyclable wastes from non-recyclable waste materials and dispose of properly.
- General construction debris may be hauled to a licensed construction debris landfill (typically less expensive than a sanitary landfill).
- Use waste facilities approved by local jurisdiction.
- Runoff which comes into contact with unprotected waste shall be directed into structural treatment such as silt fence to remove debris.

Education

- Educate all workers on solid waste storage and disposal procedures.
- Instruct workers in identification of solid waste and hazardous waste.
- Have regular meetings to discuss and reinforce disposal procedures (incorporate in regular safety seminars).
- Clearly mark on all solid waste containers which materials are acceptable.

Quality Control

- Foreman and/or construction supervisor shall monitor on-site solid waste storage and disposal procedures.
- Discipline workers who repeatedly violate procedures.

Requirements

- Job-site waste handling and disposal education and awareness program.
- Commitment by management to implement and enforce Solid Waste Management Program.
- Compliance by workers.
- Sufficient and appropriate waste storage containers.
- Timely removal of stored solid waste materials.
- Possible modest cost impact for additional waste storage containers.
- Small cost impact for training and monitoring
- Minimal overall cost impact.

LIMITATIONS

- Only addresses non-hazardous solid waste.
- One part of a comprehensive construction site management program.

BMP
22

Department of Public Works

Hazardous Waste Management

- Designate a foreman or supervisor to oversee hazardous materials handling procedures.
- Keep liquid or semi-liquid hazardous waste in appropriate containers (closed drums or similar) and under cover.
- Store waste materials away from drainage ditches, swales and catch basins.
- Use containment berms in fueling and maintenance areas and where the potential for spills is high.
- Ensure that adequate hazardous waste storage volume is available.
- Ensure that hazardous waste collection containers are conveniently located.
- Do not allow potentially hazardous waste materials to accumulate on the ground.
- Enforce hazardous waste handling and disposal procedures.
- Clearly mark on all hazardous waste containers which materials are acceptable for the container.

Disposal Procedures

- Regularly schedule hazardous waste removal to minimize on-site storage.
- Use only reputable, licensed hazardous waste haulers.

Education

- Instruct workers in identification of hazardous waste
- Educate workers of potential dangers to humans and the environment from hazardous wastes
- Instruct workers on safety procedures for common construction site hazardous wastes
- Educate all workers on hazardous waste storage and disposal procedures
- Have regular meetings to discuss and reinforce identification, handling and disposal procedures (incorporate in regular safety seminars)
- Establish a continuing education program to indoctrinate new employees.

Quality Assurance

- Foreman and/or construction supervisor shall monitor on-site hazardous waste storage and disposal procedures.
- Educate and if necessary, discipline workers who violate procedures.
- Ensure that the hazardous waste disposal contractor is reputable and licensed.

Requirements

- Job-site hazardous waste handling and disposal education and awareness program.
- Commitment by management to implement hazardous waste management practices.
- Compliance by workers.
- Sufficient and appropriate hazardous waste storage containers.
- Timely removal of stored hazardous waste materials.

Costs

- Possible modest cost impact for additional hazardous storage containers.
- Small cost impact for training and monitoring.
- Potential cost impact for hazardous waste collection and disposal by licensed hauler - actual cost depends on type of material and

BMP
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Department of Public Works

Concrete Waste Management

Demolition Practices

- Monitor weather and wind direction to ensure concrete dust is not entering drainage structures and surface waters.
- Where appropriate, construct sediment traps or other types of sediment detention devices downstream of demolition activities.

Requirements

- Use a pre-determined disposal site(s) approved by LADEQ for waste concrete (See BMP 22 Solid Waste Management). Inform PROGRAM MANAGER of selected disposal site(s).
- Prohibit dumping waste concrete anywhere but pre-determined areas.
- Assign pre-determined truck and equipment washing areas.
- Educate drivers and operators on proper disposal and equipment cleaning procedures.

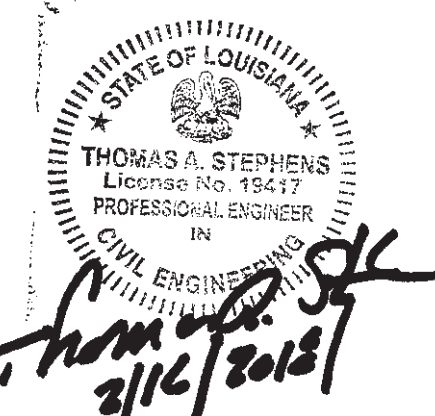
Costs

- Minimal cost impact for training and monitoring.
- Concrete disposal cost depends on availability and distance to suitable disposal areas
- Additional costs involved in equipment washing could be significant.

LIMITATIONS
This concrete waste management program is one part of a comprehensive construction site waste management program.

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Department of Public Works



STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 8 OF 11
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**STORM WATER POLLUTION
PREVENTION PLAN
BEST MANAGEMENT PRACTICES**

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED G. CHENG	DRAWN G. VANNICE	CHECKED G. CHENG	APPROVED T. STEPHENS
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DATE	DESCRIPTION	BY

Sandblasting Waste Management

DESCRIPTION

The objective of this management program is to minimize the potential of storm water quality degradation from sandblasting activities at construction sites. The key issues in this program are prudent handling and storage of sandblast media, dust suppression, and proper collection and disposal of spent media. It is not the intent of this program to outline all of the worker safety issues pertinent to this practice. Safety issues should be addressed by construction safety programs as well as local, state, and federal regulations.

INSTALLATION/APPLICATION CRITERIA

Since the media consists of fine abrasive granules, it can be easily transported by air and running water. Sandblasting activities typically create a significant dust problem which must be contained and collected to prevent off-site migration of fines.

Operational Procedures

- Use only inert, non-degradable sandblast media.
- Use appropriate equipment for the job, do not over-blast.
- Wherever possible, blast in a downward direction.
- Install a wind sock or other wind direction instrument.
- Cease blasting activities in high winds or if wind direction could transport grit to drainage facilities.
- Install dust shielding around sandblasting areas.
- Collect and dispose of all spent sandblast grit, use dust containment fabrics and dust collection hoppers and barrels.
- Non-hazardous sandblast grit may be disposed in permitted construction debris landfills or permitted sanitary landfills.
- If sandblast media cannot be fully contained, construct sediment traps downstream from blasting area where appropriate.
- Use fencing where appropriate in areas where blast media cannot be fully contained.
- If necessary, install misting equipment to remove sandblast grit from the air - prevent runoff from misting operations from entering drainage systems.
- Use vacuum grit collection systems where possible.
- Keep records of sandblasting materials, procedures, and weather conditions on a daily basis.
- Take all reasonable precautions to ensure that sandblasting grit is contained and kept away from drainage structures.

Educational Issues

- Educate all on-site employees of potential dangers to humans and the environment from sandblast grit.

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization

Waste Management

- Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- Unknown or Questionable Impact

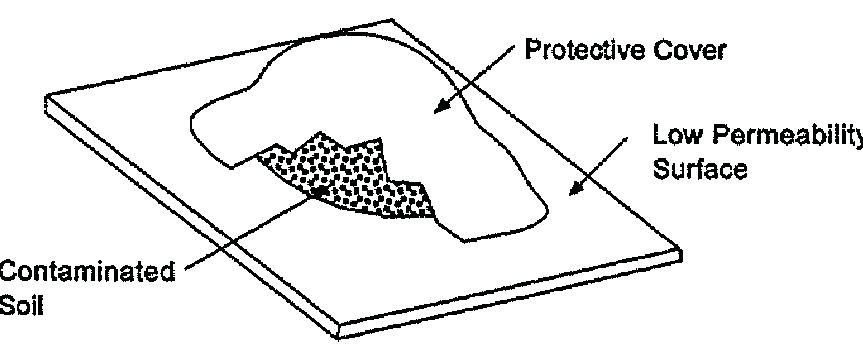
BMP

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City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Contaminated Soil Management



DESCRIPTION

Prevent or reduce the discharge of pollutants to storm water from contaminated soil and highly acidic or alkaline soils by conducting pre-construction surveys, inspecting excavations regularly, and remediating contaminated soil promptly.

APPLICATIONS

Contaminated soils may occur on your site for several reasons including:

- Past site uses and activities;
- Detected or undetected spills and leaks; and

DESIGN CRITERIA

- Conduct thorough site planning including pre-construction geologic surveys.
- Look for contaminated soil as differences in soil properties.
- Seal bedrock fractures with grout or bentonite to reduce seepage from excavation.
- Prevent leaks and spills to the maximum extent practicable. Contaminated soil can be expensive to treat and/or dispose of properly. However, addressing the problem before building construction is much less expensive than after the buildings are in place.
- Test suspected soils at a certified laboratory.
- If the soil is contaminated, work with the local regulatory agencies to develop options for treatment and/or disposal.

LIMITATIONS

If necessary, use a private spill cleanup company.

MAINTENANCE REQUIREMENTS

Contaminated soils that cannot be treated on-site must be disposed of off-site by a licensed hazardous waste hauler. The presence of contaminated soil may indicate contaminated water as well.

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization

Waste Management

- Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- Unknown or Questionable Impact

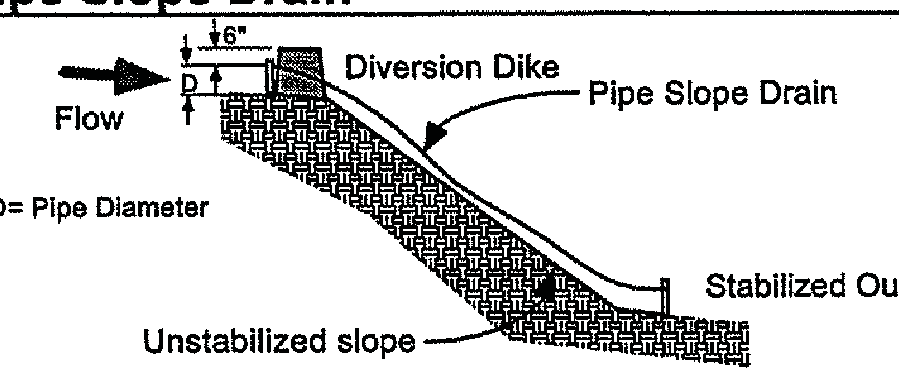
BMP

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City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Pipe Slope Drain



DESCRIPTION

A pipe slope drain is a temporary pipe line typically utilizing flexible pipe that conveys runoff down unstabilized slopes. The drain is anchored on the upstream end with some form of headwall to limit erosion and secure the pipe.

PRIMARY USE

A pipe slope drain is used on sites with a long, unstabilized, steep slope area which is subject to erosion from overland flow. It is normally used in combination with interceptor swales or diversion dikes to direct the flow into the pipe area. The pipe slope drain can provide service for a relatively large area. It does not treat the runoff, therefore if the runoff contains sediment, treatment through a controlled outlet will be required before the flow is released offsite.

APPLICATIONS

Sites with large berms or grade changes such as roadway embankments are candidates for a pipe slope drain. Since provisions must be made to direct the flow into the pipe drain, some grading is normally required upstream of the pipe slope drain. Installed properly, slope erosion can be greatly reduced (but not entirely eliminated) through the use of the drain.

Pipe slope drains also require a stabilized outlet. This is critical since the velocities at the outfall are normally high. Velocity dissipators as well as stone or concrete rip rap are typically required to reduce the velocity and spread the flow, reducing erosion. Flow from a pipe slope drain should be routed to a sediment reduction practice through interceptor swales, diversion dikes or other suitable methods.

DESIGN CRITERIA

- The entrance to the pipe slope drain may be a standard corrugated metal prefabricated flared end section with an integral toe plate extending a minimum of 6 inches from the bottom of the end section. The grade of the entrance shall be 3 percent maximum.
- The berm at the entrance shall have a minimum height of the pipe diameter + 6" and a minimum width of 3 times the pipe diameter.
- All sections of the pipe slope drain shall be connected using watertight collars or gasketed watertight fittings.
- All sediment-laden runoff conveyed by the pipe slope drain shall be directed to a sediment trapping facility.
- Temporary pipe slope drains are to be sized to accommodate runoff flows equivalent to a 10 year storm as calculated using the Rational Method and

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- Unknown or Questionable Impact

BMP

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City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Sandblasting Waste Management

- Instruct all on-site employees of the potential hazardous nature of sandblast grit and the possible symptoms of over-exposure to sandblast grit.
- Instruct operators of sandblasting equipment on safety procedures and personal protection equipment.
- Instruct operators on proper procedures regarding storage, handling and containment of sandblast grit.
- Instruct operators to recognize unfavorable weather conditions regarding sandblasting activities.
- Instruct operators and supervisors on current local, state and federal regulations regarding fugitive dust and hazardous waste from sandblast grit.
- Have weekly meetings with operators to discuss and reinforce proper operational procedures.
- Establish a continuing education program to indoctrinate new employees.

Materials Handling Recommendations

- Sandblast media should always be stored under cover away from drainage structures.
- Ensure that stored media or grit is not subject to transport by wind.
- Ensure that all sandblasting equipment as well as storage containers comply with current local, state and federal regulations.
- Refer to Hazardous Waste BMP hazardous components.
- Capture and treat runoff which comes into contact with sandblasting material or waste.

Quality Assurance

- Foreman and/or construction supervisor should monitor all sandblasting activities and safety procedures.
- Educate and if necessary, discipline workers who violate procedures.
- Take all reasonable precautions to ensure that sandblast grit is not transported off-site or into drainage facilities.

Requirements

- Education and awareness program for all employees regarding control of sandblasting and potential dangers to humans and the environment.
- Operator and supervisor education program for those directly involved in sandblasting activities instructions on material handling, proper equipment operation, personal protective equipment, fugitive dust control, record keeping and reporting.
- Proper sandblast equipment for the job.
- Site-specific fugitive dust control and containment equipment.
- Site-specific fugitive dust control procedures.
- Compliance by supervisors and workers.

Costs

- Minimal cost for training and monitoring.
- Potential for significant cost for containment procedures on large jobs.
- Potential for significant costs associated with cleanup, correction and remediation if contamination occurs.

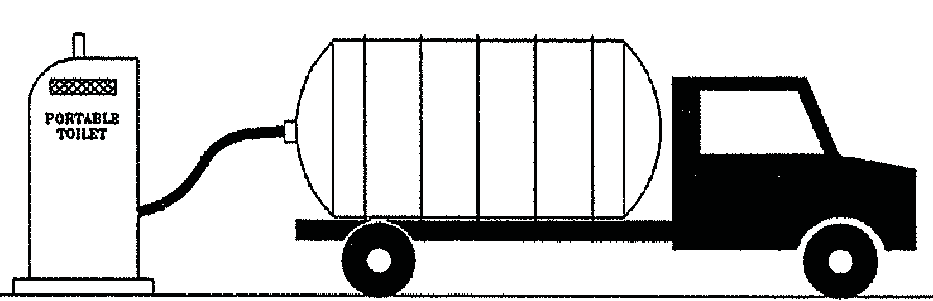
BMP

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City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Sanitary/Septic Waste Management



DESCRIPTION

Prevent or reduce the discharge of pollutants to storm water from sanitary/septic waste by providing convenient, well-maintained facilities, and arranging for regular service and disposal.

APPLICATIONS

This BMP is

DESIGN CRITERIA

- Sanitary or septic wastes should be treated or disposed of in accordance with State and local requirements.
- Locate sanitary facilities in a convenient location.
- Untreated raw sewage should never be discharged or buried.
- Temporary septic systems should treat wastes to appropriate levels before discharging.
- If using an on-site disposal system (OSDS), such as a septic system, contact the
- If discharging to the sanitary sewer, contact the local sewage treatment plant for their requirements.
- Sanitary/septic facilities should be maintained in good working order by a licensed service.
- Arrange for regular waste collection by a licensed hauler before facilities overflow.

LIMITATIONS

There are no major limitations to this best management practice.

MAINTENANCE REQUIREMENTS

Inspect facilities regularly. Arrange for regular waste collection.

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization

Waste Management

- Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil & Grease
- Floatable Materials
- Other Construction Wastes

Implementation Requirements

- Capital Costs
- Maintenance
- Training
- Suitability for Slopes >5%

Legend

- Significant Impact
- Medium Impact
- Low Impact
- Unknown or Questionable Impact

BMP

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City of Baton Rouge
Parish of East Baton Rouge

Department of Public Works

Pipe Slope Drain

Manning's equation, but in no case shall pipes be sized smaller than is shown in the following table:

Minimum Pipe Size	Maximum Contributing Drainage Area
12"	0.5 Acres
16"	1.5 Acres
21"	2.5 Acres
24"	3.5 Acres
30"	5.0 Acres

- Maximum drainage area for individual pipe slope drains shall be 5 acres. For areas larger than 5 acres, additional drains shall be added.
- Both the entrance and outfall of the pipe slope drain should be properly stabilized. Grass can normally be used at the entrance, but armor type stabilization such as stone or concrete rip rap is normally required to address the high velocities of the outfall.
- An effectiveness rating is based on the ratio of storm water routed away from the slope and into the pipe drain versus the total area of the drainage basin. A minimum value of 0.40 and a maximum value of 0.85 is used for the rating.

LIMITATIONS

- Drains must be located away from construction areas since the drain can easily be damaged by construction traffic.
- Securing the pipe to the slope can be difficult and require significant maintenance during the life of the system.
- In situations where pipe slope drains convey sediment-laden runoff, pipes can become clogged during large rain events causing water to overflow the diversion dike thereby creating a serious erosion condition.
- Grading is normally required upstream of the pipe slope drain in order to direct flow into the system. This can cause additional cost and maintenance.
- A pipe slope drain reduces erosion but does not prevent it or reduce the amount of sediment in runoff. Additional measures should be used in conjunction with the pipe slope drain to treat the flow.

MAINTENANCE REQUIREMENTS

Inspection must be made of the pipe after each significant (>0.5 inch) rain event to locate and repair any damage to joints or clogging of the pipe. In cases where the diversion dike has deteriorated from around the entrance of the pipe, it may be necessary to reinforce the dike with sandbags or to install a concrete collar to prevent failure. Signs of erosion around the pipe drain should be addressed in a timely manner by stabilizing the area with erosion control mats, crushed stone, concrete or other acceptable method.

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Department of Public Works

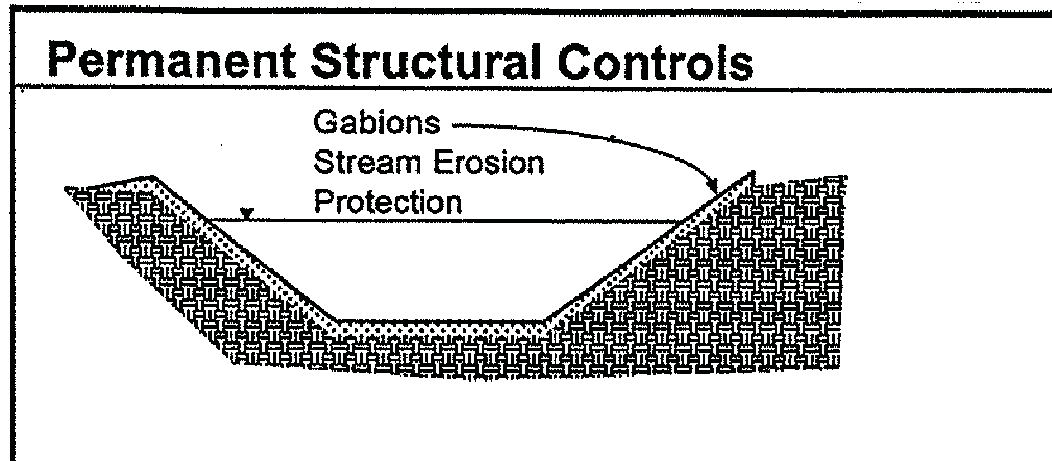
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2/16/2018

STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 9 OF 11
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STORM WATER POLLUTION
PREVENTION PLAN
BEST MANAGEMENT PRACTICES

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

DATE	DESCRIPTION	BY
	REVISIONS	



Permanent Structural Controls

DESCRIPTION
Permanent erosion techniques consist of a wide variety of erosion prevention methods including gabions, retaining walls, and rip rap. These are not included as individual BMPs since they go beyond construction phase measures and due to the fact that their use is widespread in the region and the variety of design factors influencing design.

PRIMARY USE
Permanent erosion control is required at the completion of the construction phase of the project. This includes permanent structural methods as well as non-structural methods such as vegetation.

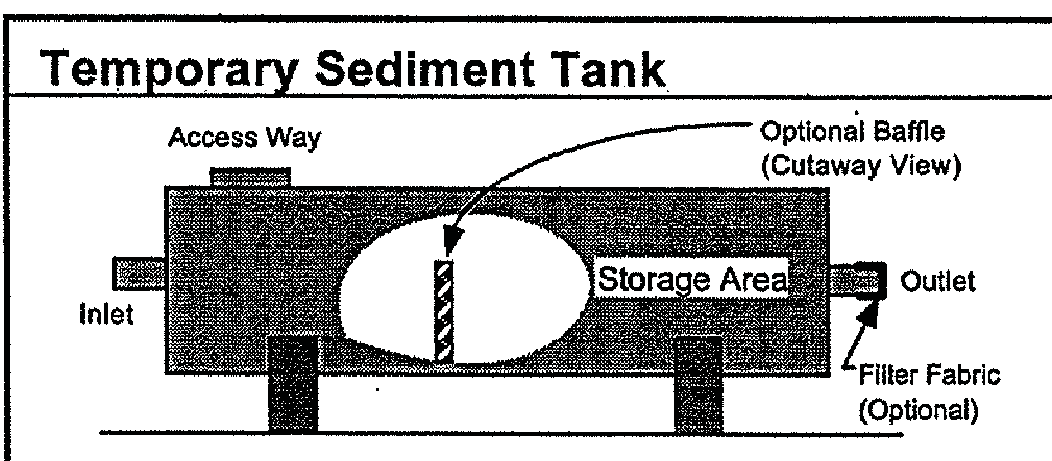
APPLICATIONS
Due to high installation cost and long term maintenance, permanent structural methods should be used only when necessary to address severe erosion conditions. In certain instances however, retaining walls are an effective method to reduce site slopes, reducing runoff velocity. Gabions and concrete rip-rap are effective in reducing stream bank erosion under severe concentrated flow conditions and at pipe outfalls.

DESIGN CRITERIA
Most structural controls such as gabions and rip-rap are designed based on the velocity of flow and the size of the stone used. Project plans will address this as part of standard details. Specifications for rip rap will be provided in design specifications for stone size based on the design velocity of flow across the structure. Manufacturers' information addresses stone size along with basket dimensions for gabions.

Design of retaining walls is based on a variety of structural conditions including soil compressive strength, wall height and water table influence. Tables of dimensions for retaining walls based on site conditions are available from a variety of sources including the Concrete Reinforcing Steel Institute (CRSI).

A critical aspect with regards to the design of many permanent controls is adequate anchoring of the structure to prevent undermining of the

Applications
Perimeter Control
Slope Protection
Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
Housekeeping Practices
Targeted Constituents
● Sediment
○ Nutrients
○ Toxic Materials
○ Oil & Grease
○ Floatable Materials
○ Other Construction Wastes
Implementation Requirements
● Capital Costs
● Maintenance
○ Training
● Suitability for Slopes >5%
Legend
● Significant Impact
● Medium Impact
○ Low Impact
? Unknown or Questionable Impact
BMP
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City of Baton Rouge Parish of East Baton Rouge
Department of Public Works



Temporary Sediment Tank

DESCRIPTION
A temporary sediment tank (TST) is a large truck mounted tank used to hold sediment laden water to provide for sedimentation and filtration. For smaller applications, 55 gallon drums or other water tight container can be used for storage. Water is pumped into the tank where it is detained. If desired an outlet with a geofabric filter can be provided to release the flow after a period of detention.

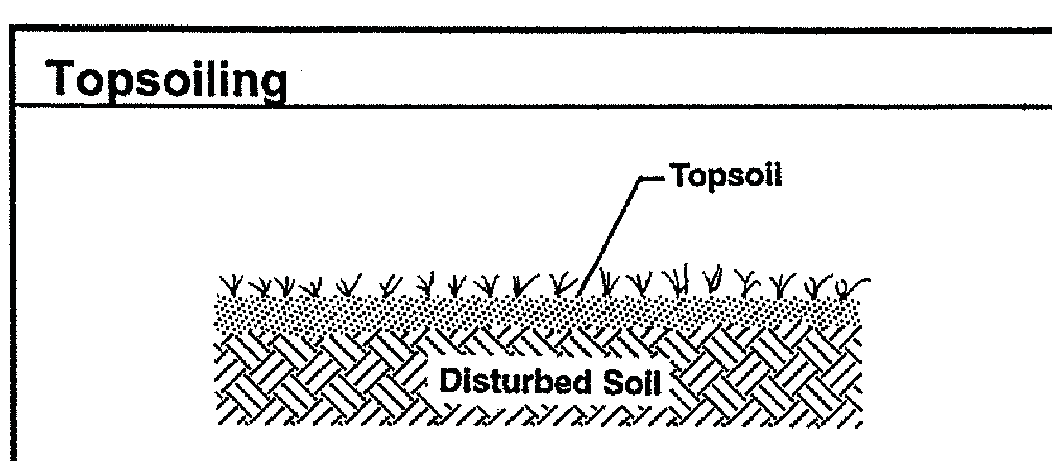
PRIMARY USE
A TST is typically used at construction sites in urban areas where conventional methods of sediment removal (e. g., sediment traps, sediment basins) are not practical.

APPLICATIONS
Applications for a TST include utility construction in confined areas (such as a business district or large developed area) or localized construction in which other BMPs are not required such as small, depressed construction (tank farms). This includes pumpage from excavation in heavily developed areas, such as a central business district, with flows due to groundwater or runoff entering the trench or excavated area.

DESIGN CRITERIA

- A TST can be used as either a sedimentation or filtration device. If an oil sheen is present in the runoff, additional treatment will be required before release of runoff.
- For use as a small scale sedimentation basin, de-watering discharge is directed into the TST to a level below the tank midpoint and held for a minimum of 2 hours to allow settlement of a majority of the suspended particles. The tank should be designed for a controlled release when the contents of the tank reach a level higher than the midpoint. When sediment occupies 1/3 the capacity of the TST, it should be removed from the tank.
- As a filtration device, a TST is used for collecting de-watering discharge and flowing it through a filtered opening at the outlet of

Applications
Perimeter Control
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Sediment Trapping
Channel Protection
Temporary Stabilization
Permanent Stabilization
Waste Management
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Targeted Constituents
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○ Nutrients
○ Toxic Materials
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○ Floatable Materials
○ Other Construction Wastes
Implementation Requirements
● Capital Costs
● Maintenance
● Training
○ Suitability for Slopes >5%
Legend
● Significant Impact
● Medium Impact
○ Low Impact
? Unknown or Questionable Impact
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City of Baton Rouge Parish of East Baton Rouge
Department of Public Works



Topsoiling

STANDARD FOR TOPSOILING¹

TOPSOILING
Definitions: Topsoiling is the stripping, storing and spreading of fertile topsoil over disturbed areas.

Purpose: Topsoiling will provide a more suitable soil medium if the existing or constructed surface is unfavorable for plant growth. Topsoiling will greatly increase the success of establishing good vegetations, help reduce soil erosion, and enhance the beauty of the development.

Conditions Where Practices Applies:

Topsoiling is Used Where:

- The texture and quality of the exposed subsoil or parent material are not suitable for producing adequate vegetative growth.
- The soil material is so shallow that the rooting zone is not deep enough to support plants with continuing supplies of moisture and plant nutrients.
- The soil is extremely acidic or contains material toxic to plant growth.

Design Criteria

- **Topsoil Materials**
The site should be explored to determine if there is sufficient surface soil of good quality to justify stripping. If

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Perimeter Control
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City of Baton Rouge Parish of East Baton Rouge
Department of Public Works

Permanent Structural Controls

foundation and washout of sediment at the edges of the structure. Where applicable, proper anchoring in the form of embedment or "toe in" of the structure is required.

LIMITATIONS
The initial cost is an important consideration in selection of permanent structural controls.

Stream bank erosion protection such as rip rap provides limited protection unless used extensively due to the potential for erosion at the edges of the rip rap.

MAINTENANCE REQUIREMENTS
Most stone or concrete structures require little maintenance, but may be subject to vandalism. As mentioned above, erosion around the structure may undermine the integrity of the structure. When maintenance is required, it is typically very extensive and costly.

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Temporary Sediment Tank

the tank to reduce suspended sediment volume. The filter opening in the TST should have an EOS (see silt fence BMP) of 70 or smaller.

LIMITATIONS
This is a specialized technique for the situations listed. It is not cost effective for normal sediment removal conditions.

The use of a temporary sediment tank is limited by the capacity of the tank, the time required for settlement of suspended material, and disposal of the water and the sediment.

MAINTENANCE REQUIREMENTS
The temporary sediment tank should be inspected periodically during and after use. A tank should be cleaned out when it becomes 1/3 full of sediment.

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Topsoiling

additional off-site topsoil is needed, it should meet the following standards as well:

- Topsoil should be friable and loamy (loam, sandy loam, silt loam, sandy clay loam, clay loam).
- Topsoil should be free of debris, objectionable weeds and stones, and contain no toxic substances that may be harmful to plant growth.
- Organic matter content should not be less than 0.75 percent by weight; pH range should be from 5.0 - 7.5.

Stripping and Stockpiling
Stripping should be confined to the immediate construction area. A 4-6 inch stripping depth is common, but may vary depending on the particular soil.

Topsoil should be stockpiled so that natural drainage is not obstructed and off-site sediment damage does not occur. stockpile sideslopes should not exceed 2:1. A perimeter dike with a outlet or straw bale barriers should surround the stockpiles. Temporary seeding should be completed within 15 days of stockpile formation.

Site Preparation
When topsoiling, maintain needed erosion control practices such as diversion dikes, sediment basins, waterways, etc.

Grading - Grades on the areas to be topsoiled, which have been previously established, should be maintained.

Liming - Where the pH of the subsoil is .0 or less or the soil is composed of heavy clays, agricultural lime be spread in accordance with the soil test on the vegetative establishment practice being used.

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STANDARD PLAN NO. 903-01	DATED FEBRUARY 25, 2008	SHEET NO. 10 OF 11
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STORM WATER POLLUTION
PREVENTION PLAN
BEST MANAGEMENT PRACTICES

ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE

DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

PROJECT NO.	SHEET
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Topsoiling

Bonding - After and immediately prior to dumping and spreading the topsoil, the subgrade should be loosened by disking and scarifying to a depth of at least two inches to insure bonding of the topsoil and subsoil.

Applying Topsoil
Topsoil should be handled when it is dry enough to work without damaging soil structure. A uniform application of 4 to 6 inches unsettled should be made.

No sod or seed should be placed on soil which has been treated with soil sterilants until sufficient time has elapsed to permit dissipation of toxic materials.

General Notes

There are advantages and disadvantages in topsoiling:

- Stripping, stockpiling, reapplying or importing topsoil may not always be cost-effective. Topsoiling can delay seeding or sodding operations and increase the exposure time of denuded areas. Also, most topsoils contain weed seeds, and weeds may compete with desirable species.
- On the other hand, the advantages of topsoil include its high organic matter content, friable nature, water-holding capacity, and nutrient content, which makes it an excellent medium for growth and greatly reduces chances of failure.

Further, preparing a seedbed in subsoil may be considered instead of topsoiling, as some subsoils may provide a good growth medium which is generally free of weed seeds.

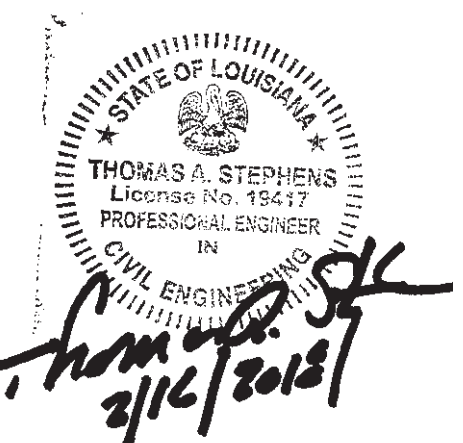
If topsoiling is to be done, it should be determined if an adequate volume of topsoil exists on the site. The stockpile should be located for proper non-erosive drainage and such that it does not interfere with work on the site. Sufficient time should be allowed for spreading and bonding topsoil

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Topsoiling

prior to seeding, sodding or planting; topsoil and subsoil should be properly bonded. Topsoil should not be applied to a subsoil with contrasting texture (as a clay) unless the surface of the subsoil is scarified to provide a good bond with the topsoil.

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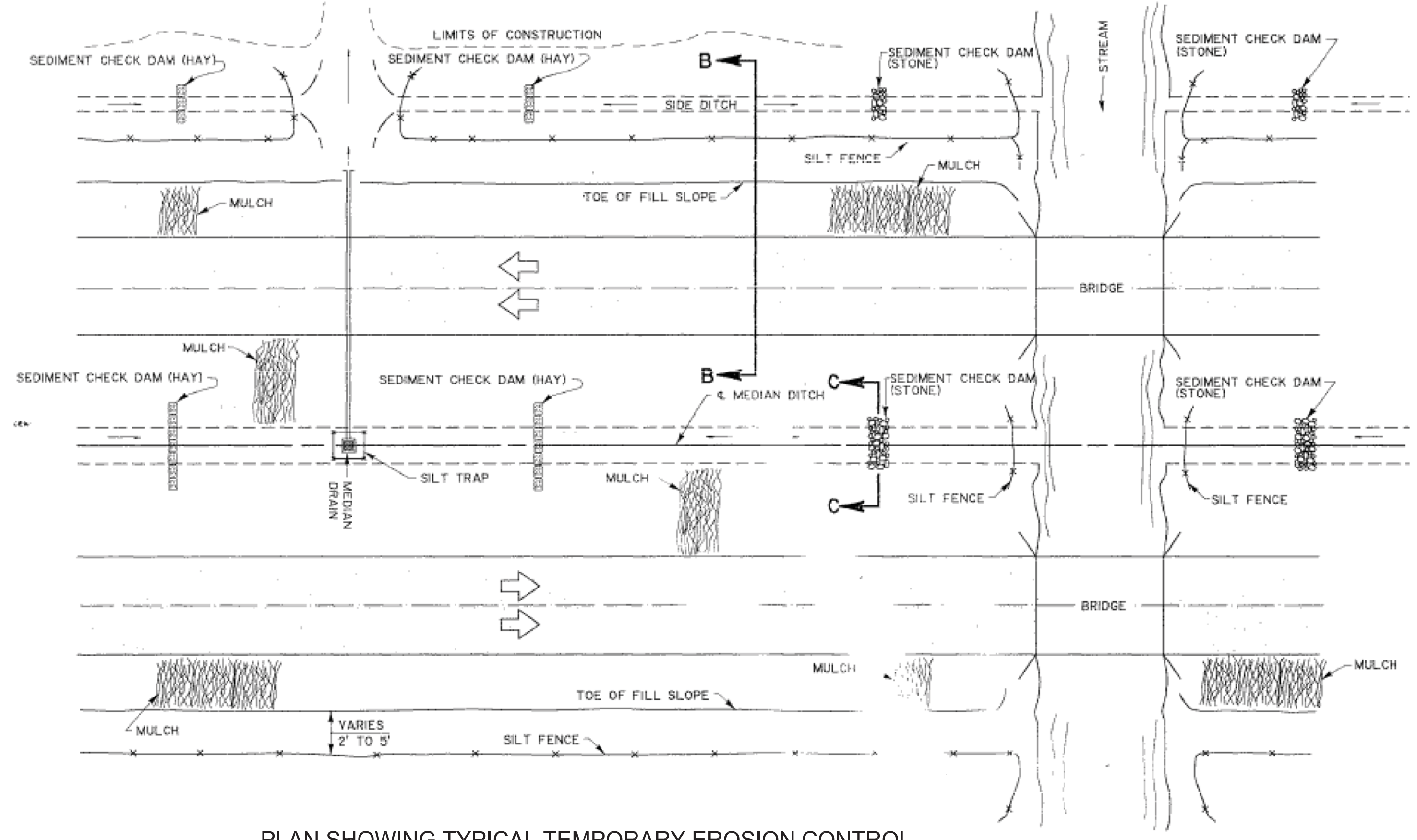


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**STORM WATER POLLUTION
PREVENTION PLAN
BEST MANAGEMENT PRACTICES**

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED	DRAWN	CHECKED	APPROVED
G. CHENG	G. VANNICE	G. CHENG	T. STEPHENS

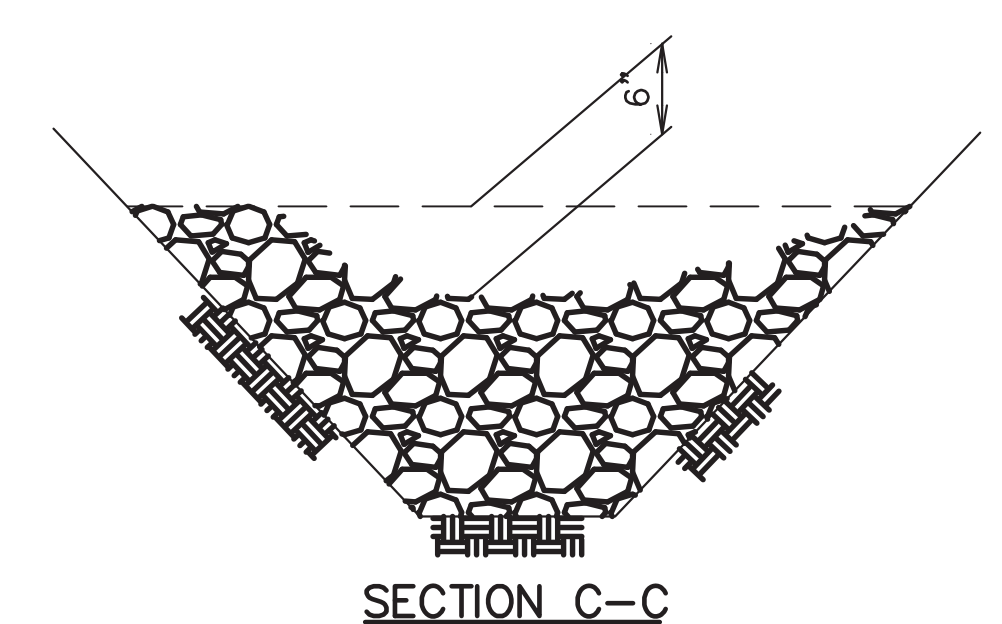
DATE	DESCRIPTION REVISIONS	BY



PLAN SHOWING TYPICAL TEMPORARY EROSION CONTROL

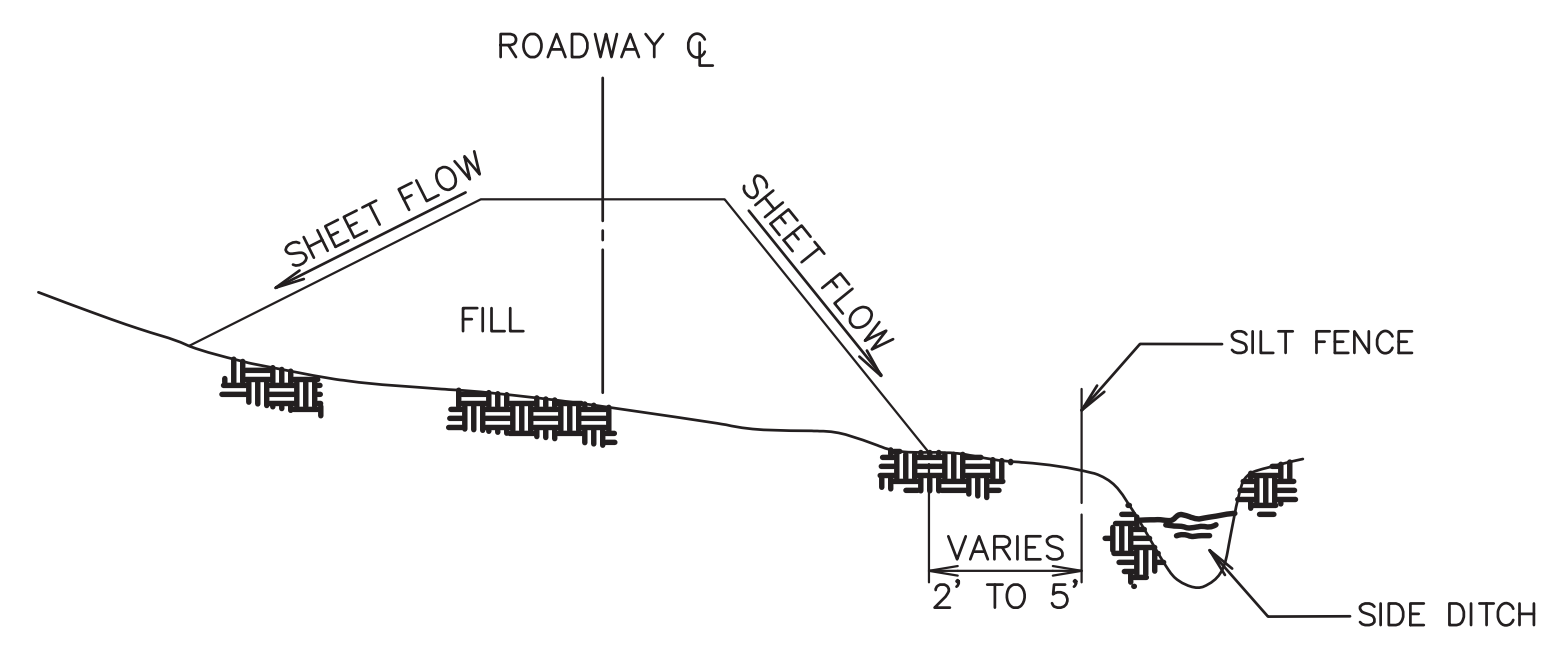
MULCHES:
 Mulches are the application of mats of material placed on the soil surface to prevent erosion by protecting the soil surface from raindrop impact and to reduce the velocity of overland flow. Mulches can be organic or synthetic. Mulches shall be in accordance with the Standard Specifications for mulches. A few guidelines for the use of Mulches are:

1. Use on cut and embankment slopes which have not been completed to plan grade or where the weather or soil conditions will not permit completing them within a reasonable time;
2. Use on cleared, grubbed, and scalped areas where soil erosion is likely to occur;
3. Use with temporary seeding.

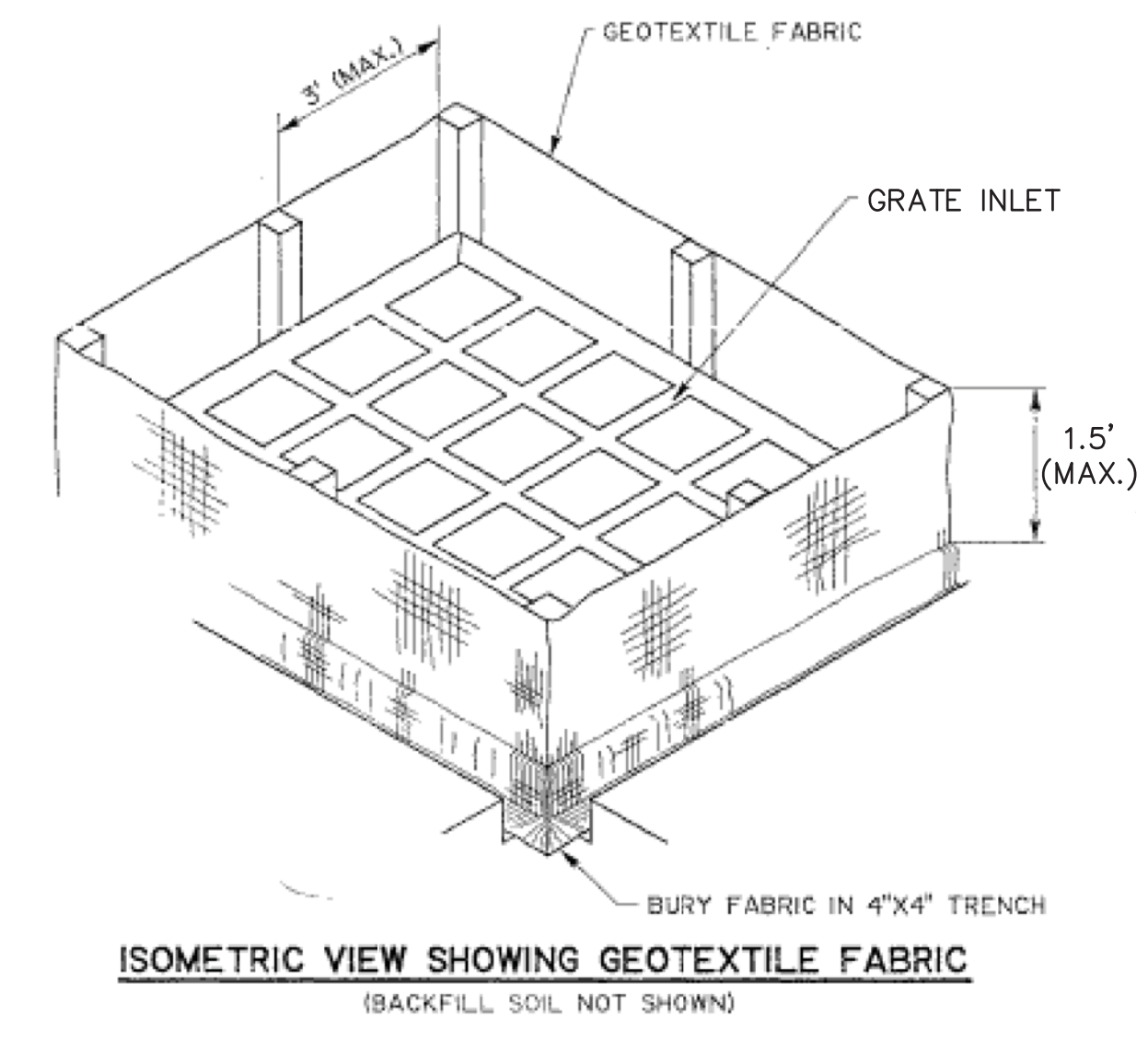


TEMPORARY SEDIMENT CHECK DAM (STONE)

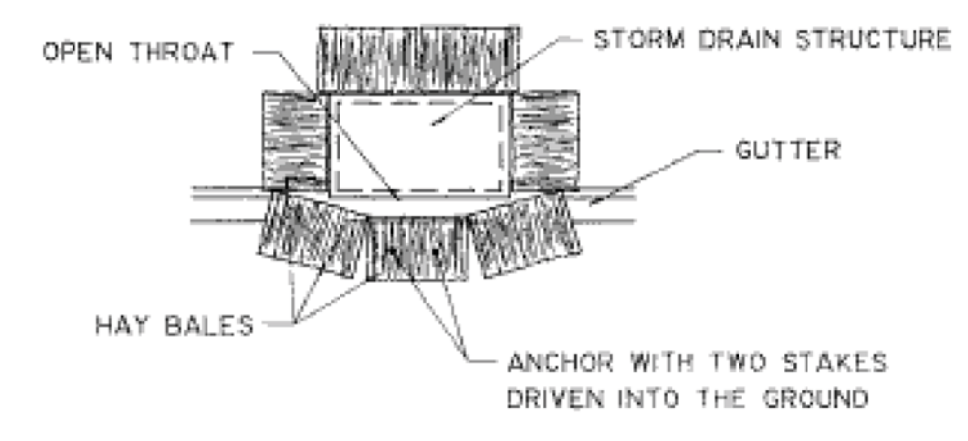
- NOTES:
1. A stone check dam is a small temporary dam constructed across a swale or drainage ditch. The purpose of this measure is to reduce the velocity of concentrated stormwater flows, thereby reducing erosion of the of the swale or ditch. The stone check dam will trap small amounts of sediments generated in the ditch itself, however it should not be used as a sediment trapping device. A few basic design guidelines for the use of Stone Check Dams are:
 2. Use in small open channels which drain 10 acres or less;
 3. Do not use in a live stream;
 4. Use in a temporary ditch or swale which, because of their short length of service, cannot receive a non-erodible lining;
 5. Use in permanent ditches or swales which will not receive a permanent lining for an extended period of time;
 6. use in temporary or permanent ditches or swales which need protection during the establishment of grass linings.
 7. For stone specifications, see Section 705, 2lb class.



TEMPORARY SILT FENCE APPLICATION
 (FOR CONSTRUCTION DETAILS AND SPECIFICATIONS SEE SHEET 2 OF 2)

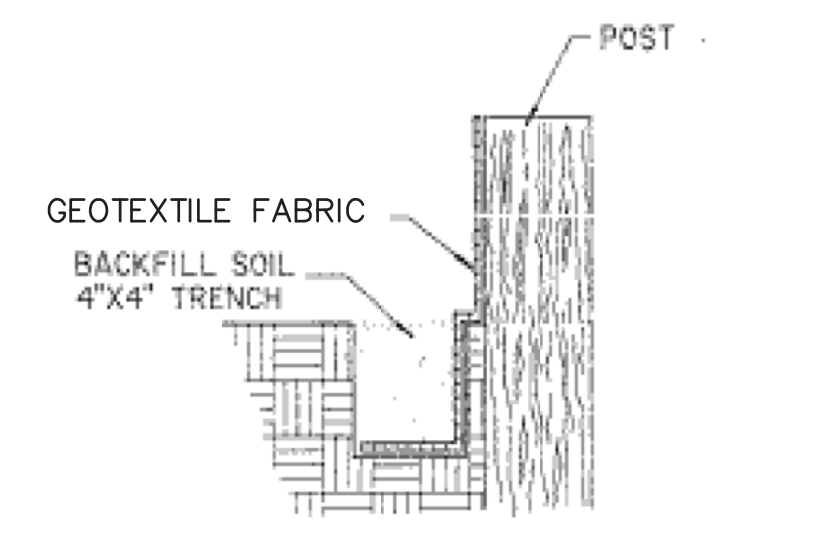


ISOMETRIC VIEW SHOWING GEOTEXTILE FABRIC
 (BACKFILL SOIL NOT SHOWN)



PLAN SHOWING HAY BALES

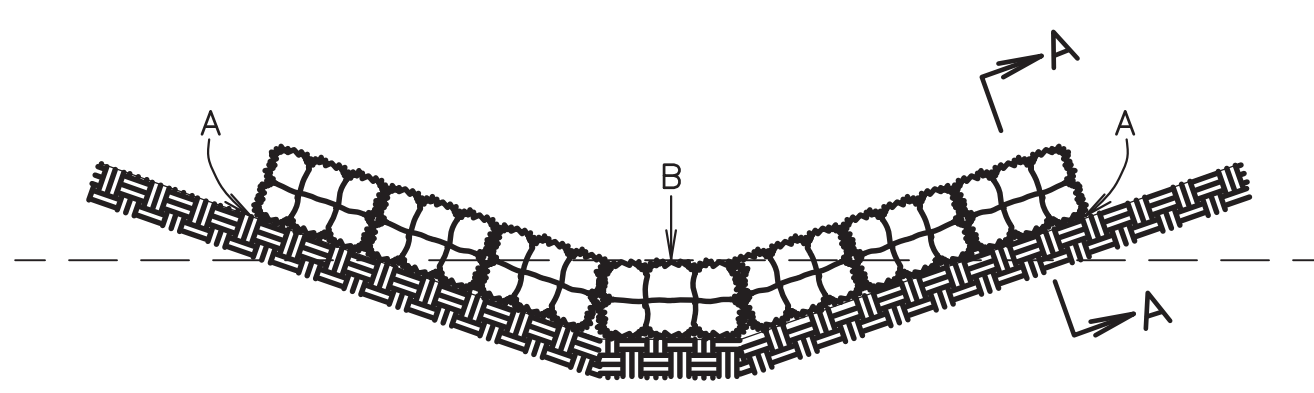
TEMPORARY INLET SILT TRAP



SECTION THRU TRENCH SHOWING GEOTEXTILE FABRIC

NOTES:
 The temporary drop inlet silt trap is to be used for small drainage areas (less than 1 acre) where the storm drain is functional before the area is stabilized. The trap can be either geotextile fabric or hay bales.

1. Wooden stakes supporting the fabric shall be 2" X 2" or 2" X 4" with a minimum length of 3 feet. The stakes shall be spaced around the inlet at a maximum spacing of 3 feet;
2. The height of the fabric above the inlet shall be limited to 1.5' and the bottom of the fabric shall be buried in a trench approximately 4" wide by 4" deep. The fabric shall be stapled to the post with 1/2" staples;
3. The trap should be inspected regularly after each storm. The sediment should be removed and make sure each stake is firmly in the ground.
4. The geotextile fabric shall conform to Type F or G as per Standard Specifications.

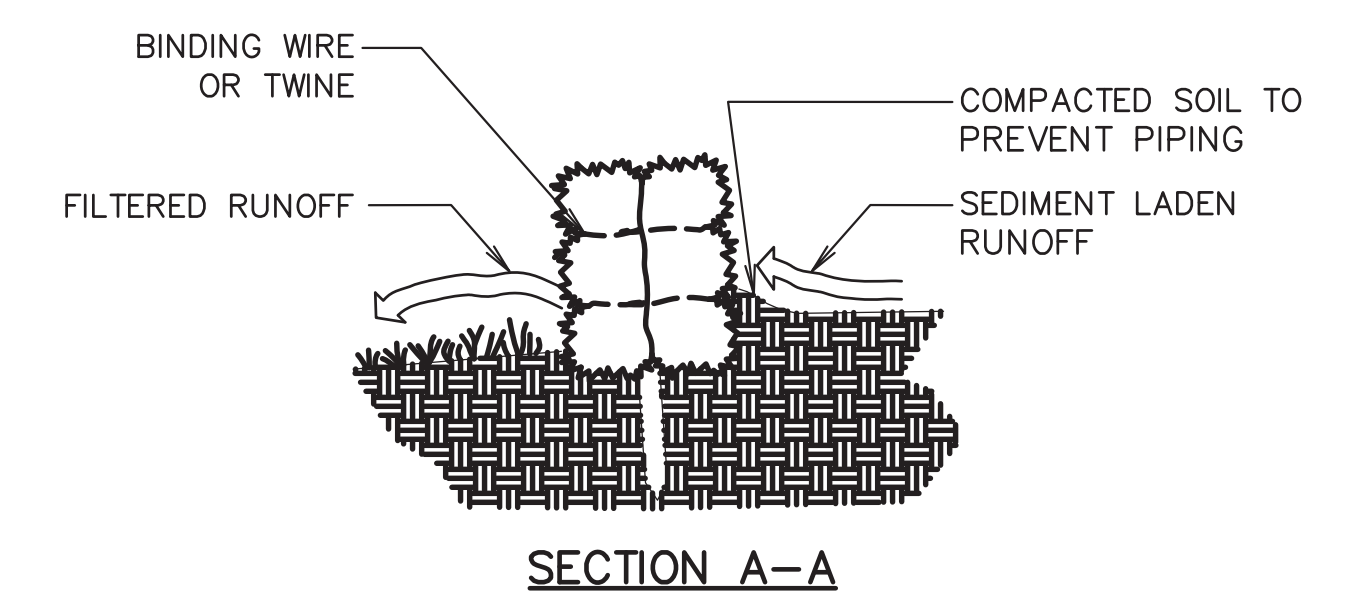


POINTS A SHOULD BE HIGHER THAN POINT B.
 ELEVATION

TEMPORARY SEDIMENT CHECK DAM (HAY)

NOTES:
 A hay bale barrier is a temporary sediment barrier consisting of a row of entrenched and anchored bales of straw or hay. The hay bale barrier is also used as a check dam to reduce the velocity in small ditches or swales. A few basic design guidelines for the use of a Hay Bale Barrier are:

1. Use where erosion would occur in the form of sheet and rill erosion;
2. Use in minor swales or ditches where the maximum drainage area is 2 acres;
3. Only use where the effectiveness is required for less than 3 months;
4. Do not use in live streams or in swales or ditches where there is a possibility of a washout.



SECTION A-A

LADOTD Standard Plan EC-01 has been adopted with modifications for use by the City/Parish as Standard Plan 903-02.

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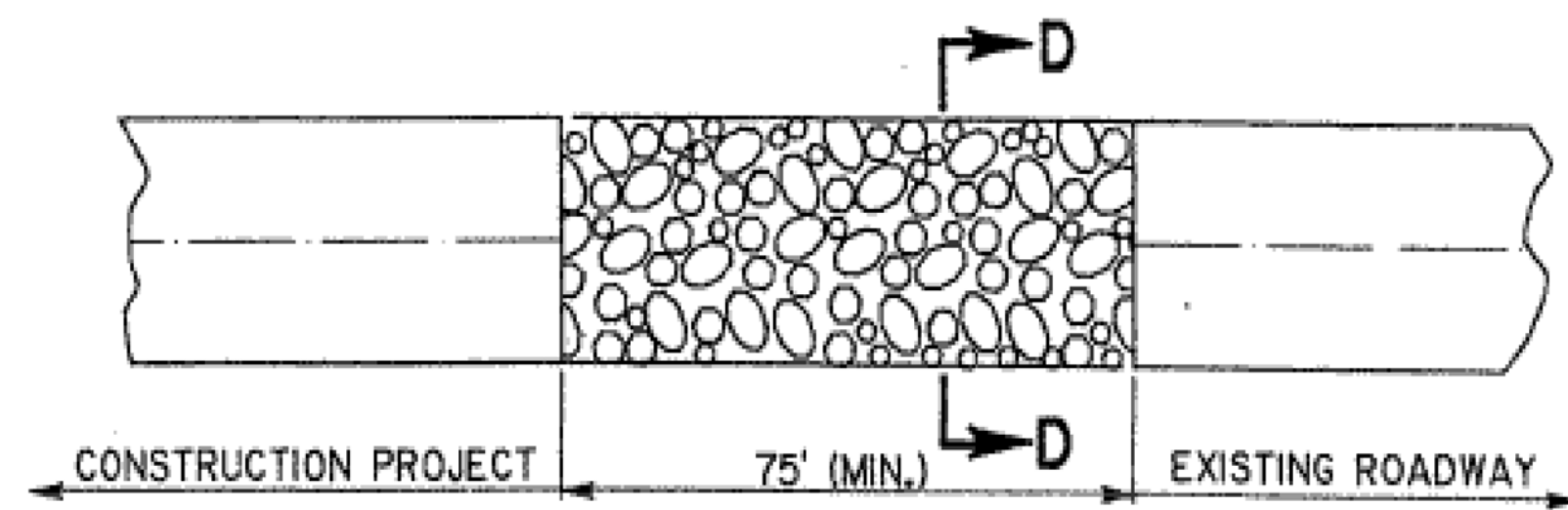
STANDARD PLAN NO. 903-02	DATED November 28, 2009	SHEET NO. 1 OF 2
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TEMPORARY EROSION CONTROL
 INSTALLATION DETAILS

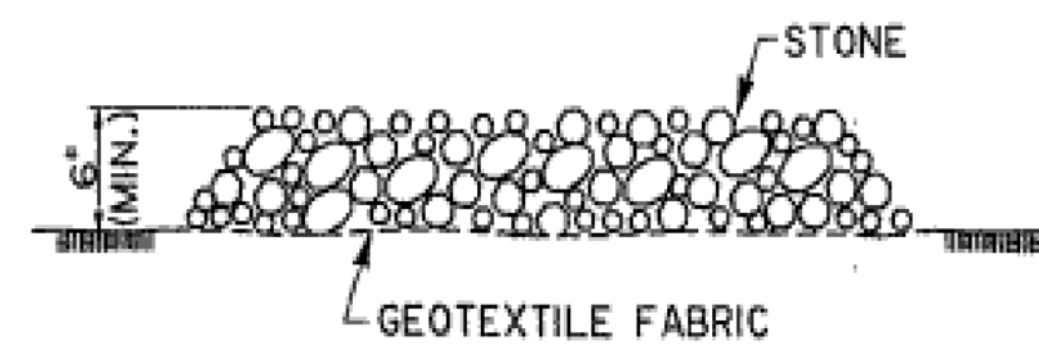
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED G. L. P.	DRAWN G. VANNICE	CHECKED G. L. P.	APPROVED T. STEPHENS

DATE	DESCRIPTION REVISIONS	BY

PROJECT NO.	SHEET
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PLAN



SECTION D-D

TEMPORARY STONE CONSTRUCTION ENTRANCE

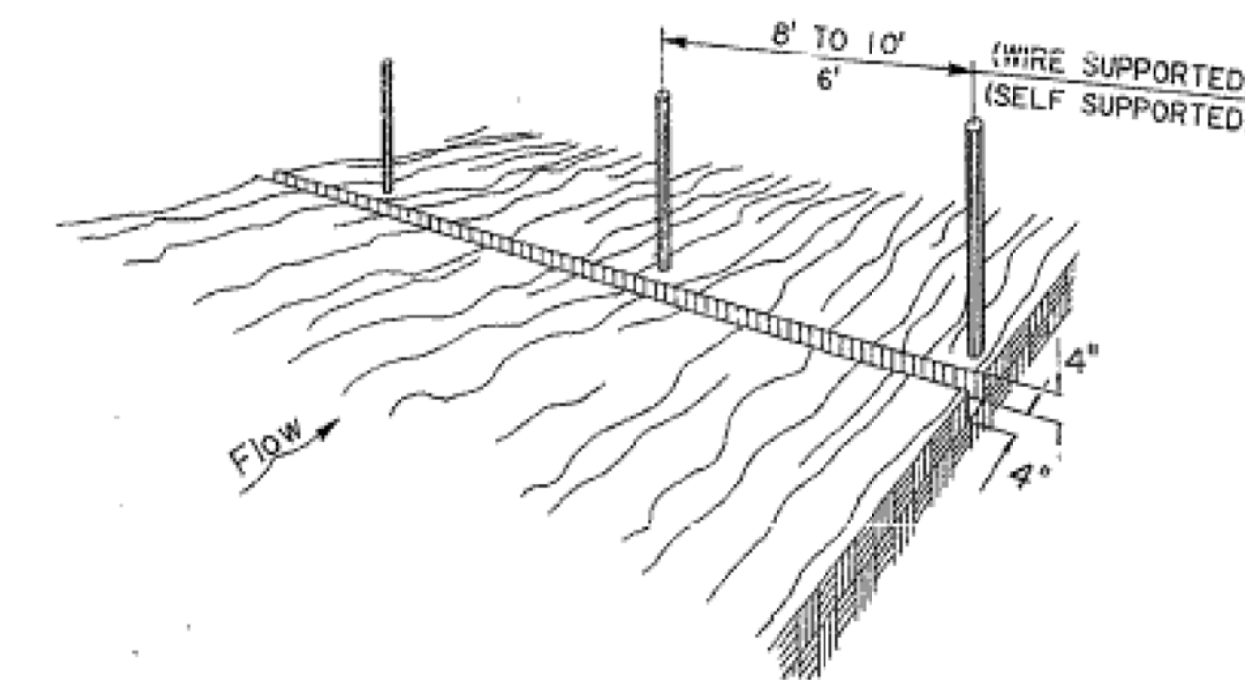
PAY AS SPECIAL ITEM, TEMPORARY STONE CONSTRUCTION ENTRANCE

NOTES:
TEMPORARY STONE CONSTRUCTION ENTRANCE AND/OR WASH RACK

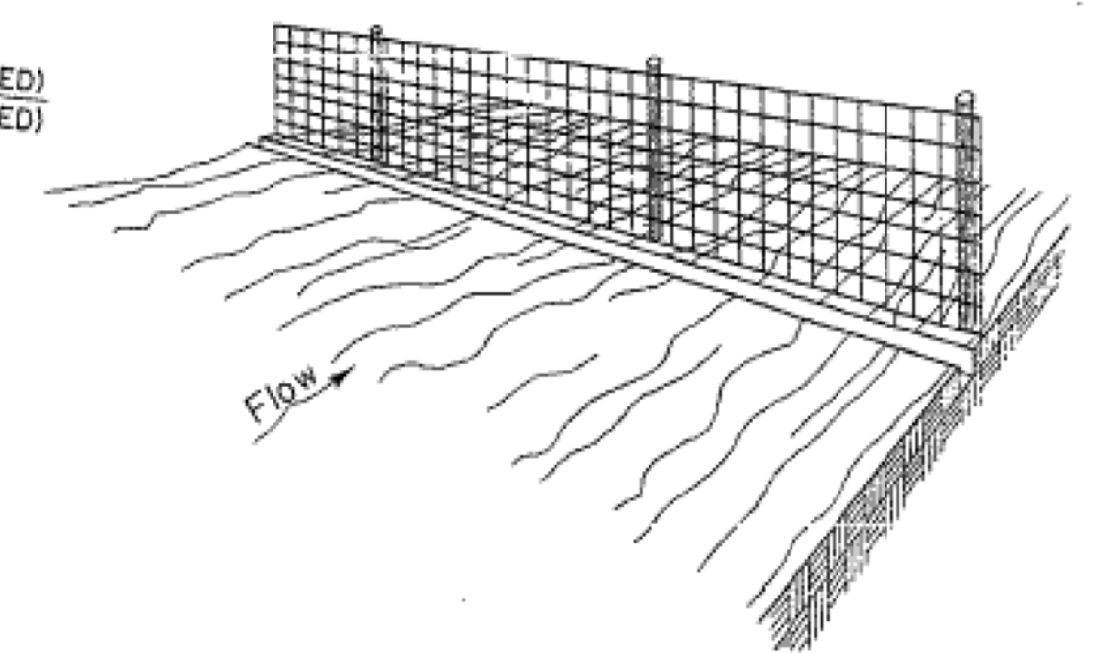
A stone stabilized pad located at points of vehicular ingress and egress on the construction site to reduce the amount of mud transported onto public roads. If the action of the vehicle traveling over the gravel pad is not sufficient to remove the majority of the mud, then the tires must be washed before the vehicle enters a public road. A few basic design guidelines for the use of a Stone Construction Entrance and/or Wash Racks are:

1. The stone layer must be a least 6 inches thick;
2. The length of the pad must be at least 75 feet and it must extend the width of the vehicular ingress and egress;
3. A geotextile fabric underliner is required. The geotextile fabric shall be Type D or per the Standard Specifications;
4. If a wash rack is necessary, provisions must be made to intercept the wash water and trap the sediment before it is carried off-site.
6. For stone specifications, see Section 705, 2lb class.

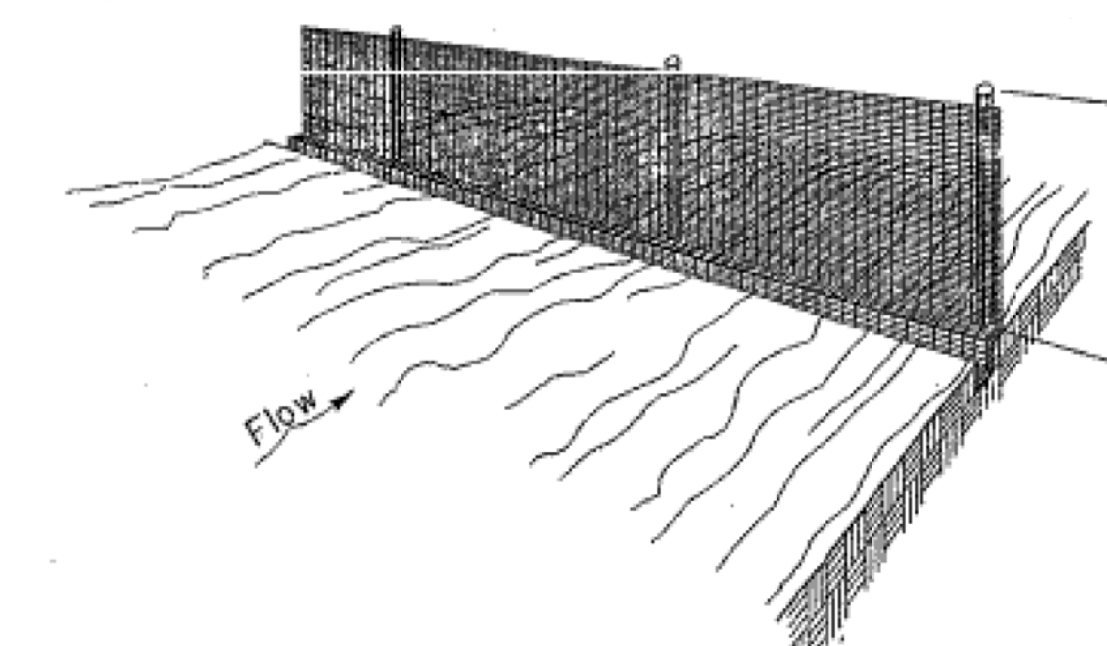
1. SET POSTS AND EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



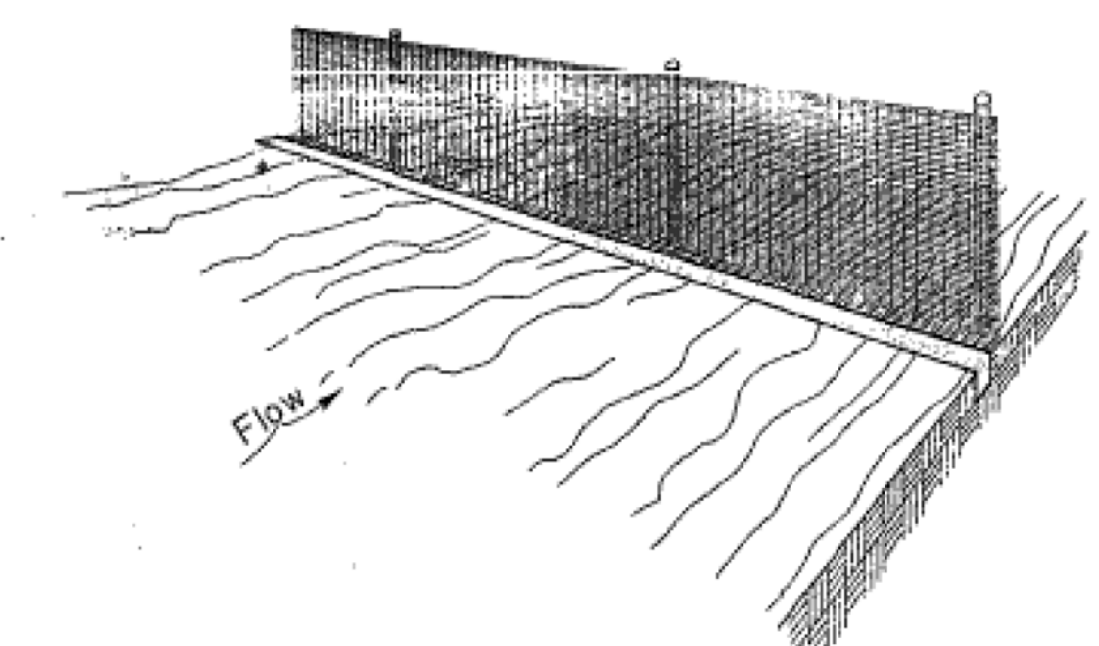
2. STAPLE WIRE FENCING TO THE POSTS.



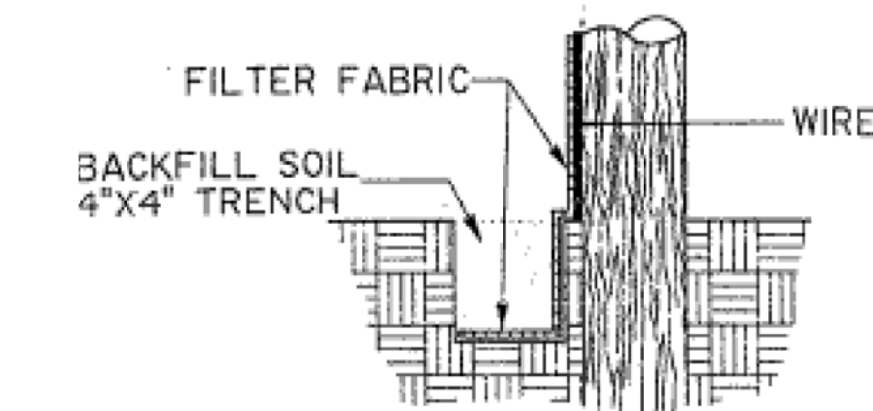
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT EXCAVATED SOIL.



EXTENSION OF FABRIC INTO THE TRENCH.

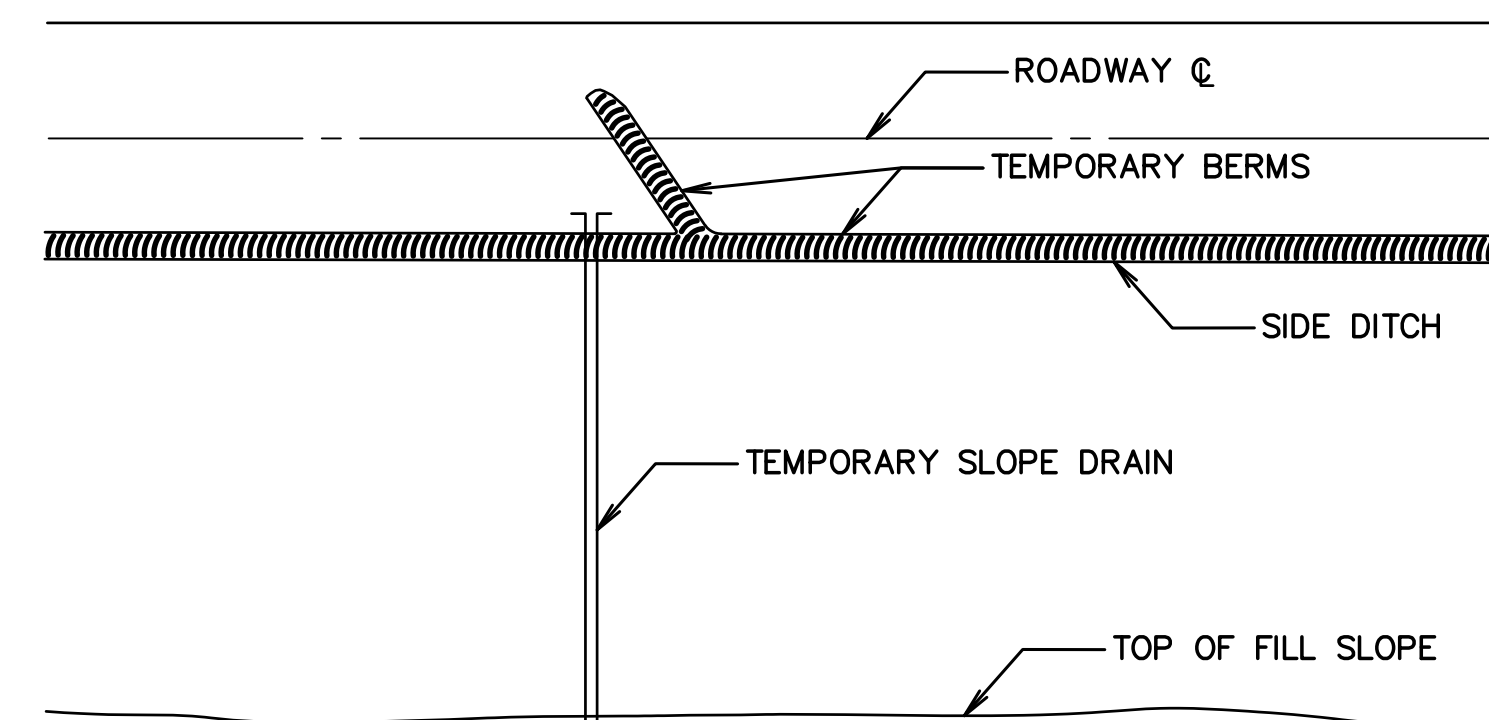


CONSTRUCTION OF TEMPORARY SILT FENCING

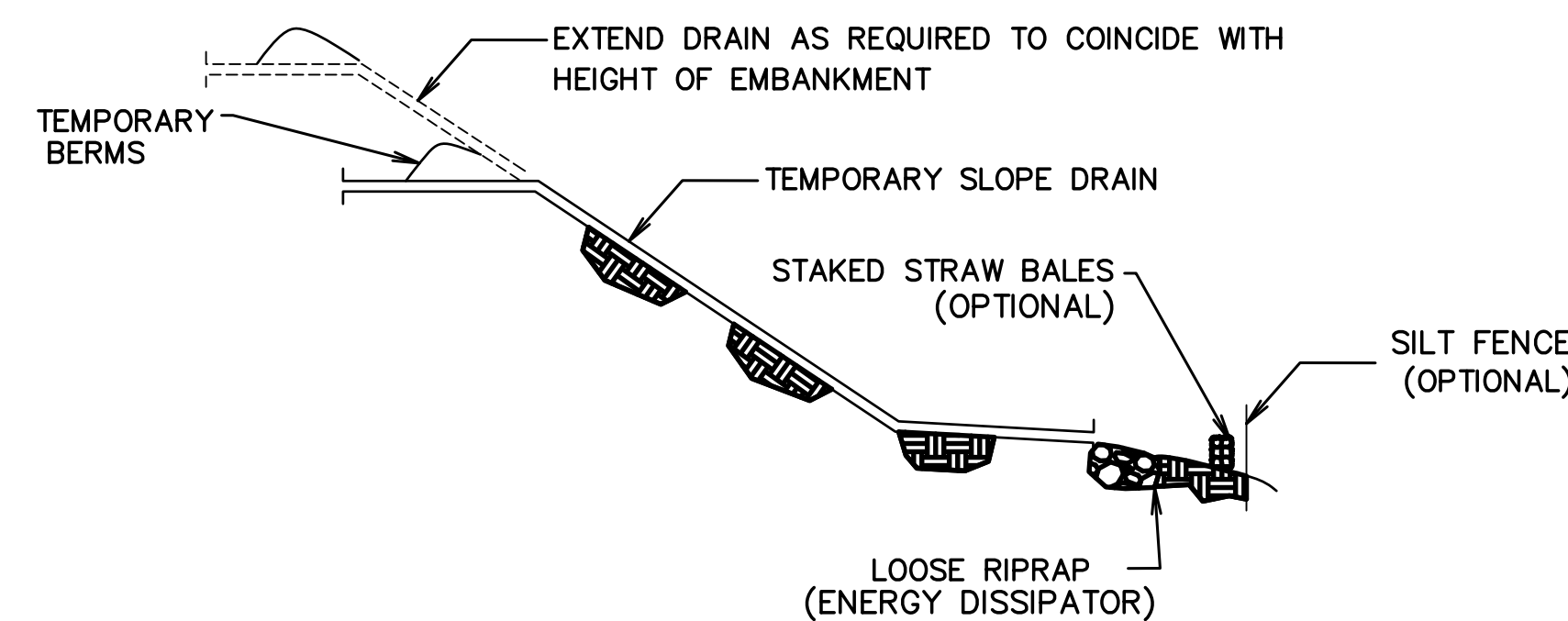
(WIRE SUPPORTED SILT FENCE IS SHOWN. SELF SUPPORTED SILT FENCE WILL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.)

NOTES:
Silt fencing is a temporary sediment barrier consisting of a filter fabric support by post and stretched across an area to intercept and detain small amounts of sediment. Silt fencing shall be in accordance with Section 903 of the Standard Specifications. A few basic guidelines for the use of Silt Fencing are:

1. Use where erosion would occur in the form of sheet and rill Erosion;
2. Use where the maximum drainage area behind the silt fence is 1/4 acre per 100 feet of silt fence length;
3. Use where the maximum slope length behind the barrier is 100 feet;
4. Use where the maximum gradient behind the barrier is 2:1;
5. Do not use silt fences in live streams or in ditches or swales where flows exceed one cubic foot per second.



PLAN

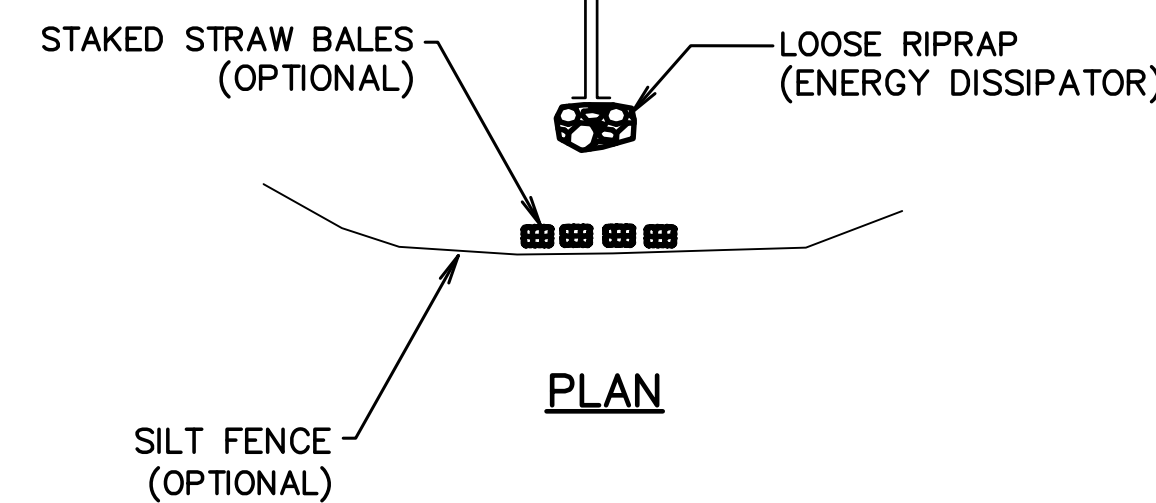


ELEVATION

NOTES:
A temporary slope drain is a device used to carry water from the construction work area to a lower elevation. Slope drains may be plastic sheets, metal or plastic pipe, stone gutters, fiber mats, or concrete or asphalt ditches. A few basic design guidelines for the use of a Temporary Slope Drain are:

1. The spacing of the slope drains varies with the road grade.
For Grades: 0.0% - 2.0% use 500' spacing
2.1% - 5.0% use 200' spacing
Greater than 5.0% use 100' spacing
2. Slope drain material: Smooth pipe - 8" minimum
Corrugated pipe - 12" minimum
Plastic sheeting - 4" wide minimum
Plastic sheeting - 3 mils thick minimum
3. Plastic sheeting can be staked down or weighted with rocks or Logs. The area under the sheeting should be shaped to provide an adequate channel.
4. The outlet end should be protected or have some means of dissipating energy. The flow should be directed through a sediment trap such as silt fence or hay bales.
5. To insure proper operation, temporary slope drains should be inspected regularly and after each storm, for clogging or displacement. Erosion at the outlet should be checked and the slit traps cleaned if necessary.

TEMPORARY SLOPE DRAIN



DATE	DESCRIPTION	BY
	REVISIONS	

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2/16/2015

STANDARD PLAN NO. 903-02	DATED November 28, 2009	SHEET NO. 2 OF 2
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TEMPORARY EROSION CONTROL
INSTALLATION DETAILS

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED G. L. P.	DRAWN G. VANNICE	CHECKED G. L. P.	APPROVED T. STEPHENS

GENERAL PROVISIONS

- All Temporary Traffic Control (TTC) Devices used shall be in accordance with the City-Parish Standard Specifications for Public Works Construction, the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), and the requirements of the National Cooperative Highway Research Program (NCHRP) 350 for Test Level 3. The MUTCD is available at <http://mutcd.fhwa.dot.gov/>
- The Contractor shall provide one or more authorized Traffic Control Supervisor (TCS) in accordance with the Standard Specifications.
- Materials used for Temporary Traffic Controls shall be in accordance with the City-Parish Standard Specifications for Public Works Construction and when applicable the City-Parish Qualified Products List (C-P QPL).
- No temporary traffic controls shall be erected without the approval of the City-Parish Traffic Engineer and until work is about to begin, unless they are covered.
- No lane closures, lane shifts, diversions, or detours shall occur without the authorization of the City-Parish Traffic Engineer.
- Responsibility is hereby placed upon the contractor for the installation, maintenance, and operation of all temporary traffic control devices called for in these plans or required by the Project Engineer for the protection of the traveling public as well as all Department and construction personnel. All reflective devices such as signs, drums, barricades, vertical panels, delineators of any type, etc. shall be cleaned or washed periodically to maintain their effectiveness, as required by conditions or Project Engineer.
- The contractor shall also be responsible for the maintenance of all permanent signs and pavement markings left in place as essential to the safe movement and guidance of traffic within the project limits.
- The City-Parish Traffic Engineer shall serve as a technical advisor to the Project Engineer for all Traffic Control matters.
- "Road Work XX Miles" sign shall be required on all projects and located at beginning of the project unless otherwise noted. The sign shall be a minimum Thirty-Six (36) inch X Sixty (60) inch unless otherwise noted.
- Warning signs used for lane closures or lane shifts in which the roadway shall be returned to full public use within Fourteen (14) hours or less may be placed on NCHRP350 approved portable sign frames.
- The City-Parish will approve any detour route marking required to guide travelers around the construction area, but the contractor will be responsible for the required signage.

SPEED LIMITS

- Speed limits shall be lowered by Ten (10) mph for any construction, maintenance, or utility operation that requires one or more of the following: (A) the condition of the original highway is degraded due to milled surfaces or uneven pavements; (B) work is in progress in the immediate vicinity of the travel way requiring lane closures, lane width reductions, or low speed diversions; (C) workers present on the shoulder within Two (2) ft of the edge of traveled way without barrier protection.
- The reduced speed zone shall only apply to those portions of the project limits affected. The Project Engineer may allow SPEED LIMIT WHEN FLASHING signs to supplement reduced speed zones.
- At the end of the reduced speed zone, a speed limit sign displaying the original speed limit before construction shall be installed.
- If conditions warrant, the City-Parish Traffic Engineer may authorize the reduction of the speed limit by more than Ten (10) mph.

PAVEMENT MARKINGS (see C-P QPL)

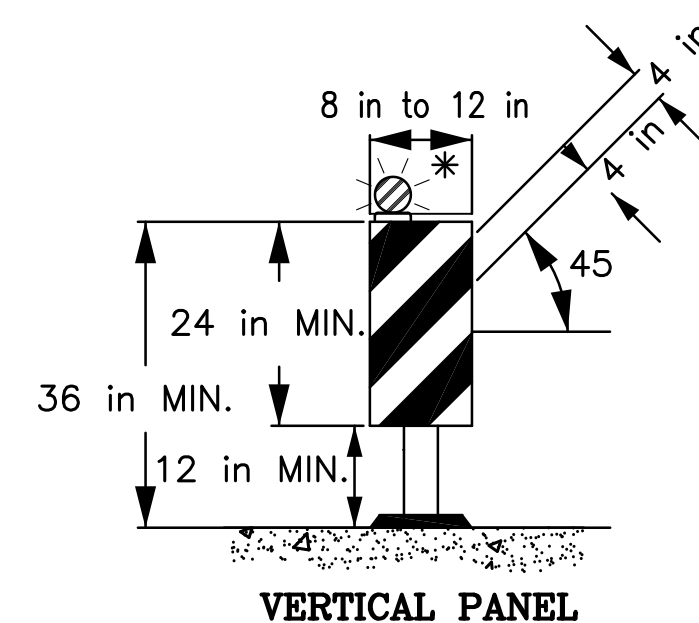
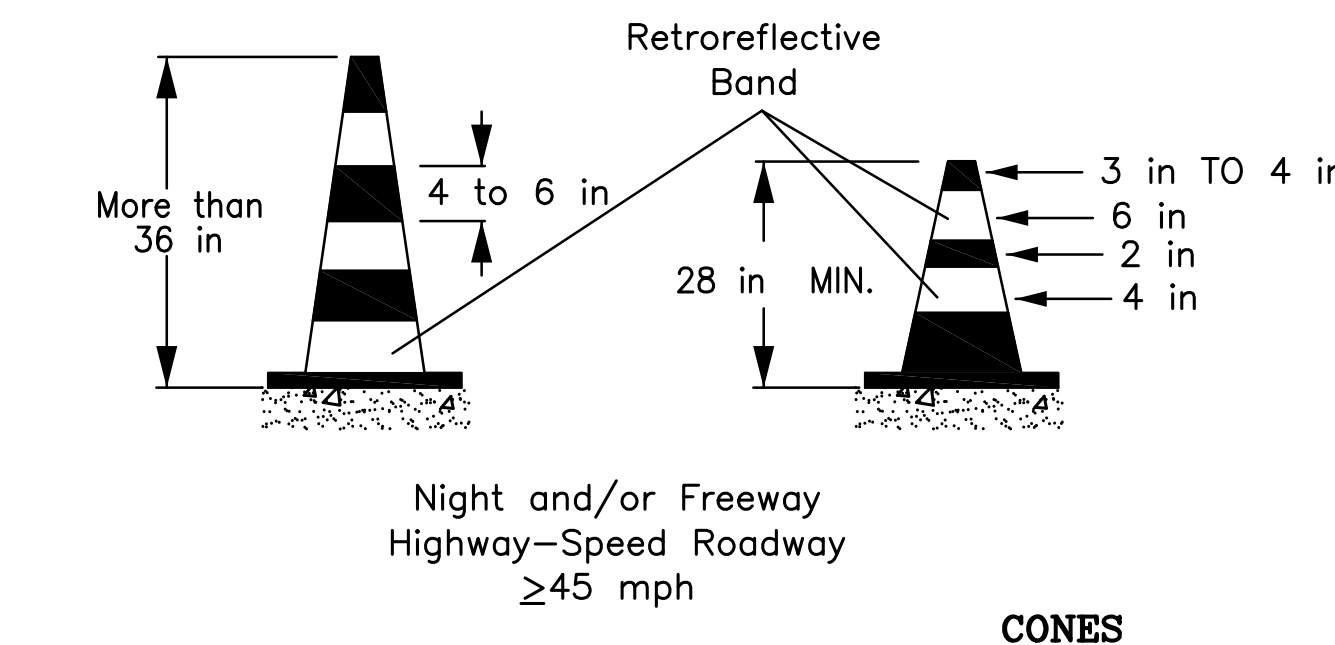
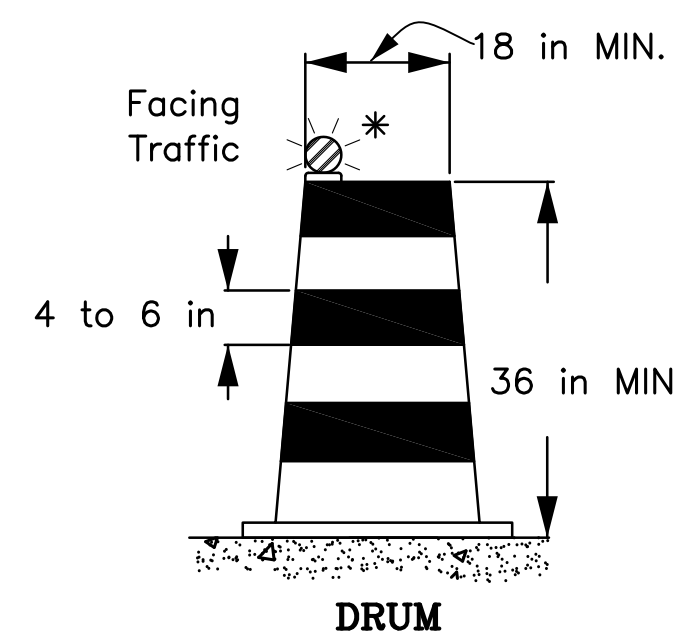
- All pavement markings within the limits of the project that are in conflict with the project signing or the required traffic movements shall be removed from the pavement by blast cleaning or grinding (Existing striping shall not be painted over with black paint or covered with tape).
- If special pavement markings are needed, they shall be reflectorized, removable, and accompanied by the proper signage.
- Temporary Raised Pavement Markers (RPMs) may be added to supplement temporary striping in areas of transition, in tapers, in detours, and in other areas of need as directed by the Project Engineer.
- Materials and placement of temporary pavement markings shall conform to Section 905 of the Standard Specifications. If no pay item exists, temporary markings will be considered incidental to traffic control.

SIGNS

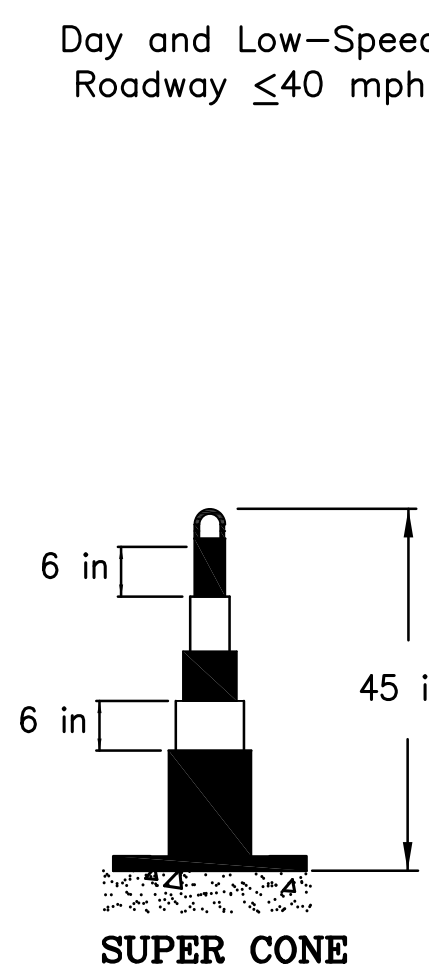
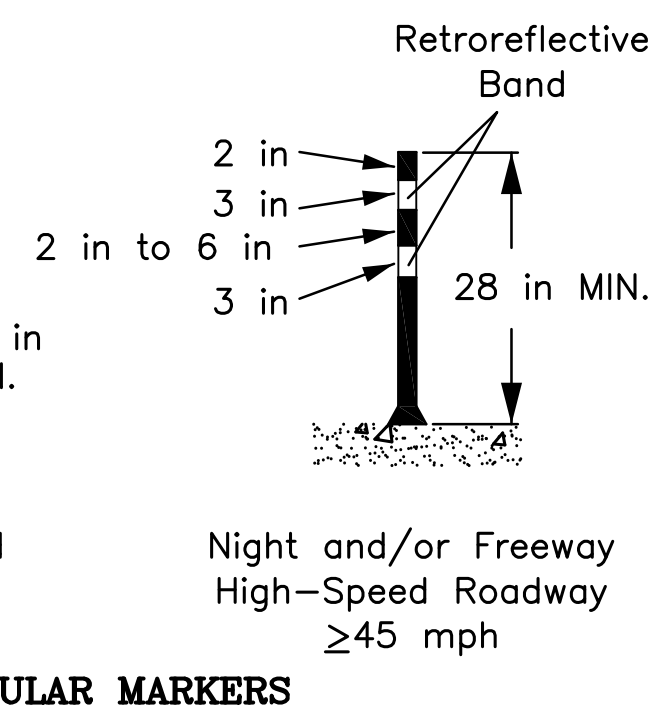
- All signs used for temporary traffic controls shall follow the Department's Standard Plans and the MUTCD. Signs shown in the Standard Plan illustrations are typical and may vary with each specific condition.
- More appropriate signing for a specific condition may be required or substituted with the approval of the Project Engineer and reviewed by the City-Parish Traffic Engineer.
- When projects are separated by less than one mile, they shall be signed as one project.
- At no time shall signs warning against a particular operation be left in place once the operation has been completed or where the obstacle has been removed.
- Signs over Ten (10) sq ft shall be mounted on two post and signs over Twenty (20) sq ft shall be mounted on at least three post.
- Signs shall have a minimum of Two (2) bolts per post.
- Permanent signs no longer applicable or in conflict shall be removed or covered with a strong, lightweight, opaque material.
- Warning signs used for temporary traffic controls shall meet the following guidelines unless otherwise noted in the plans: (A) size shall be Forty-Eight (48) ft X Forty-Eight (48) ft, (B) see the Departments Standard Specifications and the C-P QPL for sheeting information, (C) a minimum of a Two (2) lb U-Channel post may be used driven to a minimum depth of Three (3) ft, (D) sign height shall be a minimum of Five (5) ft above the roadway surface unless there is a concern for pedestrians or bicycle traffic in which it shall be a minimum of Seven (7) ft, (E) lateral distance of signs shall be a minimum of Six (6) ft from the edge of shoulder or edge of pavement if no shoulder exist and Two (2) ft from the back of curb in urban areas.
- Vinyl Roll Up signs will be allowed for short term (less than Twelve (12) hours) daytime work provided that they meet all size, color, retroreflectivity requirements, and NCHRP 350.
- Mesh rollup signs shall not be allowed on any project.
- All signs shall be removed or covered when no longer applicable.
- Contractor shall use caution not to damage existing signs which remain in place. Any signs damaged by work operations shall be replaced at the Contractor's expense.

CHANNELIZING DEVICES

- The following devices may be used: Tubular Markers, Vertical panels, Cones, Drums, and Super Cones. Drums (at standard spacing) and Super Cones (at 1/2 Standard spacing) are the only devices allowed to be used in taper area on the interstate system during daylight hours. Only drums can be used in tapers during night operations.
- Retroreflective material pattern used on super cones shall match that used on drums and conform to Section 1020-1.2(C) of the Standard Specifications.
- Spacing of channelizing devices such as cones, panels, drums, and Type I or II barricades shall not exceed a distance in feet equal to the speed limit when used for taper channelization and a distance in feet of twice the speed limit when used for tangent channelization.
- Twenty-Eight (28) inch traffic cones are not allowed on: 1) interstates, 2) Highways with speeds greater than Forty (40) mph.
- During night time operations: 1) Twenty-Eight (28) inch and Thirty-Six (36) inch cones are not allowed, 2) drums are the only device allowed in the taper.

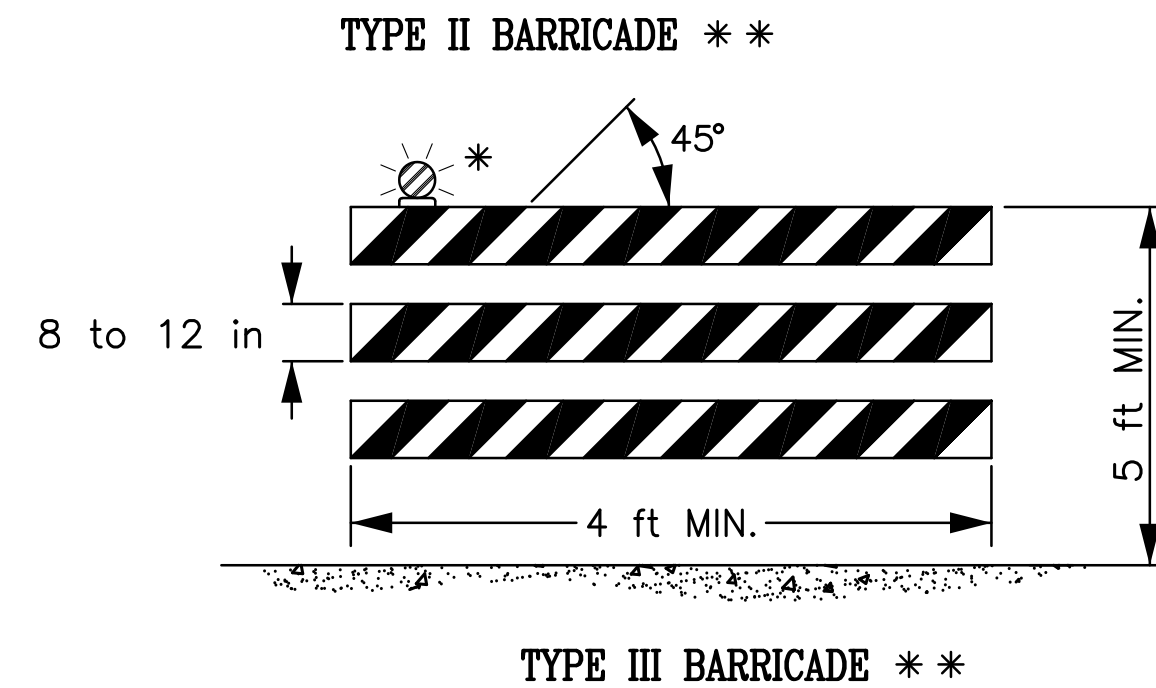
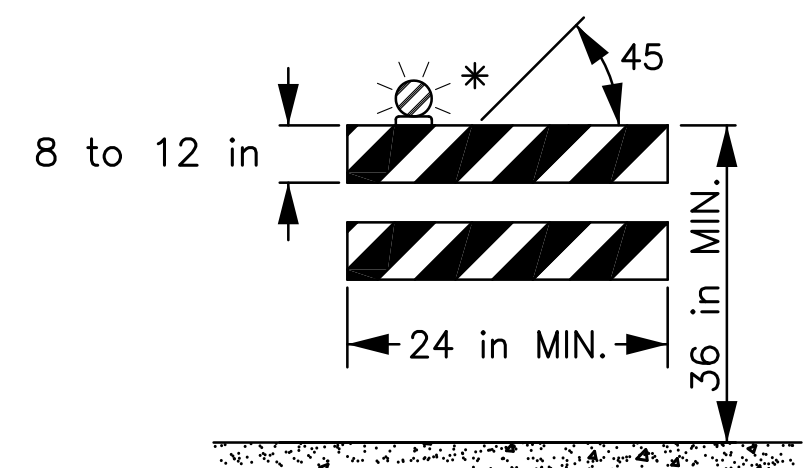
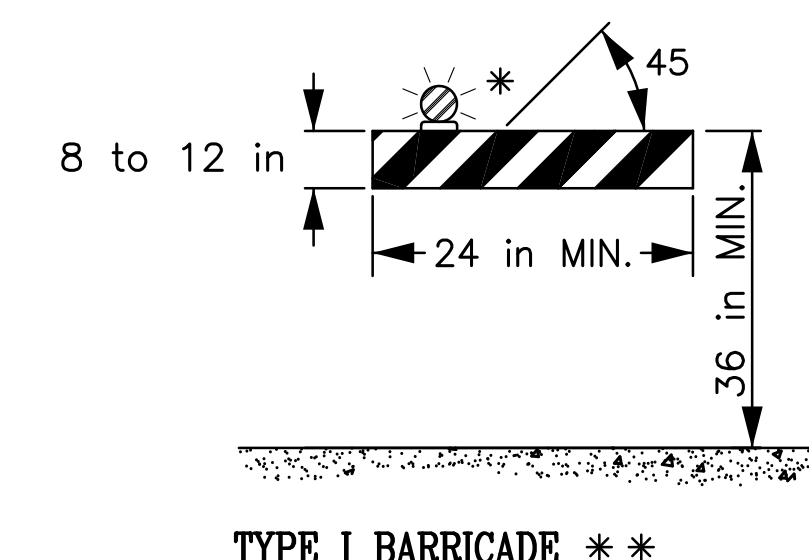


* Warning light (optional)



BARRICADES

- Barricades shall be designed and applied in accordance with these Standard Plans and the current MUTCD guidance. Generally three types of barricades are used as below. Specific project applications shall be reviewed and approved by the City-Parish Traffic Engineer and shall not be deployed without such approval.
- Steady burn lights shall be used when barricades are used in a series for channelization.
- Type I barricades shall be used on low speed roads or urban streets.
- Type II barricades shall be used on high speed roads.
- Type III barricades shall be used to close a road section to traffic and shall extend completely across a roadway and its shoulders or from curb to curb.
- When signs and lights are to be mounted to a barricade, they must meet NCHRP 350 requirements.



* Warning light (optional)

** Rail stripe widths shall be Six (6) inch, except that Four (4) inch wide stripes may be used if rail lengths are less than Thirty-Six (36) inch. The sides of barricades facing traffic shall have retroreflective rail faces.



DATE	DESCRIPTION	BY

STANDARD PLAN NO. 905-01	DATED JULY 3, 2019	SHEET NO. 1 OF 2
TEMPORARY TRAFFIC CONTROL		
ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED MUTCD	DRAWN G. C. HENG	CHECKED S. EDEL
APPROVED	I. PARTENHEIMER	

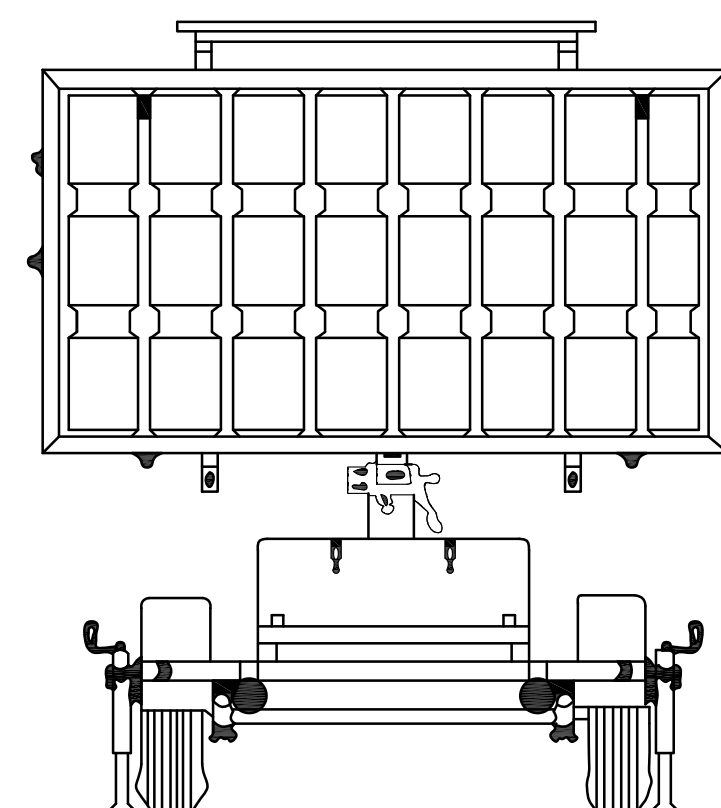
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LIGHTING

- All temporary lighting shall be LED.
- Lighting shall supplement barricades that close one or more lanes or that extends across the roadway. A minimum of two lights will be used, but where a travel way ends immediately after a barricade, a minimum of Four (4) lights shall be used. Lighting shall be by approved electrical installations. Battery operated equipment shall conform to NCHRP 350.
- High intensity flashing lights shall be used to mark the first advance warning sign.
- Low intensity flashing lights shall be used to mark all other hazards off the travel way.
- Steady burning lights shall be used on all traffic control devices used for channelizations.
- Flashing units will be mounted as high as possible and battery compartments shall be mounted Six (6) inches from the ground.

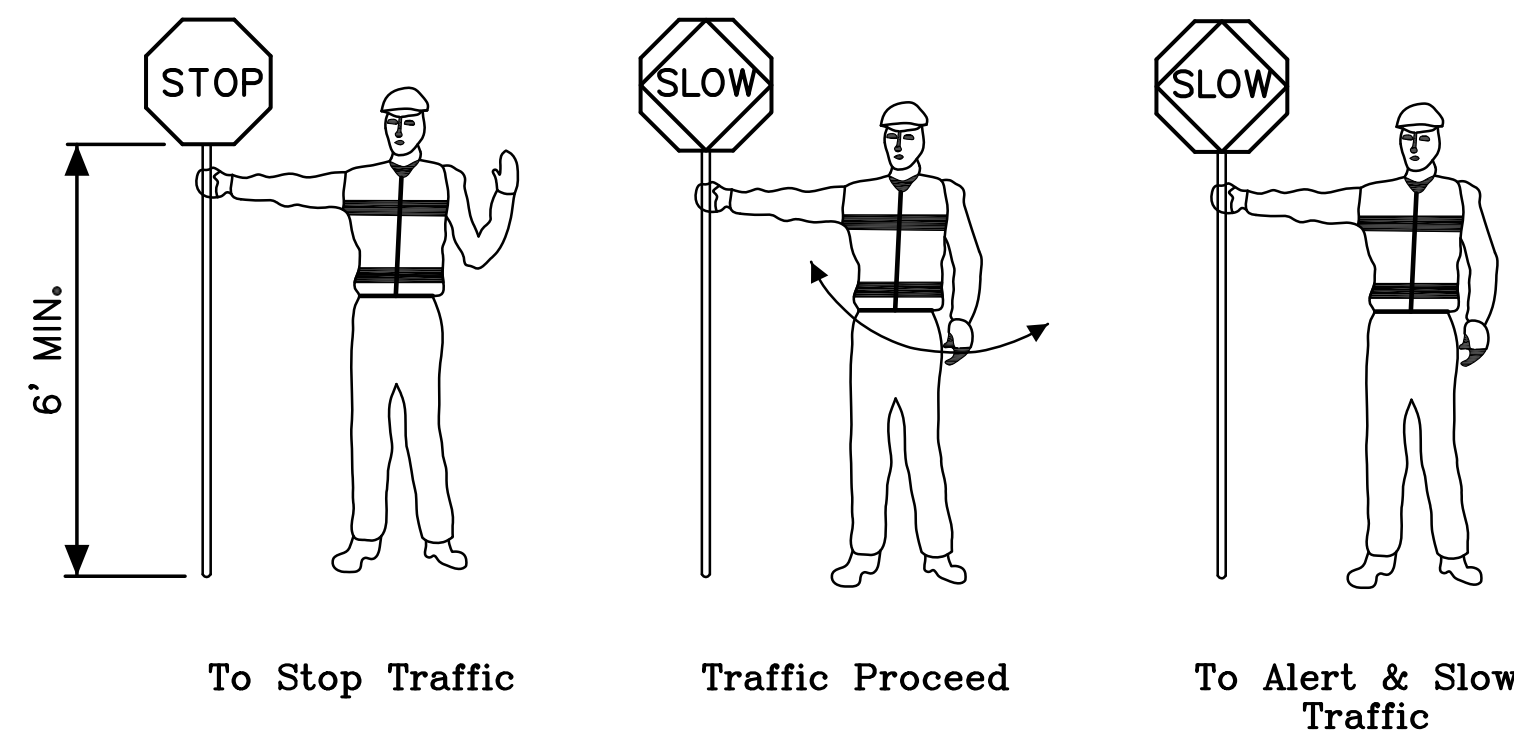
PORTABLE CHANGEABLE MESSAGE SIGNS

- When working within the traveled way, including shoulders and auxiliary lanes. Changeable Message Signs (CMS) shall be used on all Interstate Highways and on all other roadways (where space is available) with an ADT greater than Twenty Thousand (20,000) and should be delineated with retroreflective TTC devices.
- When used in advance of a lane closure or a lane shift, the CMS should be placed on the right hand side of the road a minimum distance of Two (2) miles in advance of the taper for Interstates and to be determined by the City-Parish Traffic Engineer on other roadways.
- CMS messages shall be approved by the City-Parish Traffic Engineer.
- When Portable Changeable Message signs are not being used, they should be removed; if not removed, they should be shielded by guardrail or barriers; or if the previous Two (2) options are not feasible, they should be delineated with retroreflective TTC devices.



FLAGGERS

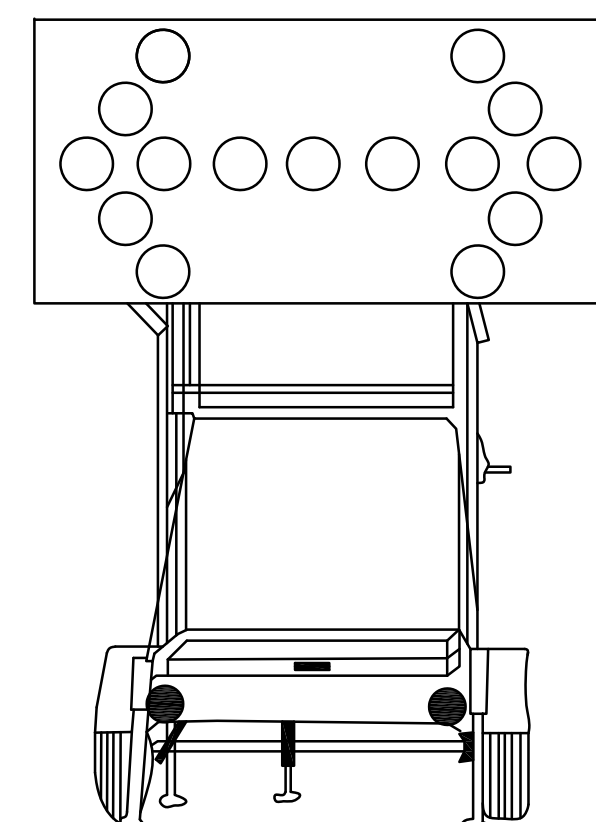
- All flaggers must be qualified. The contractor shall be responsible for training or assuring that all flaggers are qualified to perform flagging duties. A certificate indicating completion of a flagger training course shall be available to the engineer if requested. A Qualified Flagger is one that has attended courses such as those offered by the American Traffic Safety Services Association (ATSSA) or other courses approved by the City-Parish.
- When utilized, a flagger shall use a minimum Eighteen (18) inch sign on a minimum Six (6) ft stop/slow paddle and wear ANSI Class 2 vest during day time operations and ANSI Class 3 ensemble during night operations. In all flagging operations, the flagger must be visible from flagger advance warning sign.
- Flagger stations shall be in a highly visible location far enough in advance of the work site so that approaching traffic will have sufficient distance to reduce speed before entering the project. 200-300 feet is desirable. In urban areas, the advances distance may be decreased.



USE OF HAND SIGN

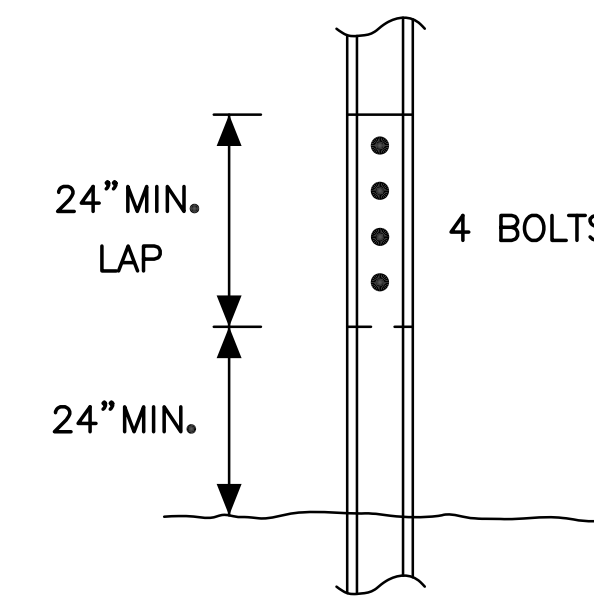
FLASHING ARROW PANELS

- Flashing Arrow Panels shall be used for lane closures on all facilities with Two (2) or more lanes in a single direction and a speed limit greater than Thirty-Five (35) mph.
- When used, flashing arrow panels should be located on the shoulder at the beginning of the taper.
- Where the shoulder width is limited, the flashing arrow panel should be placed within the closed lane as close to the beginning of the taper as practical.
- All Flashing Arrow Panels shall be Four (4) ft x Eight (8) ft Type C with LED lighting.
- When Flashing Arrow Panels signs are not being used, they should be removed; if not removed, they should be shielded by guardrail or barriers; or if the previous two options are not feasible, they should be delineated with retroreflective TTC devices.



ALLOWABLE LAP SPLICE FOR U-CHANNELL POST

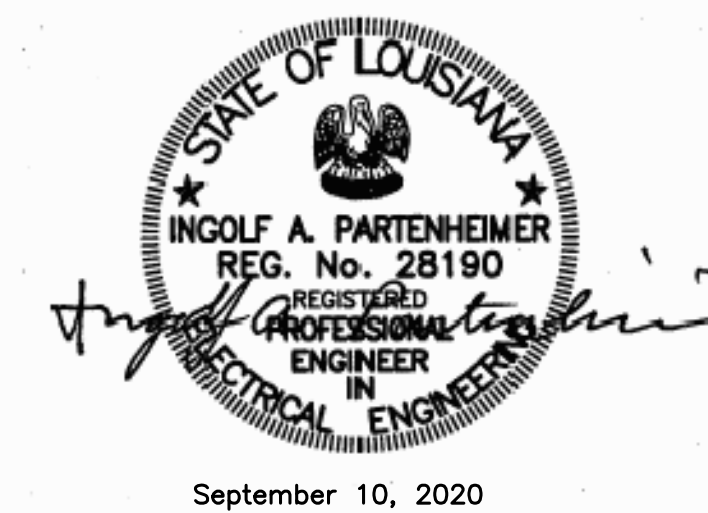
U-channel posts may be spliced where long length are required. The upper section shall overlap the lower section by at least Twenty-Four (24) inches. The bottom edge of the upper section of the splice shall be a minimum of Twenty-Four (24) inches above the ground. The spliced sections shall be secured with at least Four (4) 5/16 inch diameter hexhead bolts spaced equally along the splice.



Front View

HIGHWAY-RAIL GRADE CROSSING

1. When a highway-rail grade crossing exists within or upstream of the merging taper and it is anticipated that backups resulting from the lane closure might extend through the highway-rail grade crossing, the TTC zone should be extended so that the merging taper precedes the highway-rail grade crossing.
2. When a highway-rail grade crossing exists within the activity area, provisions should be made to provide road users operating on the left side of the normal centerline with comparable warning devices as supplied for road users operating on the right side of the normal centerline.
3. When a highway-rail grade crossing exists within the activity area, early coordination with the railroad company should occur before work starts.
4. When a highway-rail grade crossing exists within the activity area, a flagger may be used at the highway-rail grade crossing to minimize the probability that vehicles are stopped within Fifteen (15) ft of the highway-rail grade crossing, measured from both sides of the outside rails.
5. A truck-mounted attenuator may be used on the work vehicle and/or the shadow vehicle.



STANDARD PLAN NO. 905-01	DATED JULY 3, 2019	SHEET NO. 2 OF 2
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TEMPORARY TRAFFIC CONTROL

ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED MUTCD	DRAWN G. C. HENG	CHECKED S. EDEL	APPROVED I. PARTENHEIMER

DATE	DESCRIPTION REVISIONS	BY

Suggested Advance Warning Sign Spacing

Road Types	Distance Between Signs*		
	A	B	C
Urban (40 mph or less)	100	100	100
Urban (45 mph or more)	350	350	350
Rural	500	500	500

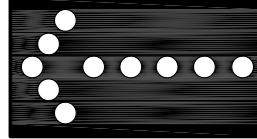
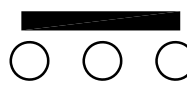


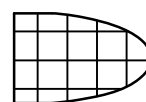


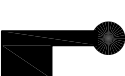
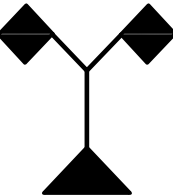






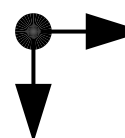
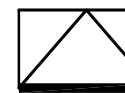



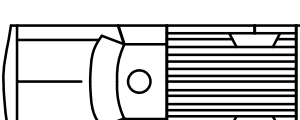
* Distances are shown in feet. The column headings A, B, and C are the dimensions shown in Typical Application Figures. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs. (The third sign is the first one in a three-sign series encountered by a driver approaching a TTC zone.)

Formulas for Determining Taper Lengths

Speed Limit (S)	Taper Length (L) Feet
40 mph or less	$L = \frac{WS^2}{60}$
45 mph or more	$L = WS$

Where:
L = taper length in feet
W = width of offset in feet
S = posted speed limit in mph.

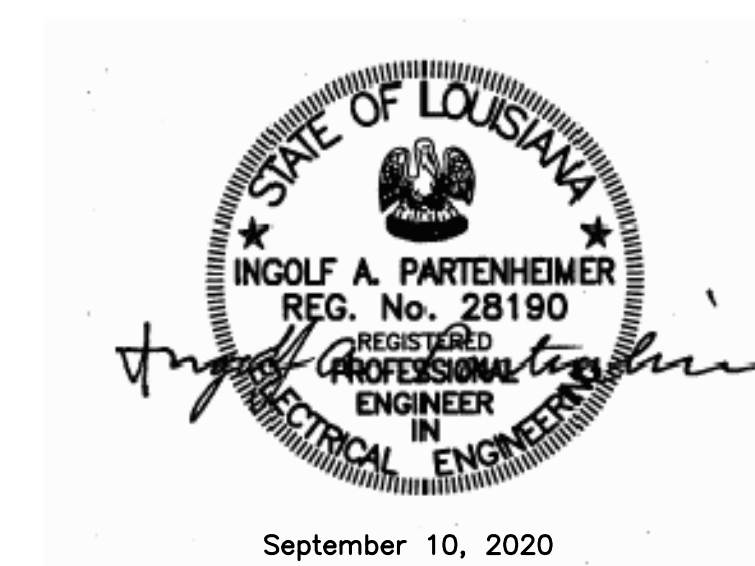
Meaning of Symbols on Typical Application Diagrams

-  Arrow panel
-  Arrow panel support or trailer (shown facing down)
-  Changeable message sign or support trailer
-  Channelizing device
-  Crash Cushion
-  Direction of temporary traffic detour
-  Direction of traffic
-  Flagger
-  High level warning device (Flag tree)
-  Luminaire
-  Pavement markings that should be removed for a long term project
-  Sign (shown facing left)
-  Surveyor
-  Temporary barrier
-  Temporary barrier with warning lights
-  Traffic or Pedestrian signal
-  Truck mounted attenuator
-  Type III Barricade
-  Warning lights
-  Work space
-  Work vehicle

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Lane Closure on Divided Highway	TA-33	905-11
Work in the Vicinity of Highway-Rail Grade Crossings		
Work in Vicinity of Highway-Rail Grade Crossing	TA-46	905-11

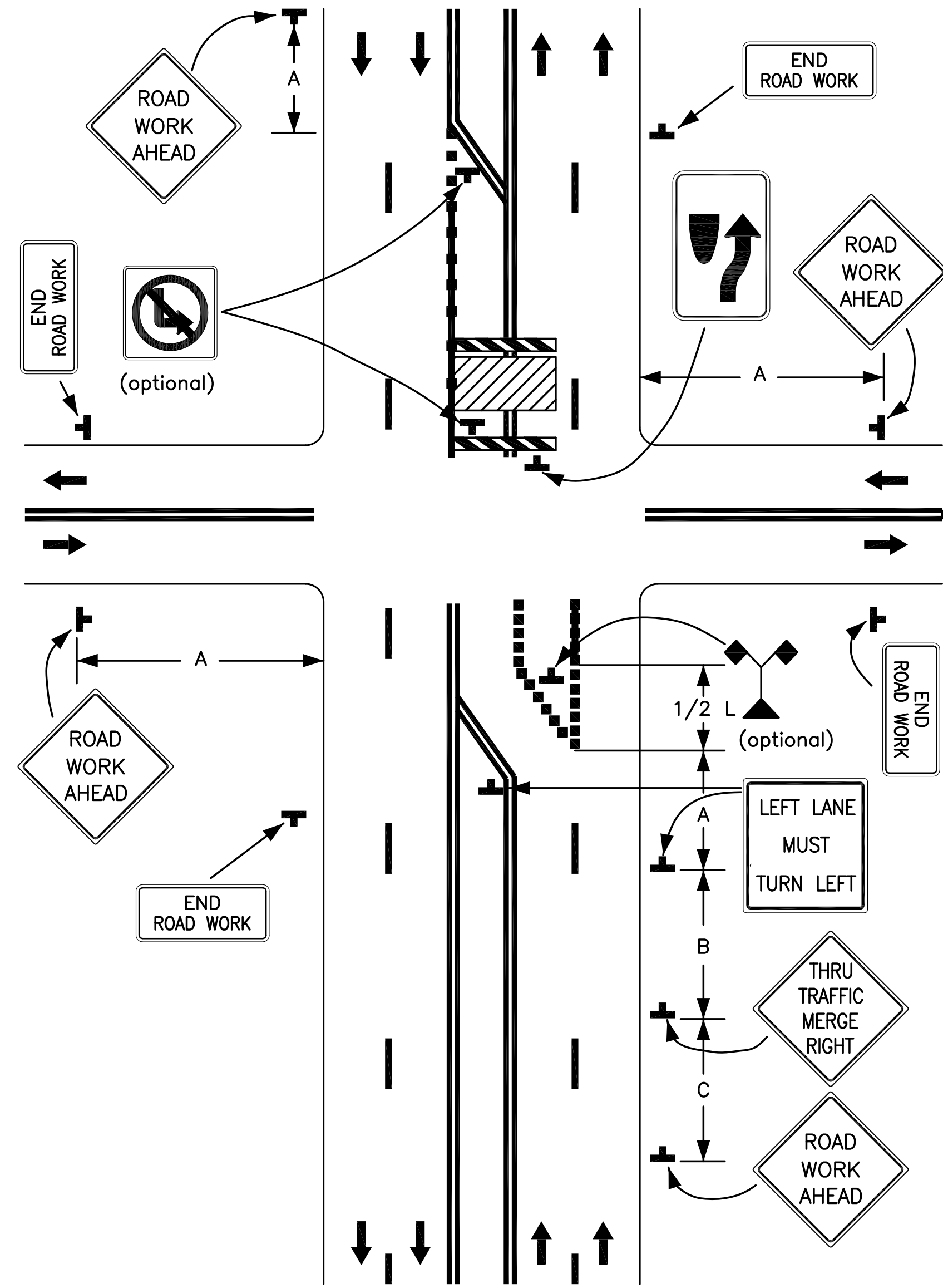
Information contained herewith was taken directly from the MUTCD 2003 version.



STANDARD PLAN NO. 905-02	DATED JULY 3, 2019	SHEET NO. 1 OF 1
TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS		
ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED MUTCD	DRAWN G. CHENG	CHECKED S. EDEL
APPROVED I. PARTENHEIMER		

DATE	DESCRIPTION REVISIONS	BY

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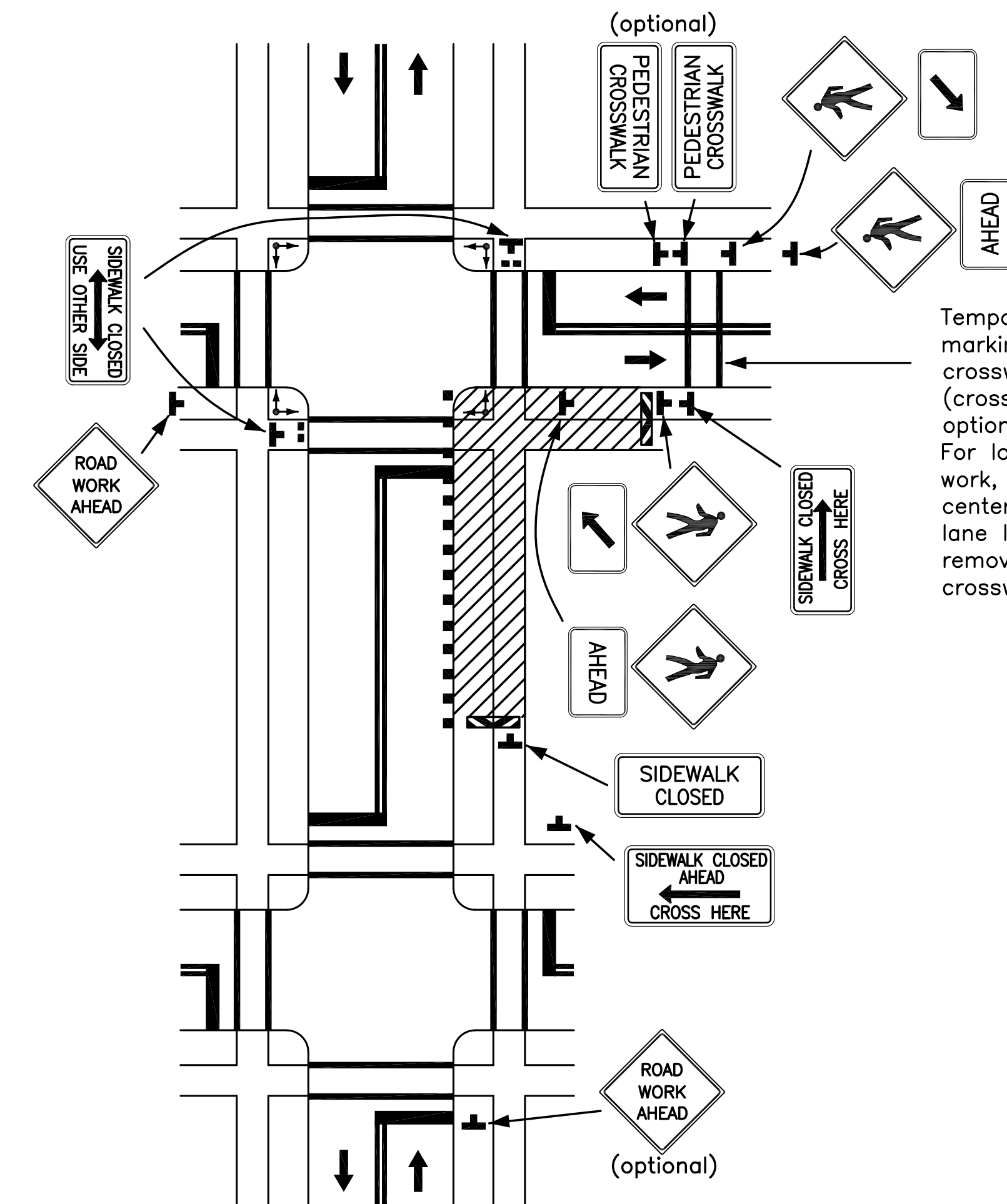


TA-25
Multiple Lane Closures at Intersection

NOTES:

1. If the work space extends across a crosswalk, the crosswalk should be closed using the information and devices shown in Figure TA-14.
2. If the left through lane is closed on the near-side approach, the LEFT LANE MUST TURN LEFT sign should be placed in the median to discourage through vehicular traffic from entering the left-turn bay.
3. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. If the left-turning movement that normally uses the closed turn bay is small and/or the gaps in opposing vehicular traffic are frequent, left turns may be permitted on that approach.
4. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

This sheet shall be used with Standard Plan No. 905-01 and 905-02.

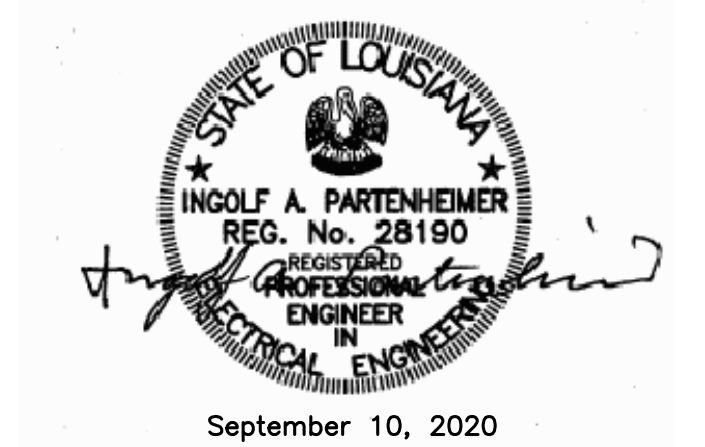


TA-29
Crosswalk Closures and Pedestrian Detours

NOTES:

1. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.
2. Curb parking shall be prohibited for at least Fifty (50) ft in advance of the midblock crosswalk.
3. Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.
4. Pedestrian traffic signal displays controlling closed crosswalks should be covered or deactivated.
5. Street lighting may be considered.
6. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS signs, may be used to control vehicular traffic who have visual disabilities.
7. For nighttime closures, Type A Flashing warning lights may be used on barricades supporting signs and closing sidewalks.
8. Type C Steady-Burn warning lights may be used on channelizing devices separating the work space from vehicular traffic.
9. In order to maintain the systematic use of the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs in a jurisdiction, the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs may be used in TTC zones.

Temporary marking for crosswalk lines (cross-hatching optional). For long-term stationary work, the double yellow centerline and/or lane lines should be removed between the crosswalk lines.

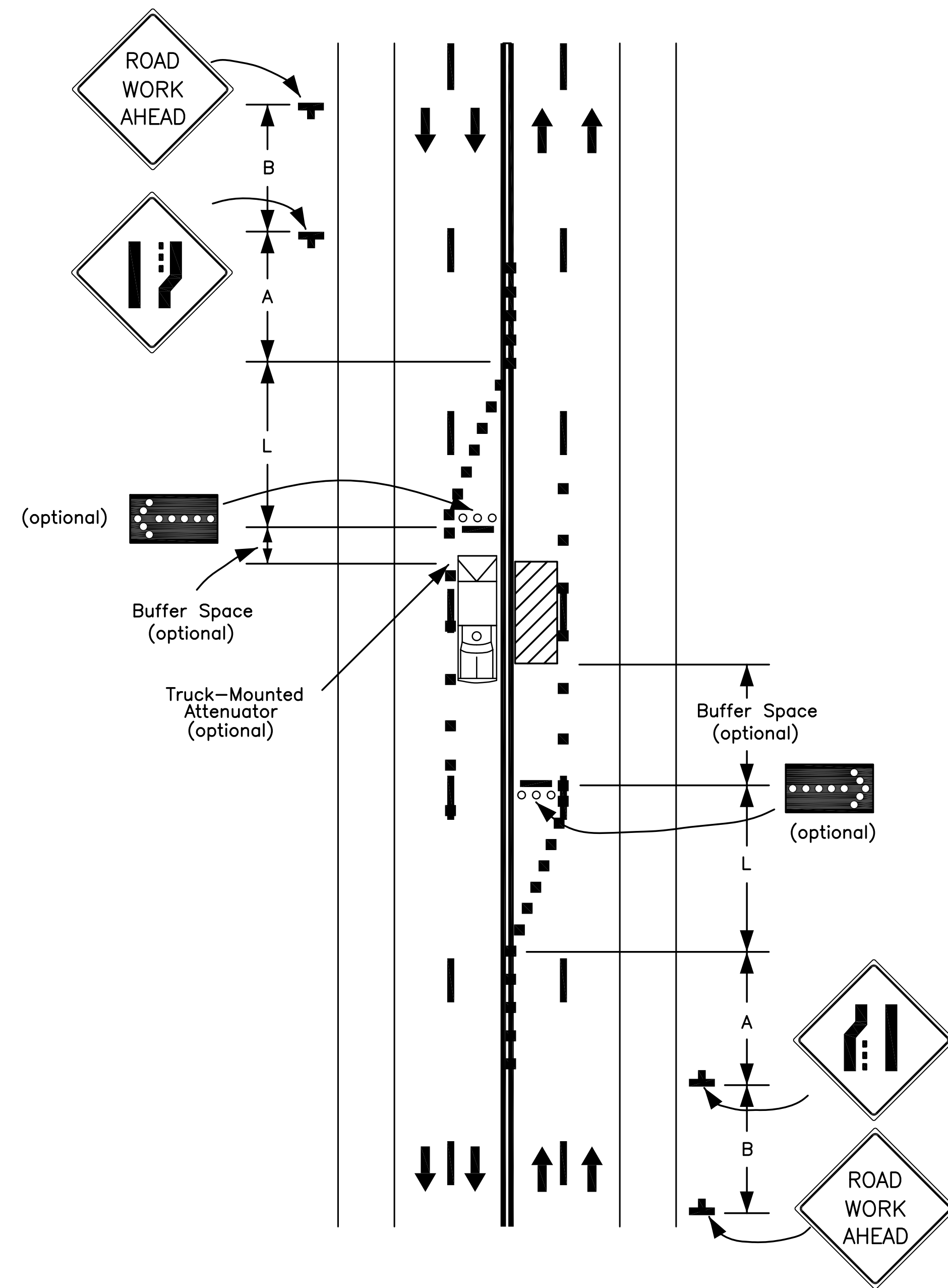


STANDARD PLAN NO. 905-09	DATED JULY 3, 2019	SHEET NO. 1 OF 1
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TEMPORARY TRAFFIC CONTROL
TYPICAL APPLICATIONS

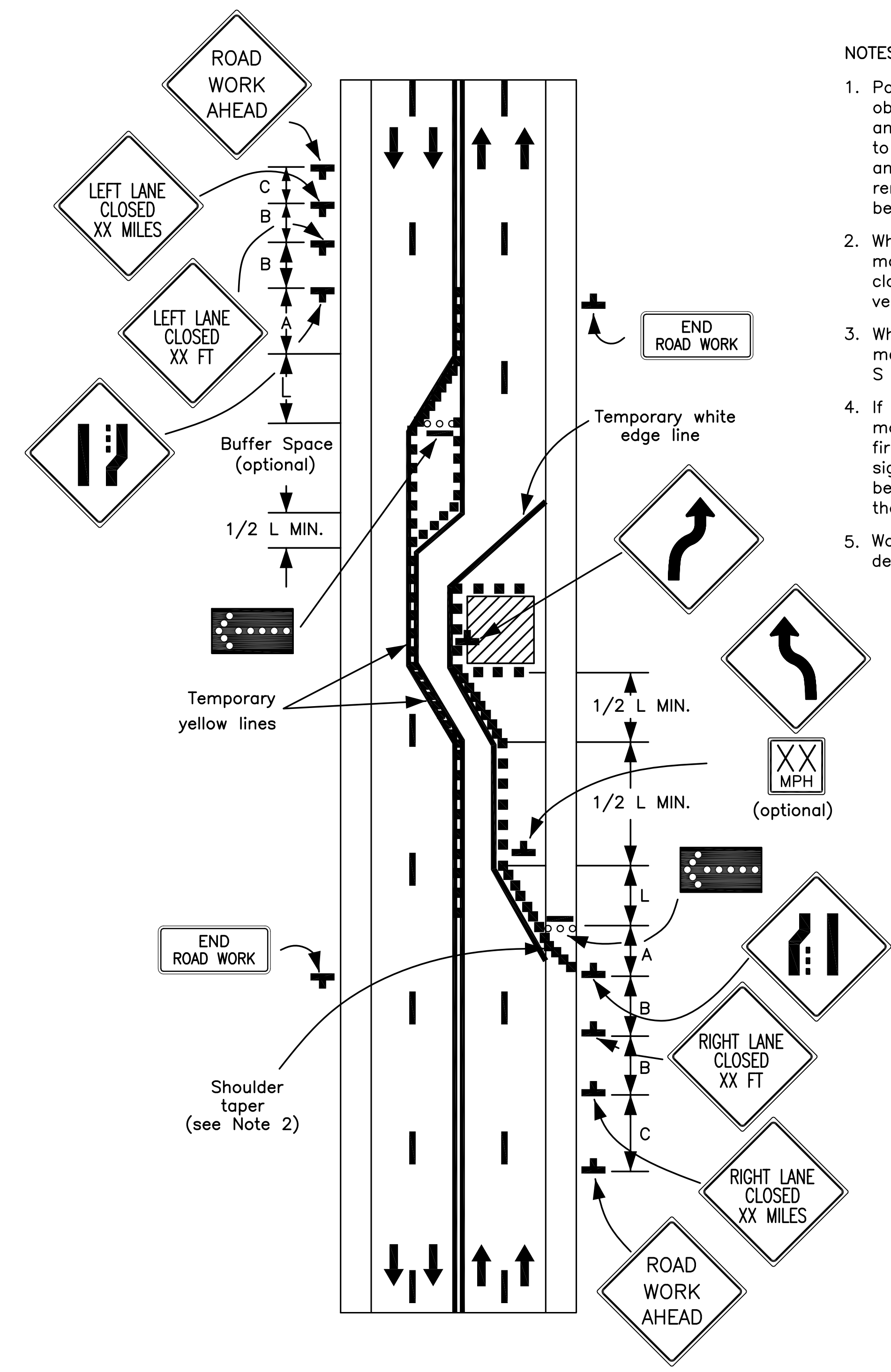
ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED MUTCD	DRAWN G. CHENG	CHECKED S. EDEL	APPROVED I. PARTENHEIMER

DATE	DESCRIPTION REVISIONS	BY



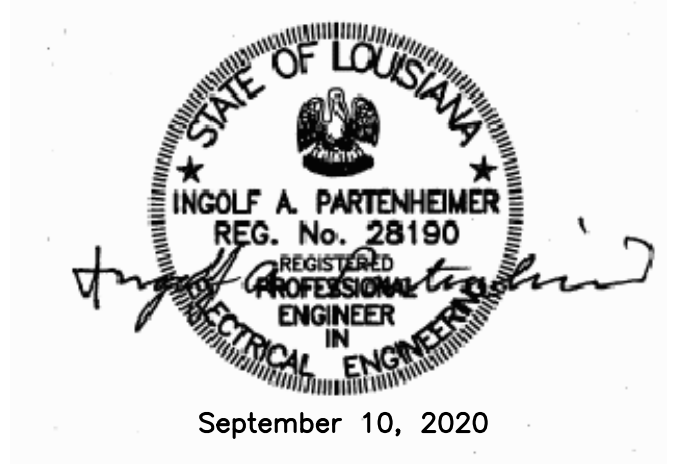
TA-30
Interior Lane Closure on Multi-lane Street

- NOTES:
1. This information applies to low-speed, low-volume urban streets. Where speed or volume is higher, additional signing such as LEFT LANE CLOSED XX FT should be used between the signs shown.
 2. The closure of the adjacent interior lane in the opposing direction may not be necessary, depending upon the activity being performed and the work space needed for the operation.
 3. Shadow vehicles with a truck-mounted attenuator may be used.



TA-32
Half Road Closure on Multi-lane, High-Speed Highway

- NOTES:
1. Pavement markings no longer applicable shall be removed or obliterated as soon as practical. Except for intermediate-term and short-term situations, temporary markings shall be provided to clearly delineate the temporary travel path. For short-term and intermediate-term situations where it is not feasible to remove and restore pavement markings, channelization shall be made dominant by using a very close device spacing.
 2. When paved shoulders having a width of Eight (8) ft or more are closed, channelizing devices should be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.
 3. Where channelizing devices are used instead of pavement markings, the maximum spacing should be 0.5 S feet where S is the speed in mph.
 4. If the tangent distance along the temporary diversion is more than Six Hundred (600) ft, a Reverse Curve sign, left first, should be used instead of the Double Reverse Curve sign, and a second Reverse Curve sign, right first, should be placed in advance of the second reverse curve back to the original alignment.
 5. Warning lights may be used to supplement channelizing devices at night.



This sheet shall be used with Standard Plan No. 905-01 and 905-02.

STANDARD PLAN NO. 905-10	DATED JULY 3, 2019	SHEET NO. 1 OF 1
TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS		
ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE		
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED MUTCD	DRAWN G. CHENG	CHECKED S. EDEL
		APPROVED I. PARTENHEIMER

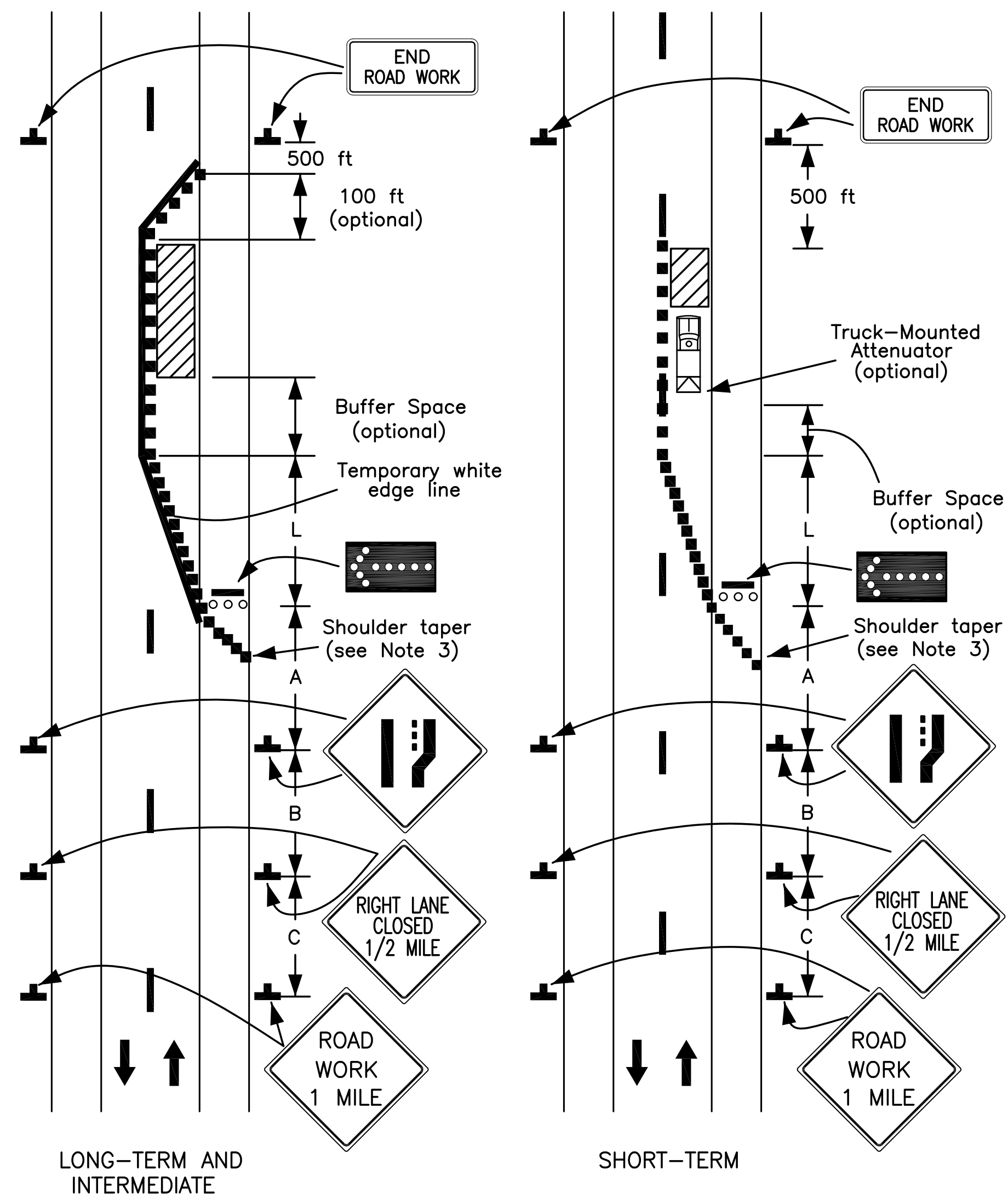


Figure TA-33
Lane Closure on Divided Highway

NOTES:

1. This information also shall be used when work is being performed in the lane adjacent to the median on a divided highway. In this case, the LEFT LANE CLOSED signs and the corresponding Lane Ends signs shall be substituted.
2. When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.
3. When paved shoulders having a width of Eight (8) ft or more are closed, channelizing devices should be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.
4. A truck-mounted attenuator may be used on the work vehicle and/or shadow vehicle.
5. Where conditions permit, restricting all vehicles, equipment, workers, and their activities to one side of the roadway might be advantageous.

This sheet shall be used with Standard Plan No. 905-01 and 905-02.

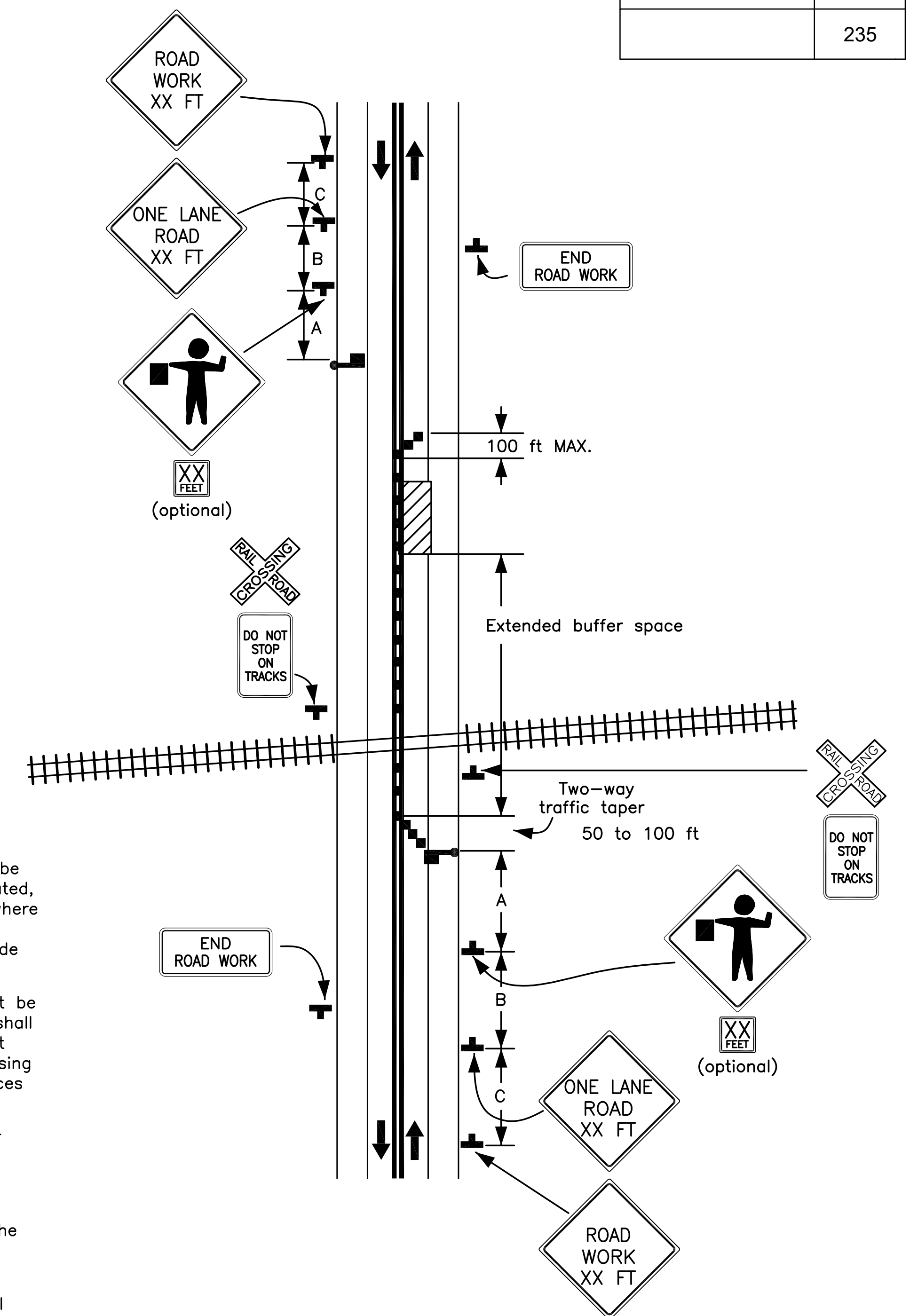
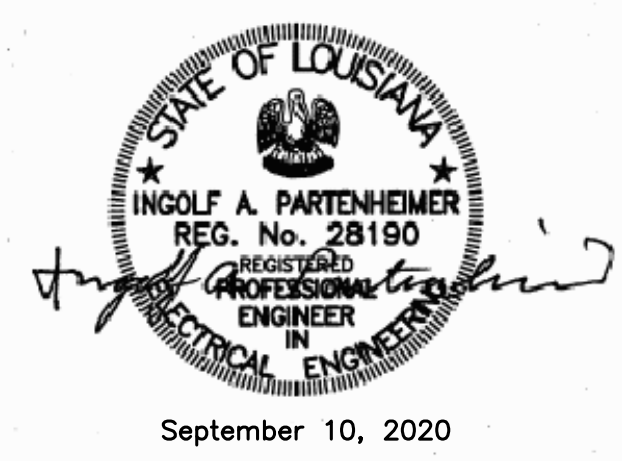


Figure TA-46
Work in Vicinity of Highway-Rail Grade Crossing

NOTES:

1. When highway-rail grade crossings exit either within or in the vicinity of roadway work activities, extra care should be taken to minimize the probability of conditions being created, either by lane restrictions, flagging or other operations, where vehicles might be stopped within the highway-rail grade crossing, considered as being Fifteen (15) ft on either side of the closest and farthest rail.
2. If the queuing of vehicles across active rail tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the highway-rail grade crossing to prevent vehicles from stopping within the highway-rail grade crossing (as described in Note 1), even if automatic warning devices are in place.
3. Early coordination with the railroad company should occur before work starts.
4. In the example depicted, the buffer space of the activity area should be extended up stream of the highway-rail grade crossing (as shown) so that a queue created by the flagging operation will not extend across the highway-rail grade crossing.
5. The DO NOT STOP ON TRACKS sign should be used on all approaches to a highway-rail grade crossing within the limits of a TTC zone.
6. Flashing warning lights and/or flags may be used to call attention to the advance warning signs.
7. A BE PREPARED TO STOP sign may be added to the sign series.
8. When used, the BE PREPARED TO STOP sign should be located before the Flagger symbol sign.
9. At night, flagger stations shall be illuminated, except emergencies.

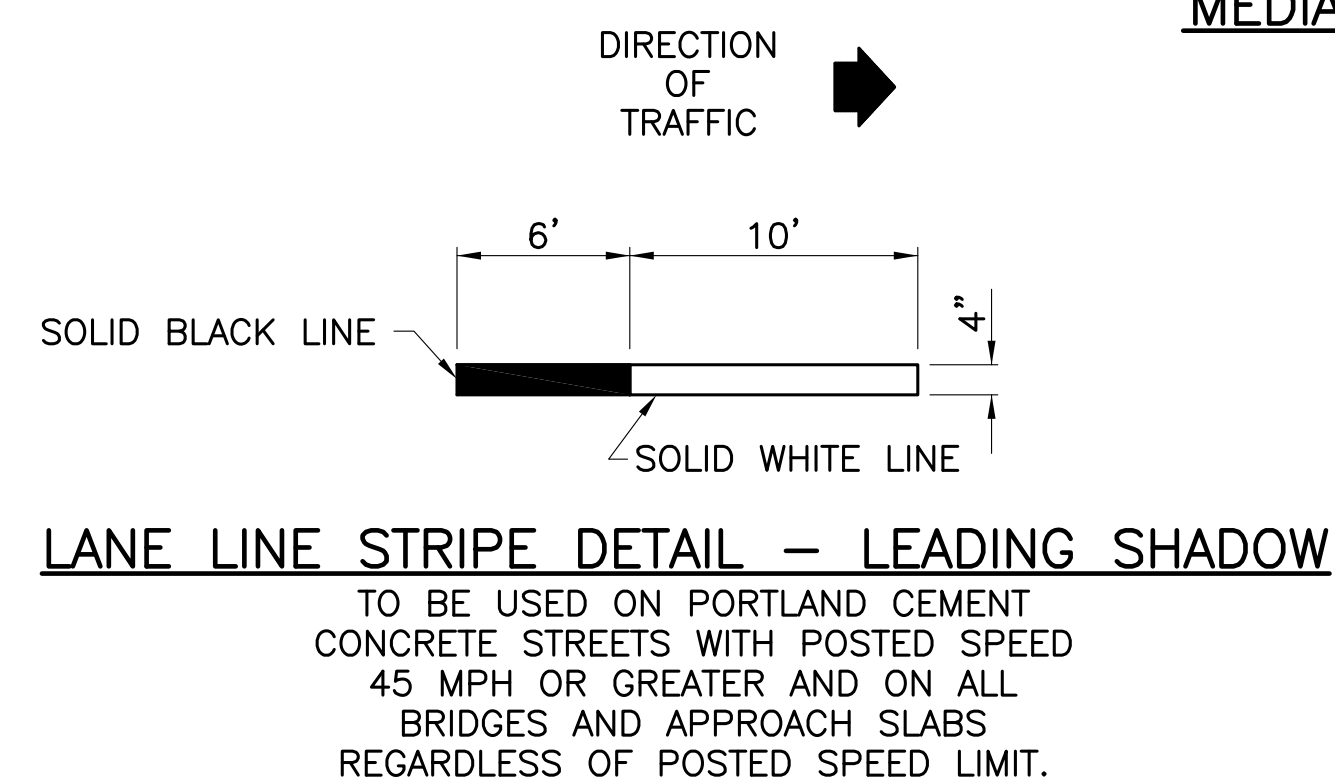
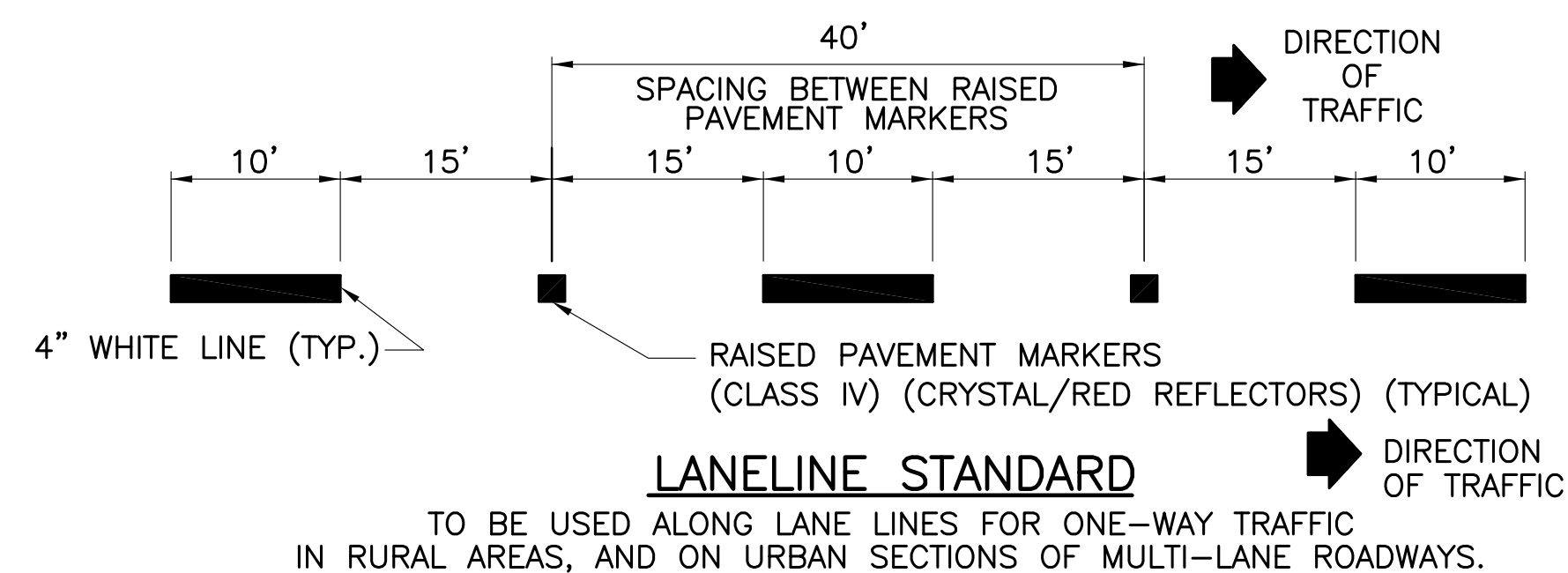
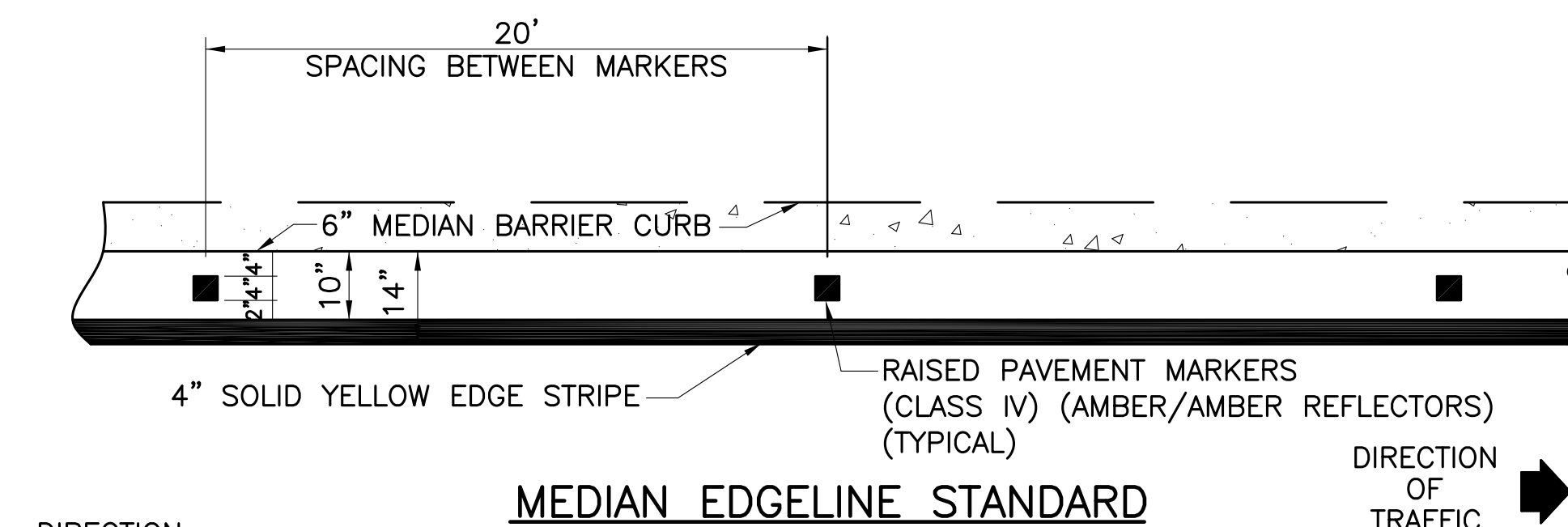
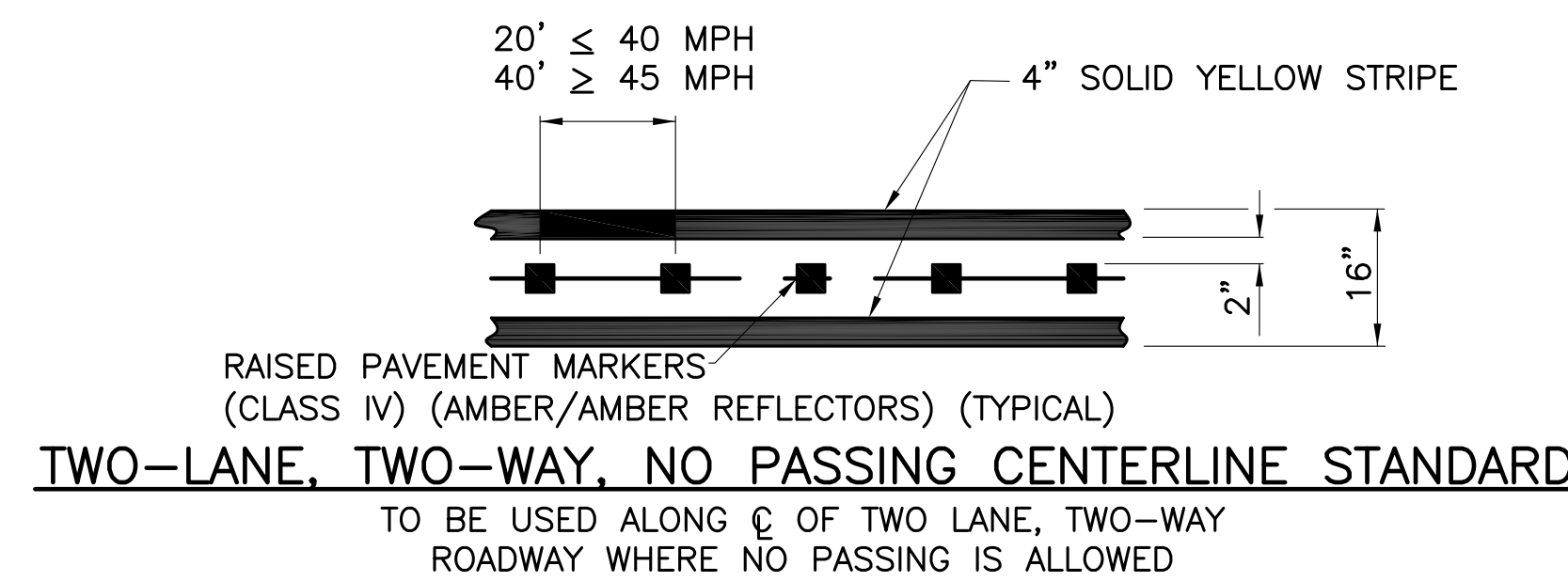
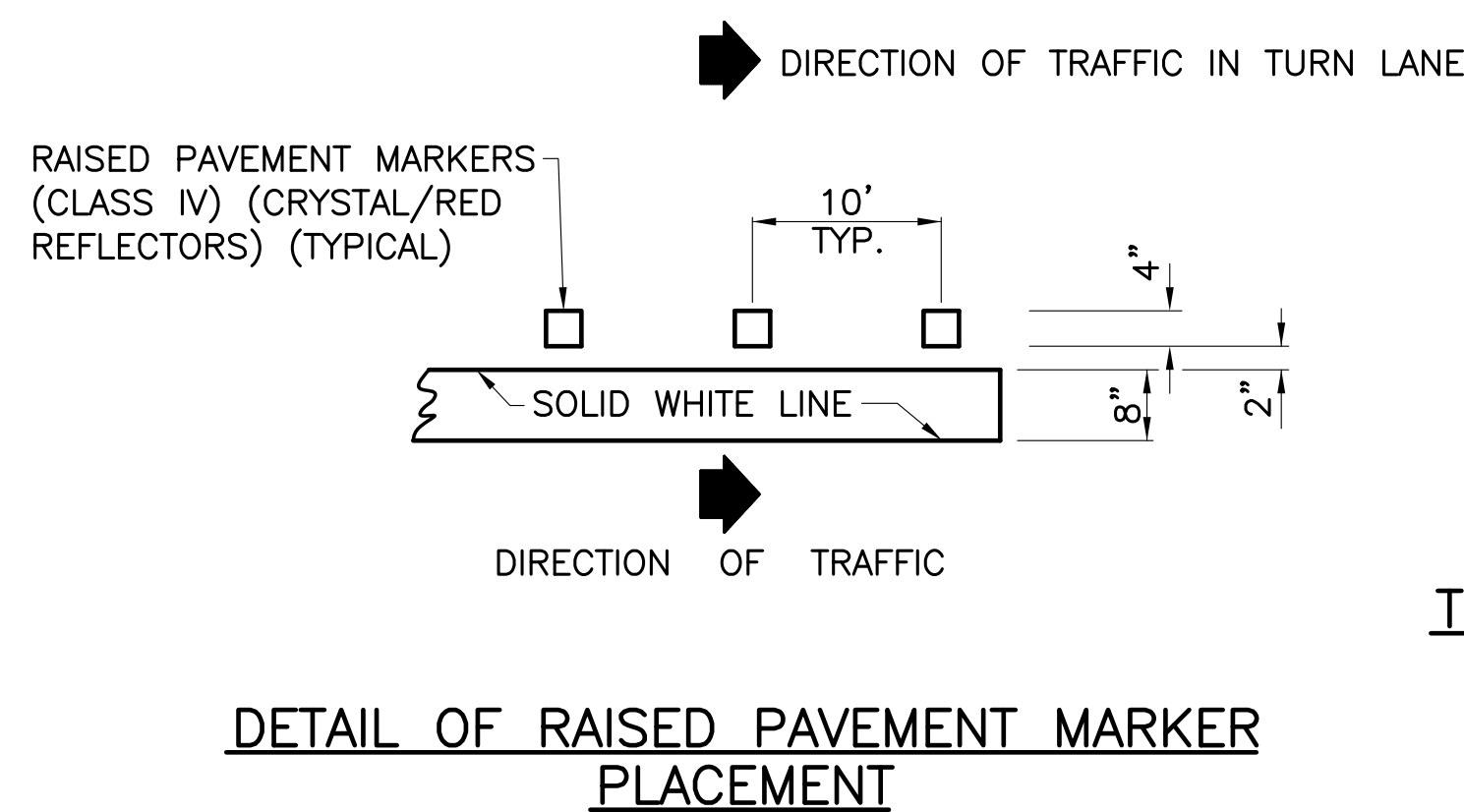
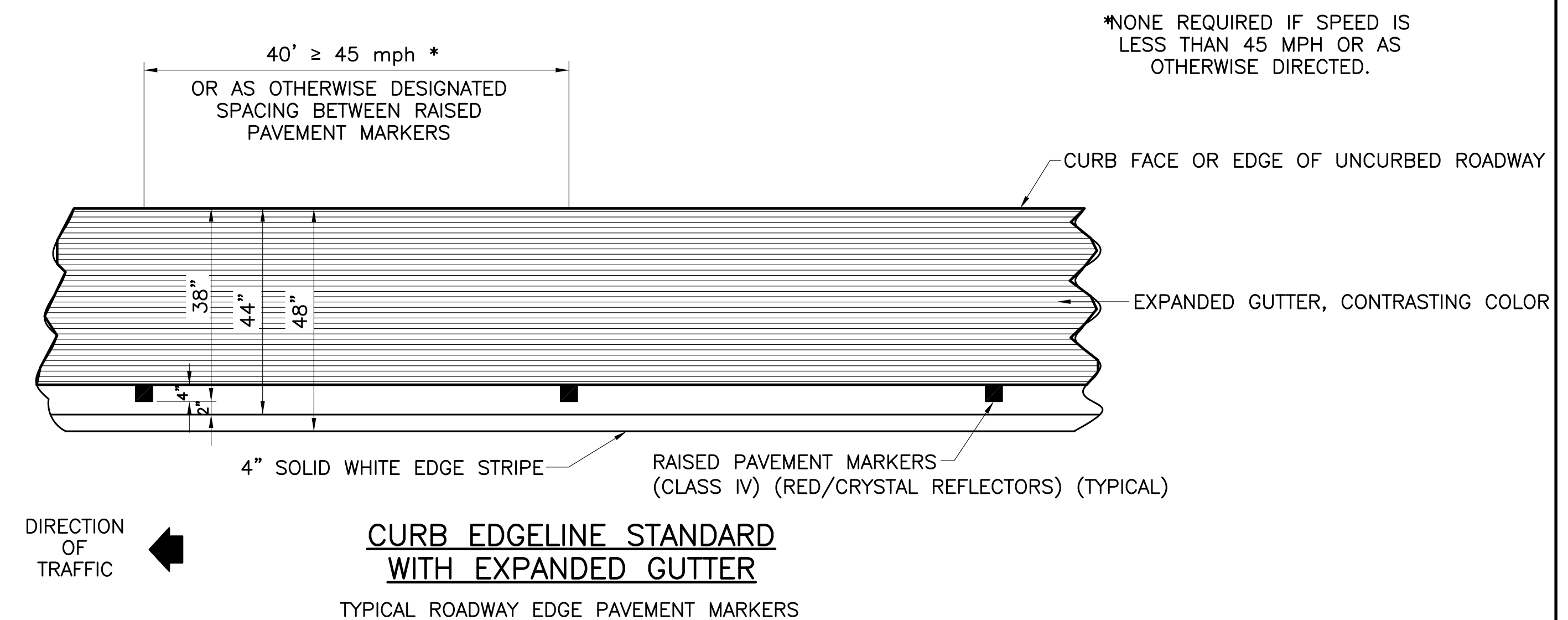
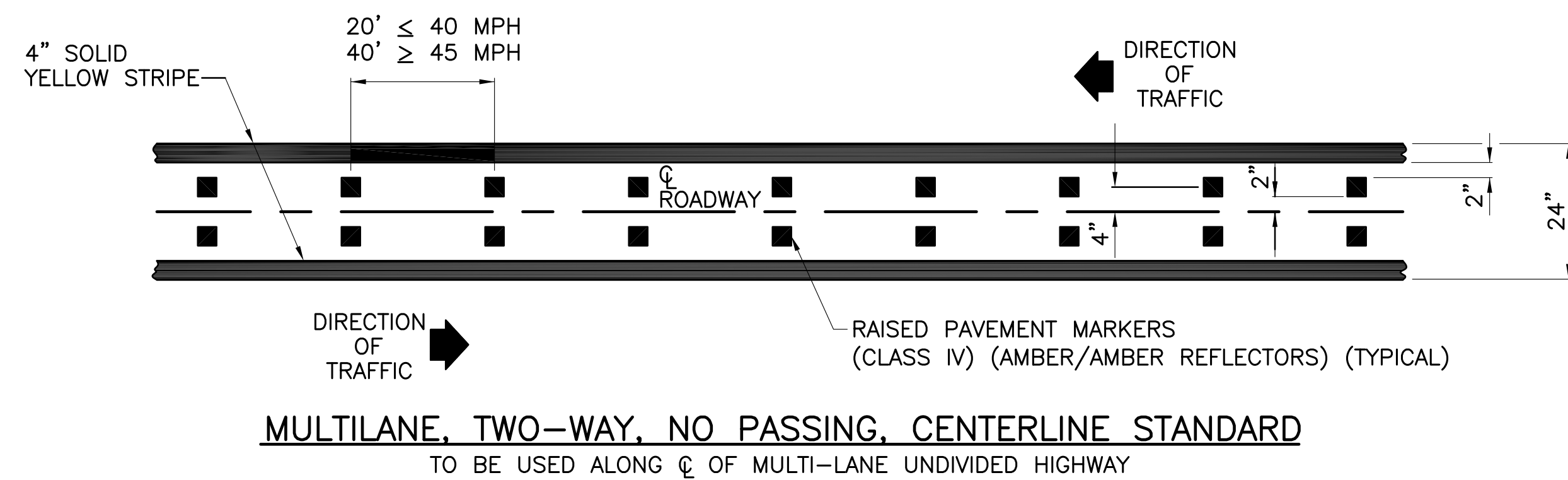
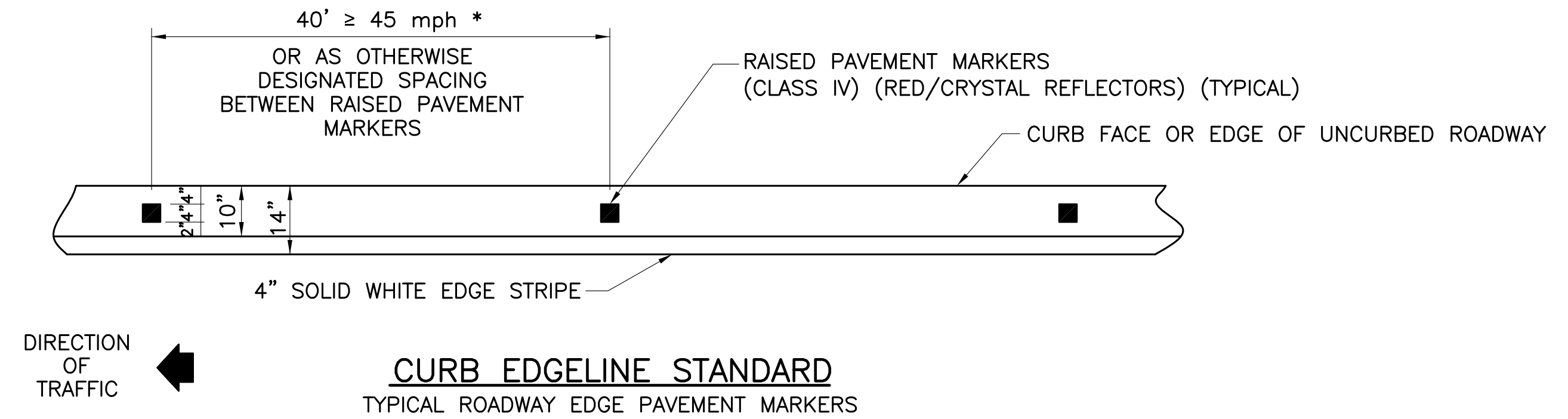
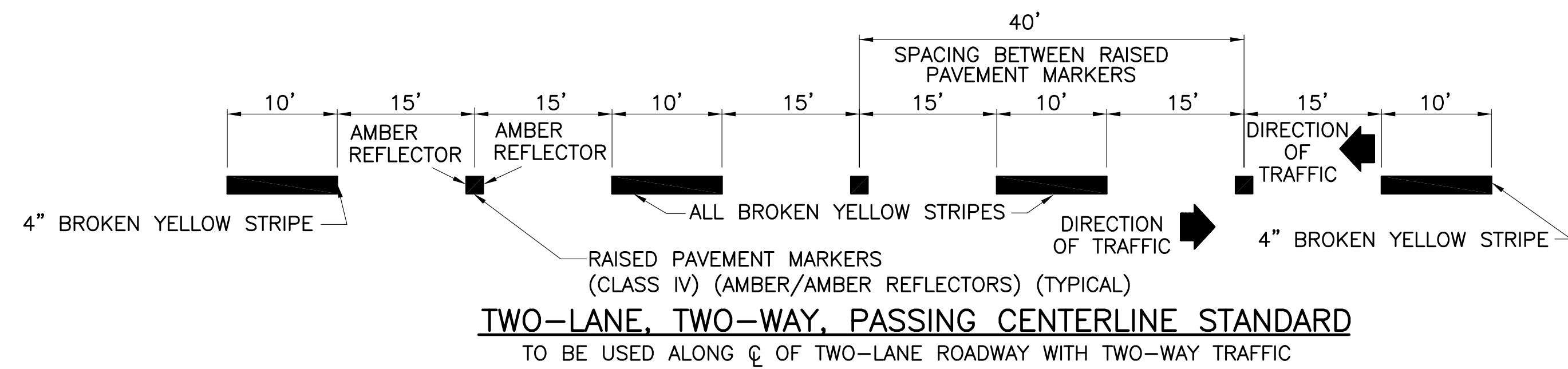


STANDARD PLAN NO. 905-11	DATED JULY 3, 2019	SHEET NO. 1 OF 1
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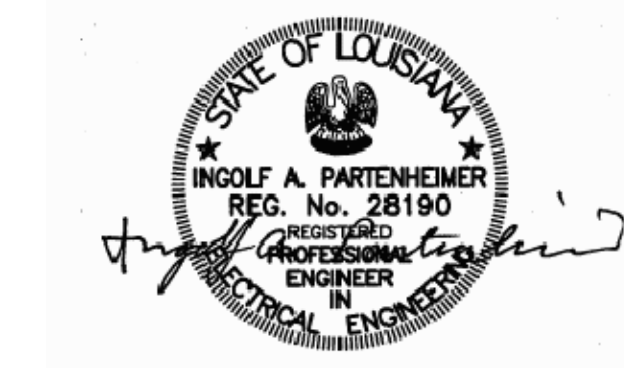
TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS			
ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE			
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED MUTCD	DRAWN G. CHENG	CHECKED S. EDEL	APPROVED I. PARTENHEIMER

DATE	DESCRIPTION REVISIONS	BY

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	236



*NONE REQUIRED IF SPEED IS LESS THAN 45 MPH OR AS OTHERWISE DIRECTED.

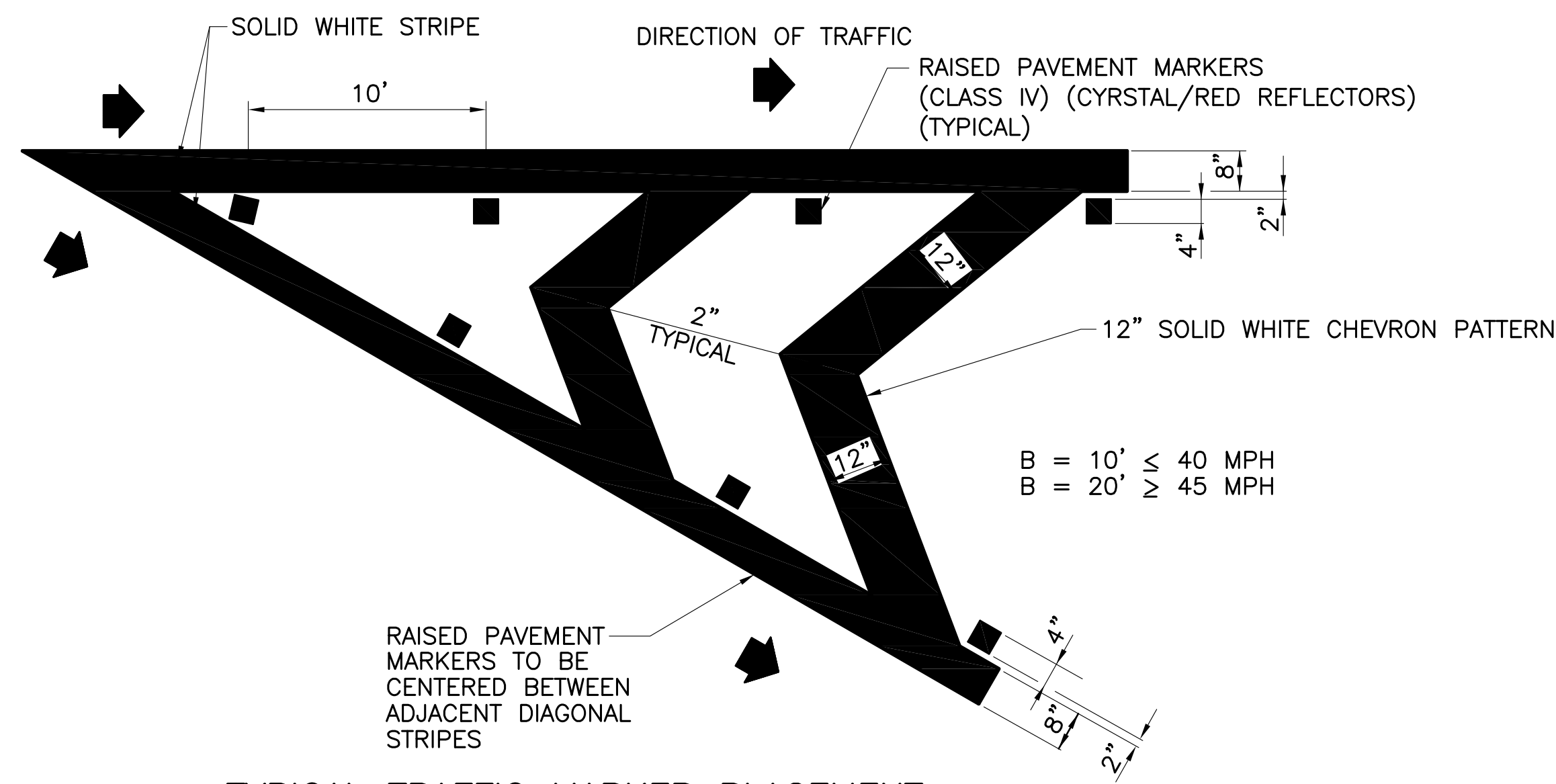


JUNE 13, 2008

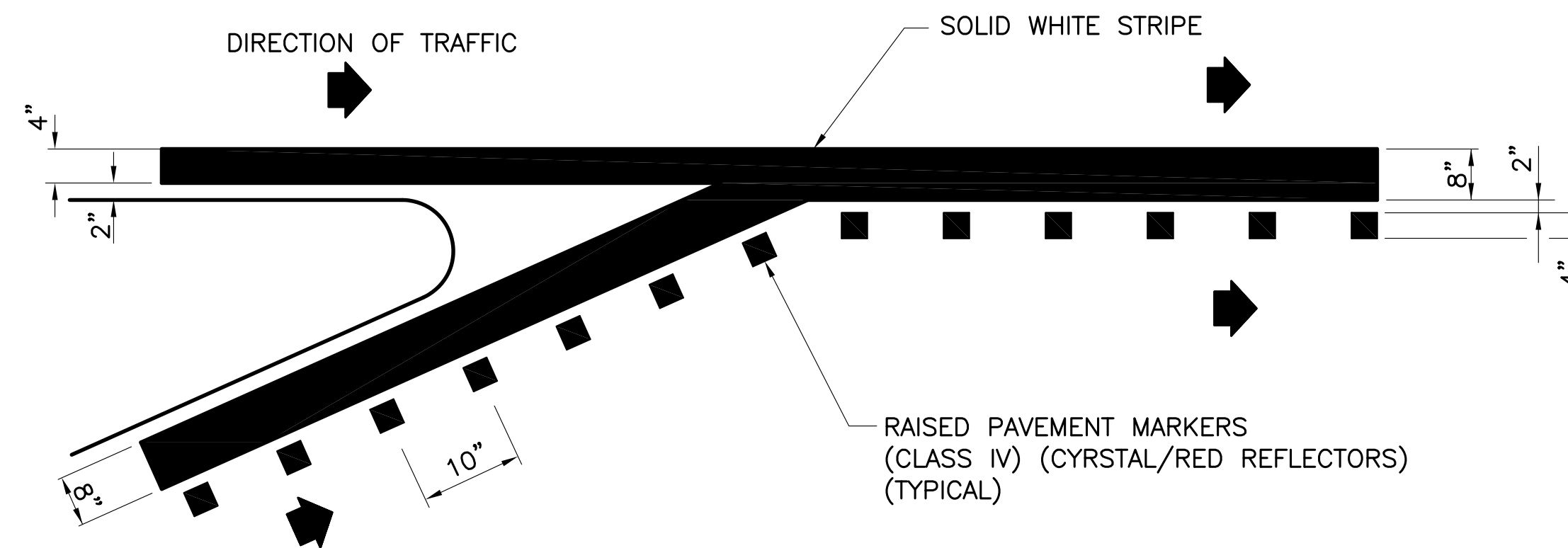
STANDARD PLAN NO. 905-50	DATED JUNE 13, 2008	SHEET NO. 1 OF 8
ROADWAY MARKING AND TYPICAL DETAILS		
ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE		
CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED GLP	DRAWN GLP	CHECKED GLP
		APPROVED I. PARTENHEIMER

DATE	DESCRIPTION REVISIONS	BY

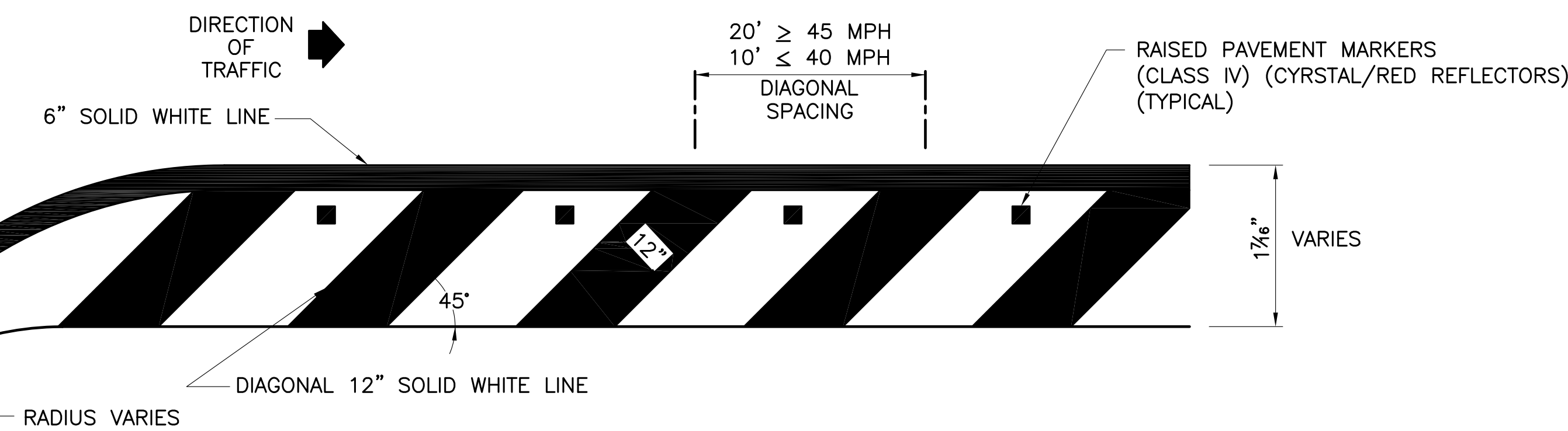
ENGINEERING AUTODESK LAND DESKTOP STDLAY FORM C.V.



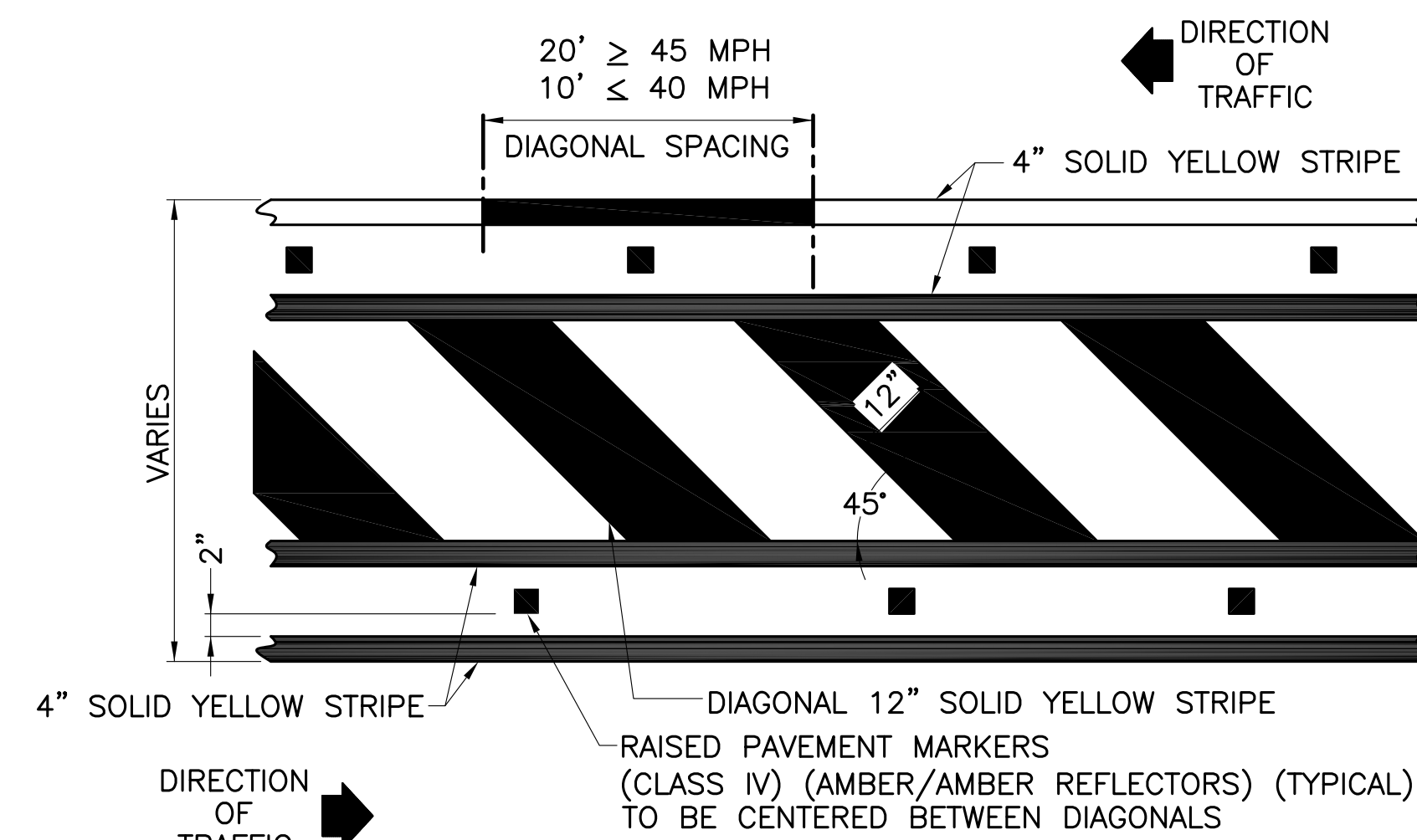
TYPICAL TRAFFIC MARKER PLACEMENT AT OFF-RAMP GORES



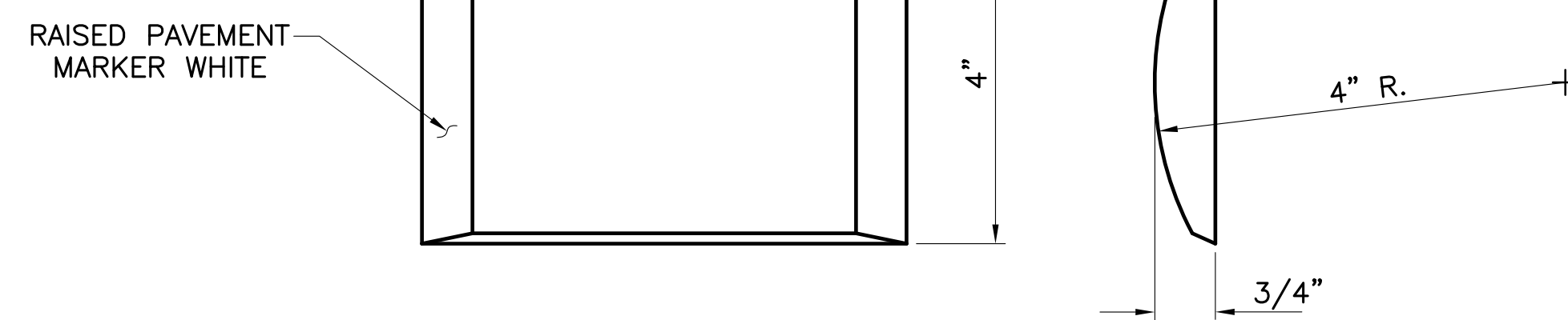
TYPICAL TRAFFIC MARKER PLACEMENT AT ON-RAMP GORES



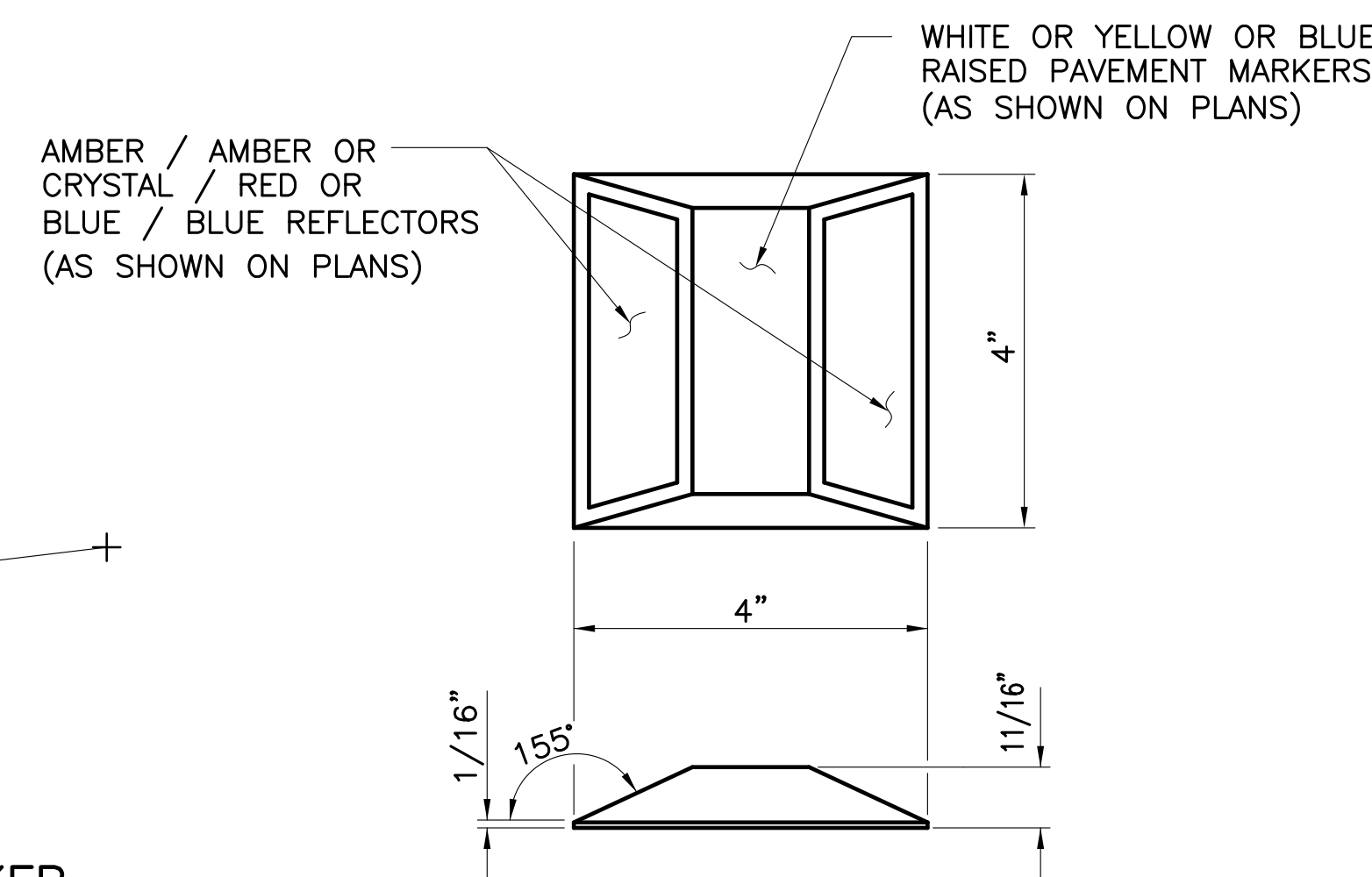
CROSS HATCHING AT RADIUS STANDARD



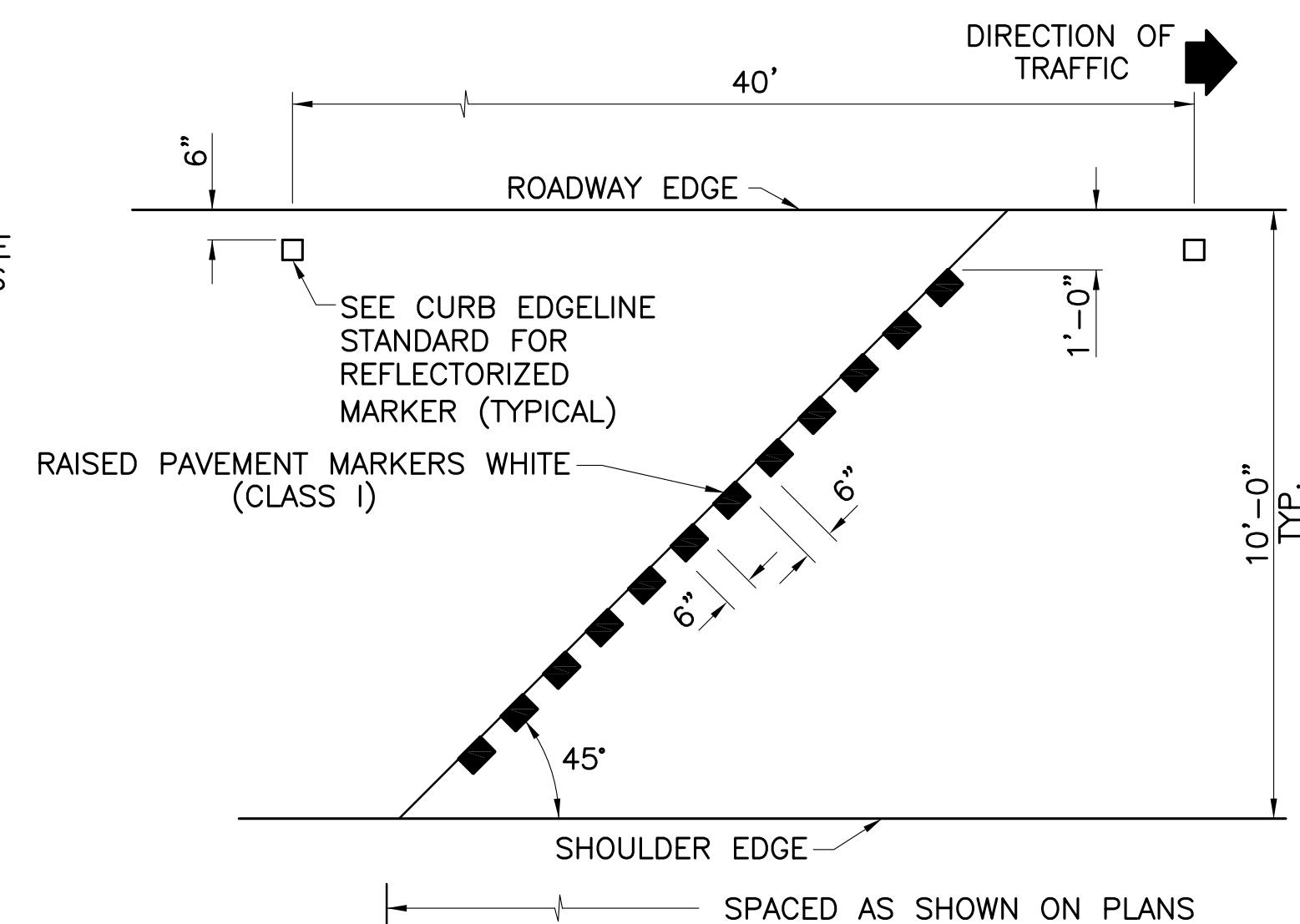
CROSS HATCHING STANDARD



4" X 6" NON-REFLECTORIZED RAISED PAVEMENT MARKER TYPICAL (CLASS I)



4" X 4" REFLECTORIZED RAISED PAVEMENT MARKER TYPICAL (CLASS IV)



TYPICAL RAISED MARKER PLACEMENT ALONG BRIDGE SHOULDER



JUNE 13, 2008

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ROADWAY MARKING AND TYPICAL DETAILS

ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED I. PARTENHEIMER

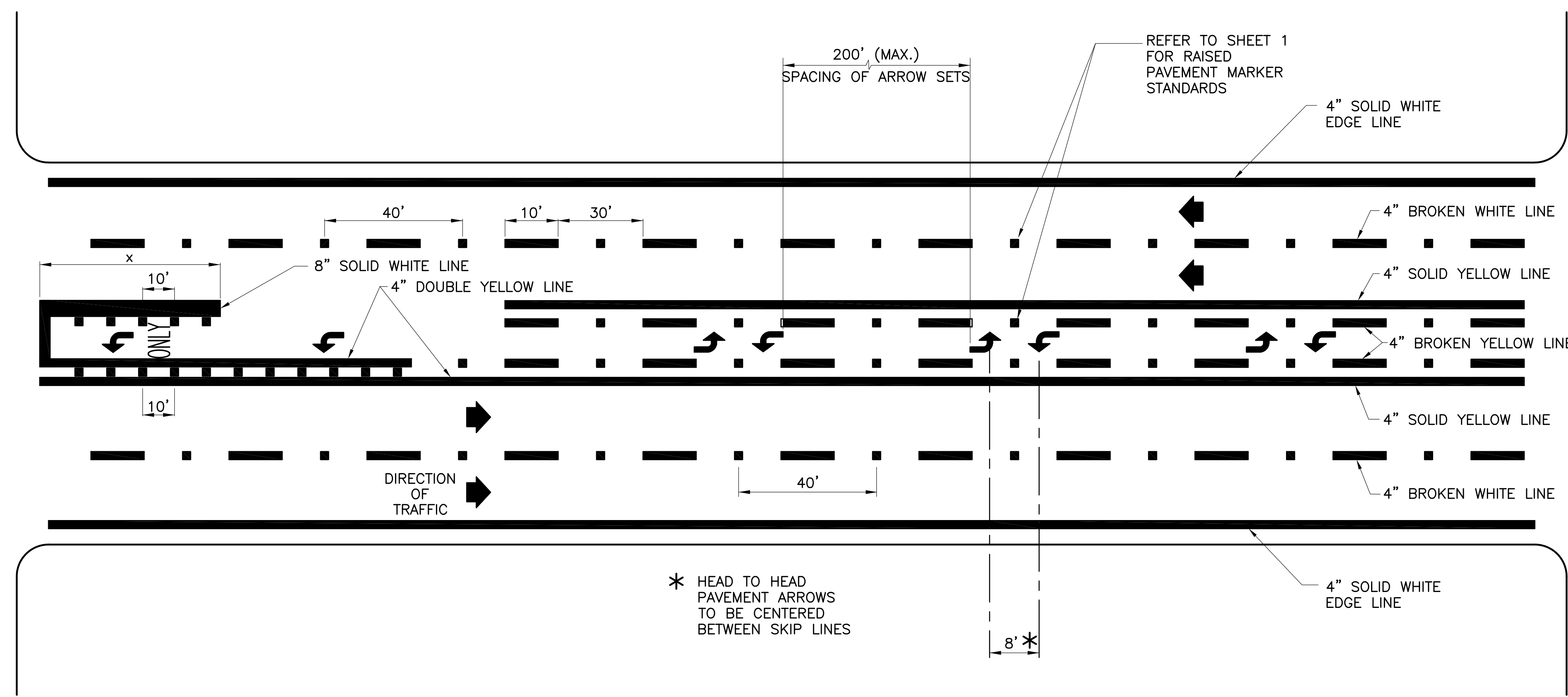
DATE	DESCRIPTION REVISIONS	BY

ENGINEERING AUTODESK LAND DESKTOP-STDLAY FORM C.V.

PROJECT NO.	SHEET
	238

MAJOR CROSS STREET

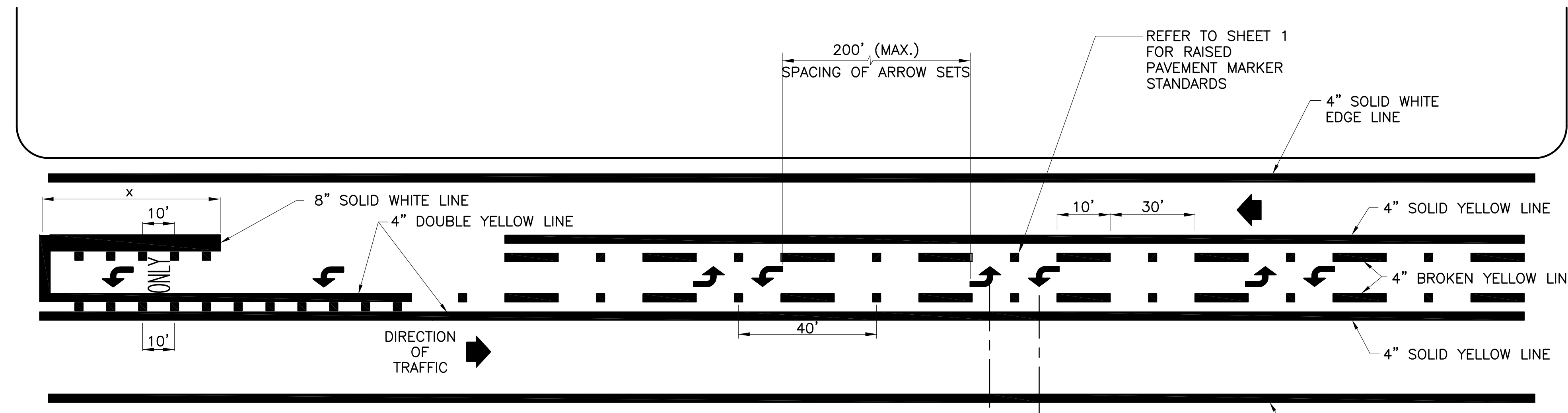
MINOR CROSS STREET



TWO WAY LEFT TURN LANE MARKINGS
5-LANE ROADWAY

MAJOR CROSS STREET

MINOR CROSS STREET



TWO WAY LEFT TURN LANE MARKINGS
3-LANE ROADWAY

NOTE:
LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, AND MARKERS AT INTERSECTIONS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO SHEET 7, NOTE 2, FOR ADDITIONAL INFORMATION REGARDING STOP BARS AND CROSSWALKS.

* HEAD TO HEAD PAVEMENT ARROWS TO BE CENTERED BETWEEN SKIP LINES



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ROADWAY MARKING
AND
TYPICAL DETAILS

ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED I. PARTENHEIMER

DATE	DESCRIPTION	BY
	REVISIONS	

PROJECT NO.	SHEET
	239

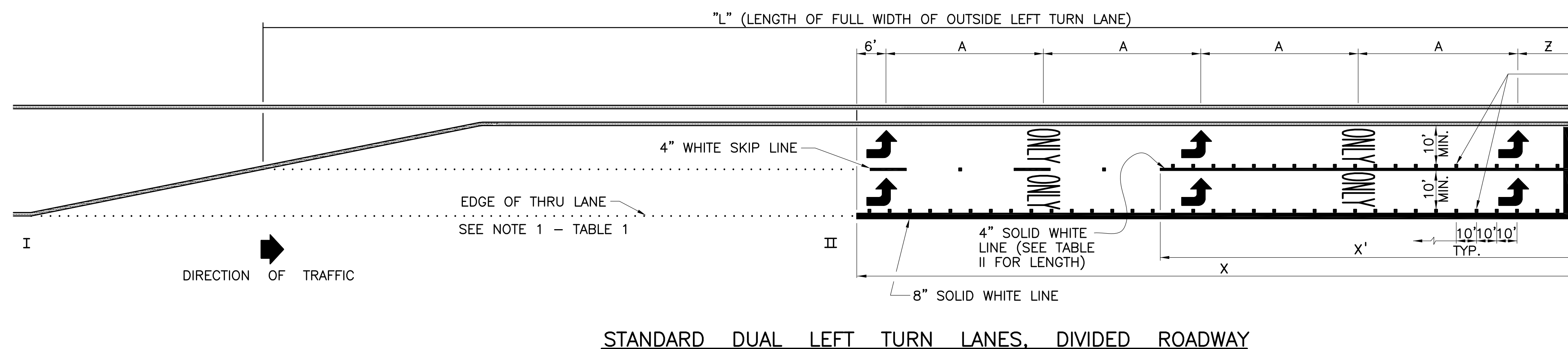
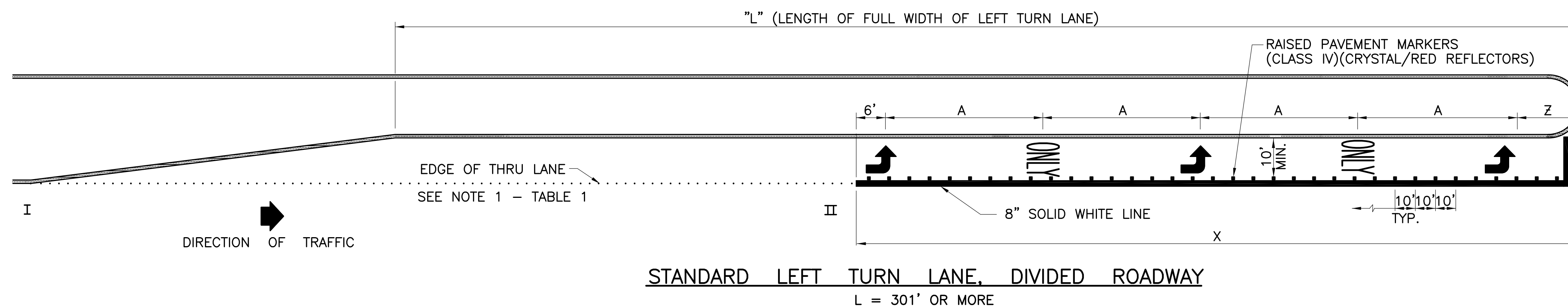
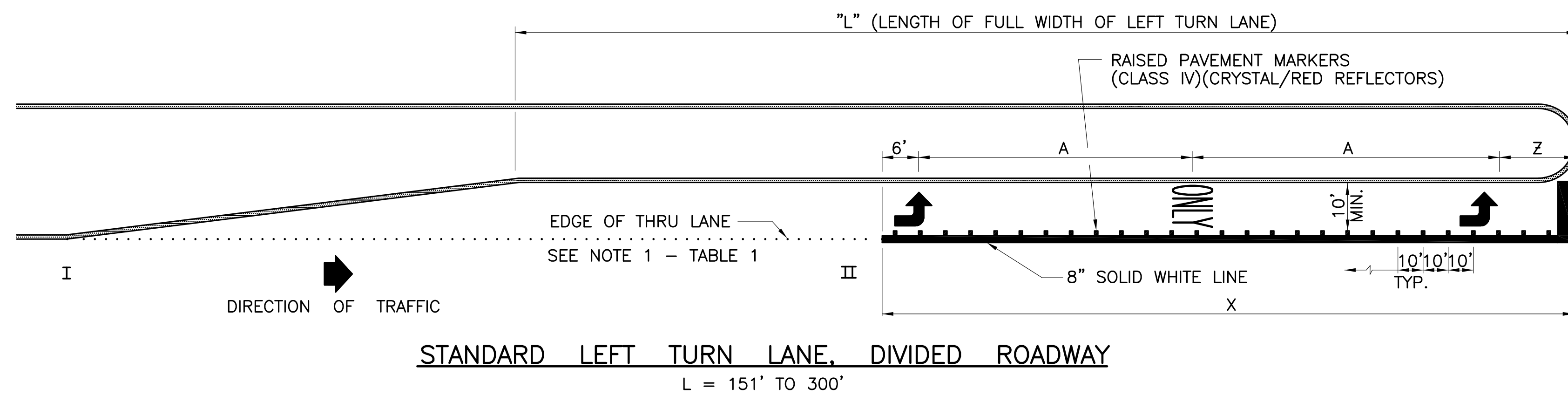
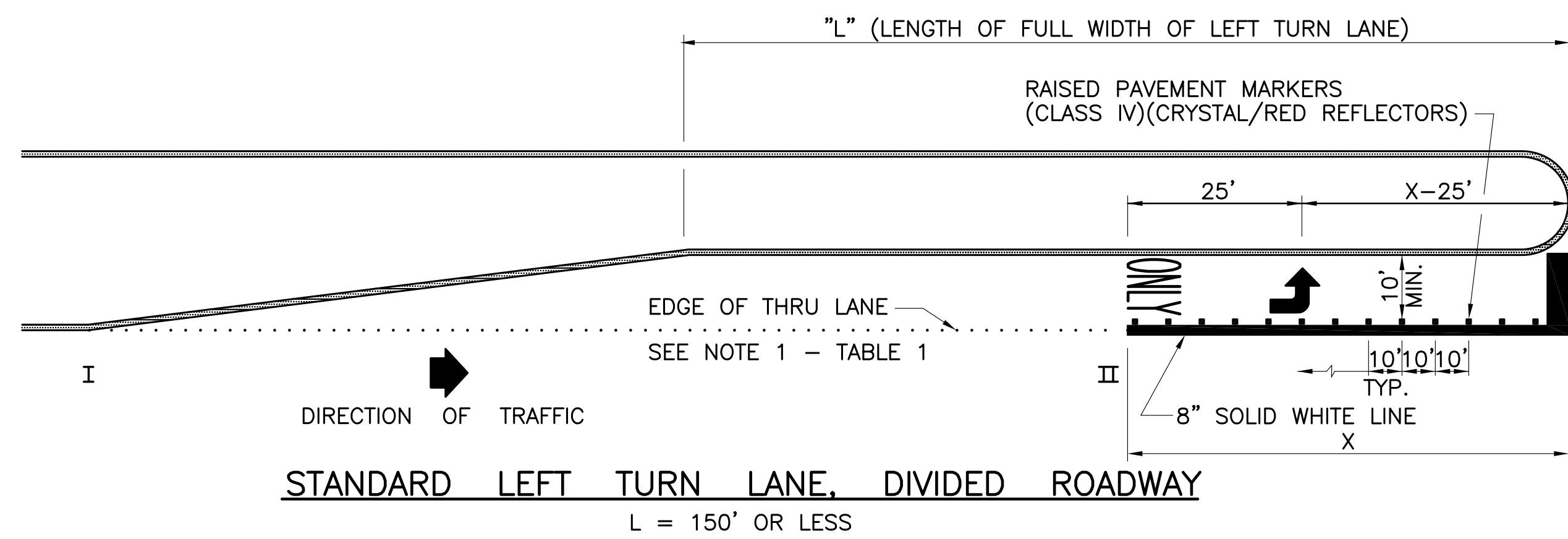


TABLE I
DIMENSIONS OF LEFT TURN LANES

L FEET	X FEET	Z FEET	A FEET	NUMBER OF LEGENDS	
				ARROWS	"ONLY"
≤150	1/2 L	-	-	1	1
151-300	$125/150(L-150)+75$	10-25	$(X-Z-6)/2$	2	1
301 & UP	2/3 L	10-25	$(X-Z-6)/4$	3	2

NOTE: 1. WHEN ROADWAY IS IN A CURVE OR LANE SHIFT TO THE RIGHT A 4" WHITE DOTTED LINE IS TO BE PLACED ALONG THE EDGE OF THE THRU LANE FROM I TO II.
2. 150 FEET IS DESIRED MINIMUM STANDARD FOR DIMENSION L

TABLE II

ADDITIONAL DIMENSIONS FOR DUAL LEFT TURN LANES

X FEET	X' FEET
≤150	1/2 X
151-300	$125/150(X-150)+75$
301 & UP	2/3 X

NOTES: ALL OTHER DIMENSIONS ARE TO BE DETERMINED FROM TABLE I.

PAVEMENT LEGENDS AND SYMBOLS ARE TO BE PLACED AT THE SAME LOCATION IN EACH LANE (SEE TABLE I FOR NUMBER & LOCATION). REFER TO MUTCD FOR SIZE AND DIMENSIONS OF SYMBOLS AND LEGENDS.

GENERAL NOTES:

- REFER TO SHEET 1 FOR TYPICAL STRIPING CONFIGURATION FOR ROADWAYS.
- REFER TO SHEET 6 FOR TYPICAL STRIPING OF INTERSECTIONS.
- REFER TO SHEET 7 FOR LAYOUT AND STRIPING OF HANDICAP RAMPS AND CROSSING.
- LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY CHIEF TRAFFIC ENGINEER. REFER TO SHEET 7, NOTE 2, FOR ADDITIONAL INFORMATION REGARDING STOP BARS AND CROSSWALKS.

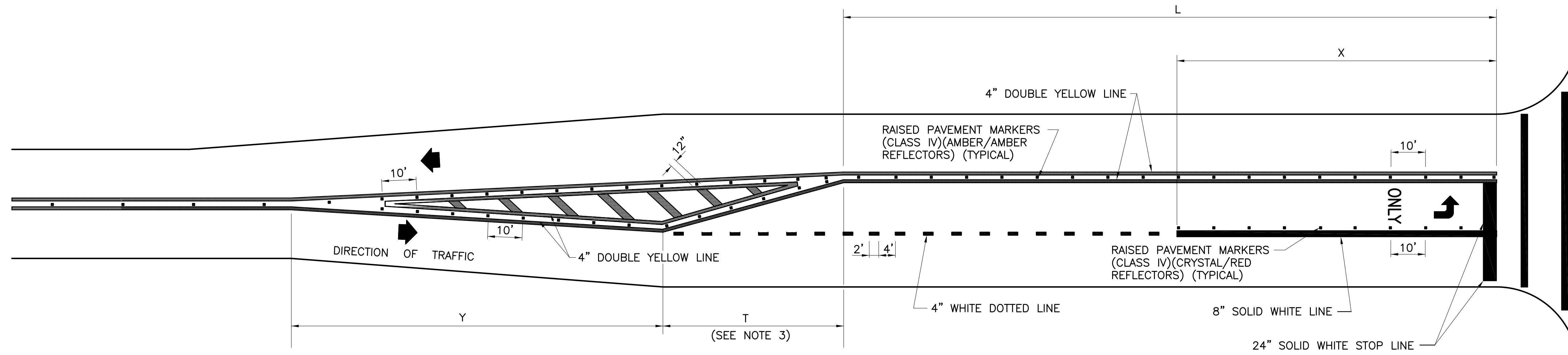


JUNE 13, 2008

STANDARD PLAN NO. 905-50	DATED JUNE 13, 2008	SHEET NO. 4 OF 8
ROADWAY MARKING AND TYPICAL DETAILS (DIVIDED ROADWAY)		
ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED GLP	DRAWN GLP	CHECKED GLP
APPROVED I. PARTENHEIMER		

DATE	DESCRIPTION	BY
	REVISIONS	

PROJECT NO.	SHEET
	240

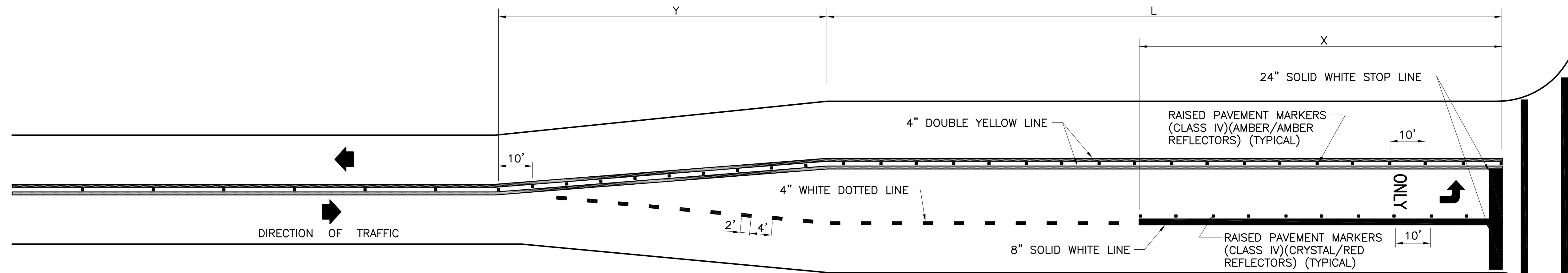


TWO LANE UNDIVIDED LEFT TURN LANES AT CONTROLLED INTERSECTION – CASE 1

1. $Y = WS$ FOR SPEEDS ≥ 45 MPH
 WHERE W IS WIDTH OF OFFSET
 AND S IS SPEED IN MPH.
 2. $Y = \frac{WS^2}{60} \leq 40$ MPH

- LEFT TURN LANE TREATMENT FOR SPEEDS ≥ 40 MPH.
- FOR TURN LANE SYMBOL, NUMBERS & SPACING SEE TABLE I, SHEET 4

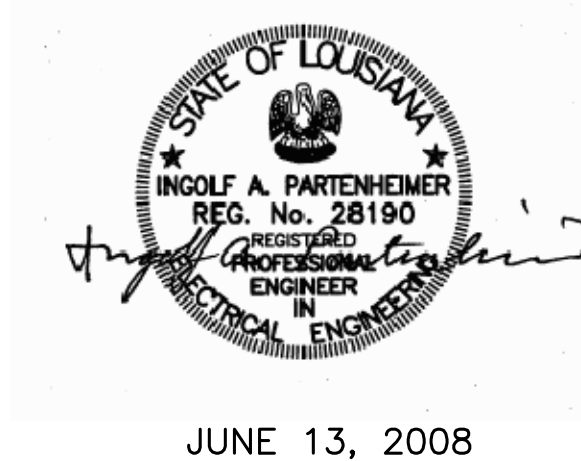
NOTE:
 PAVEMENT LEGENDS AND SYMBOLS ARE TO BE PLACED AT THE SAME LOCATION IN EACH LANE (SEE SHEET 4—TABLE I FOR NUMBER & LOCATION). REFER TO MUTCD FOR SIZE AND DIMENSIONS OF SYMBOLS AND LEGENDS.



TWO LANE UNDIVIDED LEFT TURN LANES AT CONTROLLED INTERSECTION – CASE 2

- LEFT TURN LANE TREATMENT FOR SPEEDS ≤ 35 MPH.
- FOR TURN LANE SYMBOL, NUMBERS & SPACING SEE TABLE I, SHEET 4

- REFER TO SHEET 1 FOR TYPICAL STRIPING CONFIGURATION ON ROADWAYS AND INTERSECTIONS.
- REFER TO SHEET 6 FOR TYPICAL STRIPING OF INTERSECTIONS.
- REFER TO SHEET 7 FOR LAYOUT AND STRIPING OF HANDICAP RAMPS AND CROSSING.
- LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY CHIEF TRAFFIC ENGINEER. REFER TO SHEET 7, NOTE 2, FOR ADDITIONAL INFORMATION REGARDING STOP BARS AND CROSSWALKS.



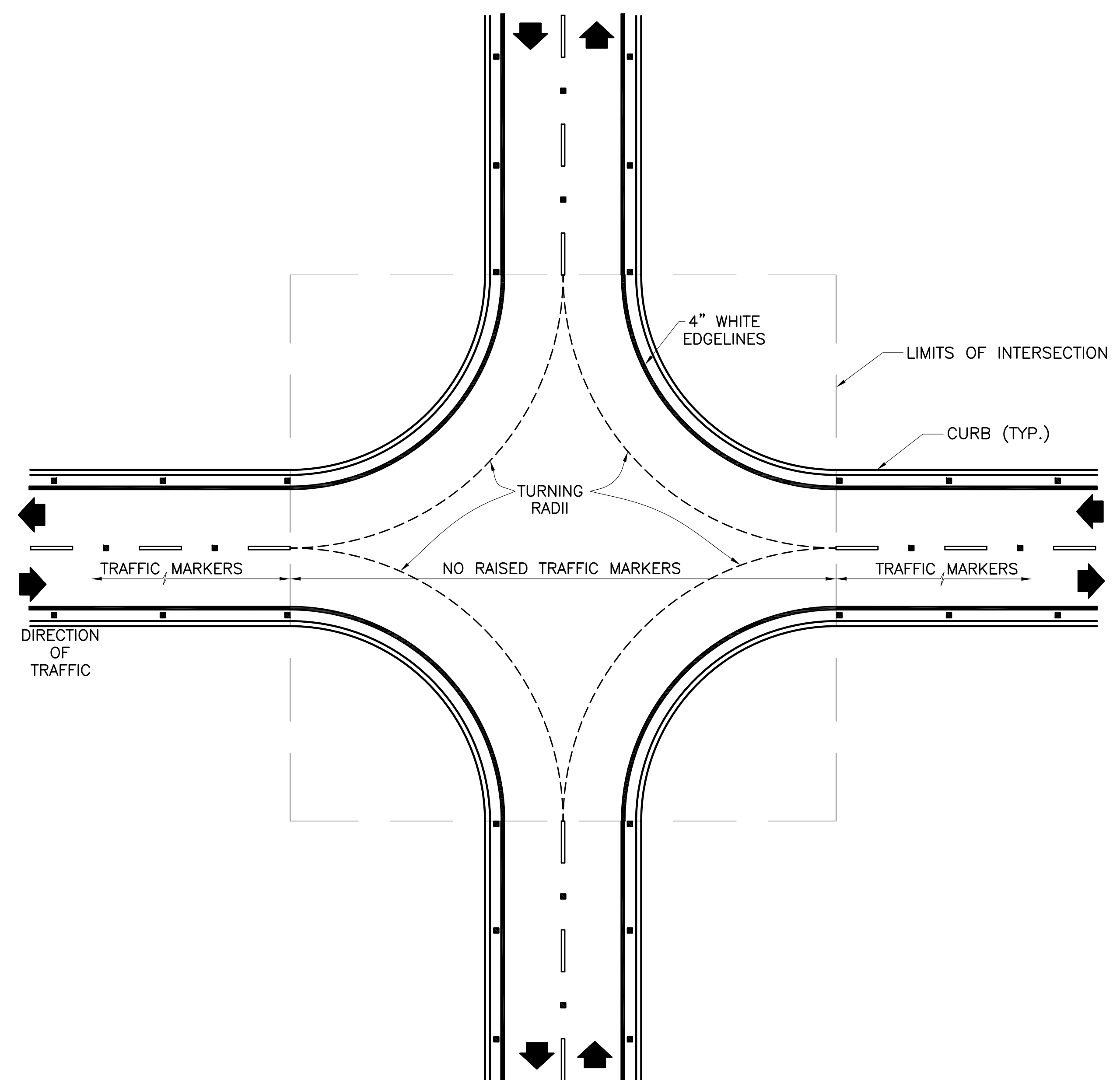
STANDARD PLAN NO. 905-50	DATED JUNE 13, 2008	SHEET NO. 5 OF 8
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ROADWAY MARKING AND TYPICAL DETAILS (UNDIVIDED ROADWAY)

ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED I. PARTENHEIMER

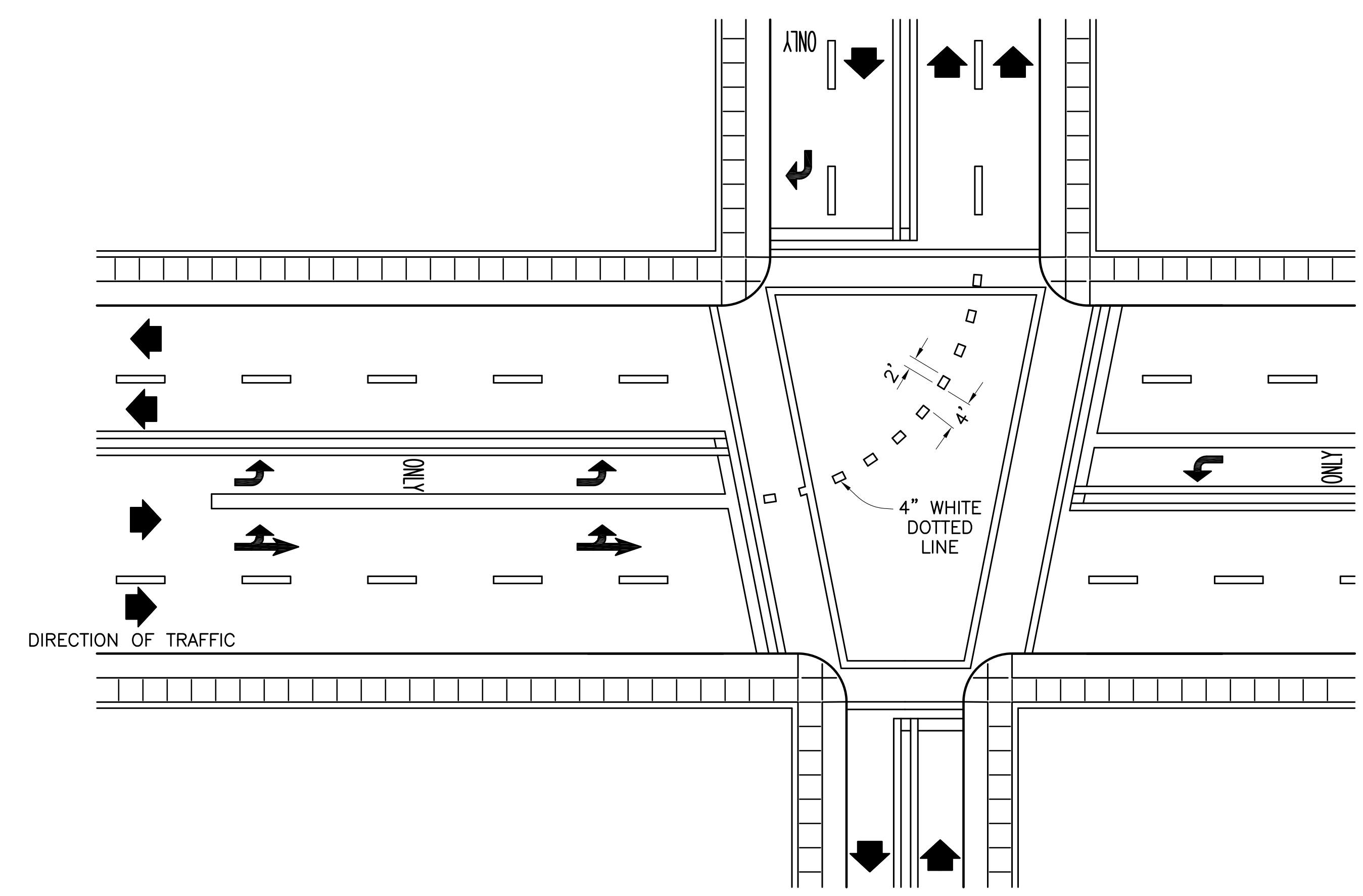
DATE	DESCRIPTION	BY
11/18/09	CASE 1 TAPER AND NOTES REVISION	G.L.P.
	REVISIONS	

PROJECT NO.	SHEET
	241

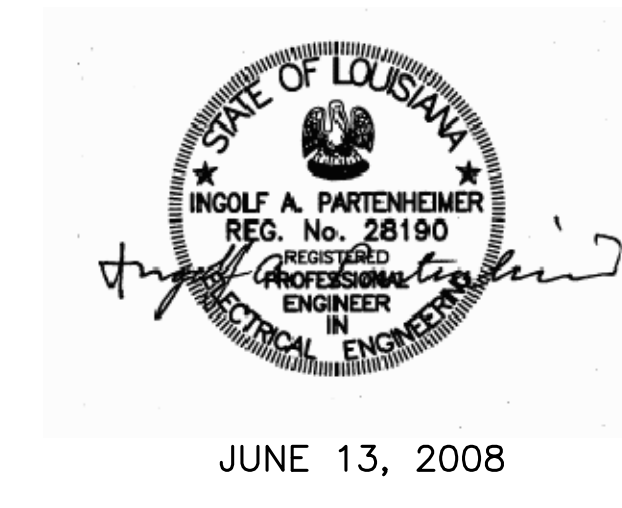


DETAIL OF TYPICAL INTERSECTION
SHOWING TRAFFIC MARKER PLACEMENT
FOR TWO-LANE ROADWAY

NOTE:
AT CHANNELIZED INTERSECTION TRAFFIC MARKERS TO BE PLACED AS DIRECTED BY THE PROJECT ENGINEER.
ALL STRIPING TO BE THERMOPLASTIC MATERIAL, UNLESS OTHERWISE DIRECTED.
RAISED MARKERS SHALL BE CLASS IV, UNLESS OTHERWISE DIRECTED.
ALL PATTERNS SHOWN ARE TYPICAL AND SUBJECT TO CHANGE DEPENDING ON ROADWAY WIDTH.



DETAIL OF TYPICAL INTERSECTION
SHOWING LANE STRIPING FOR
DOUBLE LEFT-TURN CONDITION.

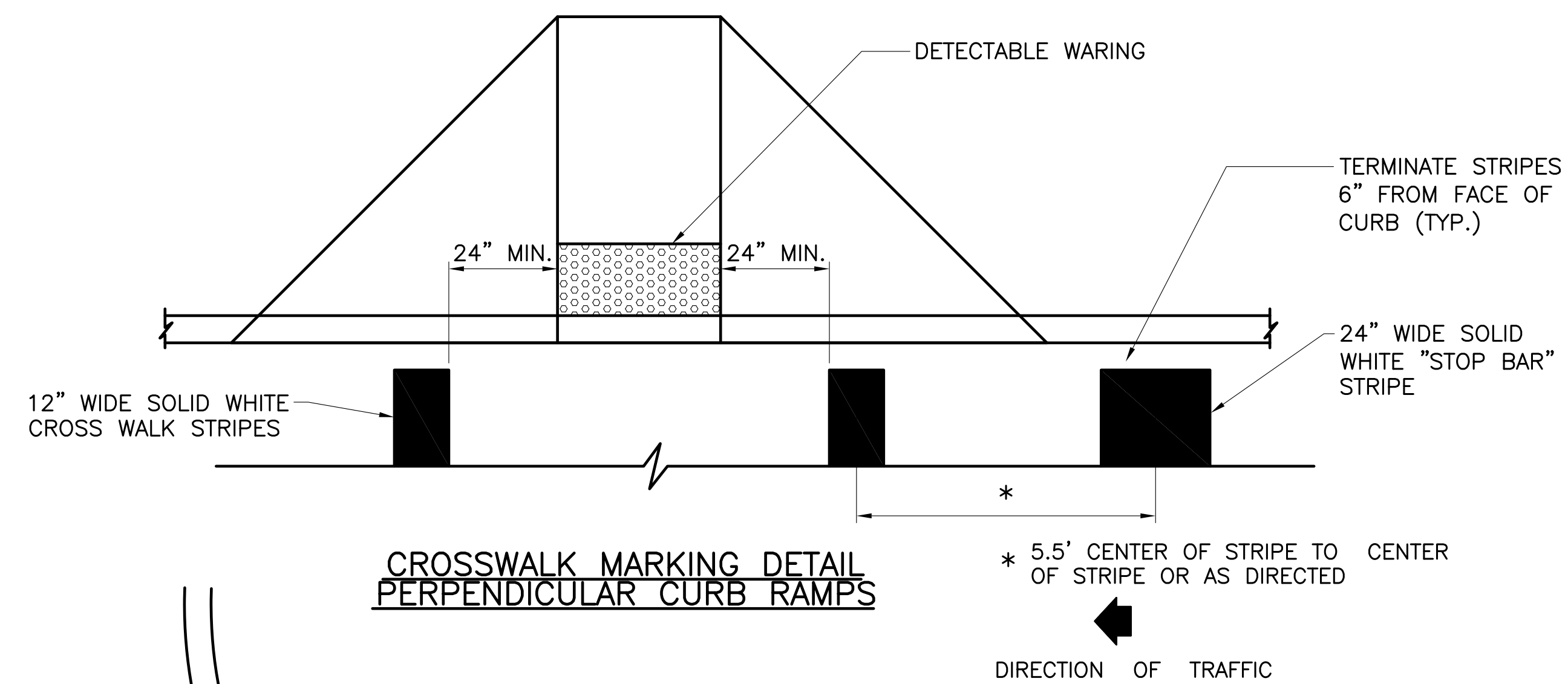


STANDARD PLAN NO. 905-50	DATED JUNE 13, 2008	SHEET NO. 6 OF 8
ROADWAY MARKING AND TYPICAL DETAILS		
ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED GLP	DRAWN GLP	CHECKED GLP
		APPROVED I. PARTENHEIMER

DATE	DESCRIPTION REVISIONS	BY

ENGINEERING AUTODESK LAND DESKTOP-STDLAY FORM C.V.

PROJECT NO.	SHEET
	242

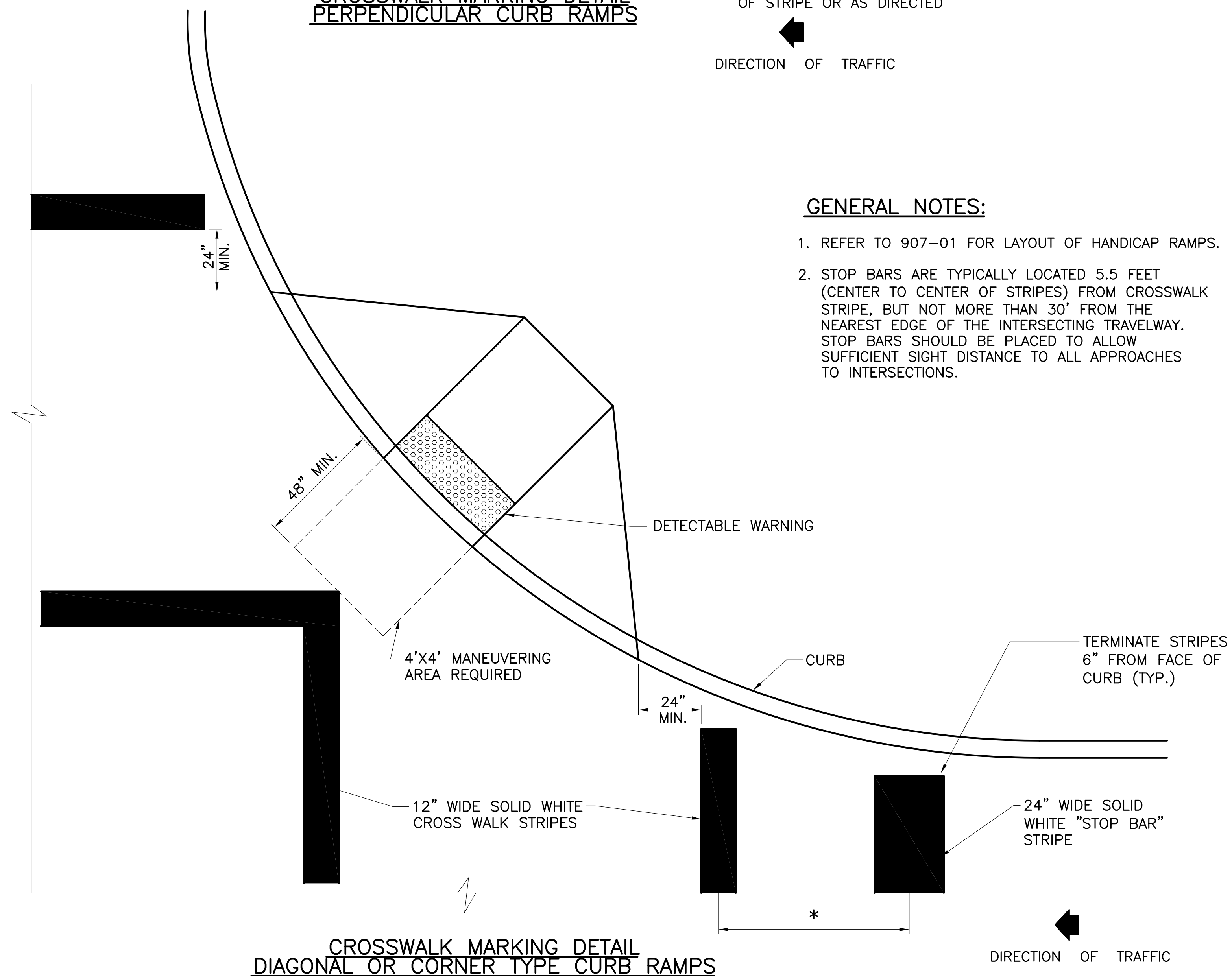


**CROSSWALK MARKING DETAIL
PERPENDICULAR CURB RAMPS**

* 5.5' CENTER OF STRIPE TO CENTER OF STRIPE OR AS DIRECTED
DIRECTION OF TRAFFIC

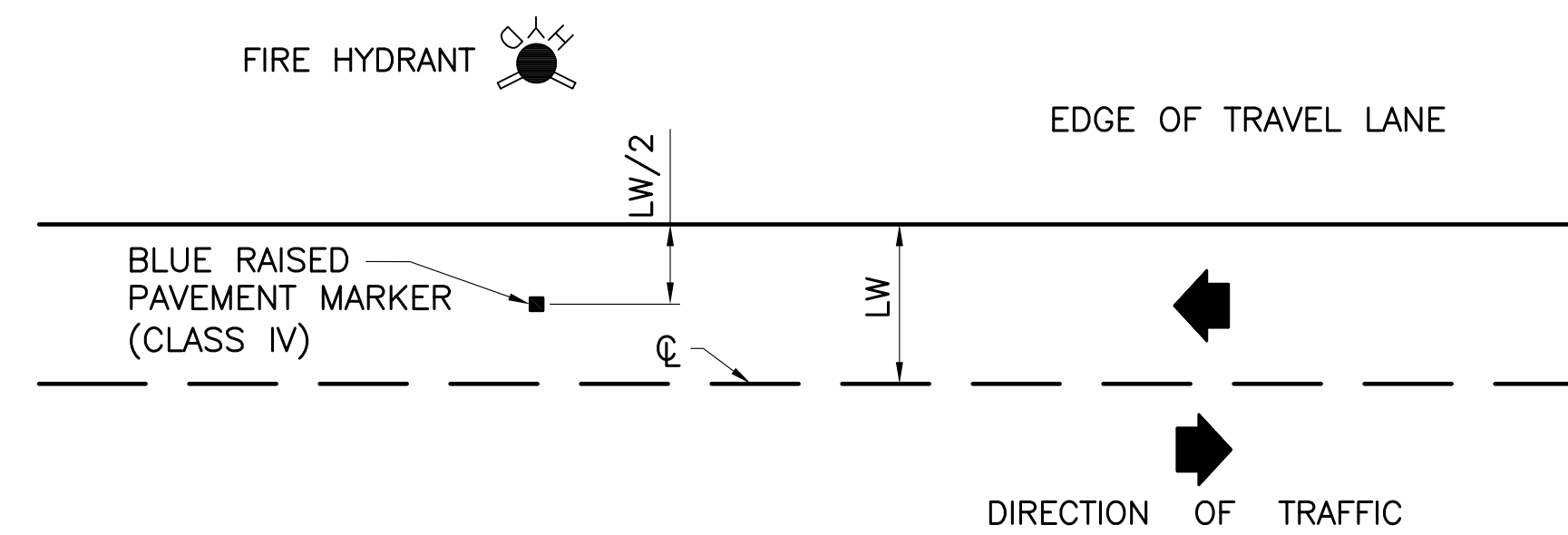
GENERAL NOTES:

1. REFER TO 907-01 FOR LAYOUT OF HANDICAP RAMPS.
2. STOP BARS ARE TYPICALLY LOCATED 5.5 FEET (CENTER TO CENTER OF STRIPES) FROM CROSSWALK STRIPE, BUT NOT MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTING TRAVELWAY. STOP BARS SHOULD BE PLACED TO ALLOW SUFFICIENT SIGHT DISTANCE TO ALL APPROACHES TO INTERSECTIONS.

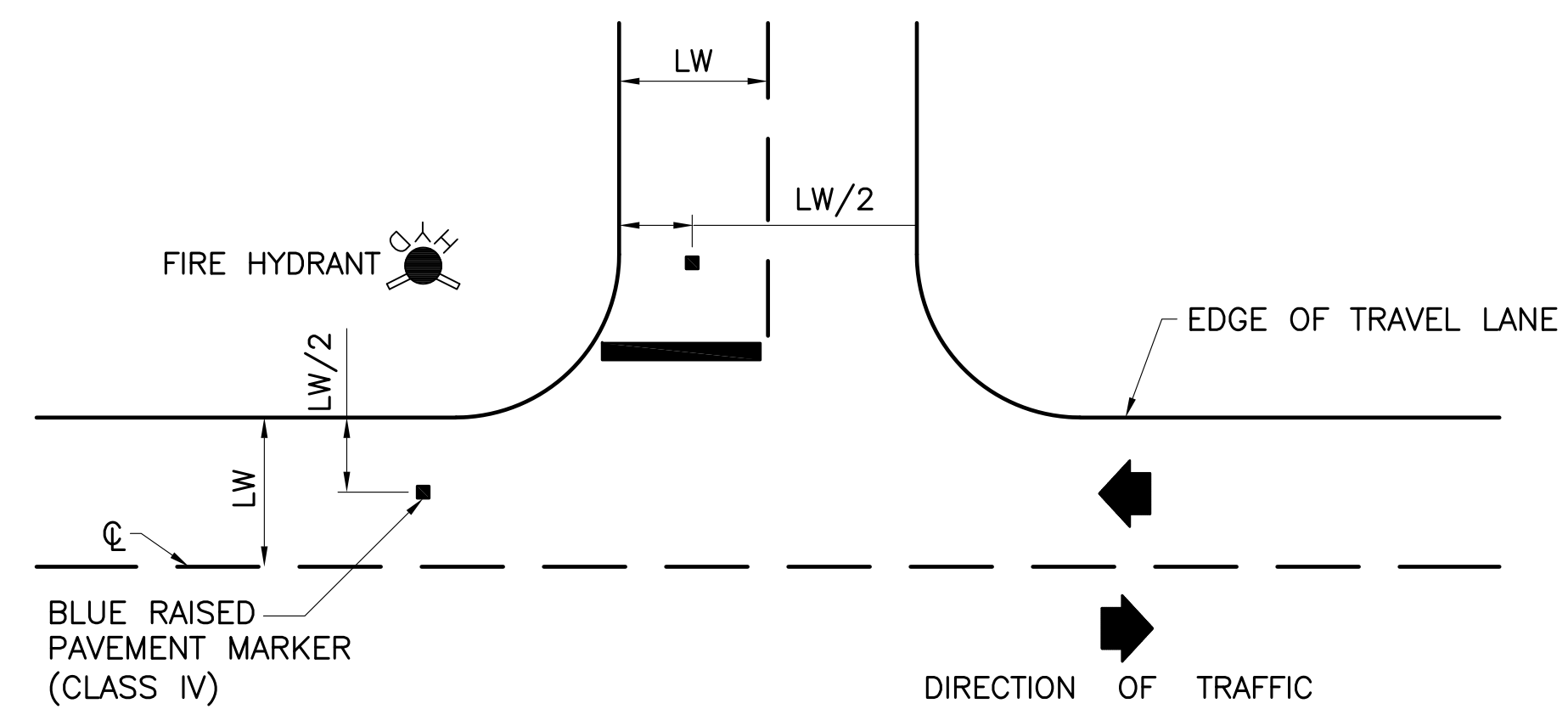


**CROSSWALK MARKING DETAIL
DIAGONAL OR CORNER TYPE CURB RAMPS**

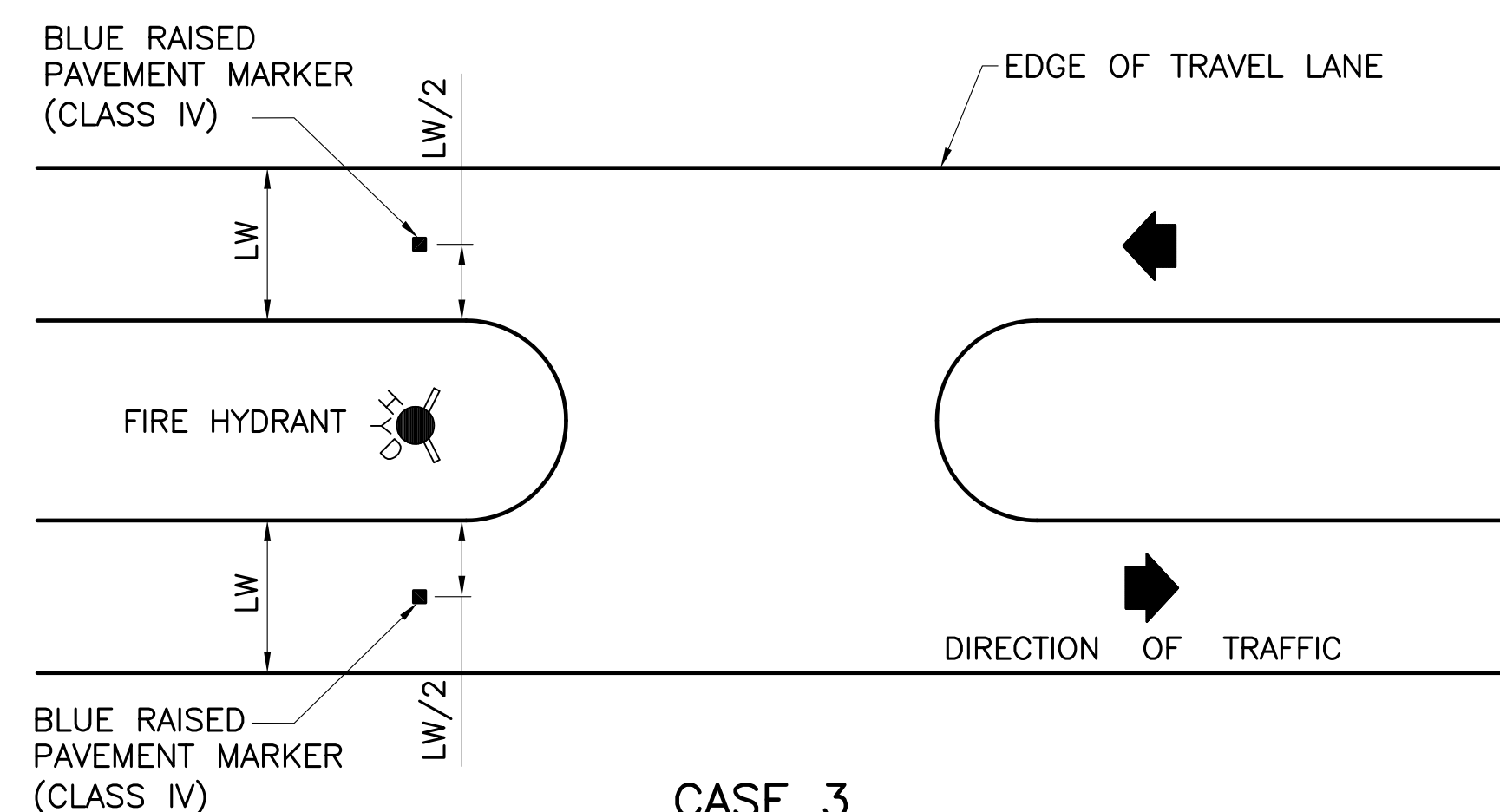
* 5.5' CENTER OF STRIPE TO CENTER OF STRIPE OR AS DIRECTED
DIRECTION OF TRAFFIC



**CASE 1
(THRUWAY CONDITION)**

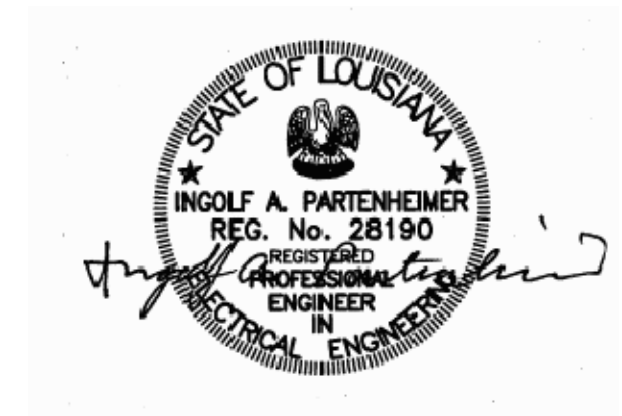


**CASE 2
(CORNER CONDITION)**



**CASE 3
(MEDIAN CONDITION)**

REFLECTIVE MARKER FOR FIRE DEPARTMENT



JUNE 13, 2008

STANDARD PLAN NO. 905-50	DATED JUNE 13, 2008	SHEET NO. 7 OF 8
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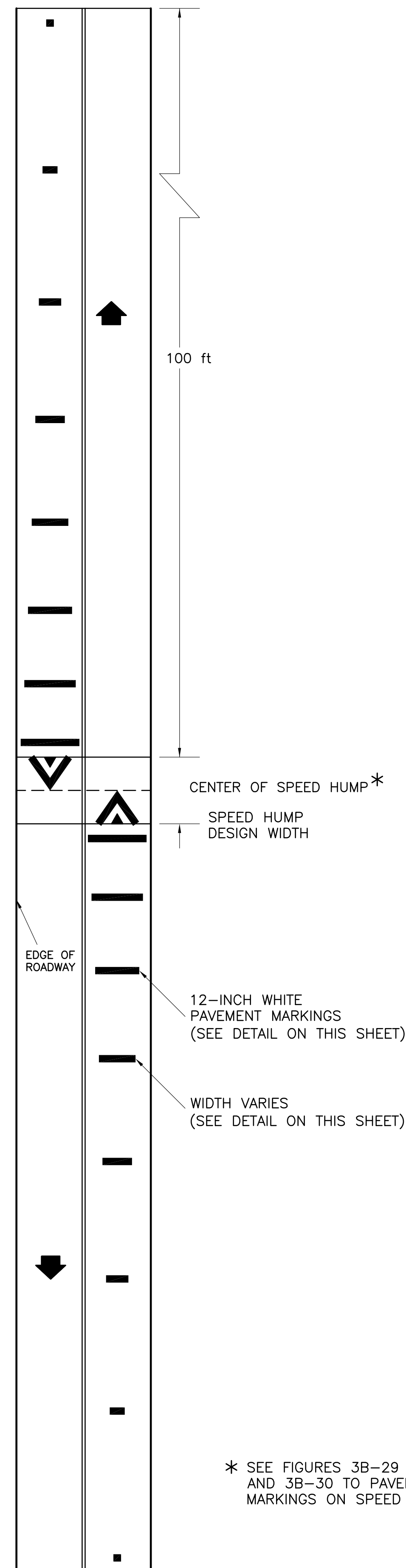
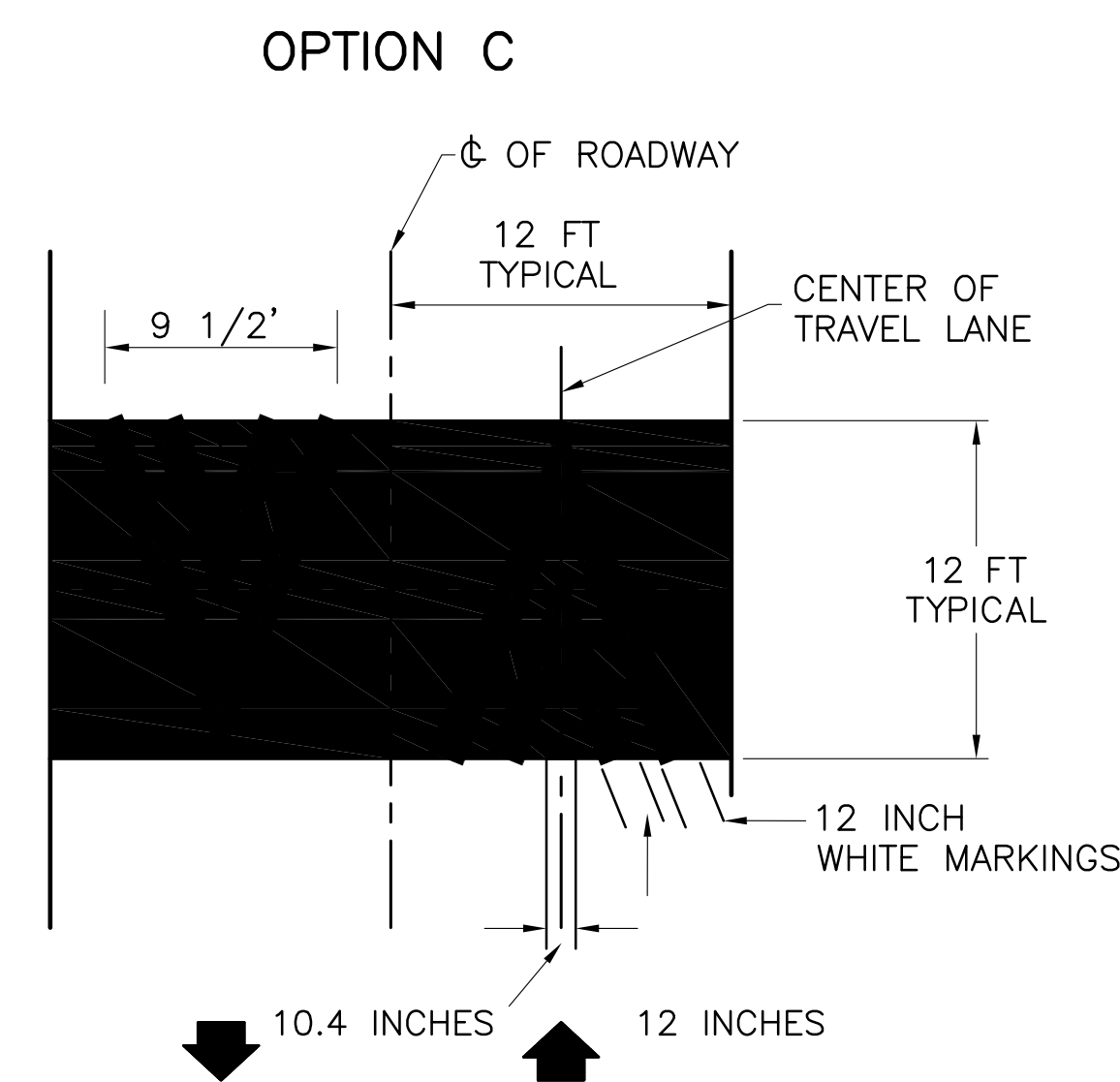
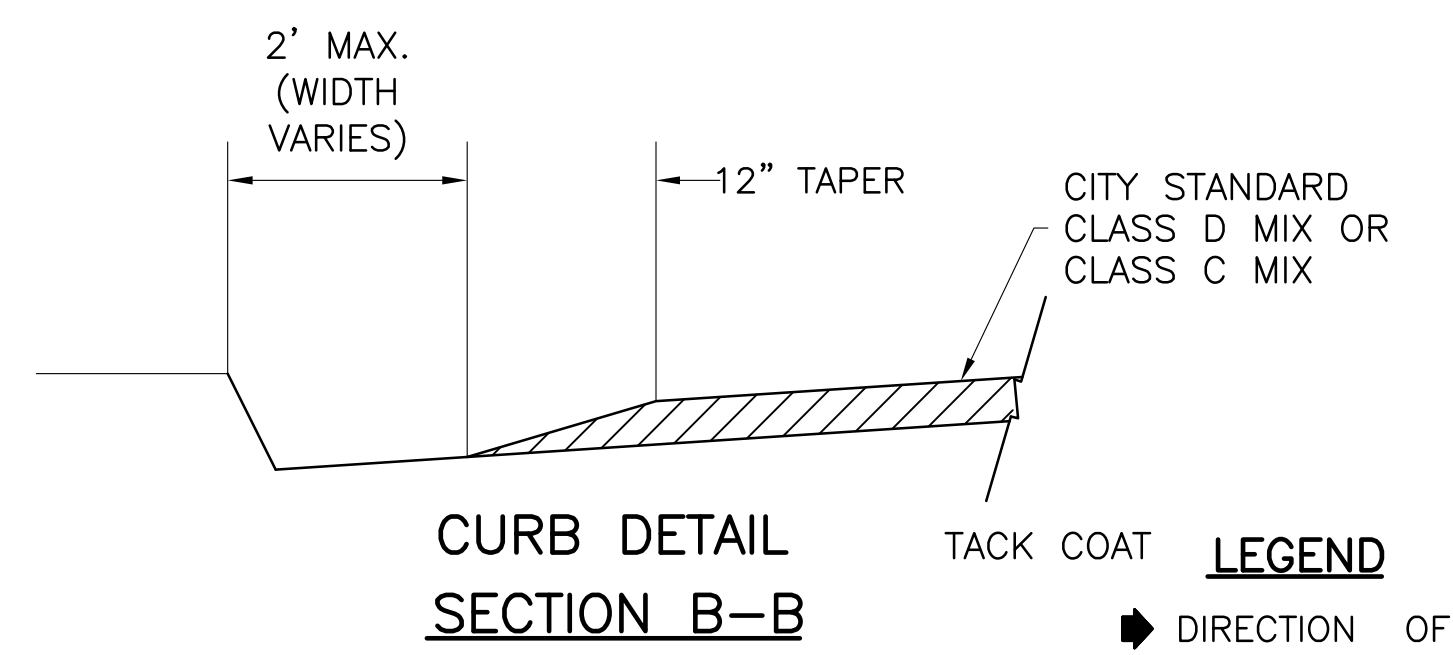
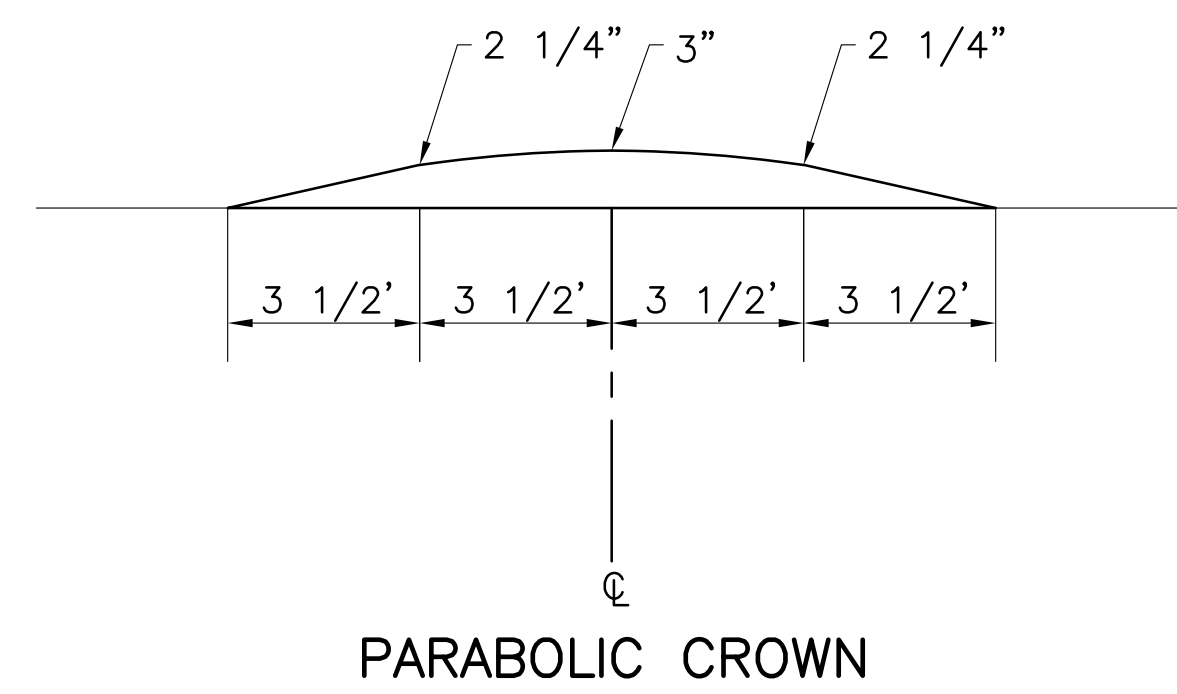
**INTERSECTION MARKINGS
AND
TYPICAL DETAILS**

ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED I. PARTENHEIMER

DATE	DESCRIPTION REVISIONS	BY

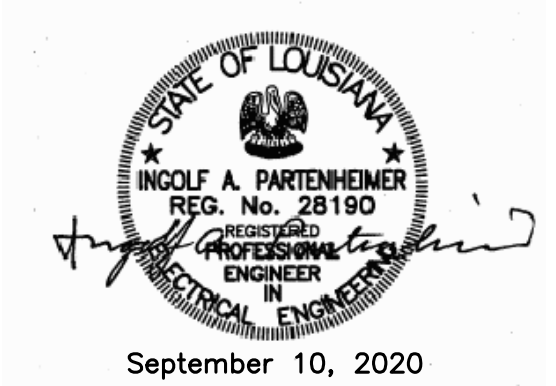
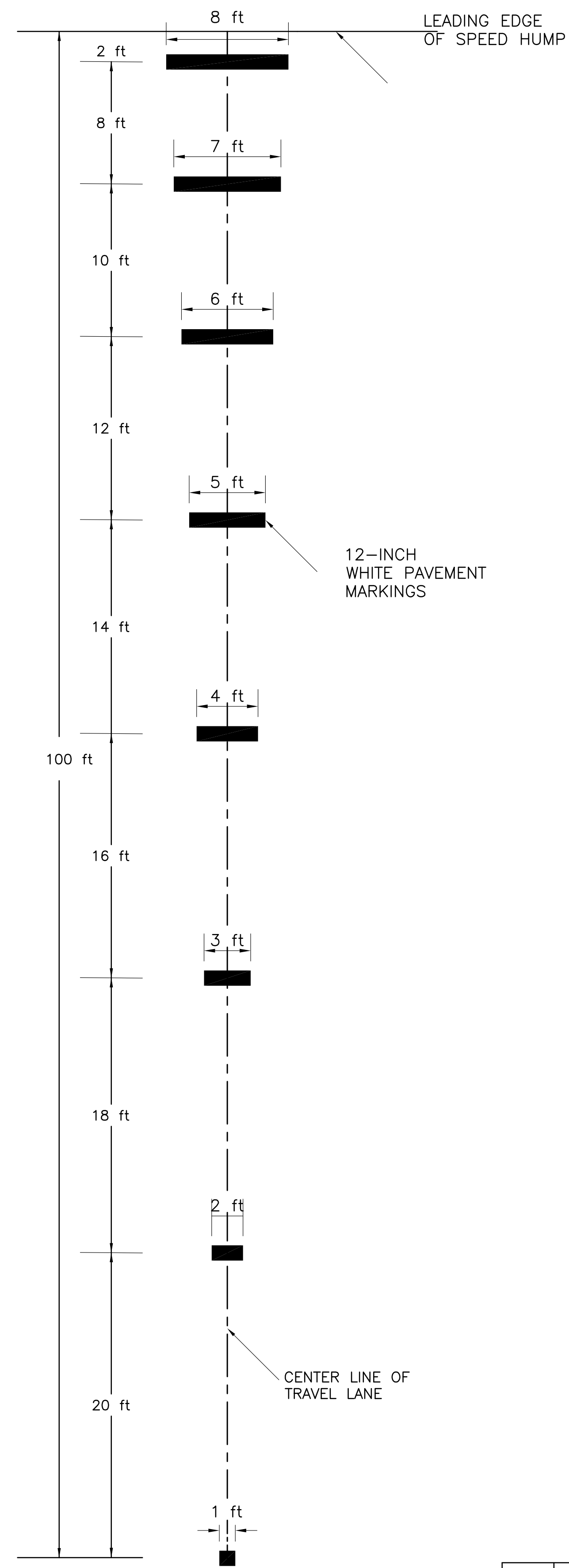
FIGURE 3B-31. ADVANCE WARNING MARKINGS FOR SPEED HUMPS

PROJECT NO.	SHEET
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* SEE FIGURES 3B-29 AND 3B-30 TO PAVEMENT MARKINGS ON SPEED HUMPS

DETAIL-SPEED HUMP ADVANCE WARNING MARKERS

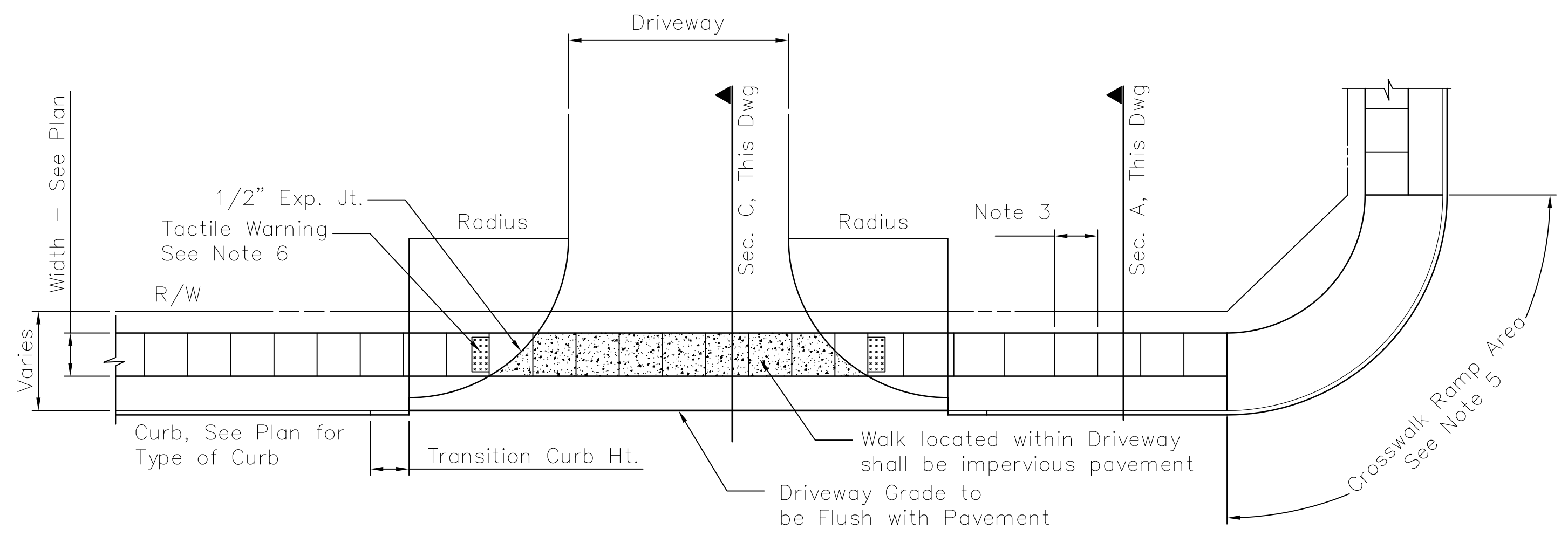


STANDARD PLAN NO. 905-50	DATED SEPTEMBER 10, 2020	SHEET NO. 8 OF 8
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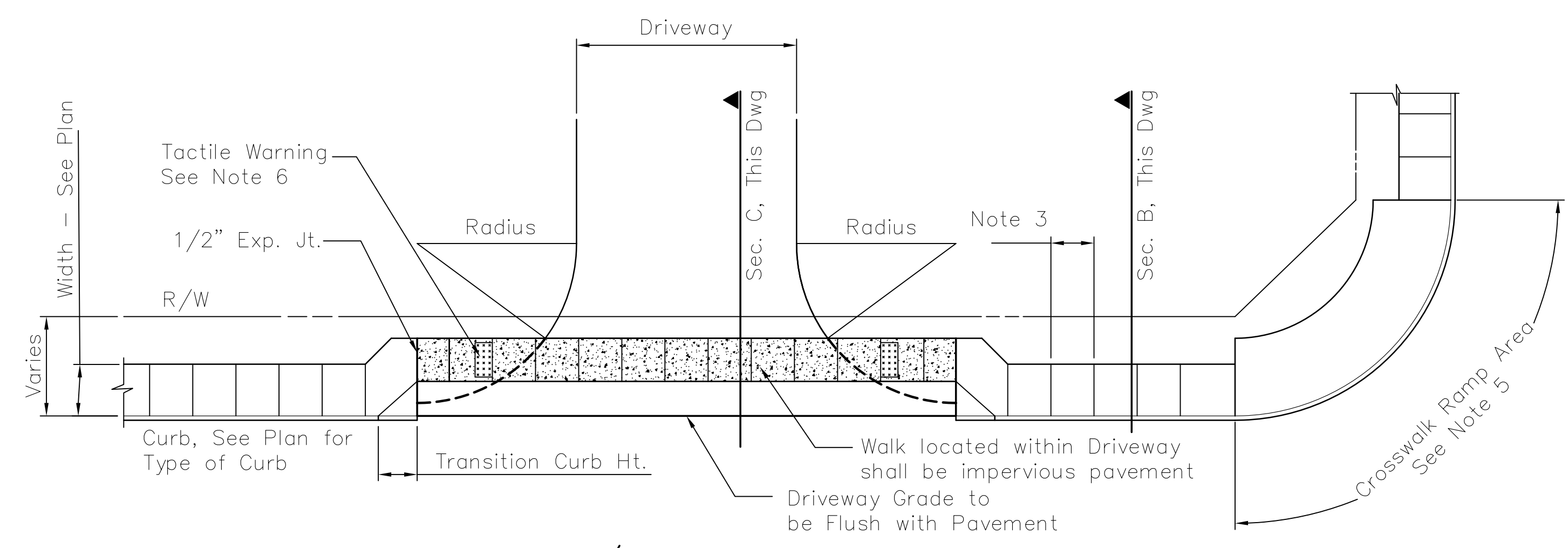
SPEED HUMP - SPEED TABLE

ENGINEERING DIVISION DEPARTMENT OF TRANSPORTATION AND DRAINAGE CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED C. PENNINGTON	DRAWN RLB	CHECKED I. PARTENHEIMER	APPROVED I. PARTENHEIMER

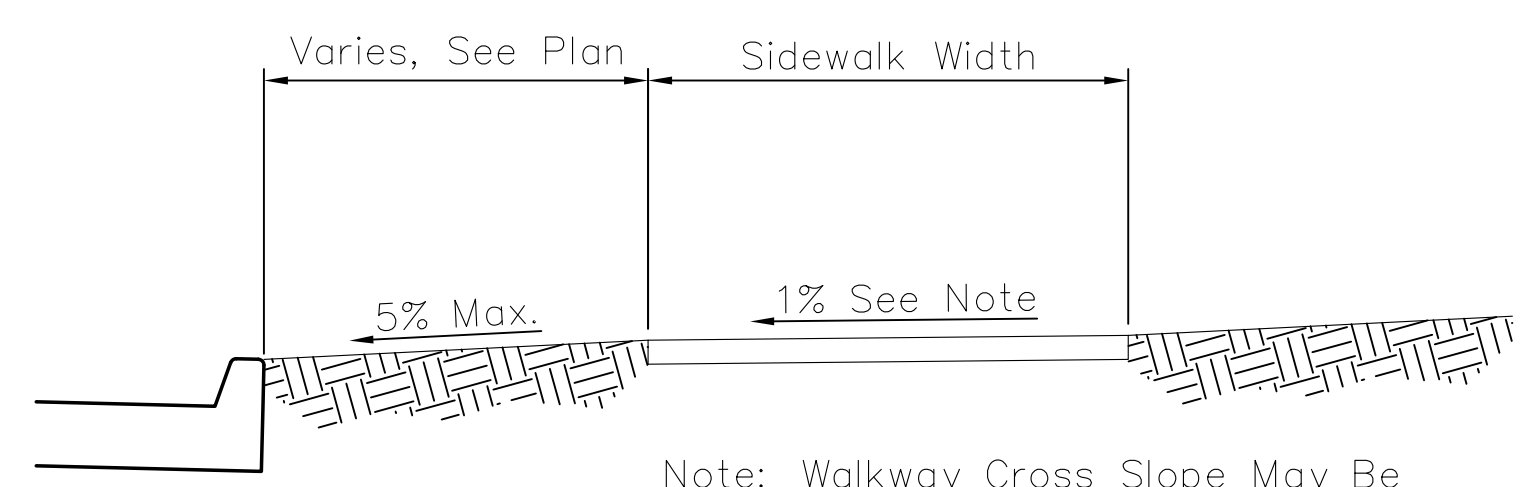
DATE	DESCRIPTION REVISIONS	BY



Driveway Crossing w/ Walk Set Off Curb

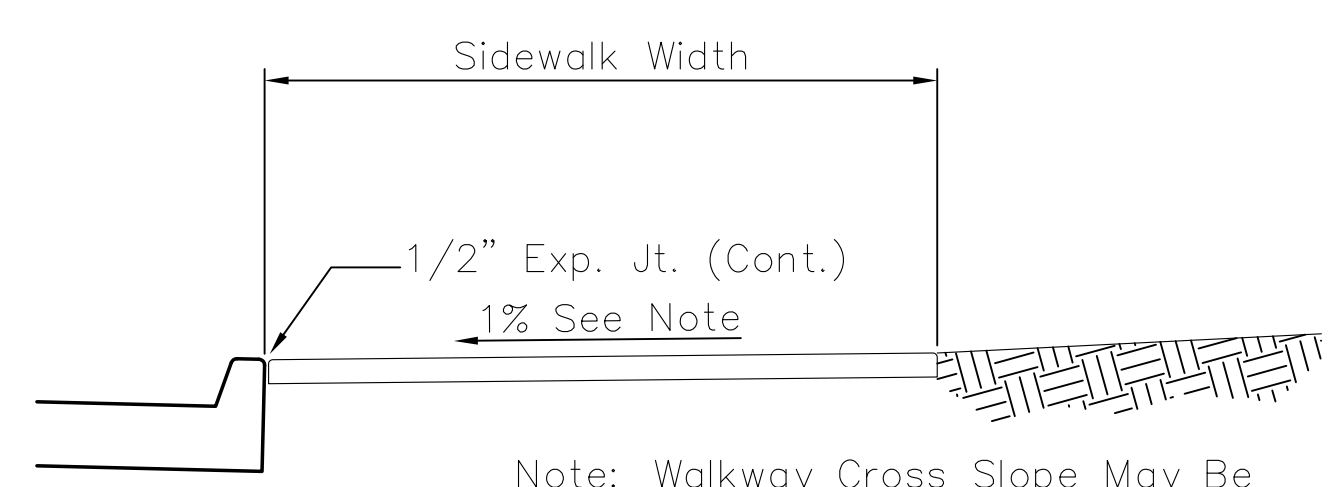


Driveway Crossing w/ Walk Set Adjacent to Curb



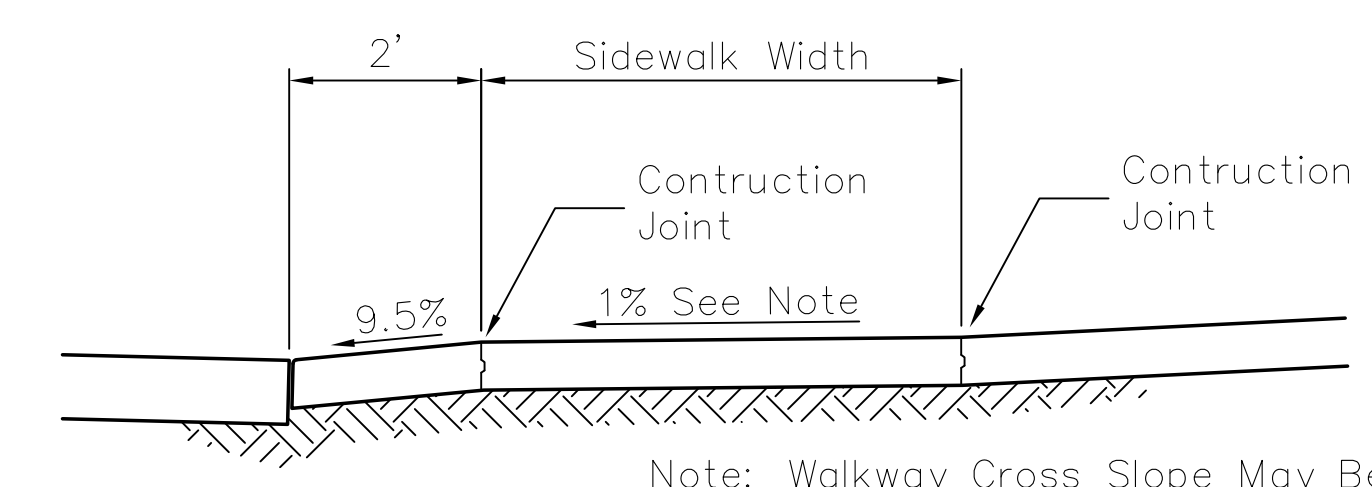
Section A

Note: Walkway Cross Slope May Be Increased to 2% max. to Resolve Grade Requirements.



Section B

Note: Walkway Cross Slope May Be Increased to 2% max. to Resolve Grade Requirements.



Section C

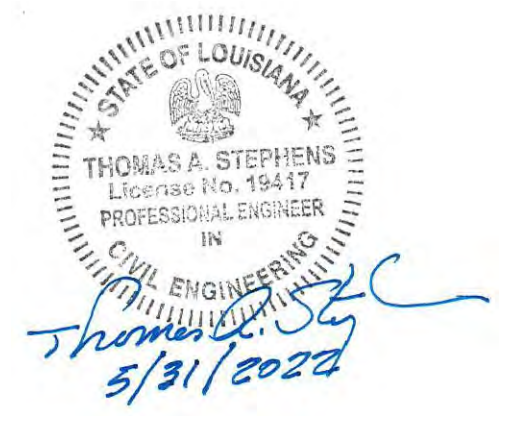
Note: Walkway Cross Slope May Be Increased to 2% max. to Resolve Grade Requirements.

General Notes

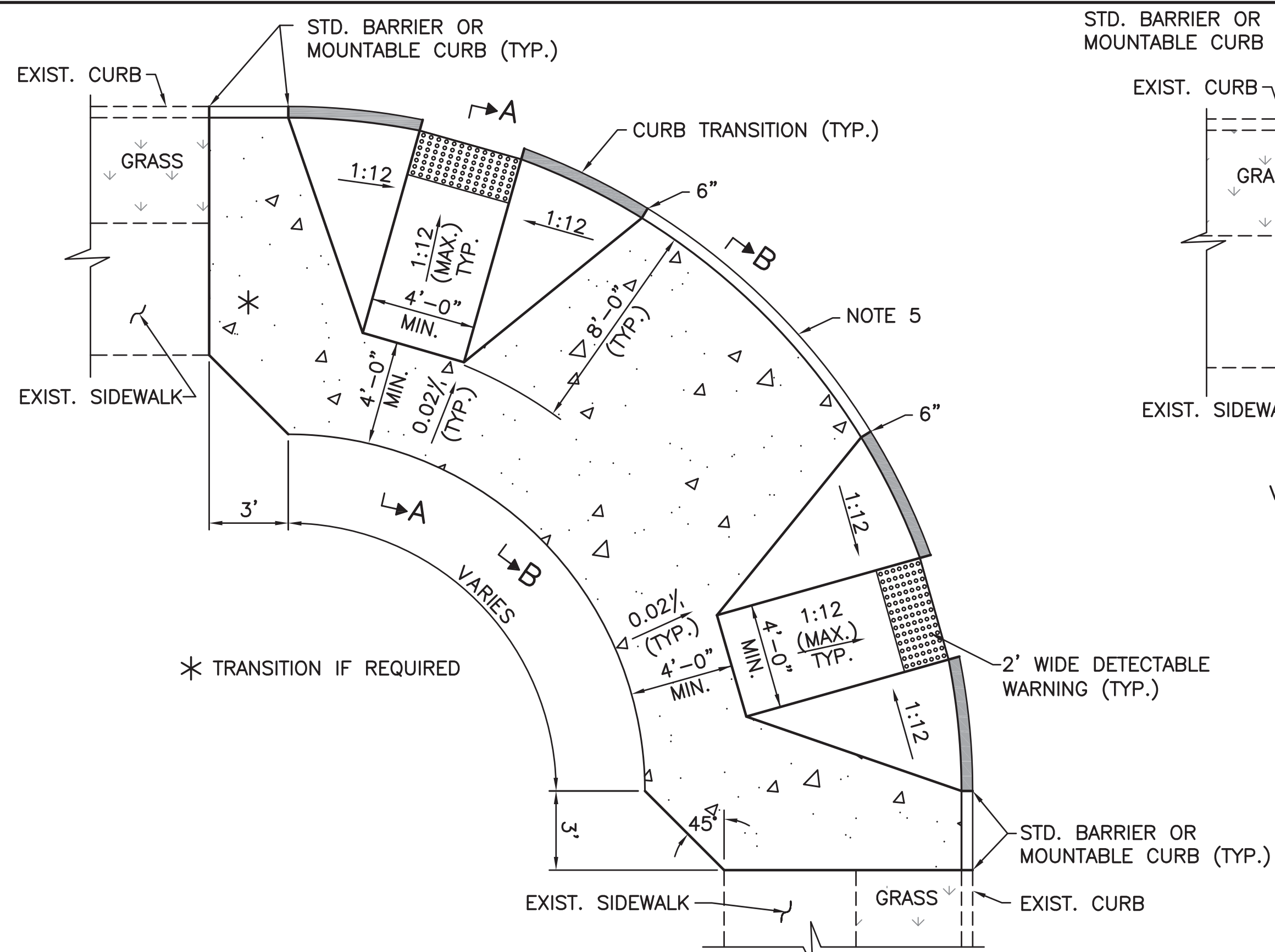
- 1/2" expansion joints shall be placed using preformed joint filler at all junctions with existing concrete, adjacent to all curbs, manholes, and junction boxes, and around poles and similar obstructions.
- For impervious pavement 1/2" expansion joints shall be placed at no more than 100 foot spaces when long pours are not interrupted by driveways or junctions with other walks. Not required for pervious pavement.
 - Impervious concrete walk joints may be tooled or sawn to a depth of 1/3 the concrete thickness. Sawn joints shall be cut between 24 and 48 hours after concrete placement.
 - Pervious concrete walk joints shall be sawn to a depth of 1/3rd the concrete thickness and shall be cut between 24 and 48 hours after placement.
- Dummy (crack control) joints in impervious concrete shall be placed at intervals equaling walkway width. Joints in pervious concrete shall be placed at 4 times the walkway width.
- Where concrete walks pass through driveways the walks shall consist of impervious concrete of the same thickness as the driveway, but not less than 6 inches. The walk shall be formed on each side to provide a controlled cross slope. Dummy joints shall be tooled.
- Curb ramps shall be installed as noted on the plans. Curb ramps and flares shall be built using impervious concrete unless noted otherwise.
- Detectable warnings shall be provided at street intersections and bus stop loading areas and as otherwise noted on the plans. Detectable warnings shall also be provided at approaches to driveways that are STOP controlled by either signs or signals.

Referenced Standards

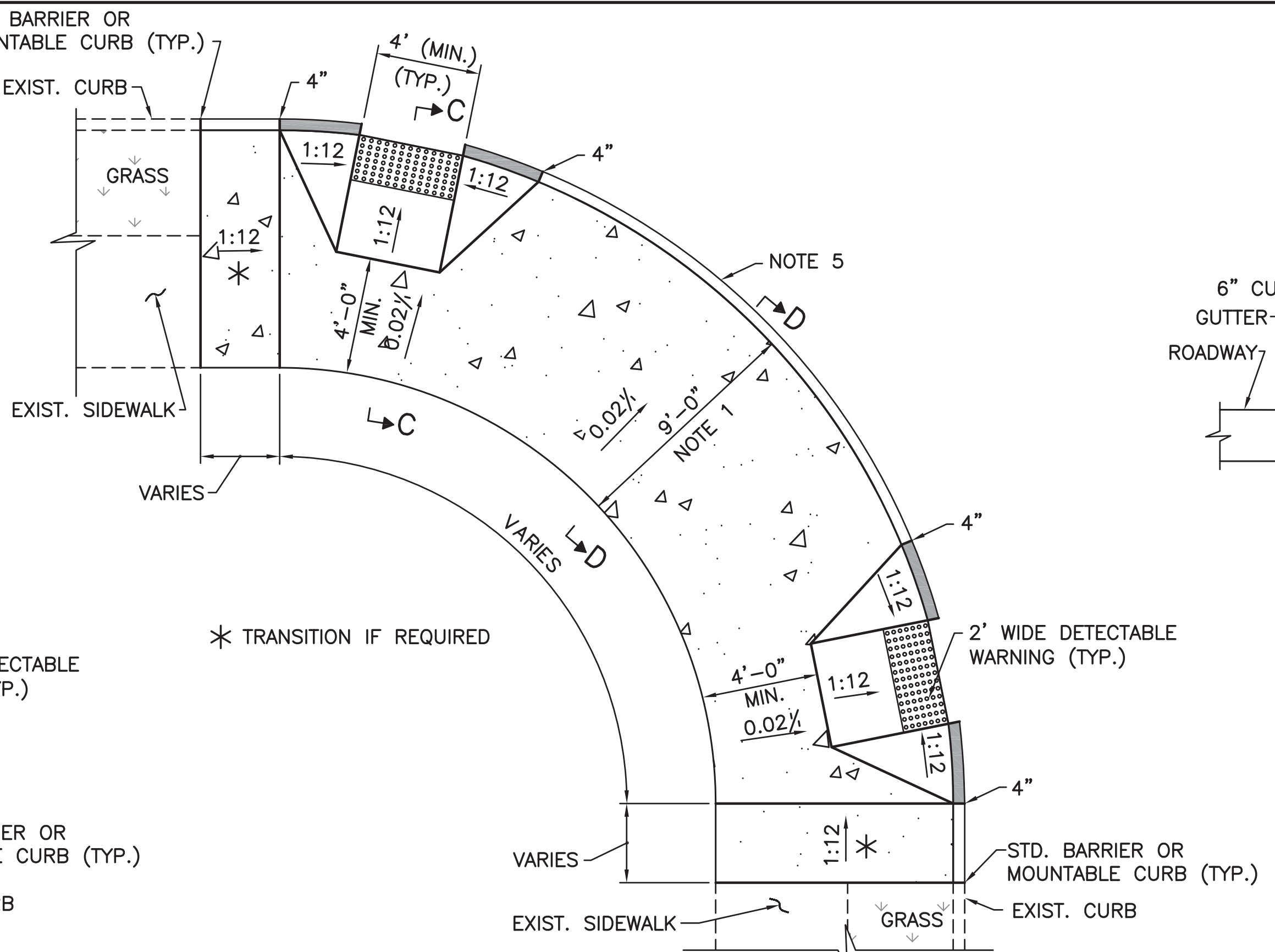
- Refer to Std 907-03 for Commercial Driveways
- Refer to Std 907-04 for Residential Driveways
- Refer to Std 907-02 for Curb and Gutter Details



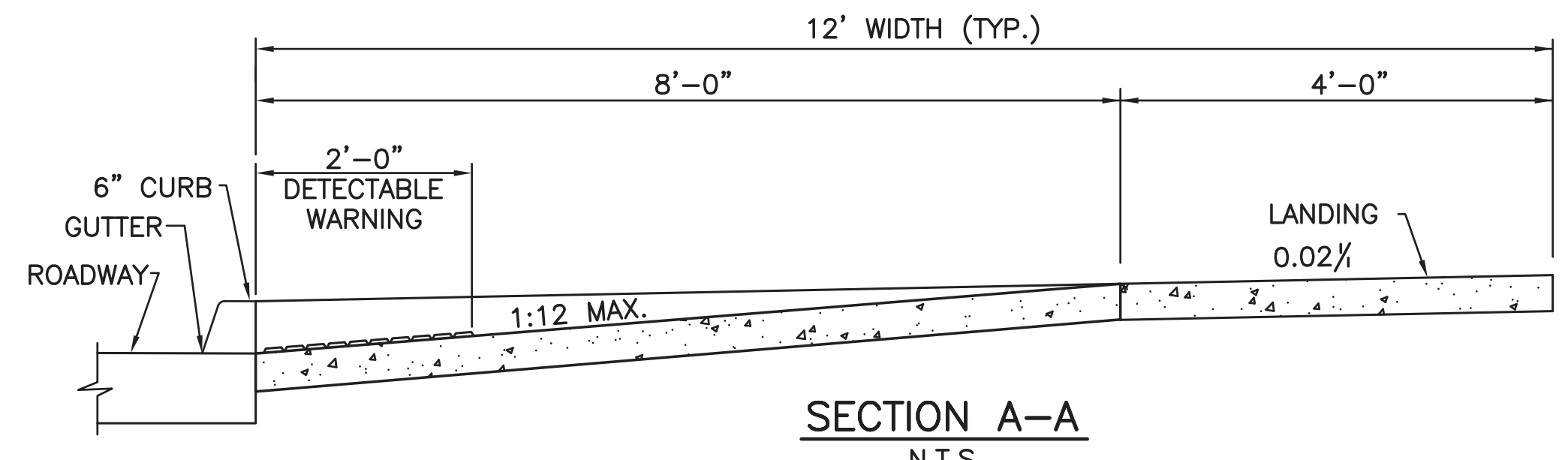
NOTE: THIS DRAWING HAS BEEN PREPARED FOR USE ON PROJECTS INTENDED FOR CONSTRUCTION ON PUBLIC ROADS IN EAST BATON ROUGE PARISH, LA. OTHER USES ARE NOT AUTHORIZED.



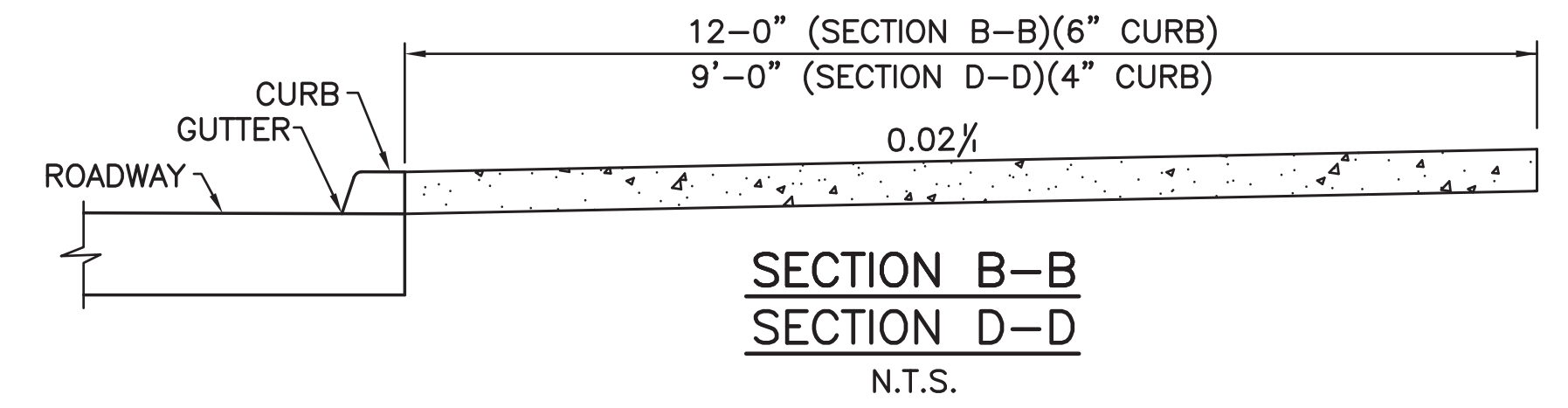
LAYOUT 1
DUAL CORNER RAMP (FLARED)
STANDARD CONDITION
 (REFER TO NOTES)



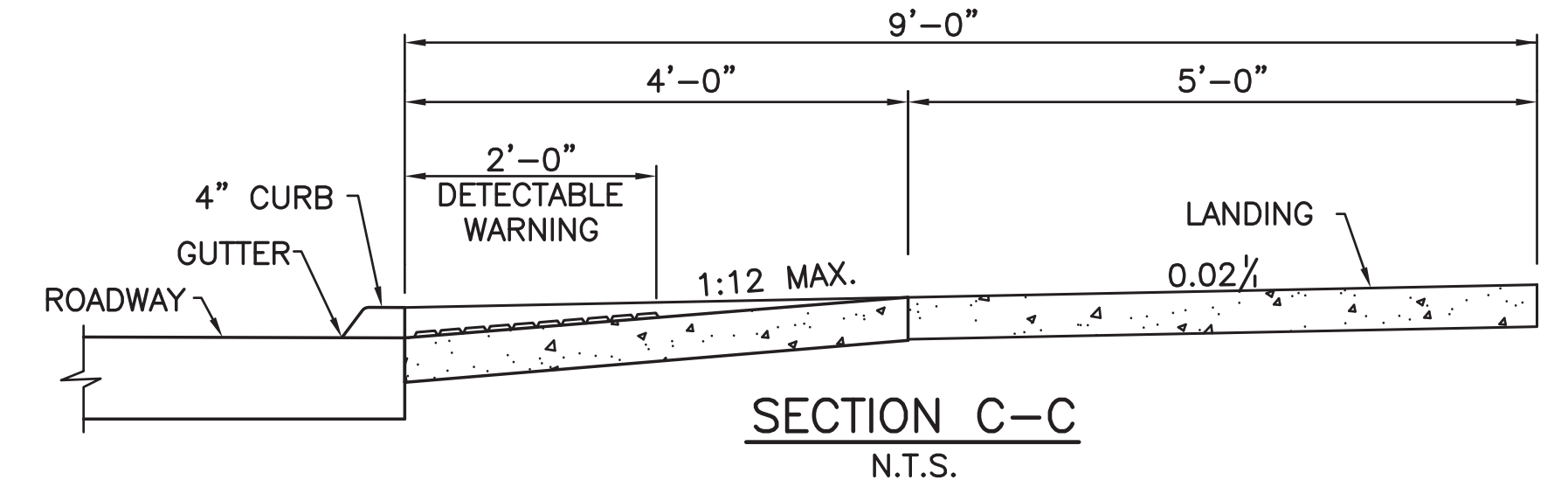
LAYOUT 2
DUAL CORNER RAMP (FLARED)
CONSTRAINED CONDITION
 (REFER TO NOTES)



SECTION A-A
 N.T.S.



SECTION B-B
SECTION D-D
 N.T.S.



SECTION C-C
 N.T.S.

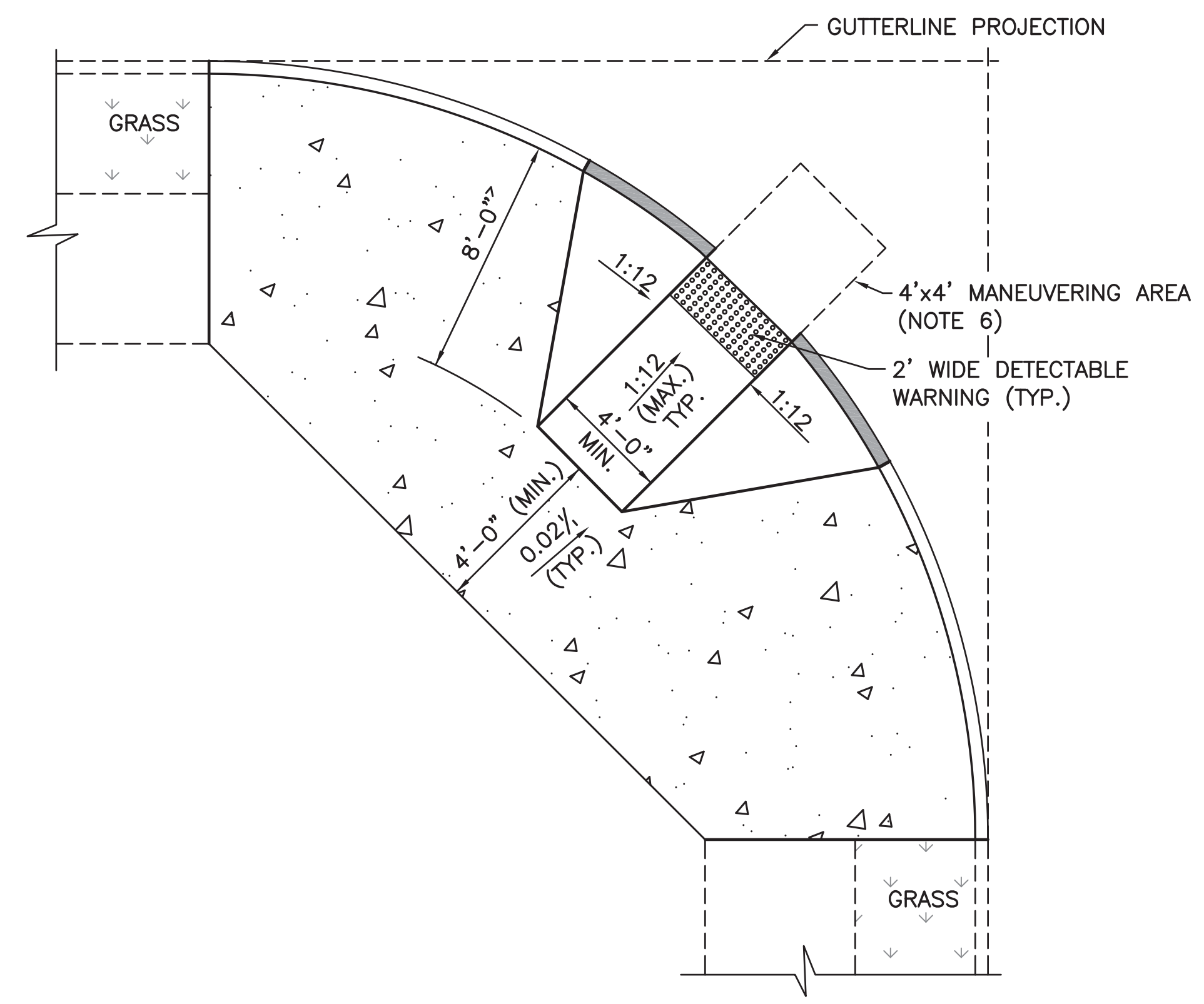
■ AREAS OF CURB MODIFICATION

NOTES:

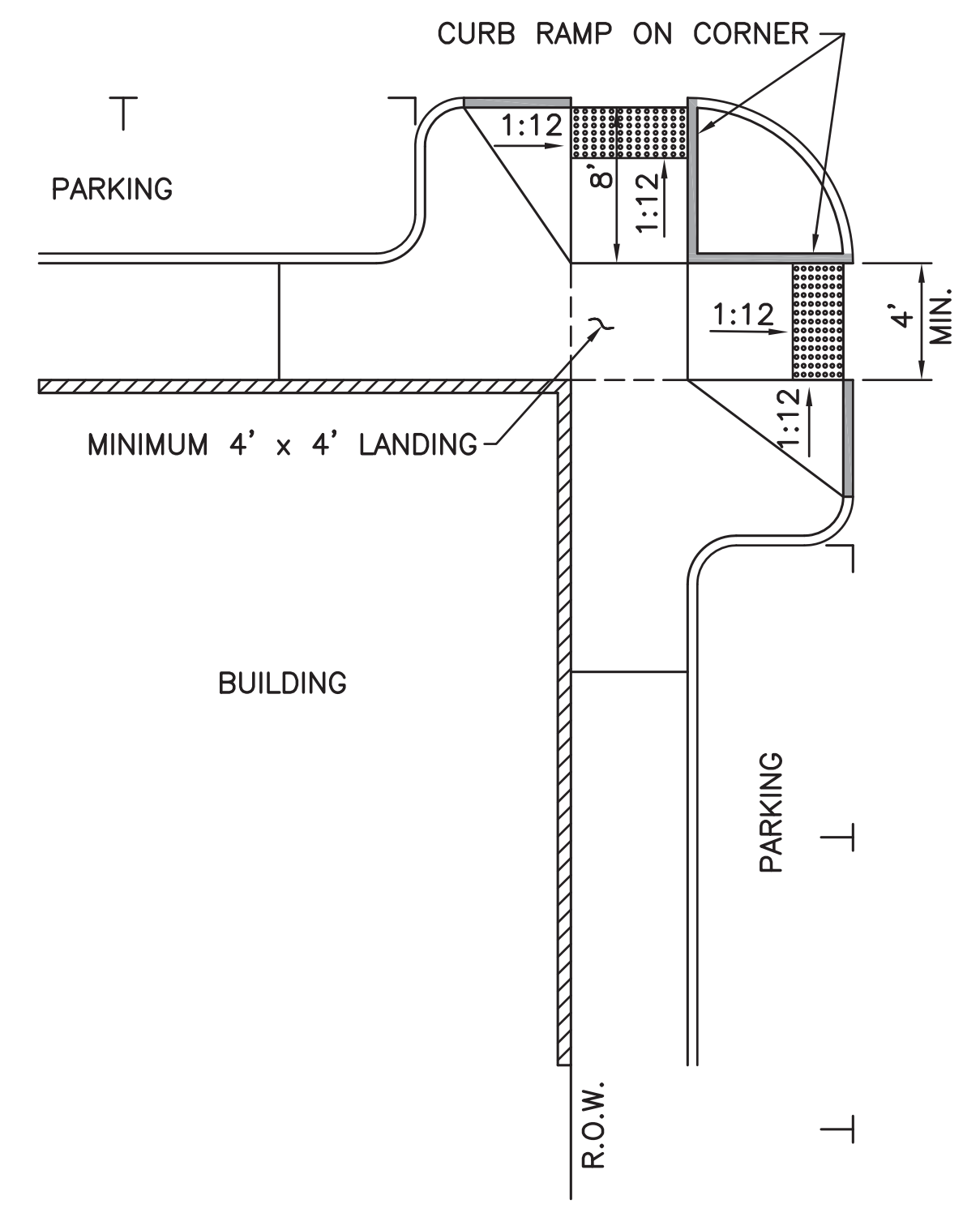
1. THE STANDARD CORNER HANDICAP RAMP WILL BE TYPE ① (SHEET 4) AS DEPICTED IN LAYOUTS 1 AND 2. OTHER SOLUTIONS MAY BE REQUIRED DEPENDING ON EXISTING CONDITIONS OR GEOMETRIC CONSTRAINTS - REFER TO SHTS. 4 AND 5. EACH LOCATION SHOULD BE EVALUATED BY QUALIFIED PERSONNEL TO DEVELOP AN APPROPRIATE SOLUTION IN ACCORDANCE WITH CURRENT STANDARDS. RAMP SELECTION AND DESIGN REQUIRES COORDINATION WITH TRAFFIC AND CROSSWALK STRIPING. ALTERNATE RAMP CONFIGURATIONS MUST BE APPROVED BY THE CHIEF TRAFFIC ENGINEER.
2. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905-50 SHEET 7.
3. THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 6 INCH BARRIER CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD MOUNTABLE CURB IS USED.
4. AREA WITHIN THE SIGHT TRIANGLE SHOULD HAVE NO SITE OBSTRUCTIONS SUCH AS BENCHES TREES, ETC..
5. MINIMUM LENGTH OF FULL HEIGHT CURB BETWEEN RAMPS SHALL BE 2 FEET LONG.
6. THE SINGLE CORNER RAMP CAN ONLY BE USED WHEN LAYOUT 1 OR LAYOUT 2 CAN NOT BE ACCOMMODATED AND IF ADEQUATE SPACE IS AVAILABLE TO DEVELOP THE REQUIRED MANEUVERING AREA BOUND BY THE CURB FACE AND THE GUTTERLINE PROJECTIONS.
7. REFER TO SHT. 907-02, CURB AND GUTTER DETAILS.



STANDARD PLAN NO. 907-01	DATED AUGUST 8, 2008	SHEET NO. 2 OF 6
SIDEWALK AND HANDICAP RAMPS - STREETS (TYPICAL LAYOUTS)		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED GLP	DRAWN GLP	CHECKED GLP
APPROVED T. STEPHENS		

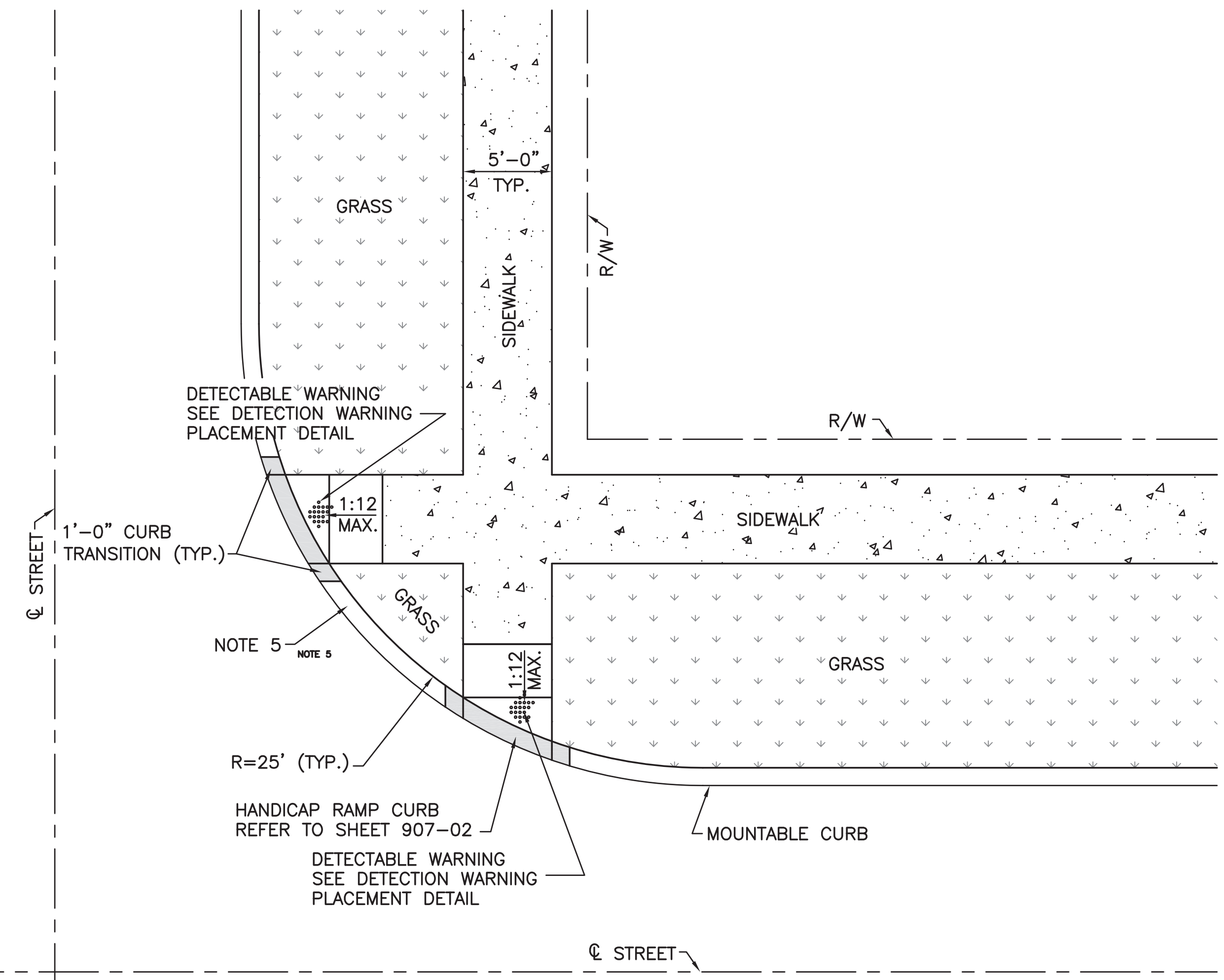


LAYOUT 3
SINGLE CORNER RAMP (FLARED)
 (REFER TO NOTES)

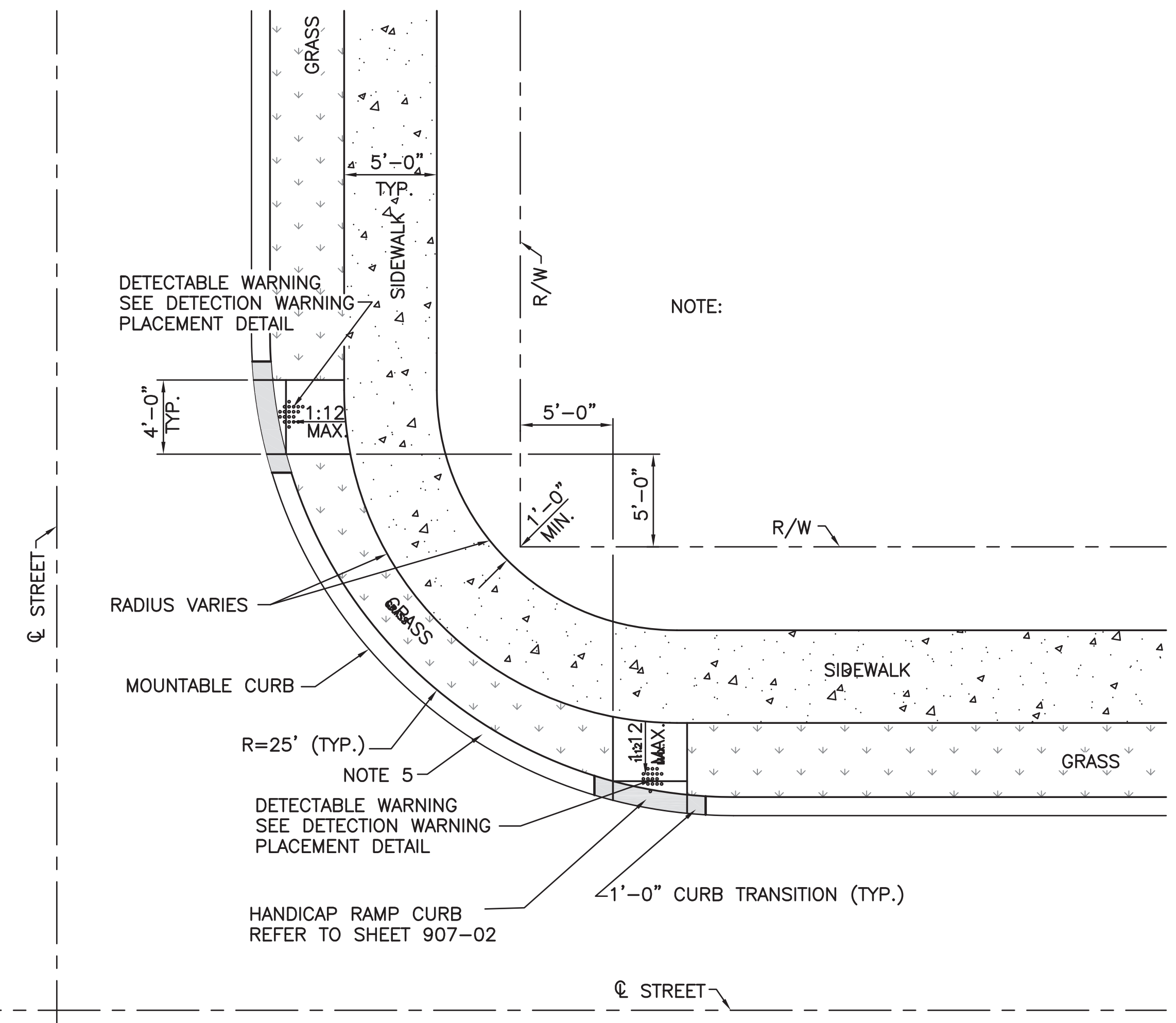


LAYOUT 4
CORNER CURB EXTENSIONS (BULB-OUTS)

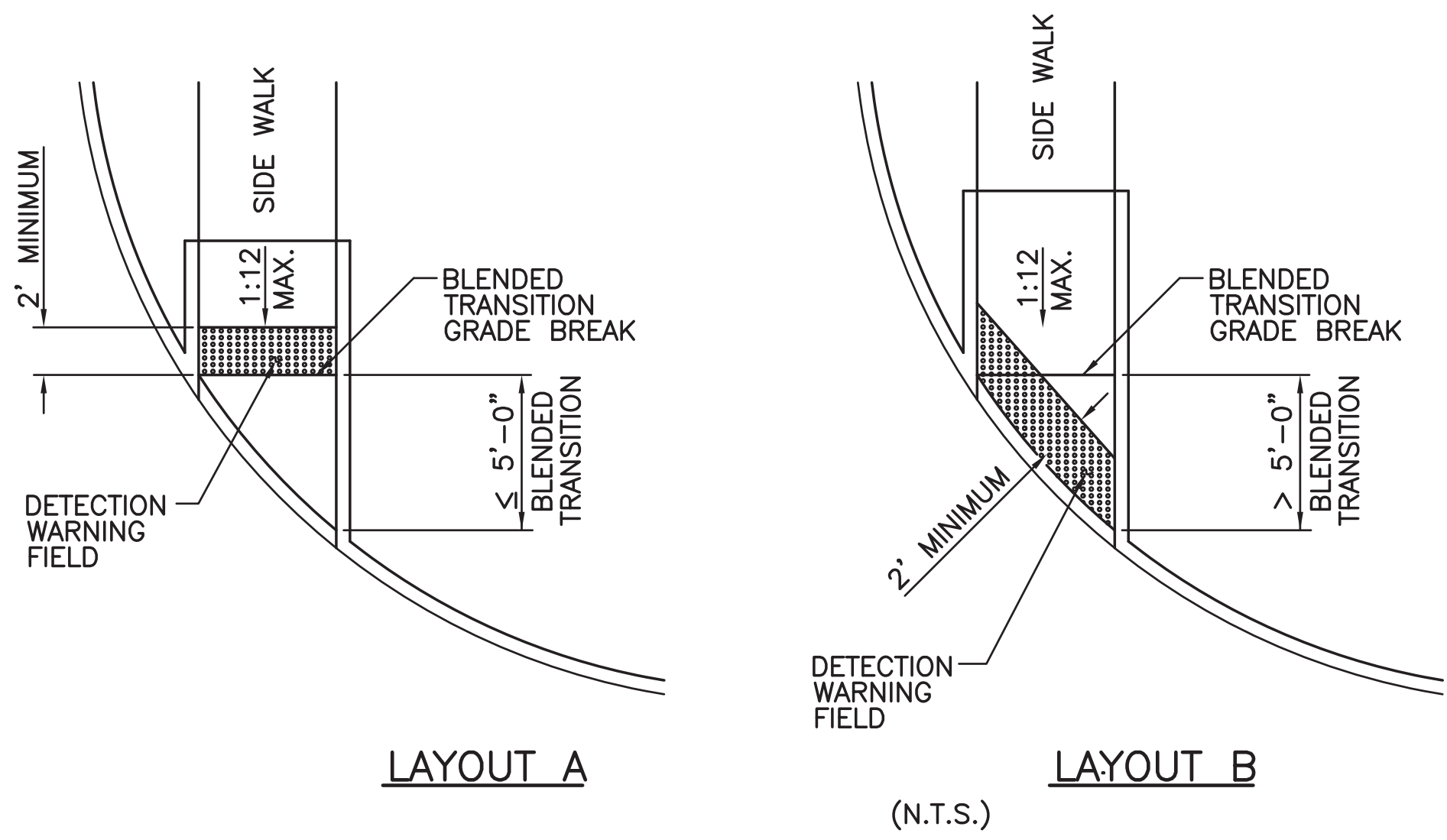
HANDICAP RAMPS - PLAN VIEWS
 N.T.S.



DUAL CORNER RAMP – LAYOUT 1
(DESIRABLE CORNER RAMP IN RESIDENTIAL SUBDIVISION)
(N.T.S.)



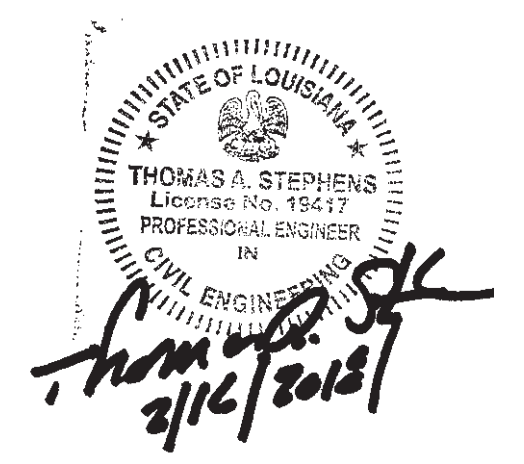
DUAL CORNER RAMP – LAYOUT 2
(FOR USE IN RESIDENTIAL SUBDIVISION WITH GEOMETRIC CONSTRAINTS)
(N.T.S.)



LAYOUT A **LAYOUT B**
(N.T.S.)
DETECTION WARNING PLACEMENT DETAIL

NOTES:

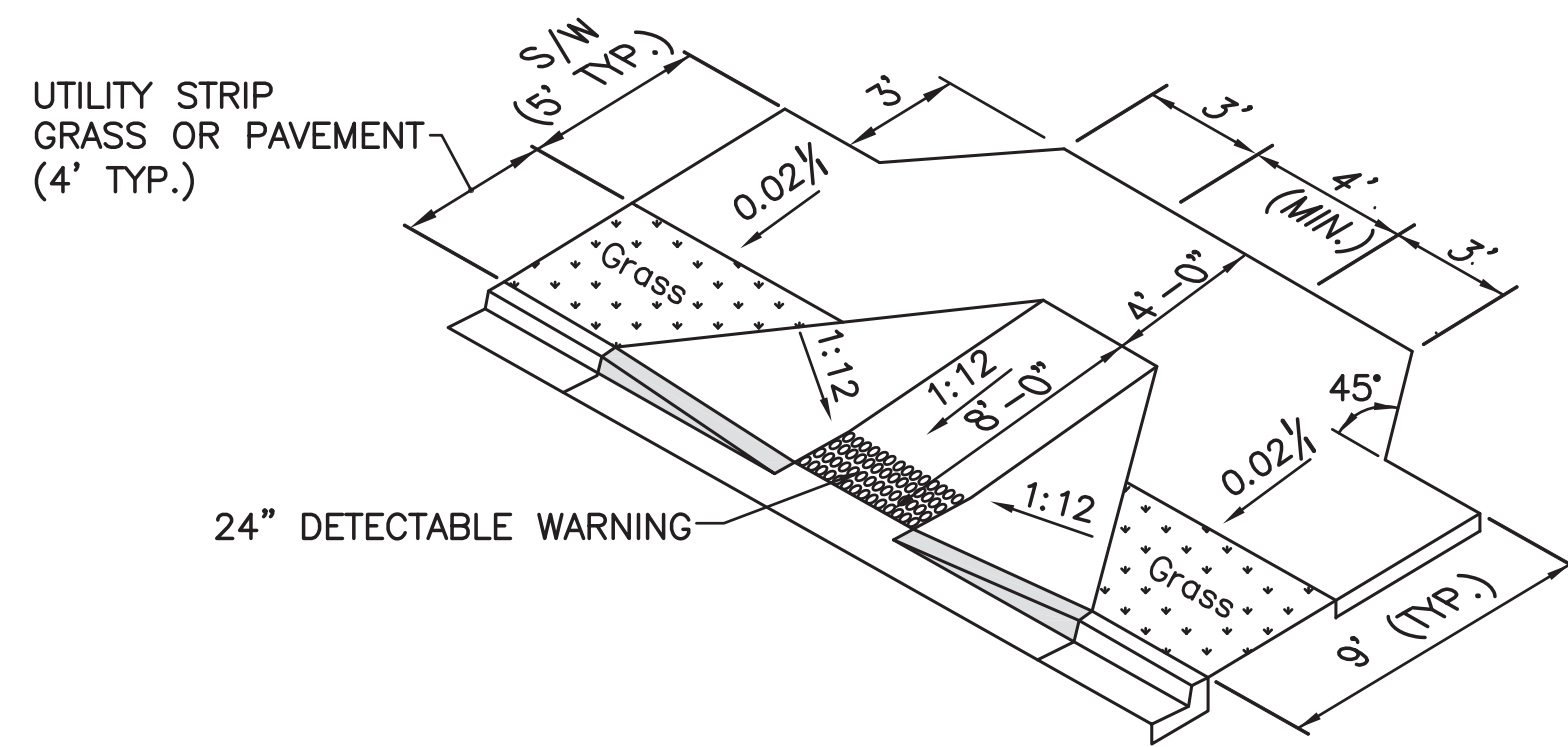
- THE STANDARD CORNER HANDICAP RAMP WILL BE TYPE 12 (SHEET 5) AS DEPICTED IN LAYOUTS 1 AND 2. OTHER SOLUTIONS MAY BE REQUIRED DEPENDING ON EXISTING CONDITIONS OR GEOMETRIC CONSTRAINTS – REFER TO SHTS. 4 AND 5. EACH LOCATION SHOULD BE EVALUATED BY QUALIFIED PERSONNEL TO DEVELOP AN APPROPRIATE SOLUTION IN ACCORDANCE WITH CURRENT STANDARDS. RAMP SELECTION AND DESIGN REQUIRES COORDINATION WITH TRAFFIC AND CROSSWALK STRIPING. ALTERNATE RAMP CONFIGURATIONS MUST BE APPROVED BY THE CHIEF TRAFFIC ENGINEER.
- LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905-50 SHEET 7.
- THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 4" MOUNTABLE CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD BARRIER CURB BE USED.
- AREA WITHIN THE SIGHT TRIANGLE SHOULD HAVE NO SIGHT OBSTRUCTIONS SUCH AS BENCHES, TREES, ETC..
- MINIMUM LENGTH OF FULL HEIGHT CURB BETWEEN RAMPS SHALL BE 2 FEET LONG.
- THE SINGLE CORNER RAMP CAN ONLY BE USED WHEN LAYOUT 1 OR LAYOUT 2 CAN NOT BE ACCOMMODATED AND IF ADEQUATE SPACE IS AVAILABLE TO DEVELOP THE REQUIRED MANEUVERING AREA BOUND BY THE CURB FACE AND THE GUTTERLINE PROJECTIONS.
- REFER TO SHT. 907-02, CURB AND GUTTER DETAILS.
- DETECTION WARNING PLACEMENT IS NOT CONSTRAINED IN BLENDED TRANSITION AREA.
- SLOPES ON BLENDED TRANSITION SHALL NOT BE STEEPER THAN 2% (1 ON 50) IN ANY DIRECTION.



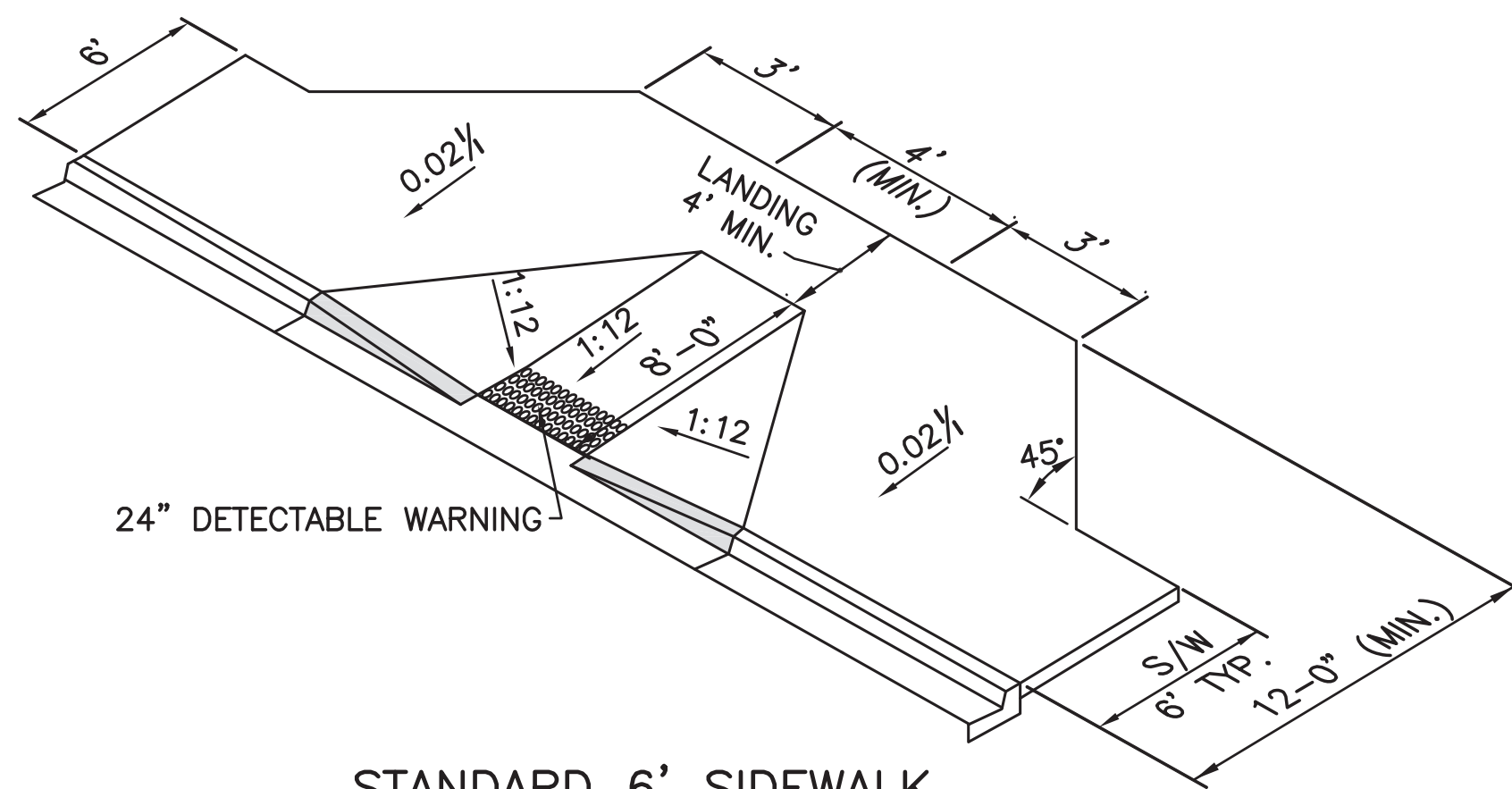
■ AREAS OF CURB MODIFICATION

4/25/11	ADD DETECTION WARNING PLACEMENT DETAIL	G.CHENG
DATE	DESCRIPTION	BY
	REVISIONS	

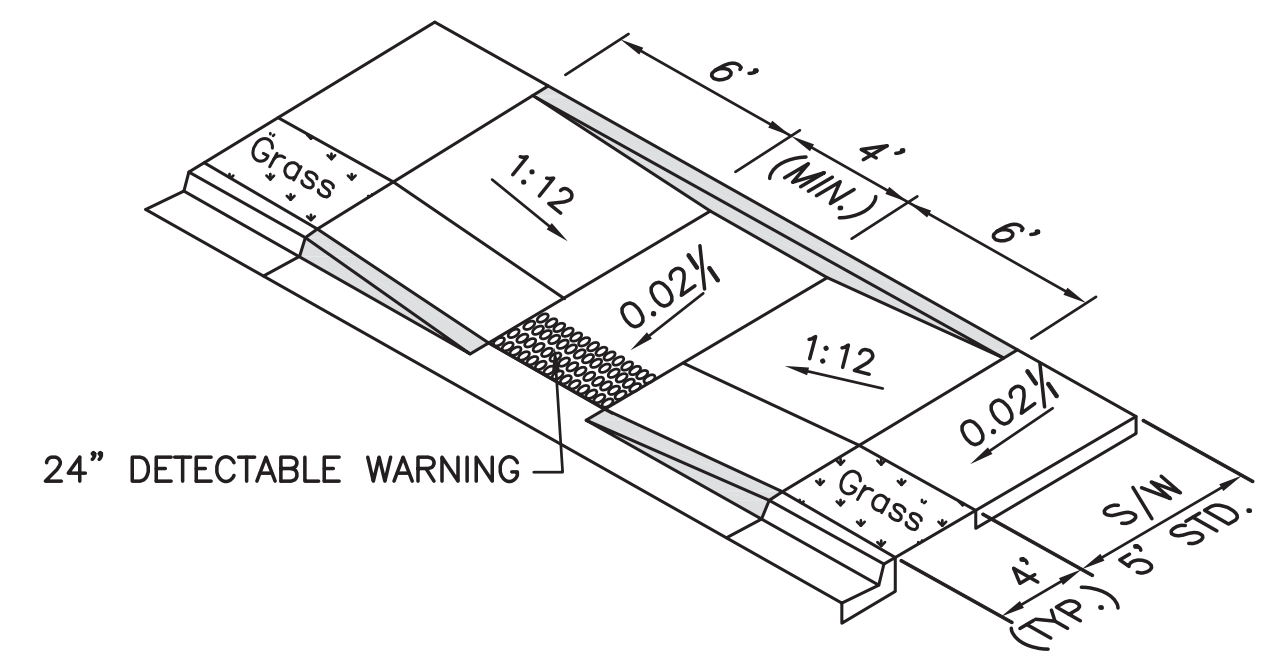
STANDARD PLAN NO. 907-01	DATED AUGUST 8, 2008	SHEET NO. 3 OF 6
SIDEWALK AND HANDICAP RAMPS-SUBDIVISIONS (TYPICAL LAYOUTS)		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED GLP	DRAWN GLP	CHECKED GLP
APPROVED T. STEPHENS		



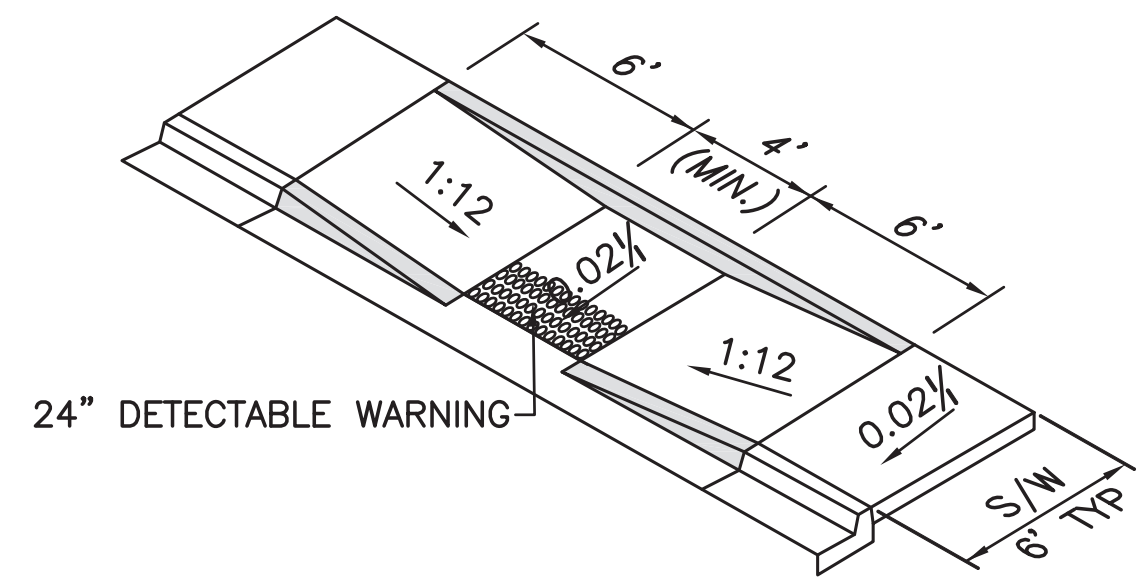
STANDARD 5' SIDEWALK
WITH FLARED SLOPES
TYPE ①
NTS



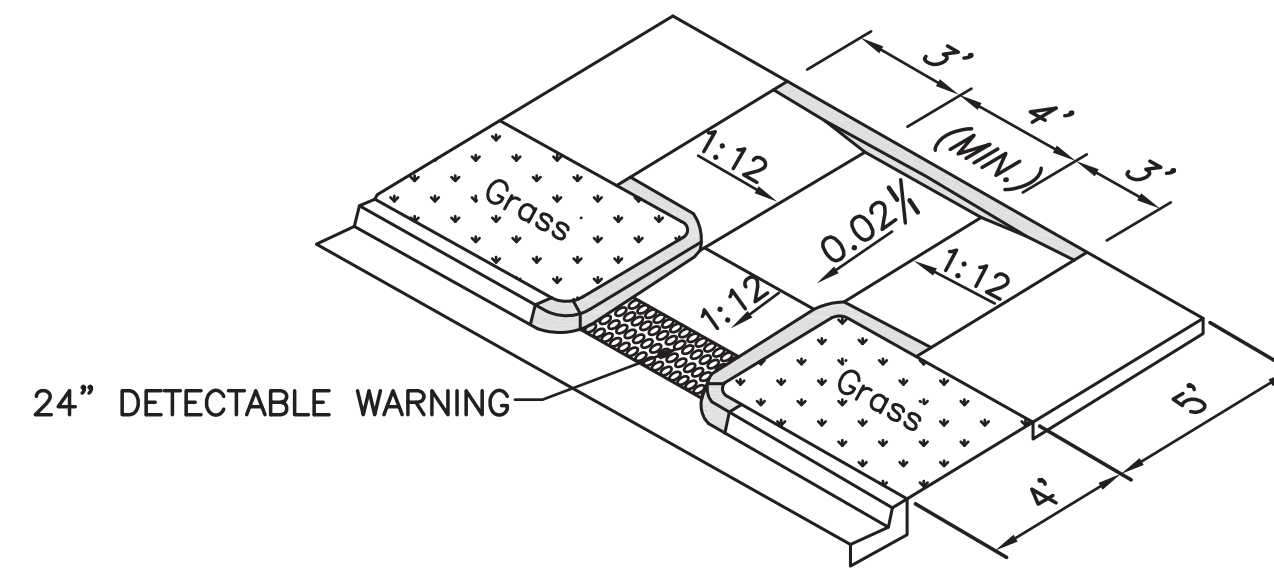
STANDARD 6' SIDEWALK
WITH FLARED RAMP
TYPE ②
NTS



STANDARD 5' SIDEWALK
WITH PAVED RAMP
TYPE ③
NTS



STANDARD 6' SIDEWALK
WITH PAVED RAMP
TYPE ④
NTS



STANDARD 5' SIDEWALK
WITH CURBED RAMP
TYPE ⑤
(REFER TO NOTES, TYP.)
NTS

■ AREAS OF CURB MODIFICATION

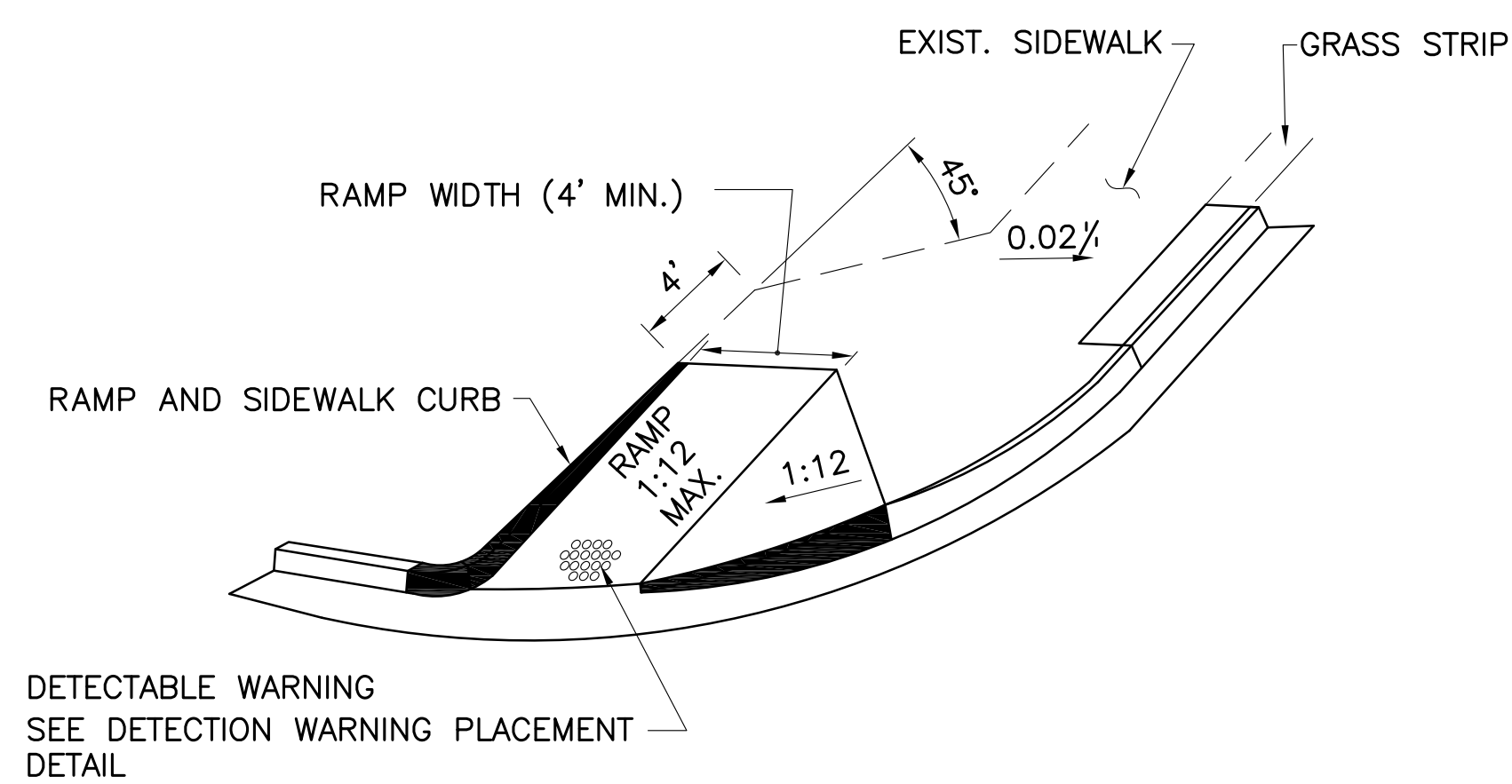
NOTES:

1. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905-50 SHEET 7.
2. THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 6 INCH BARRIER CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD MOUNTABLE CURB IS USED.
3. RAMP CONFIGURATIONS MUST BE APPROVED BY THE CHIEF TRAFFIC ENGINEER.

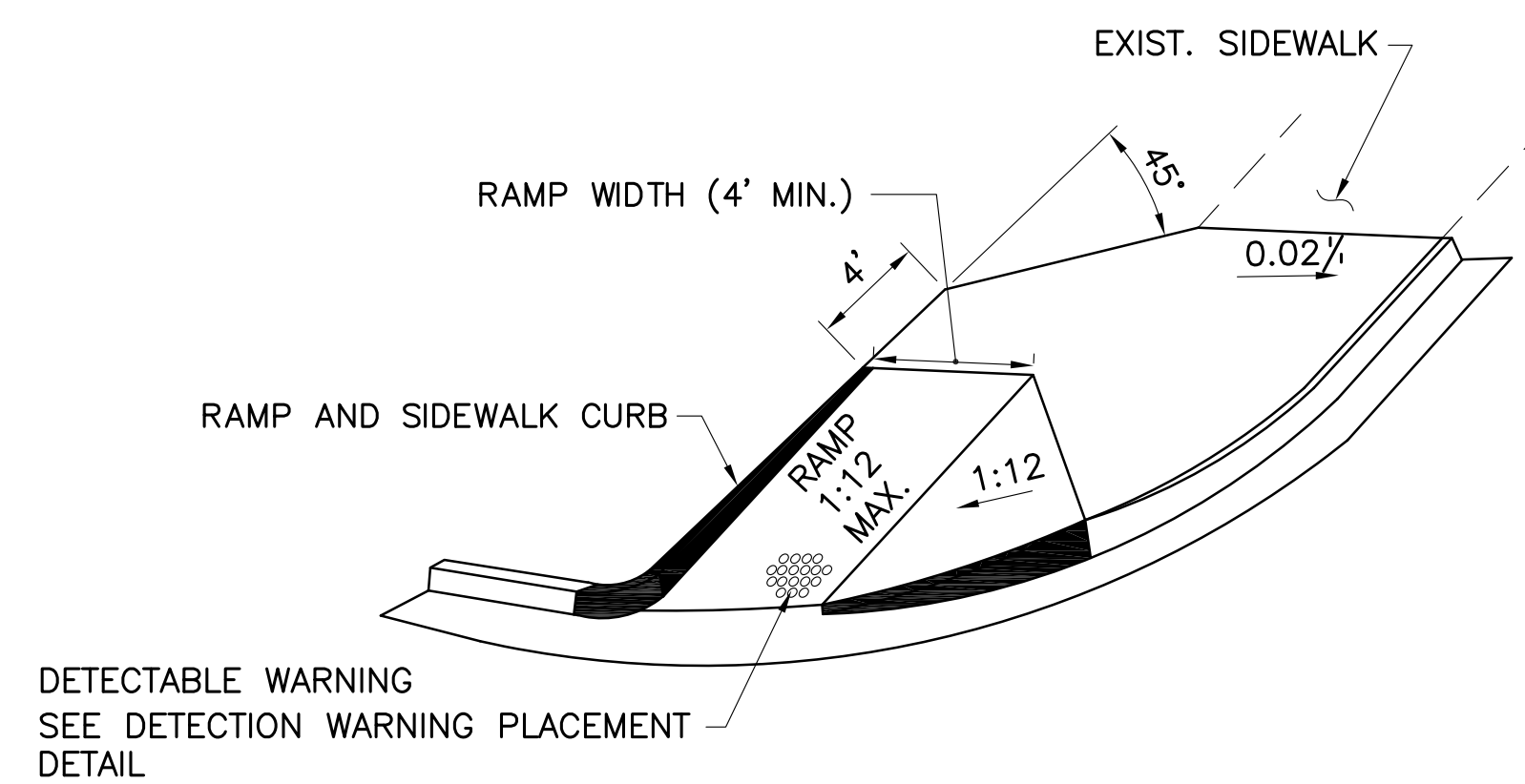


STANDARD PLAN NO. 907-01	DATED AUGUST 8, 2008	SHEET NO. 4 OF 6
SIDEWALK AND HANDICAP RAMPS (RAMP TYPES)		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED GLP	DRAWN GLP	CHECKED GLP
		APPROVED T. STEPHENS

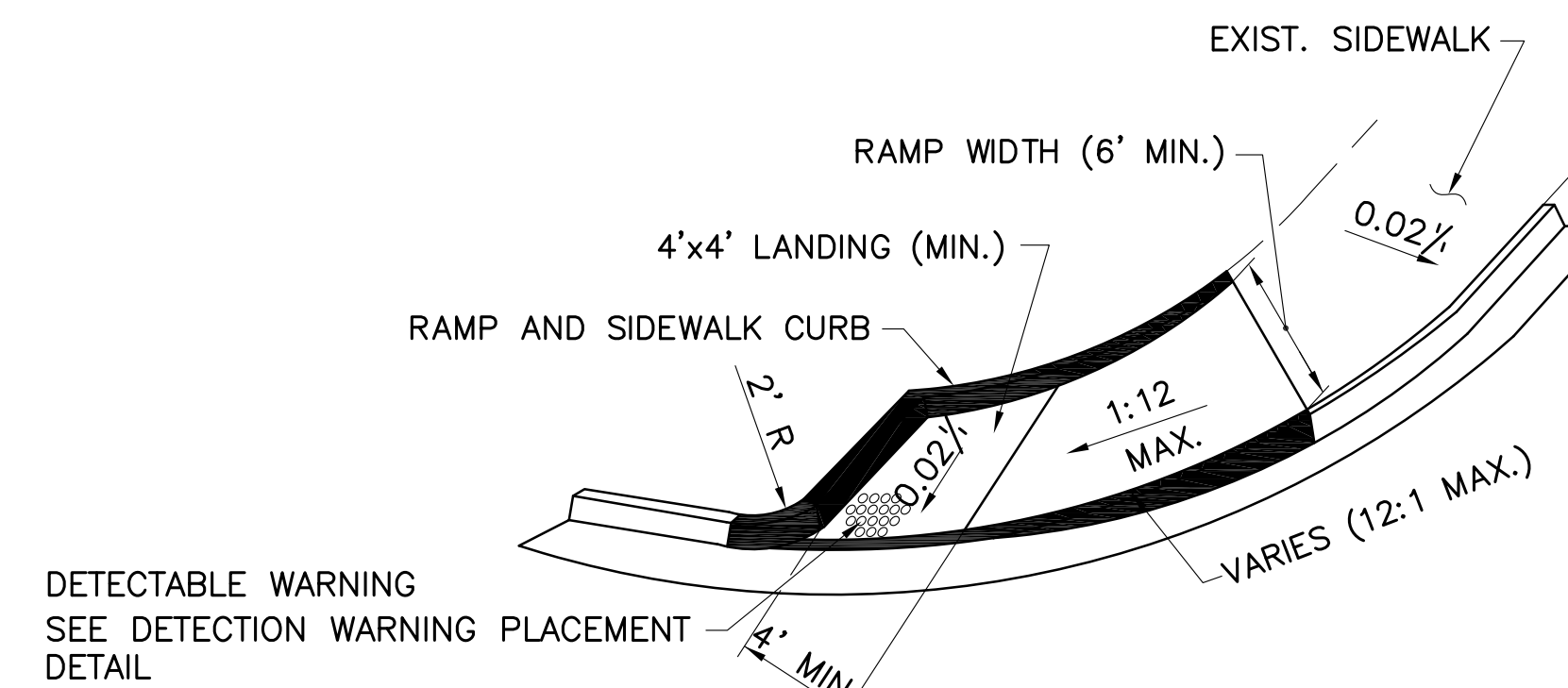
DATE	DESCRIPTION REVISIONS	BY



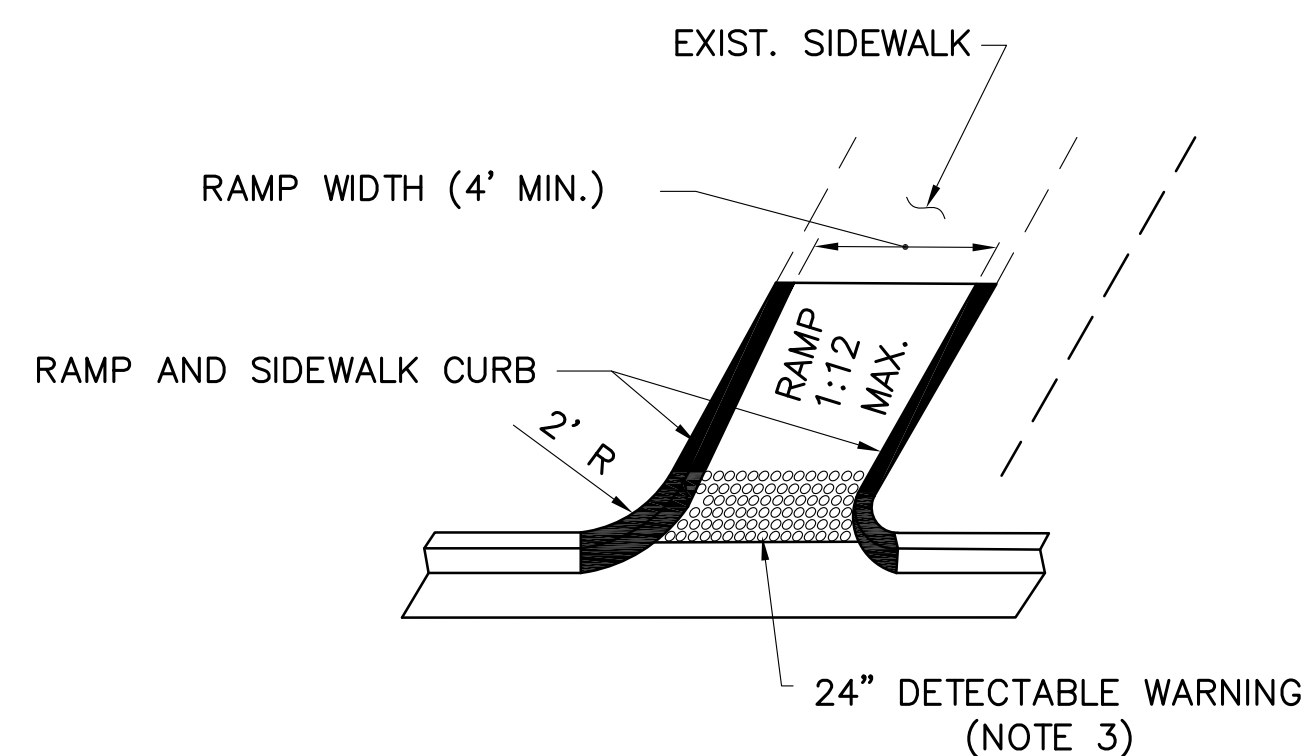
TYPE ⑥
NTS
REFER TO NOTES (TYP.)



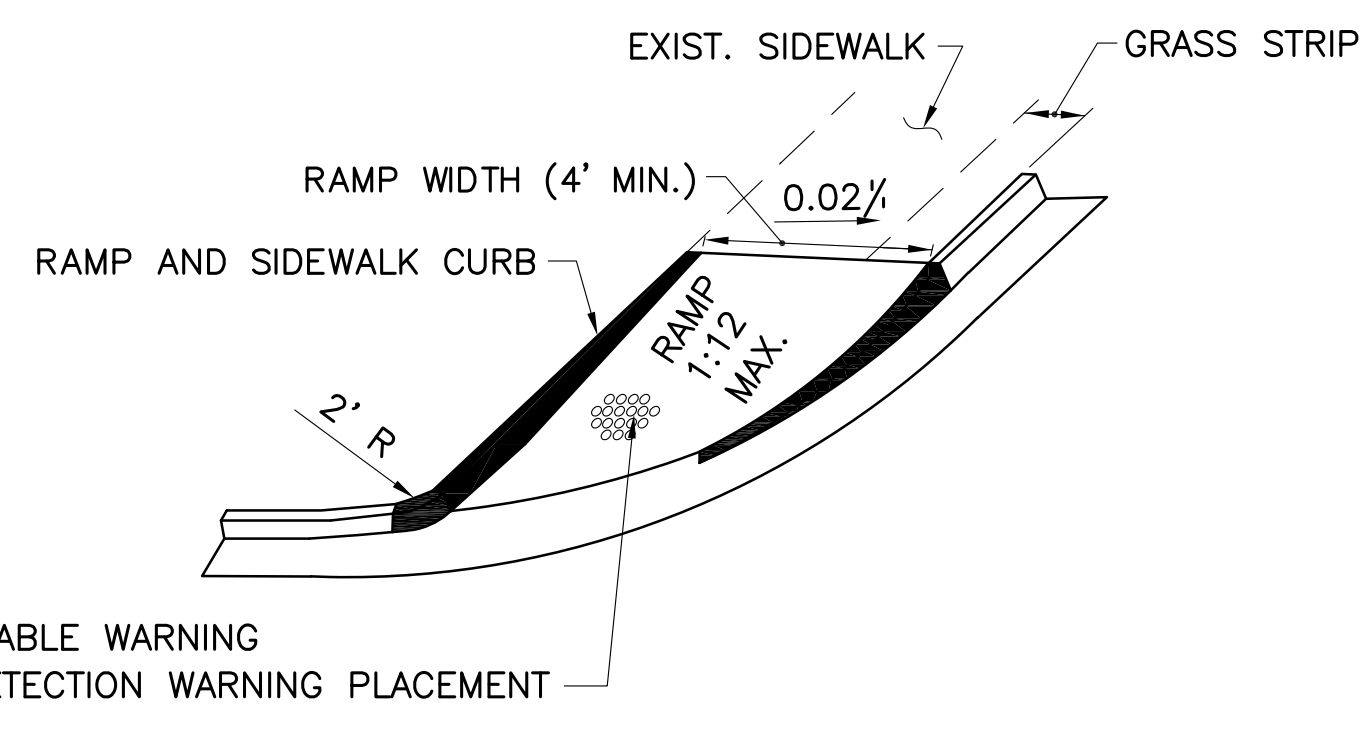
TYPE ⑦
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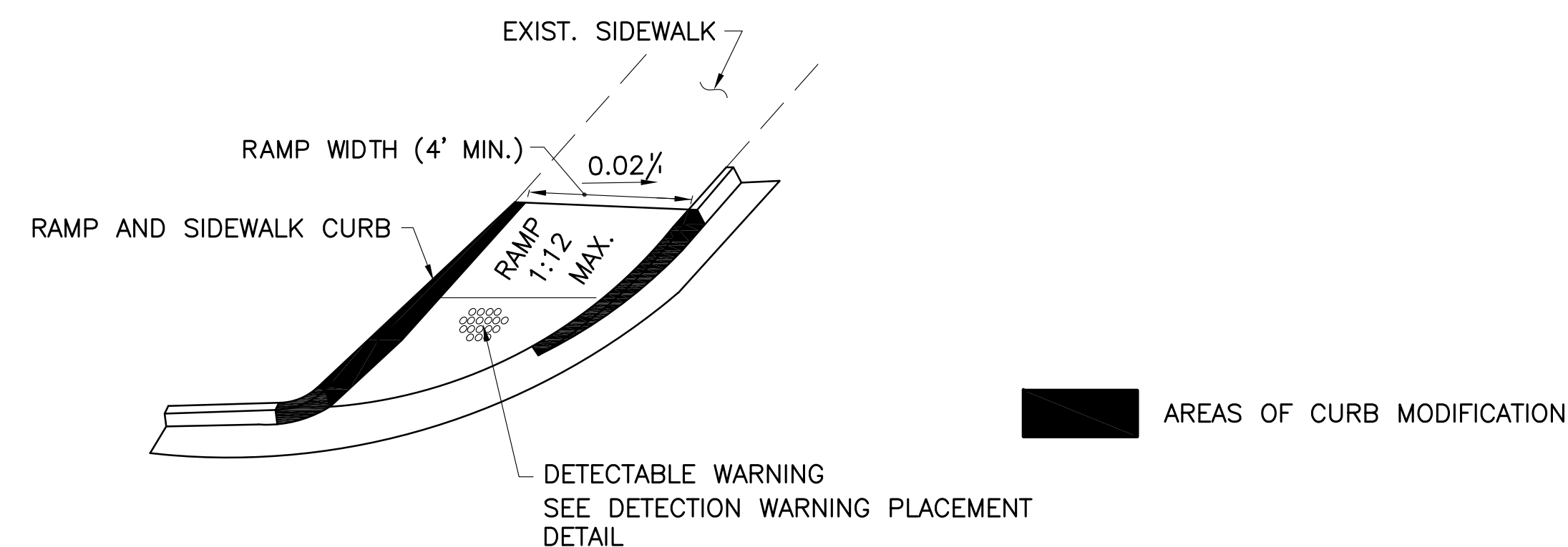
TYPE ⑧
NTS



TYPE ⑨
NTS

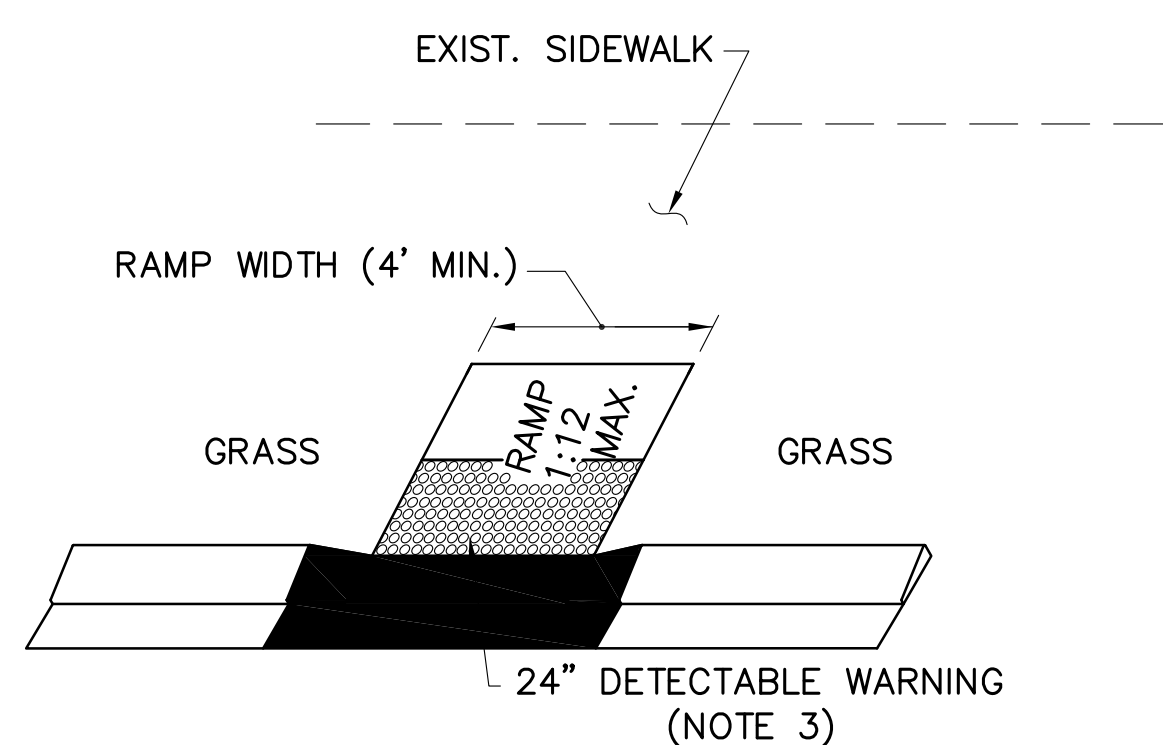


TYPE ⑩
NTS



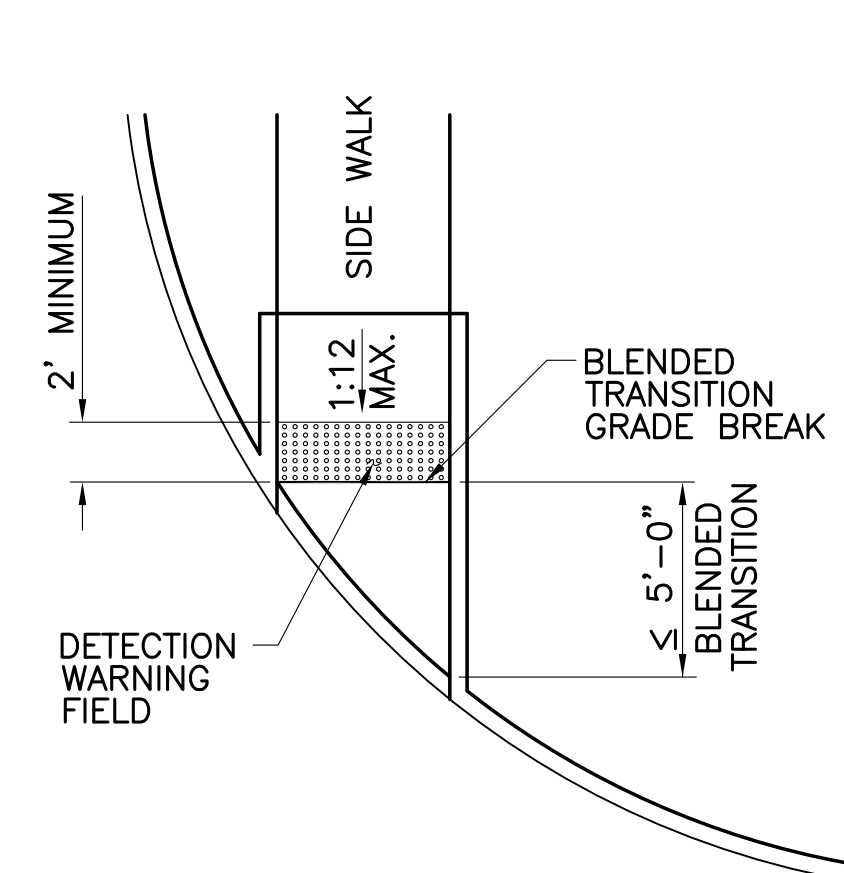
TYPE ⑪
NTS

- NOTE:
1. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905-50 SHEET 7.
 2. THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 6 INCH BARRIER CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD MOUNTABLE CURB IS USED.
 3. THE MINIMUM LENGTH OF ANY SIDE OF THE DETECTABLE WARNING MATERIAL SHALL BE TWO FEET.
 4. DETECTION WARNING PLACEMENT IS NOT CONSTRAINED IN BLENDED TRANSITION AREA.
 5. SLOPES ON BLENDED TRANSITION SHALL NOT BE STEEPER THAN 2% (1 ON 50) IN ANY DIRECTION.

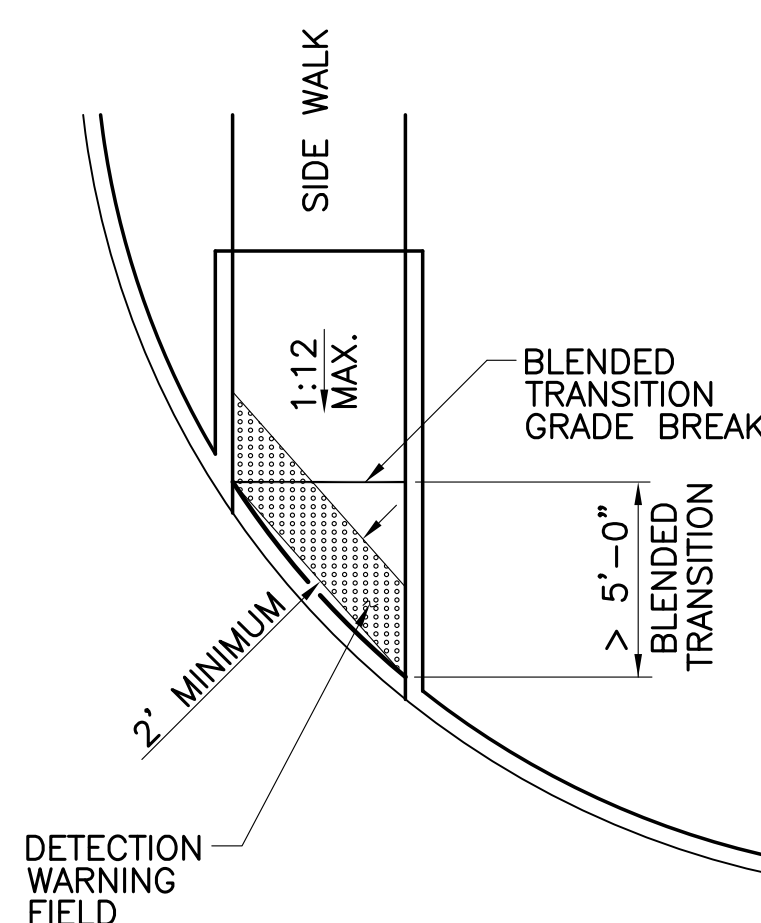


NOTE: REFER TO 907-02 FOR HANDICAP RAMP CURB AND GUTTER

TYPE ⑫
NTS



LAYOUT A



LAYOUT A

DETECTION WARNING PLACEMENT DETAIL
NTS



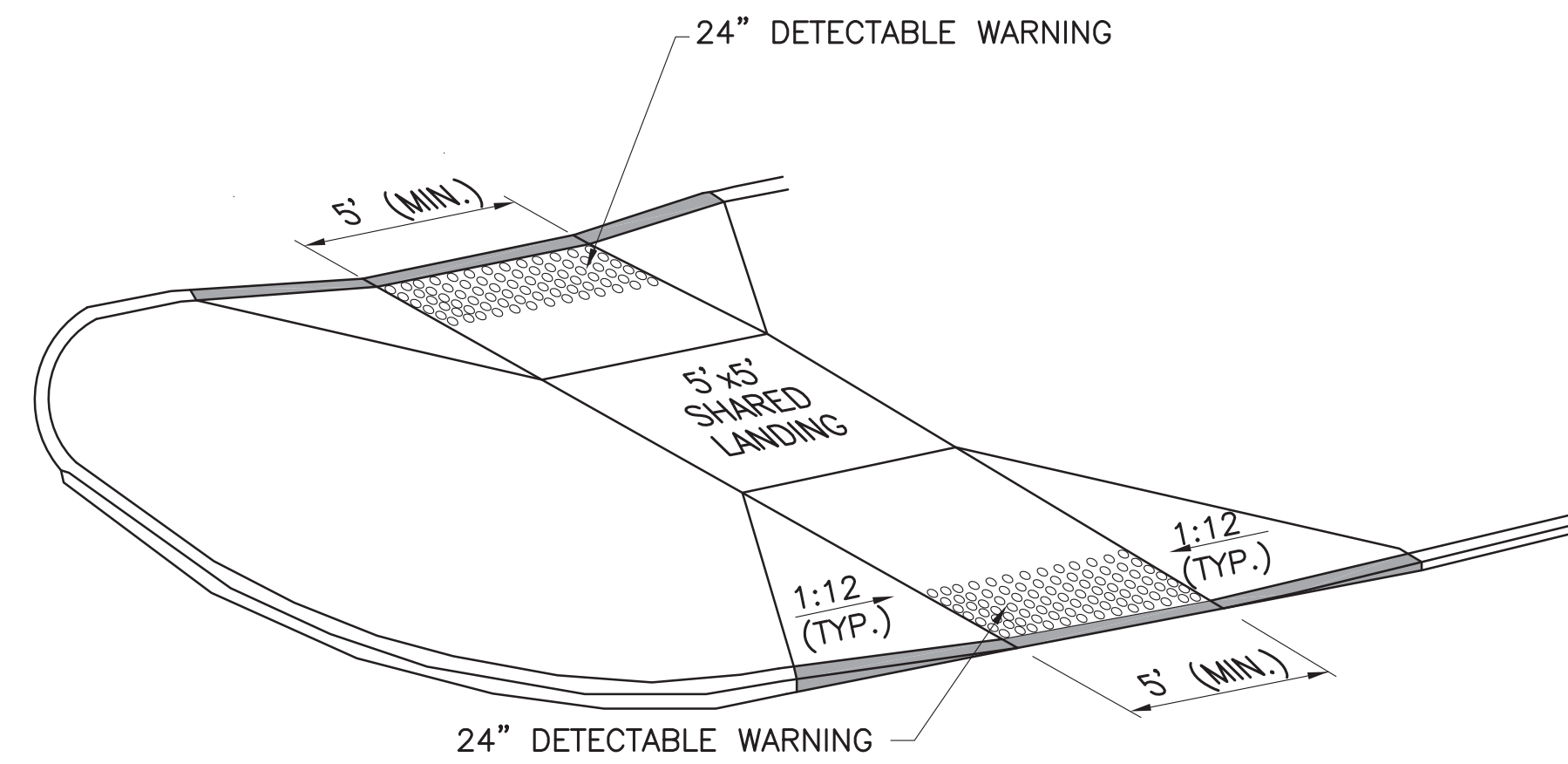
STANDARD PLAN NO. 907-01	DATED AUGUST 8, 2008	SHEET NO. 5 OF 6
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**SIDEWALK AND HANDICAP RAMPS
(RAMP TYPES)**

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T STEPHENS

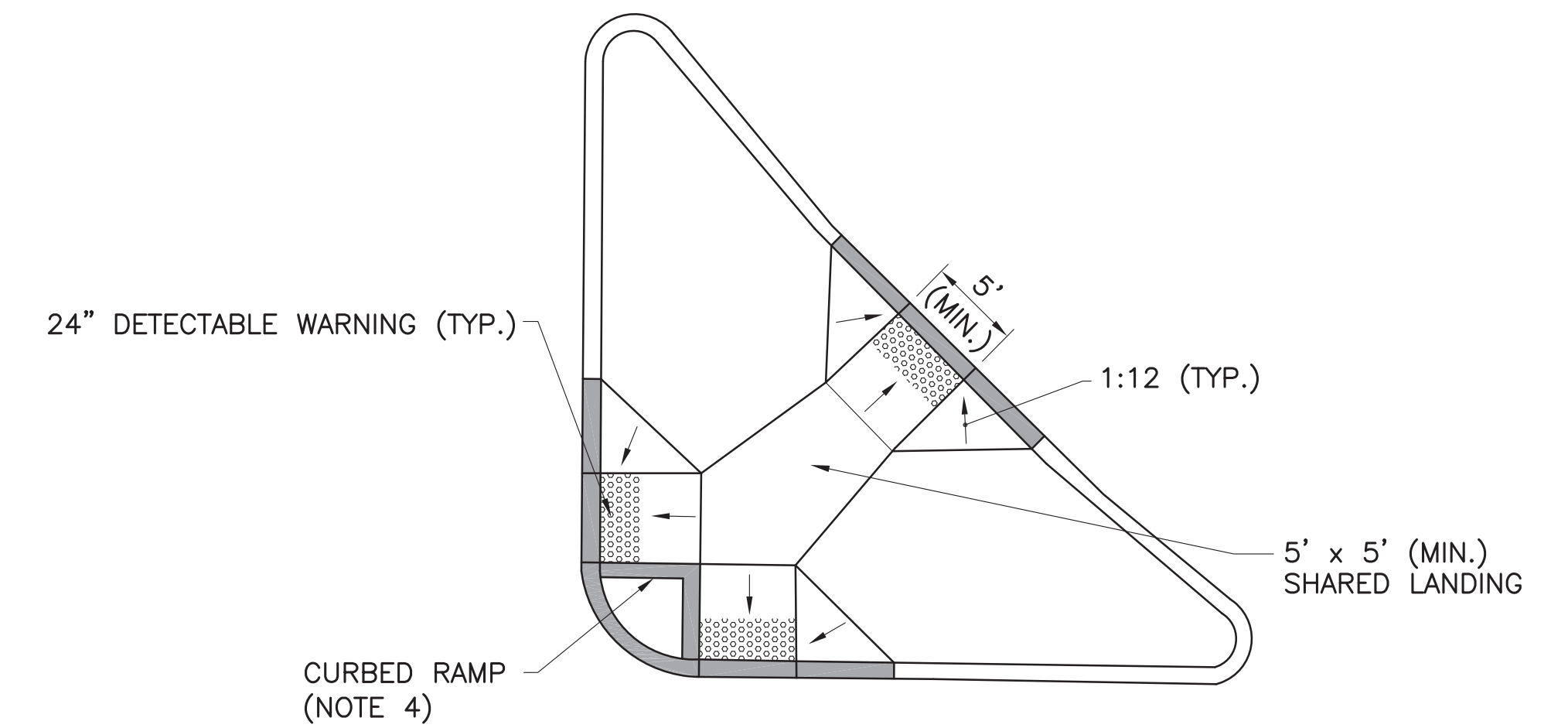
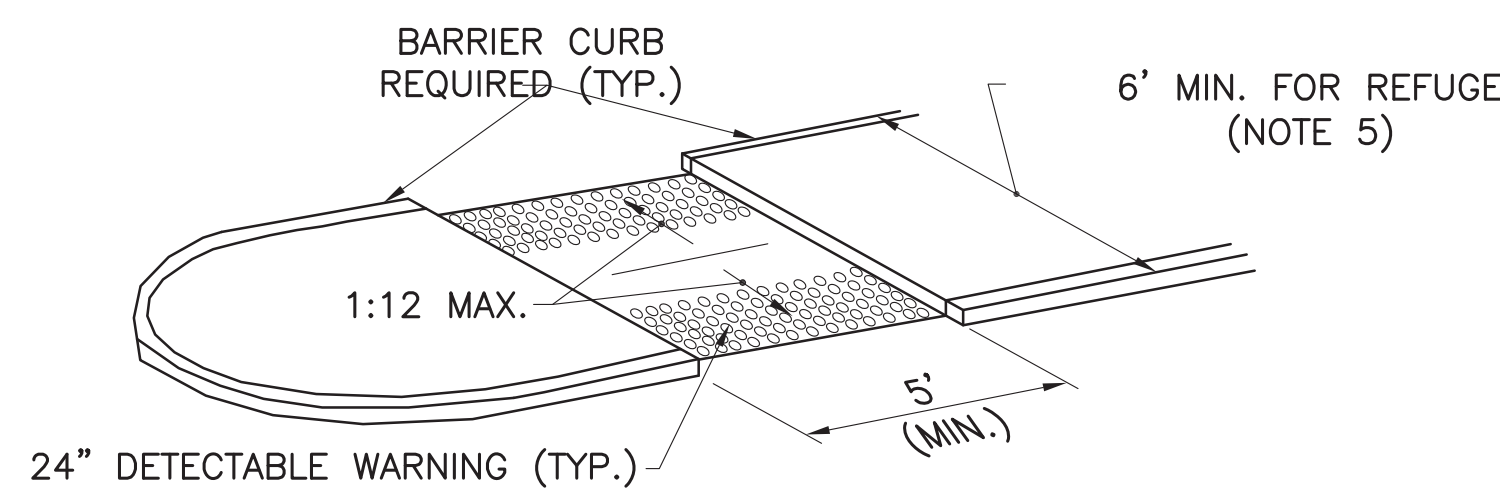
4/25/11	ADD DETECTION WARNING PLACEMENT DETAIL	G.CHENG
DATE	DESCRIPTION	BY
	REVISIONS	

PROJECT NO.	SHEET
	248



CURB RAMPS AT MEDIAN ISLANDS

(REFER TO NOTES, TYP.)
N.T.S.



COMBINATION ISLAND RAMPS

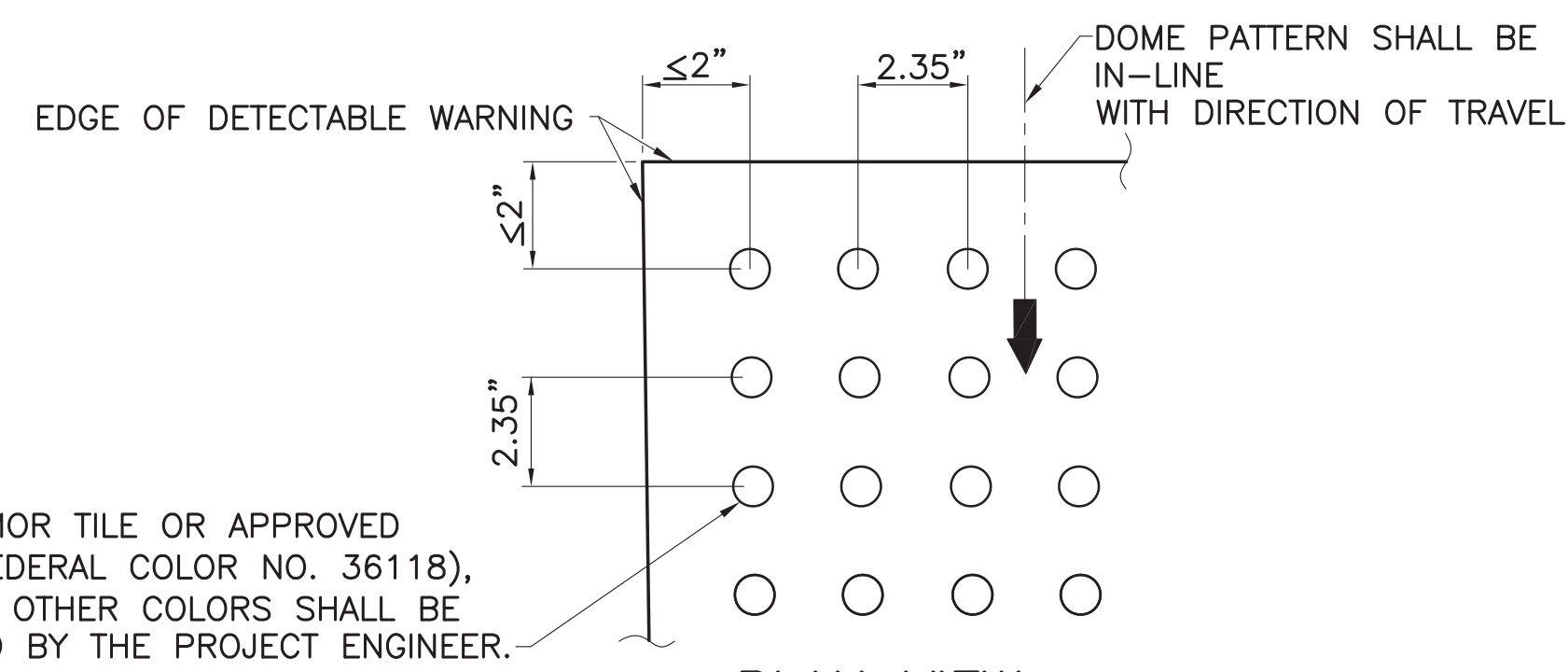
N.T.S.

■ AREAS OF CURB MODIFICATION

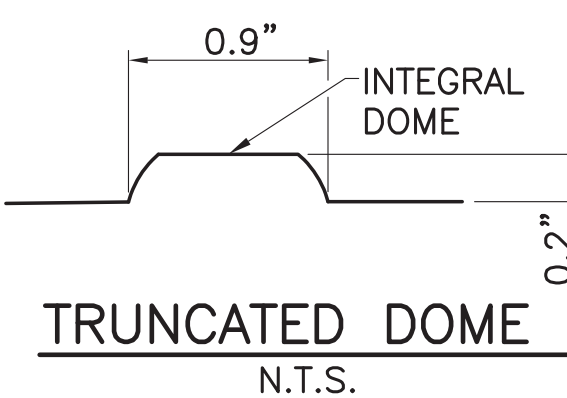
NOTES:

1. LOCATION OF ALL TRAFFIC STRIPING, CROSS BARS, STOP BARS, AND MARKERS SHALL BE BASED ON SITE SPECIFIC DESIGN APPROVED BY THE CHIEF TRAFFIC ENGINEER. REFER TO 905-50 SHEET 7.
2. THE LAYOUT OF HANDICAP RAMPS ARE BASED ON USE OF 6 INCH BARRIER CURB. ADJUSTMENTS TO DIMENSIONS WILL BE REQUIRED SHOULD MOUNTABLE CURB IS USED.
3. NO SIGHT OBSTRUCTIONS SUCH AS BENCHES TREES, ETC. SHALL BE PLACED TO LIMIT THE REQUIRED SIGHT DISTANCE.
4. WHEN GEOMETRIC LIMITATIONS PREVENT CONSTRUCTION OF THE FLARED RAMP WITH AT LEAST 2 FEET OF FULL DEPTH CURB BETWEEN FLARES, USE CURBED RAMPS.
5. IF A PEDESTRIAN REFUGE IS REQUIRED OR DESIRABLE, A MINIMUM 6' LENGTH IS REQUIRED, AS WELL AS STANDARD BARRIER CURB.

TRUNCATED DOME (ARMOR TILE OR APPROVED EQUAL, DARK GREY (FEDERAL COLOR NO. 36118), OR APPROVED EQUAL). OTHER COLORS SHALL BE ALLOWED AS APPROVED BY THE PROJECT ENGINEER.



PLAN VIEW
N.T.S.



NOTE: ALL SIDEWALK CURB RAMPS ON PUBLIC STREETS SHALL HAVE DETECTABLE WARNING SURFACES THAT EXTEND THE FULL WIDTH OF THE RAMP AND IN THE DIRECTION OF TRAVEL 24" FROM THE BACK OF THE CURB.

CURB RAMP DETECTABLE WARNING

THOMAS A. STEPHENS
License No. 19417
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
STATE OF LOUISIANA
2/16/2018

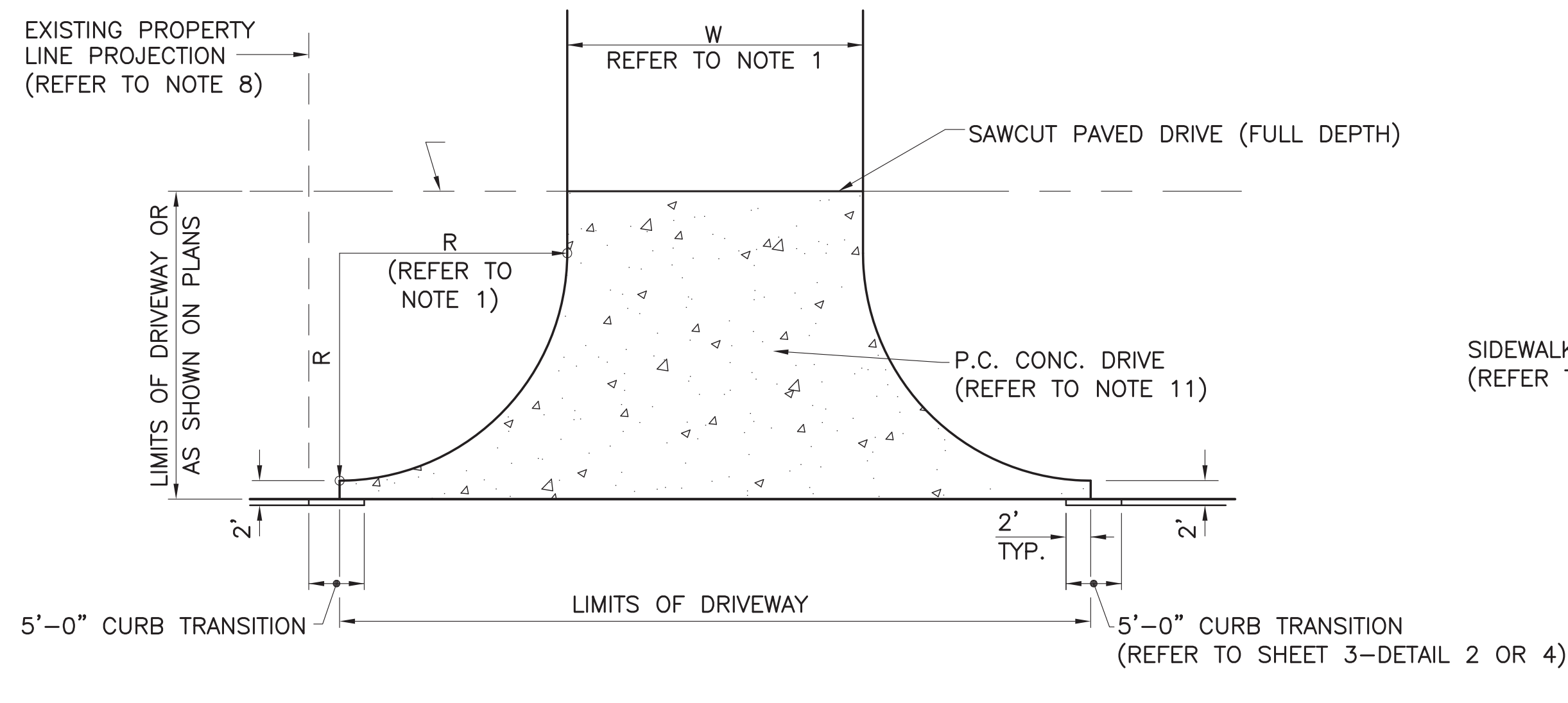
STANDARD PLAN NO. 907-01	DATED AUGUST 8, 2008	SHEET NO. 6 OF 6
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**SIDEWALK AND
HANDICAP RAMPS
(TYPICAL MEDIAN RAMPS)**

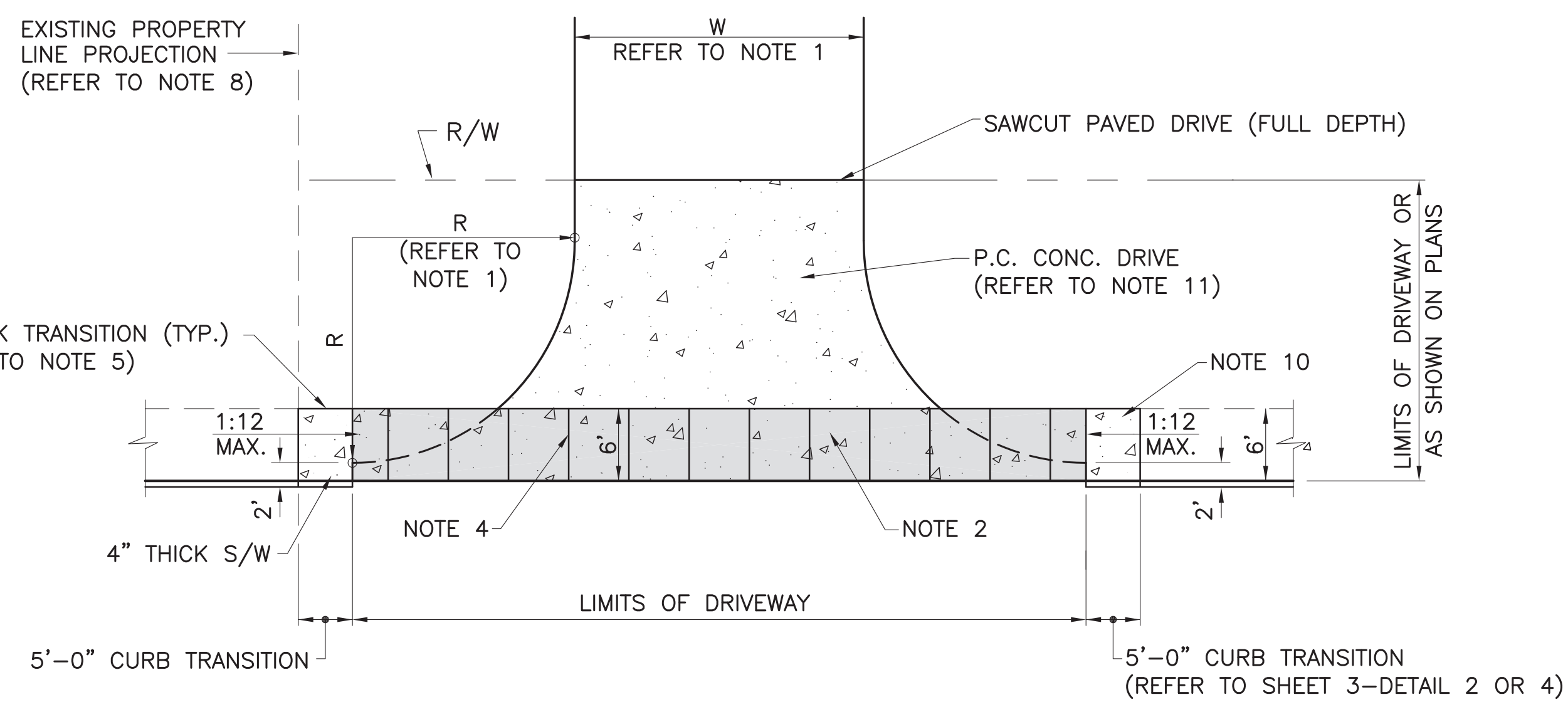
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T. STEPHENS

DATE	DESCRIPTION	BY
	REVISIONS	

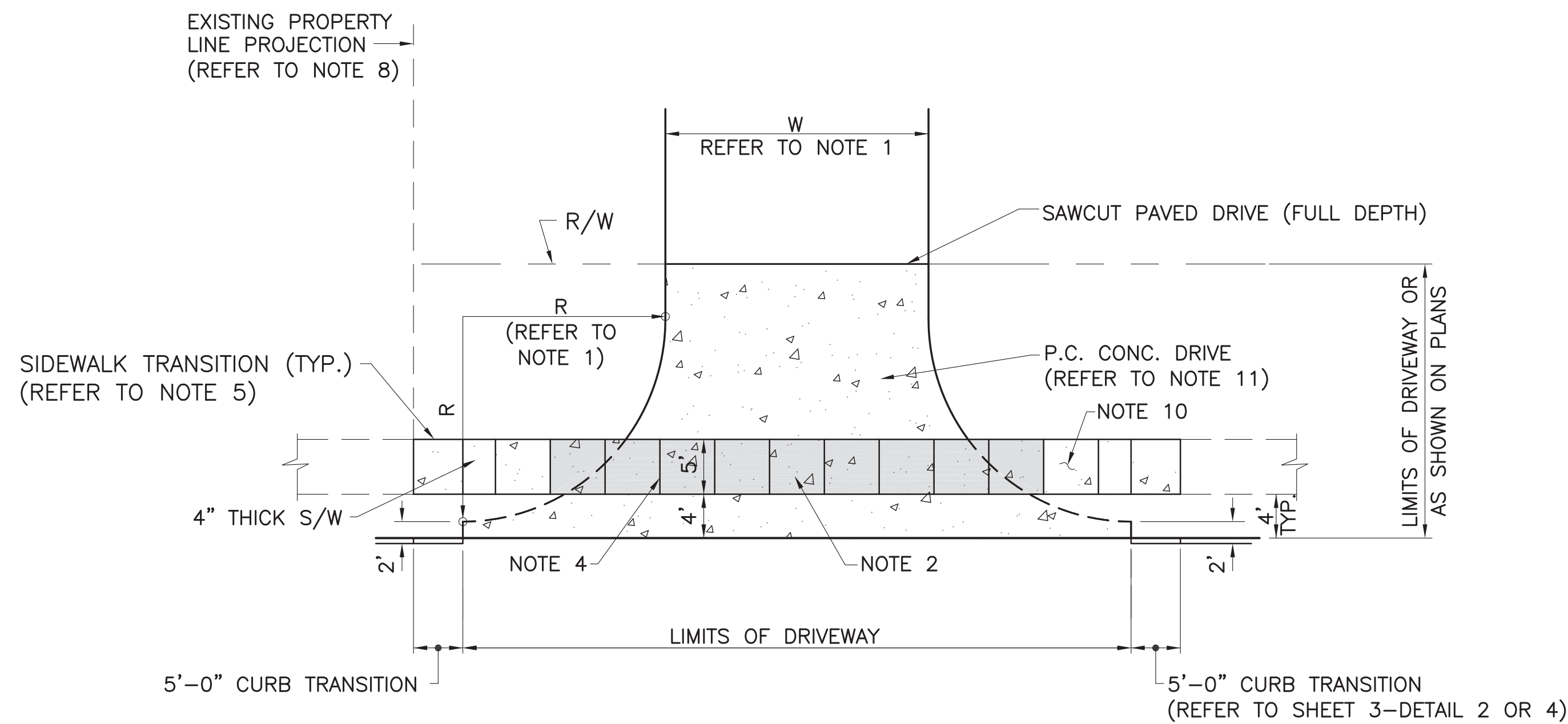
PROJECT NO.	SHEET
	249



COMMERCIAL DRIVE – TYPE 1
SINGLE NON-CURBED
NO SIDEWALK
 N.T.S.



COMMERCIAL DRIVE – TYPE 2
SINGLE NON-CURBED
WITH SIDEWALK ADJACENT TO CURB
 N.T.S.



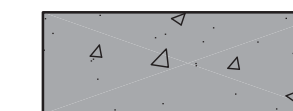
COMMERCIAL DRIVE – TYPE 3
SINGLE NON-CURBED
WITH OFFSET SIDEWALK
 N.T.S.

- NOTES:
1. DRIVEWAY GEOMETRY SHOWN SHALL APPLY FOR BOTH NEW STREET CONSTRUCTION AND MODIFICATIONS TO EXISTING STREETS. R AND W – REFER TO CONSTRUCTION PLAN FOR SPECIFIC DIMENSIONS WHEN PROVIDED, OTHERWISE REFER TO 907-DG.
 2. SIDEWALK THICKNESS SHALL MATCH DRIVEWAY THICKNESS AS SHOWN OR AS DIRECTED THE PROJECT ENGINEER.
 3. CONSTRUCTION OR KEYWAY JOINT REQ'D WHEN DRIVE DIMENSIONS EXCEED 16' IN EITHER DIRECTION. LOCATION OF JOINTS SHALL BE COORDINATED WITH THE PROJECT ENGINEER.
 4. WITHIN THE DRIVEWAY LIMITS, SIDEWALK AREA SHALL HAVE SCORED JOINTS PER STANDARD PLANS AND SPECIFICATIONS. SIDEWALK EXPANSION AND CONSTRUCTION JOINT LOCATIONS SHALL BE PER 907-01.
 5. REFER TO STD. PLAN 907-01 FOR SIDEWALK RAMPS. SIDEWALK TRANSITION SHALL NOT EXCEED 1:12 SLOPE.
 6. MAXIMUM CHANGE IN GRADES IS 12% FOR A CREST AND 11% AT SAGS WITHOUT VERTICAL CURVES. MAXIMUM GRADE CHANGES SHOULD BE AT LEAST 10' APART. MAXIMUM GRADE TYPICALLY SHALL NOT EXCEED 20%.
 7. REFER TO STD. PLAN 502-01 FOR CURB DETAILS AND STD. PLAN 907-02 FOR COMBINATION CURB AND GUTTER DETAILS.
 8. DRIVEWAY SHALL NOT EXTEND BEYOND THE ADJACENT PROPERTY LINE PROJECTION.
 9. STREET TYPES ARE AS DEFINED BY THE TRAFFIC ENGINEER.
 10. NEW SIDEWALKS SHALL BE TRANSITIONED TO MATCH THE EXISTING SIDEWALK AS DIRECTED BY THE PROJECT ENGINEER.
 11. DRIVEWAY THICKNESS SHALL BE AS SHOWN ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE PROJECT ENGINEER. MINIMUM COMMERCIAL DRIVEWAY THICKNESS IS 6 INCHES.
 12. REFER TO SHEET 3 FOR TYPICAL PROFILES AND DETAILS.

THOMAS A. STEPHENS
 License No. 15417
 PROFESSIONAL ENGINEER
 CIVIL ENGINEERING
 2/16/2018

LEGEND

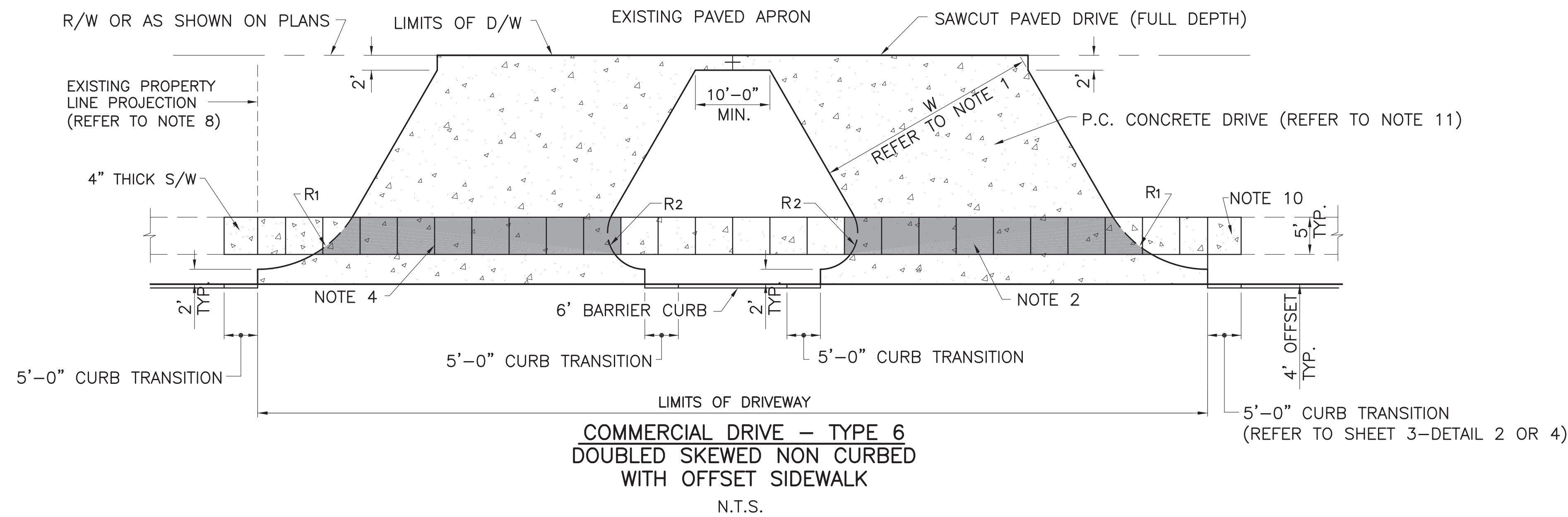
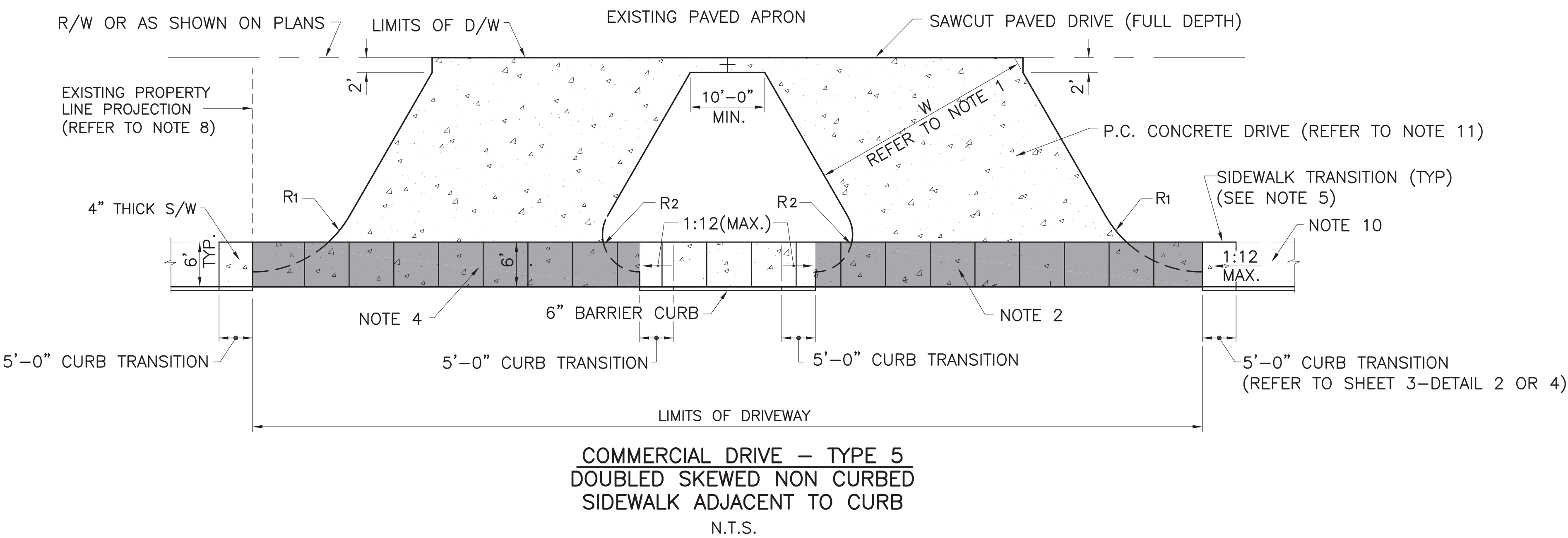
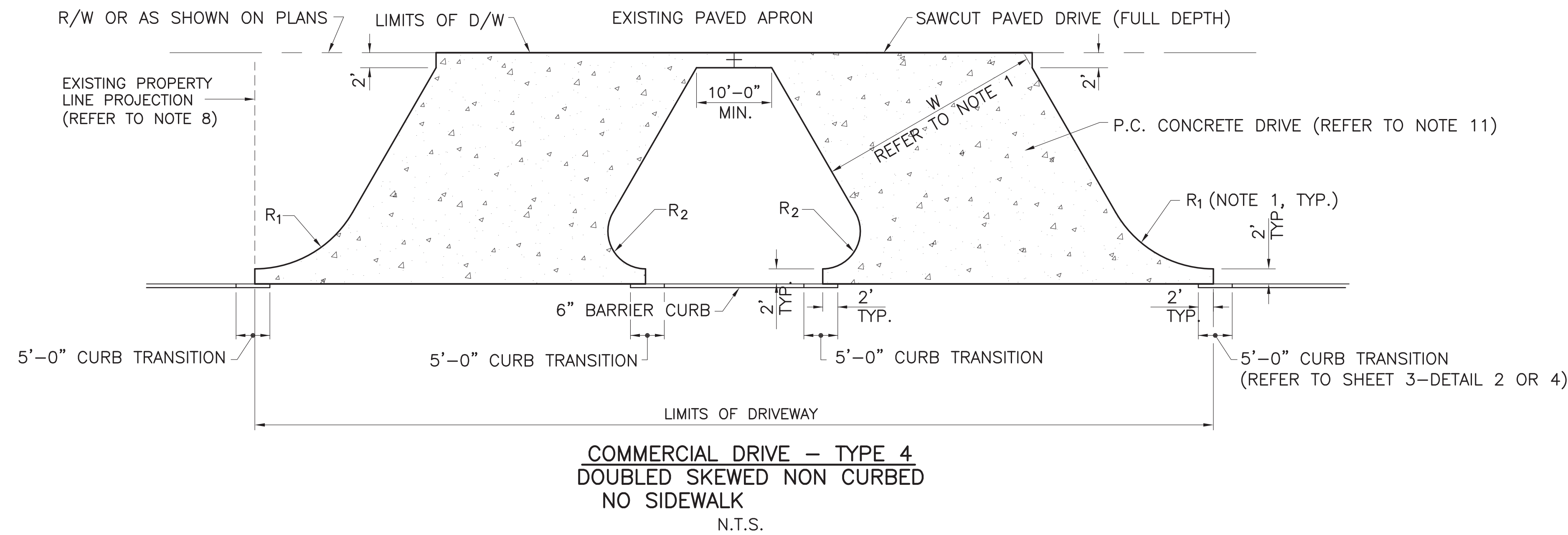
SIDEWALK AREA WITHIN DRIVEWAY
 (PAID AS DRIVEWAY)
 REFER TO NOTES 2 AND 4



DATE	DESCRIPTION	BY
	REVISIONS	

STANDARD PLAN NO. 907-03	DATED APRIL 16, 2009	SHEET NO. 1 OF 3
COMMERCIAL DRIVES		
GEOMETRIC DETAILS		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED GLP	DRAWN GLP	CHECKED GLP
		APPROVED T. STEPHENS

PROJECT NO.	SHEET
	250



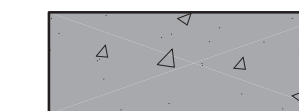
NOTES:

- DRIVEWAY GEOMETRY SHOWN SHALL APPLY FOR BOTH NEW STREET CONSTRUCTION AND MODIFICATIONS TO EXISTING STREETS. R₁, R₂ AND W - REFER TO CONSTRUCTION PLAN FOR SPECIFIC DIMENSIONS WHEN PROVIDED, OTHERWISE REFER TO 907-DG.
- SIDEWALK THICKNESS SHALL MATCH DRIVEWAY THICKNESS AS SHOWN OR AS DIRECTED THE PROJECT ENGINEER.
- CONSTRUCTION OR KEYWAY JOINT REQ'D WHEN DRIVE DIMENSIONS EXCEED 16' IN EITHER DIRECTION. LOCATION OF JOINTS SHALL BE COORDINATED WITH THE PROJECT ENGINEER.
- WITHIN THE DRIVEWAY LIMITS, SIDEWALK AREA SHALL HAVE SCORED JOINTS PER STANDARD PLANS AND SPECIFICATIONS. SIDEWALK EXPANSION AND CONSTRUCTION JOINT LOCATIONS SHALL BE PER 907-01.
- REFER TO STD. PLAN 907-01 FOR SIDEWALK RAMP. SIDEWALK TRANSITION SHALL NOT EXCEED 1:12 SLOPE.
- MAXIMUM CHANGE IN GRADES IS 12% FOR A CREST AND 11% AT SAGS WITHOUT VERTICAL CURVES. MAXIMUM GRADE CHANGES SHOULD BE AT LEAST 10' APART. MAXIMUM GRADE TYPICALLY SHALL NOT EXCEED 20%.
- REFER TO STD. PLAN 502-01 FOR CURB DETAILS AND STD. PLAN 907-02 FOR COMBINATION CURB AND GUTTER DETAILS.
- DRIVEWAY SHALL NOT EXTEND BEYOND THE ADJACENT PROPERTY LINE PROJECTION.
- STREET TYPES ARE AS DEFINED BY THE TRAFFIC ENGINEER.
- NEW SIDEWALKS SHALL BE TRANSITIONED TO MATCH THE EXISTING SIDEWALK AS DIRECTED BY THE PROJECT ENGINEER.
- DRIVEWAY THICKNESS SHALL BE AS SHOWN ON THE CONSTRUCTION PLANS OR AS DIRECTED BY THE PROJECT ENGINEER. MINIMUM COMMERCIAL DRIVEWAY THICKNESS IS 6 INCHES.
- REFER TO SHEET 3 FOR CONSTRUCTION DETAILS.



LEGEND

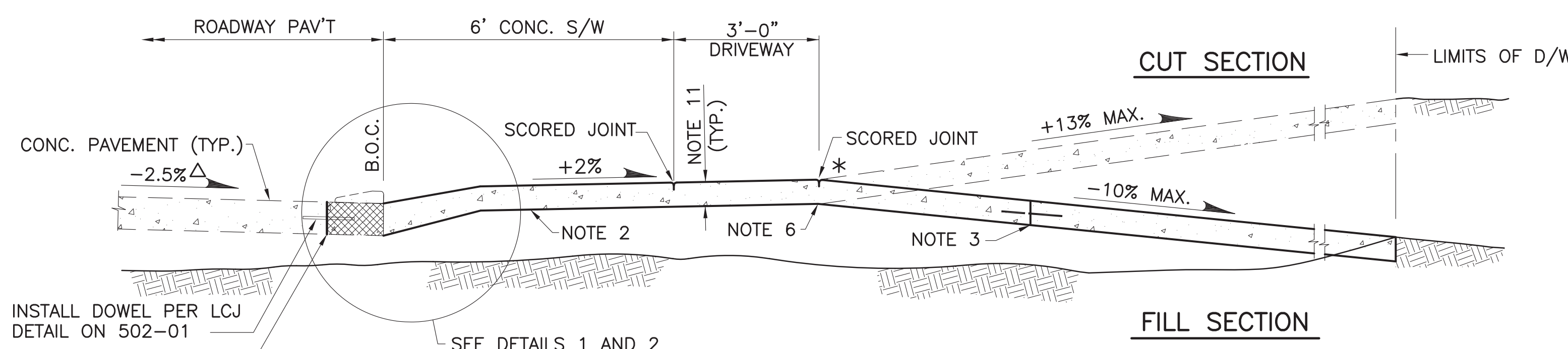
SIDEWALK AREA WITHIN DRIVEWAY (PAID AS DRIVEWAY) (REFER TO NOTES 2 AND 4)



DATE	DESCRIPTION	BY
	REVISIONS	

STANDARD PLAN NO. 907-03	DATED APRIL 16, 2009	SHEET NO. 2 OF 3
COMMERCIAL DRIVES GEOMETRIC DETAILS DOUBLED SKEWED LAYOUT		
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE		
DESIGNED GLP	DRAWN GLP	CHECKED GLP
		APPROVED T. STEPHENS

PROJECT NO.	SHEET
	251

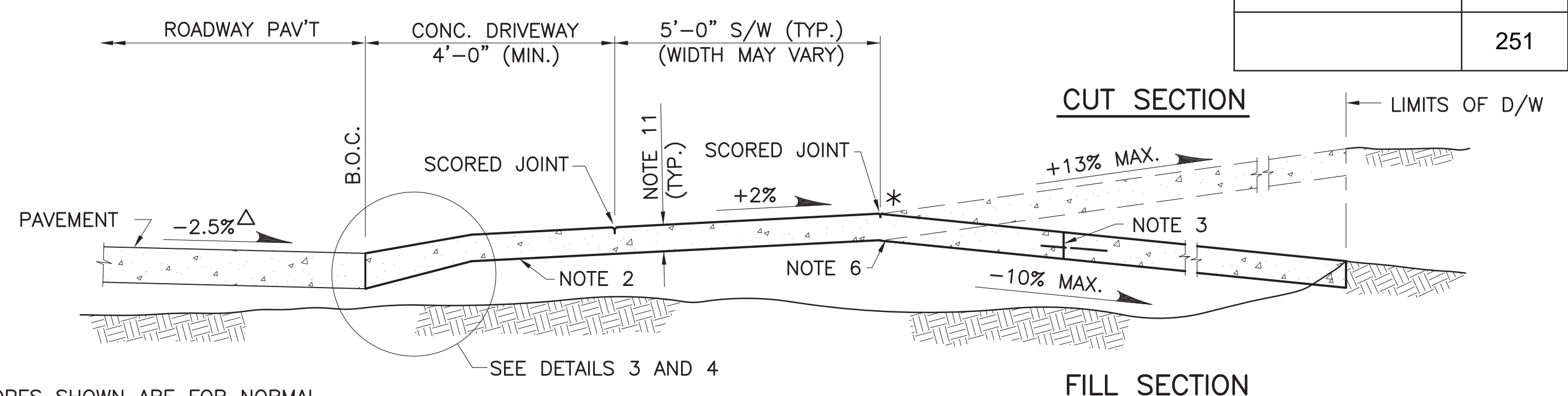


TYPICAL DRIVEWAY PROFILE 1
CONSTRUCTION ON EXISTING STREET
 (SHOWN WITH 6 FOOT SIDEWALK ADJACENT TO CURB) ©

- △ SLOPES SHOWN ARE FOR NORMAL CROWN ROADWAY SECTION
- 2'-0" DRIVEWAY TRANSITION, NOT SUBJECT TO SAG CRITERIA
- * A +0.33' VERTICAL CLEARANCE IS REQUIRED FROM THE GUTTERLINE TO THE LOCATION SHOWN.
- © PROFILE SIMILAR FOR 5' SIDEWALK WITH 4' OFFSET.

EXISTING PAVEMENT AND CURB SHALL BE SAWCUT AND REMOVED PER DETAILS 1 AND 2.
 RECONSTRUCTED STREET PAVEMENT AND CURB TRANSITIONS SHALL BE POURED MONOLITHICALLY.

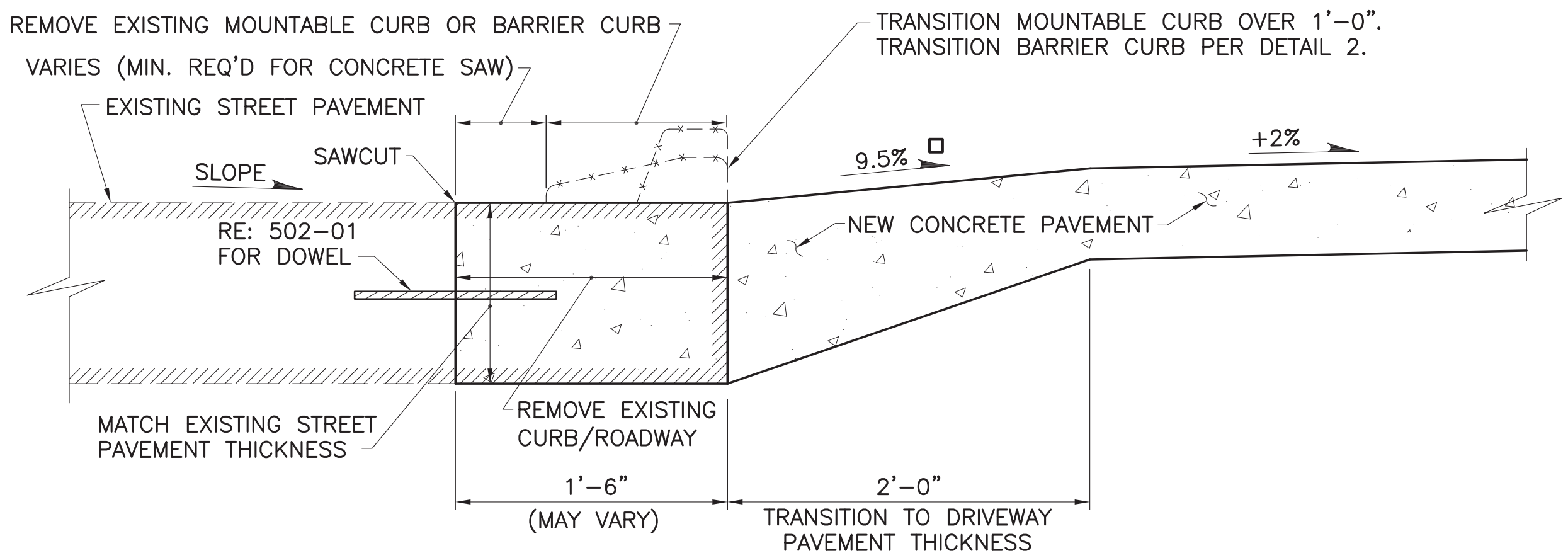
REFER TO SHEET 1 FOR NOTES
 N.T.S.



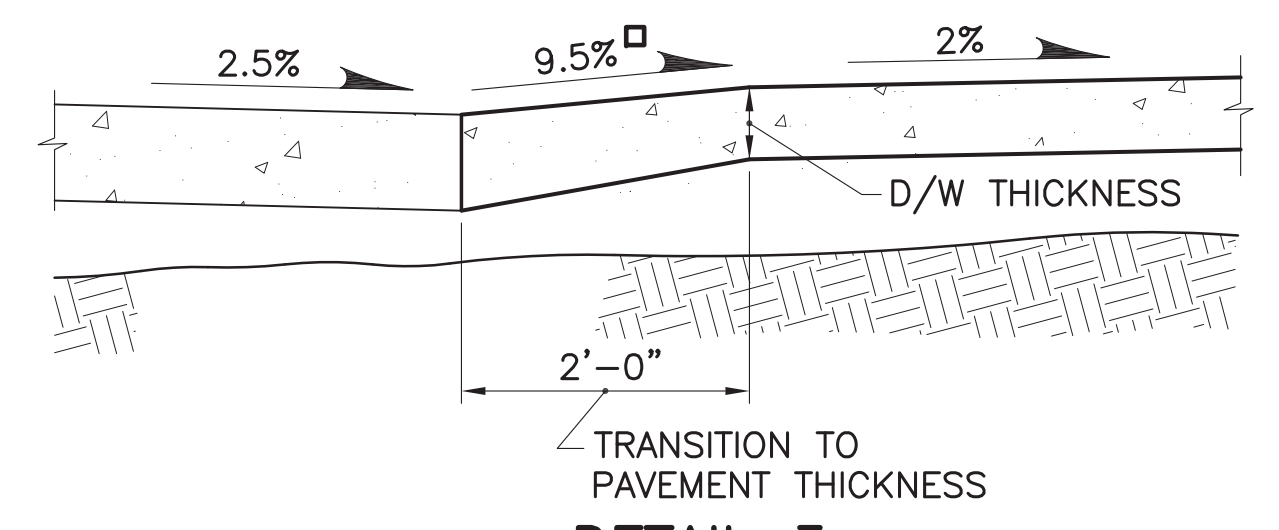
TYPICAL DRIVEWAY PROFILE 2
NEW STREET CONSTRUCTION
 (SHOWN WITH 5 FOOT SIDEWALK OFFSET FROM CURB) □

- △ SLOPES SHOWN ARE FOR NORMAL CROWN ROADWAY SECTION
- 2'-0" DRIVEWAY TRANSITION, NOT SUBJECT TO SAG CRITERIA
- * A +0.33' VERTICAL CLEARANCE IS REQUIRED FROM THE GUTTERLINE TO THE LOCATION SHOWN.
- PROFILE SIMILAR FOR 6' SIDEWALK ADJACENT TO CURB.

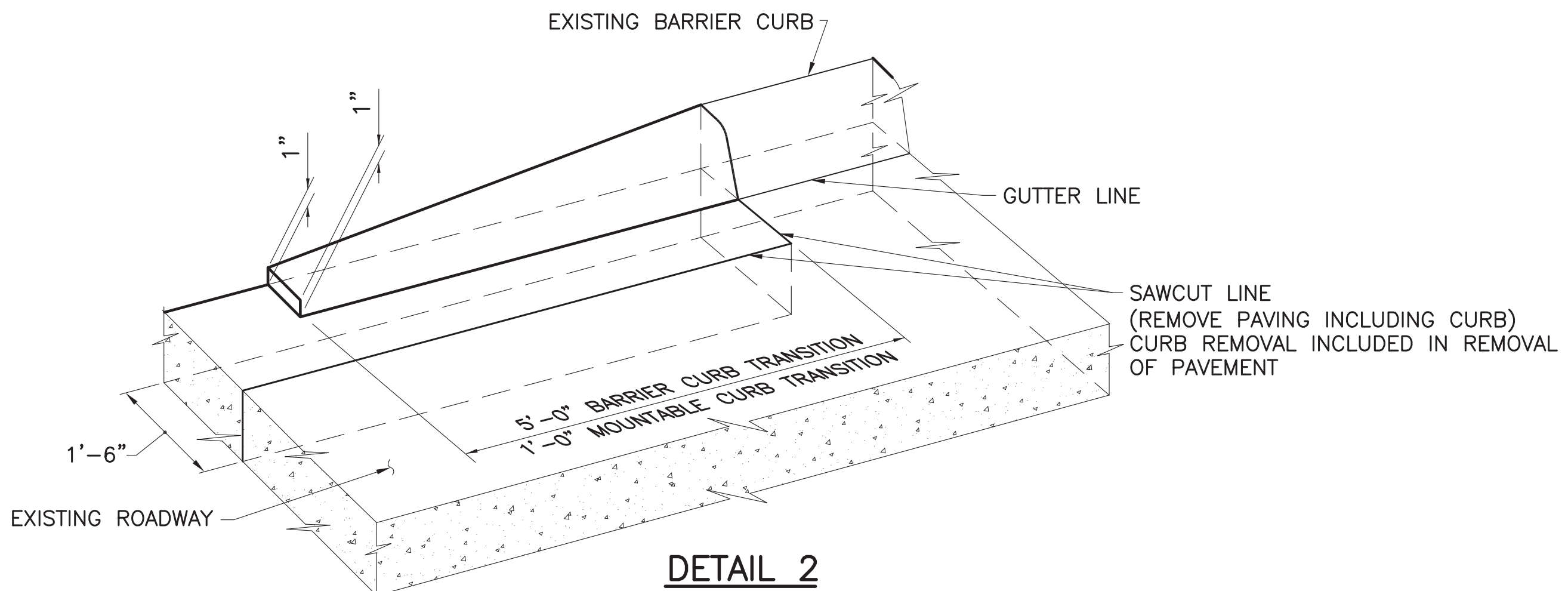
REFER TO SHEET 1 FOR NOTES
 N.T.S.



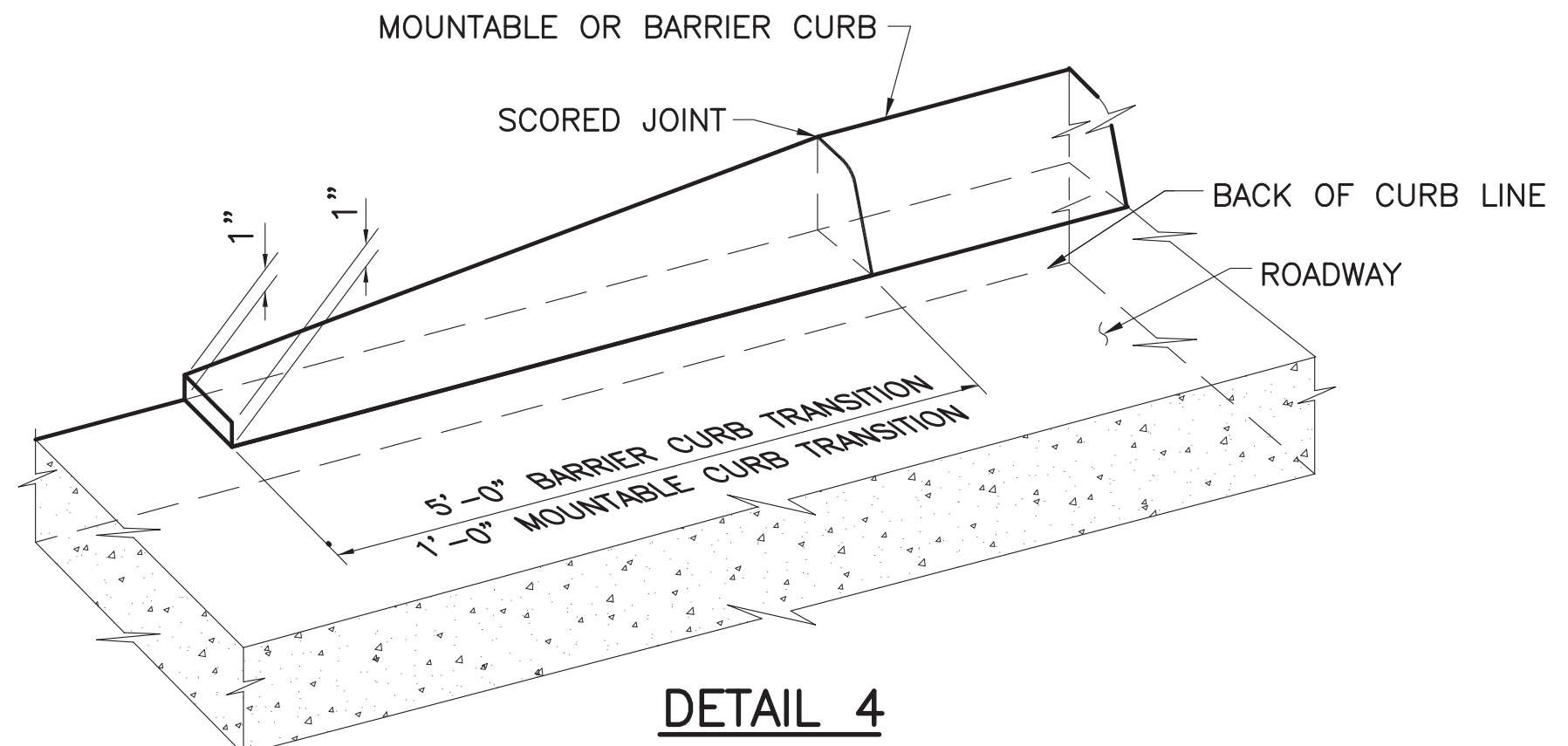
DETAIL 1
DRIVEWAY CONNECTION
 N.T.S.



DETAIL 3
DRIVEWAY CONNECTION
 N.T.S.



DETAIL 2
CURB TRANSITION
 (TRANSITION OF BARRIER CURB SHOWN.
 TRANSITION MOUNTABLE CURB OVER 1'-0".)
 N. T. S.



DETAIL 4
CURB TRANSITION
 (TRANSITION OF BARRIER CURB SHOWN.
 TRANSITION MOUNTABLE CURB OVER 1'-0".)
 N. T. S.

STATE OF LOUISIANA
 THOMAS A. STEPHENS
 License No. 15417
 PROFESSIONAL ENGINEER
 CIVIL ENGINEERING
 2/16/2013

NEW DRIVEWAY PROFILES ON NEW OR EXISTING STREETS
 N.T.S.

DATE	DESCRIPTION	BY
	REVISIONS	

STANDARD PLAN NO. 907-03	DATED APRIL 16, 2009	SHEET NO. 3 OF 3
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COMMERCIAL DRIVES
TYPICAL PROFILES AND DETAILS

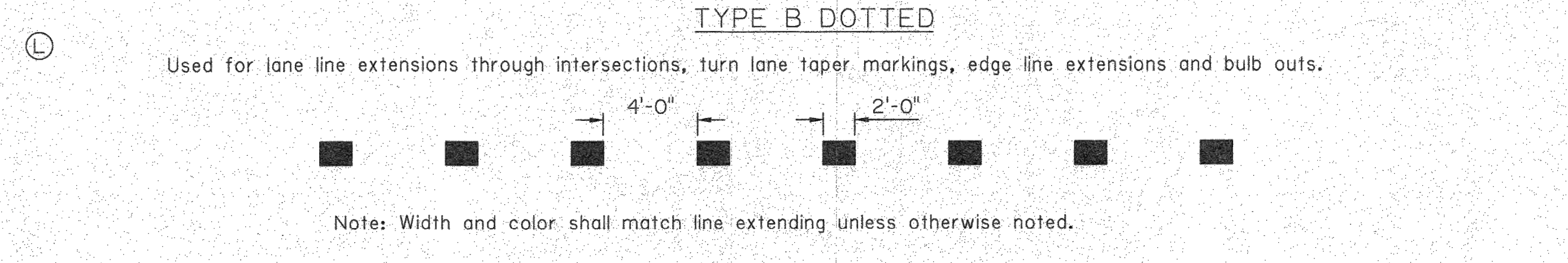
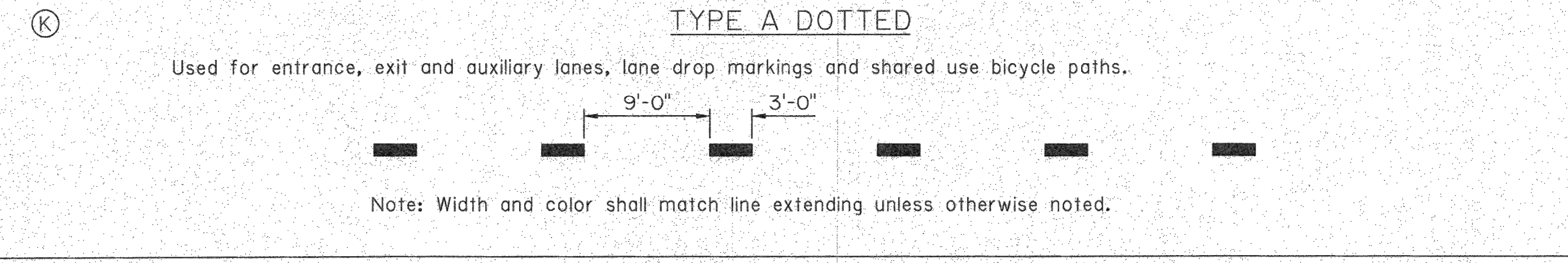
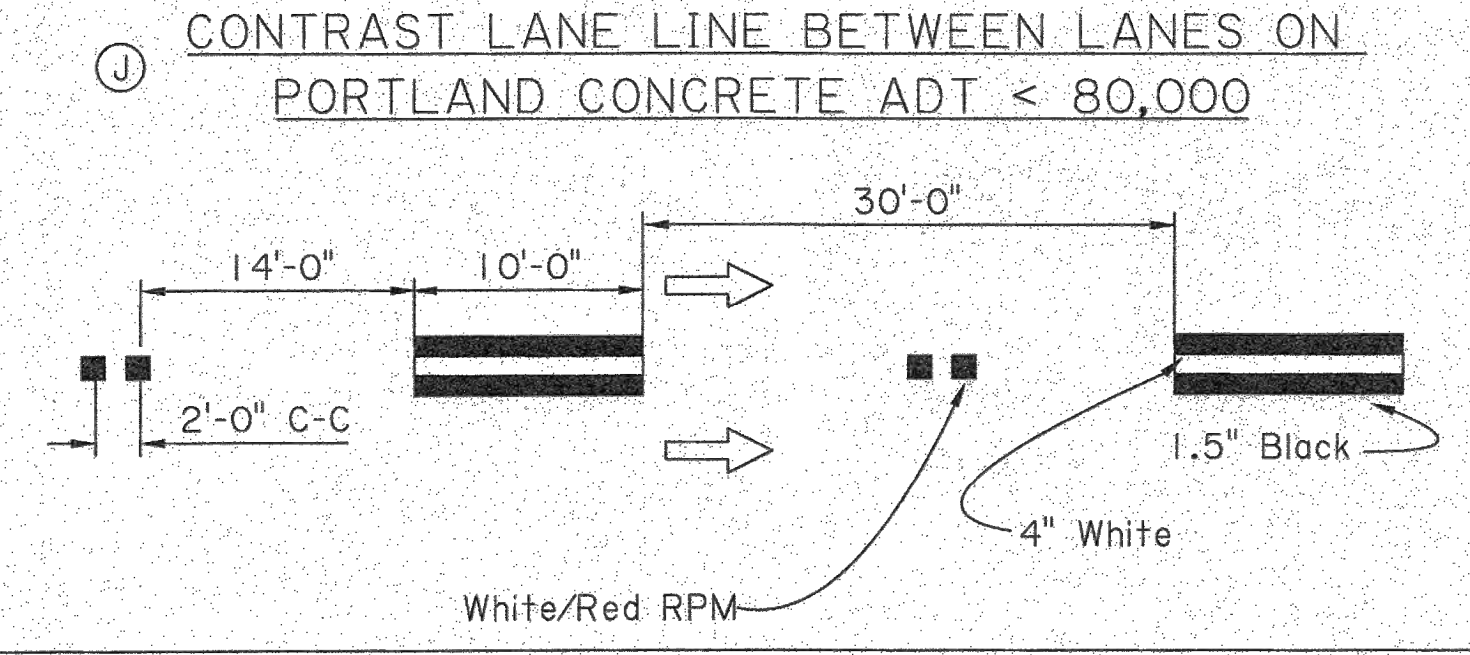
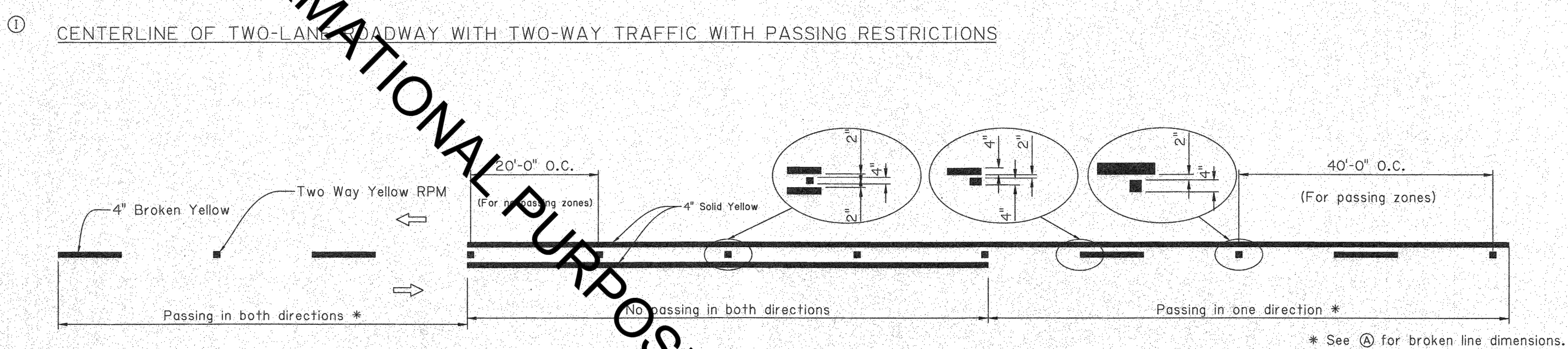
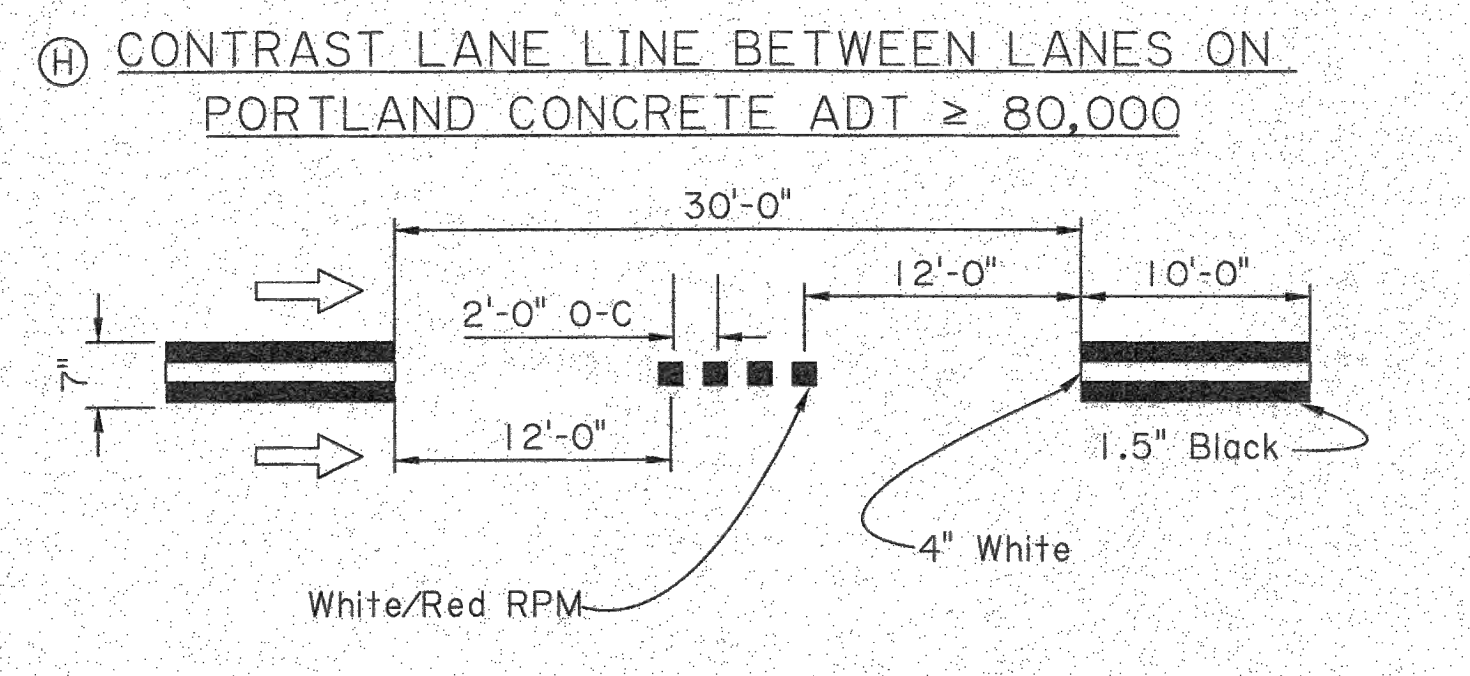
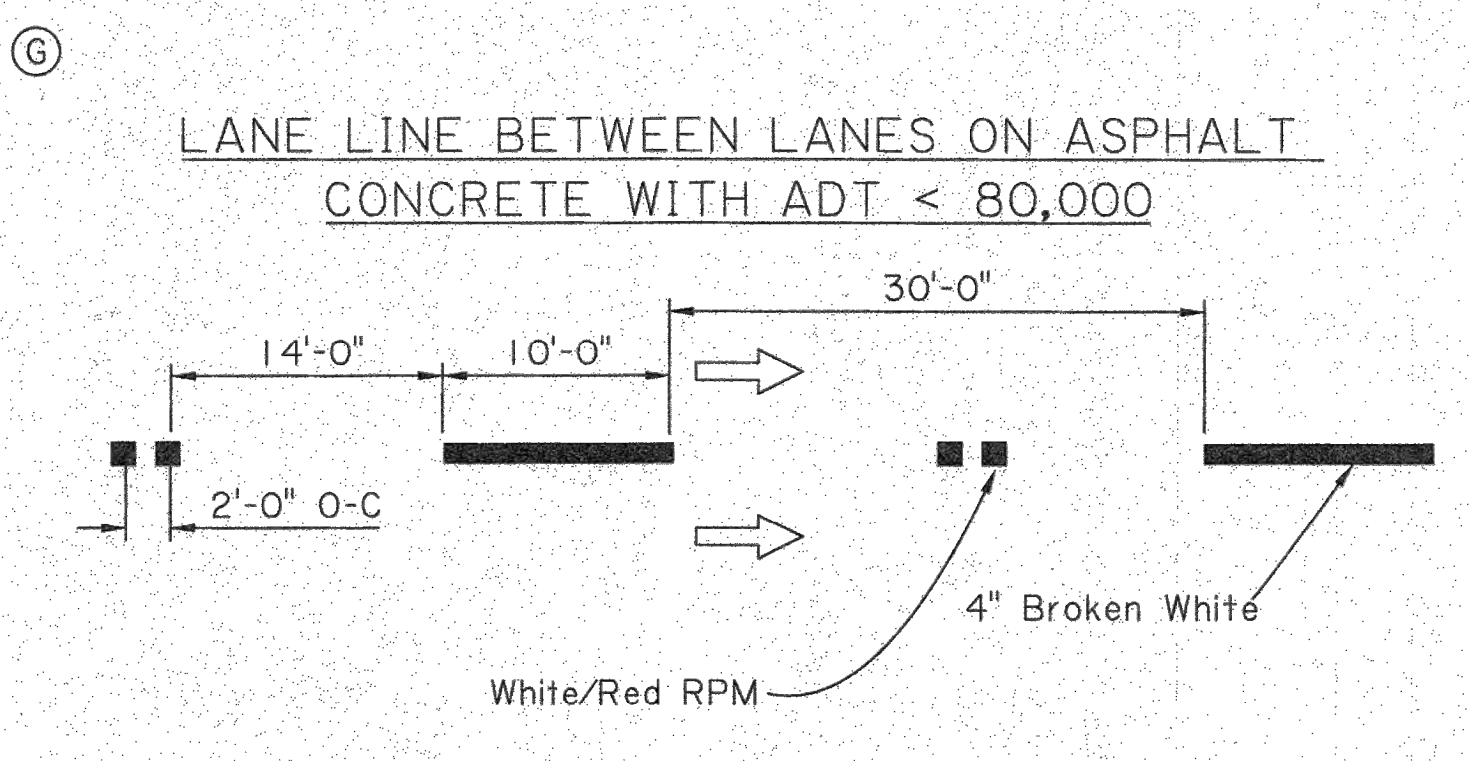
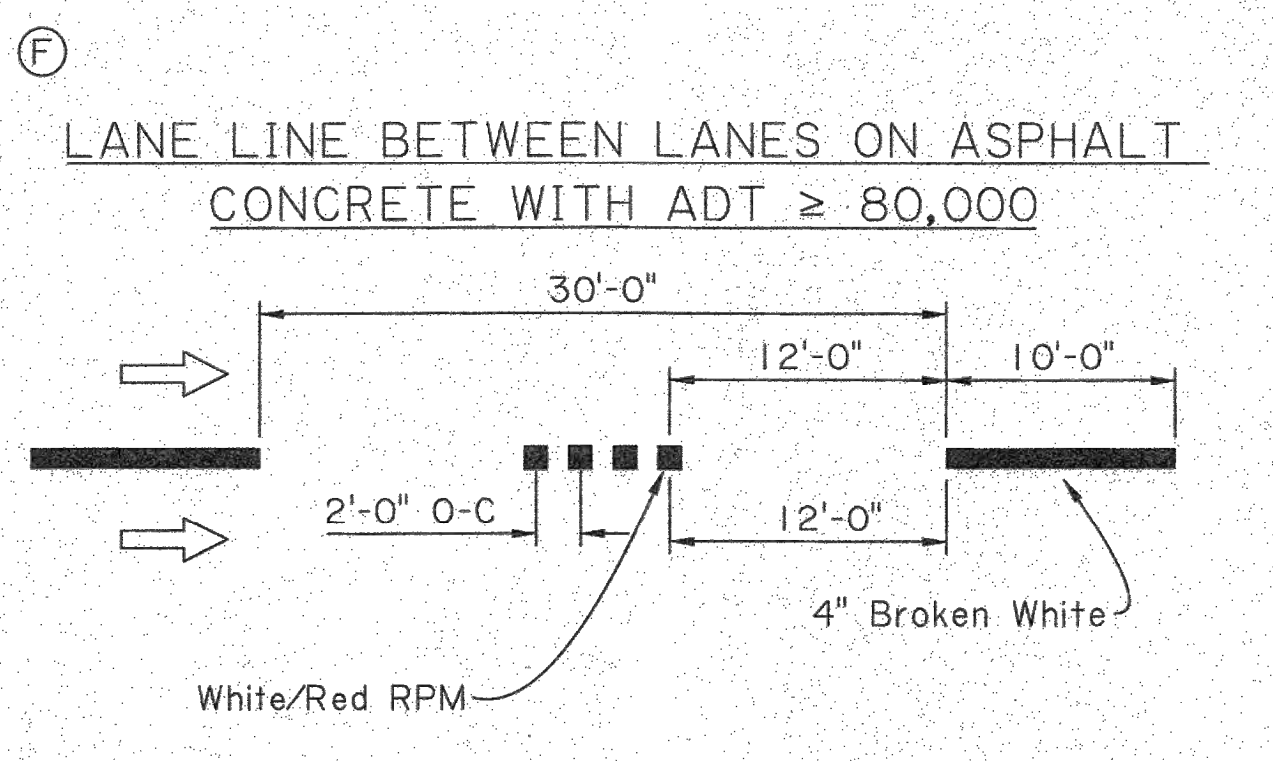
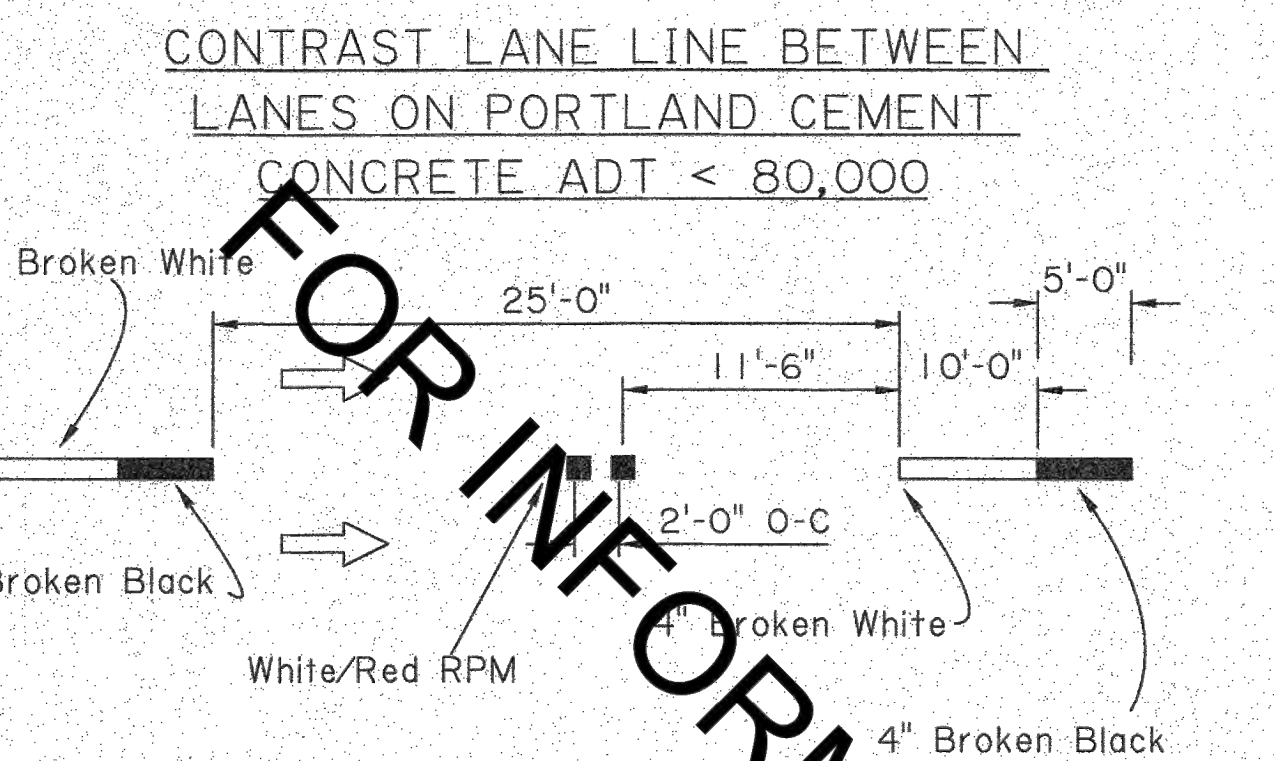
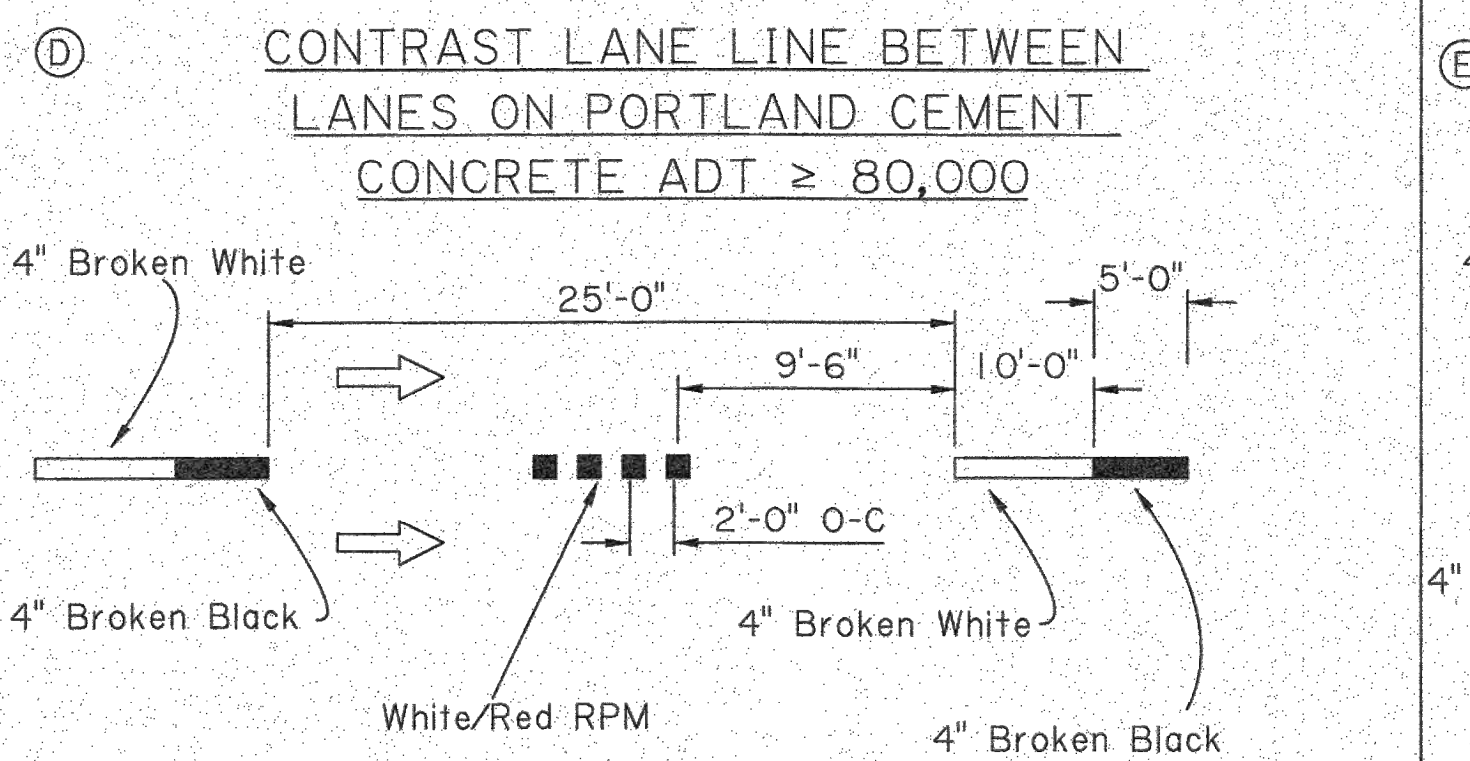
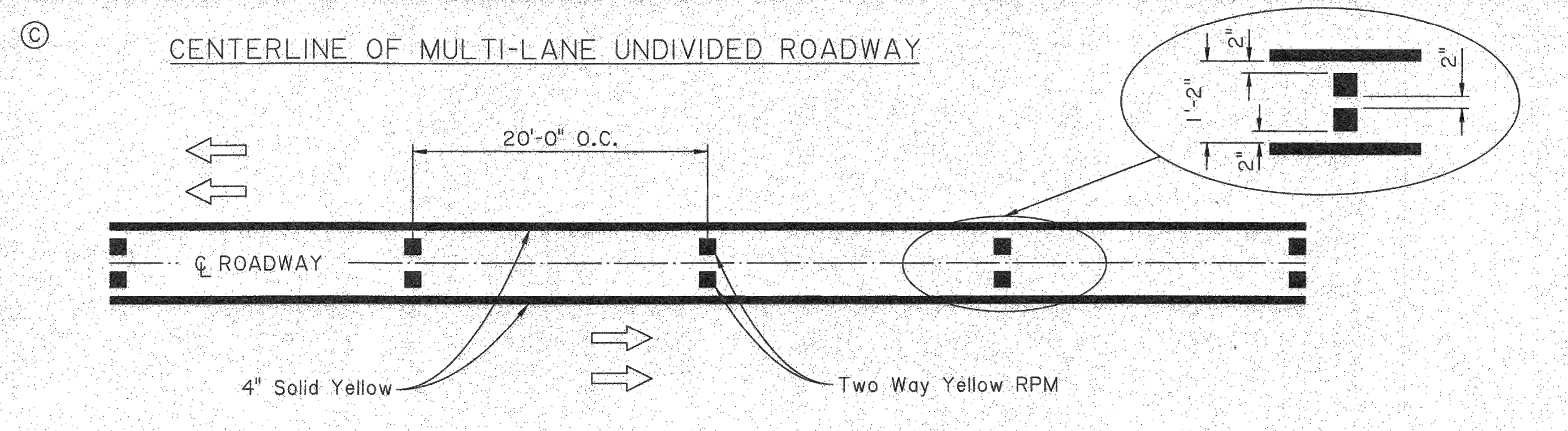
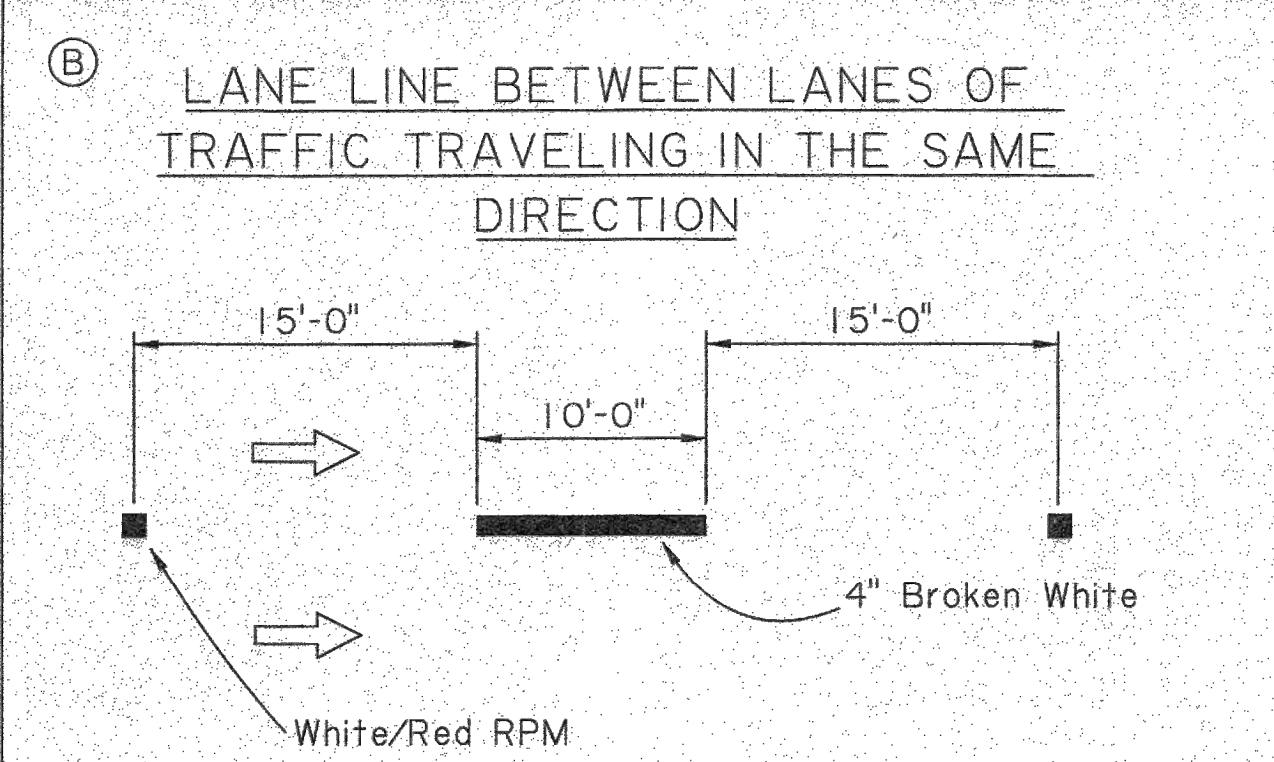
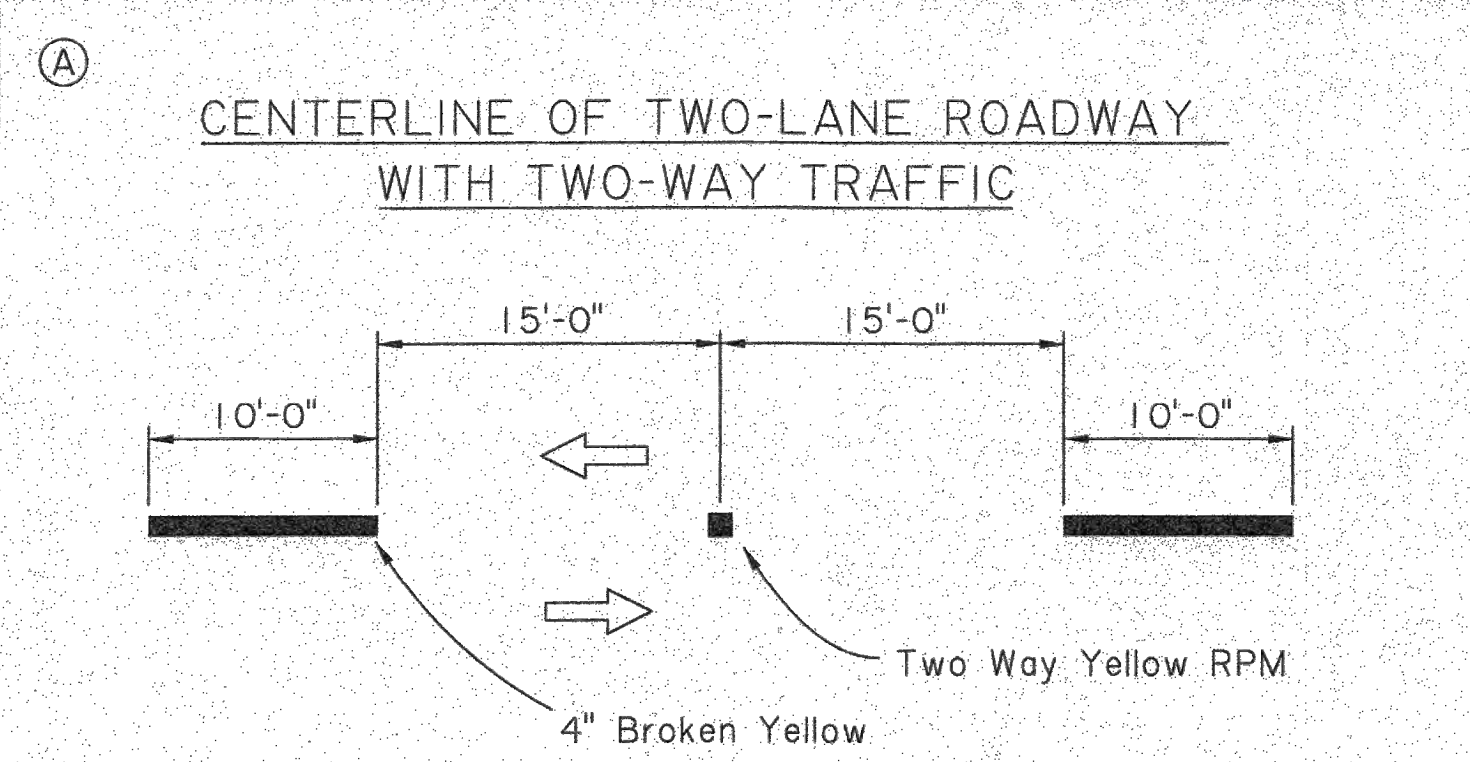
ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS CITY OF BATON ROUGE & PARISH OF EAST BATON ROUGE			
DESIGNED GLP	DRAWN GLP	CHECKED GLP	APPROVED T. STEPHENS

ENGINEERING AUTODESK LAND DESKTOP STOLAY FORM G.V.

SPATES \$TIMES\$

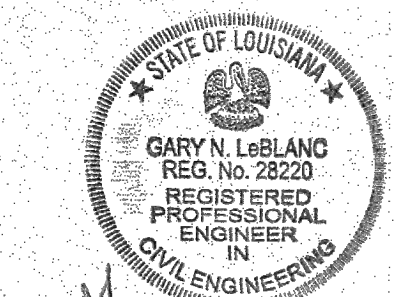
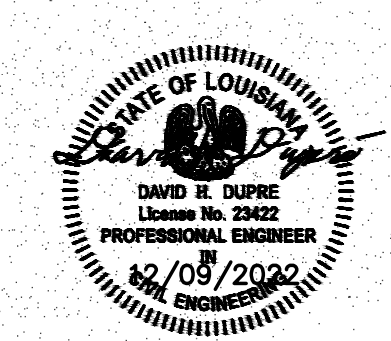
\$\$\$ SUBMITTAL STAGE ----- \$\$\$

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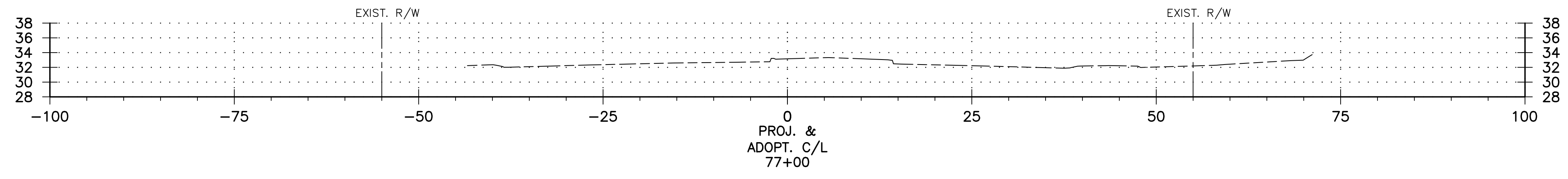
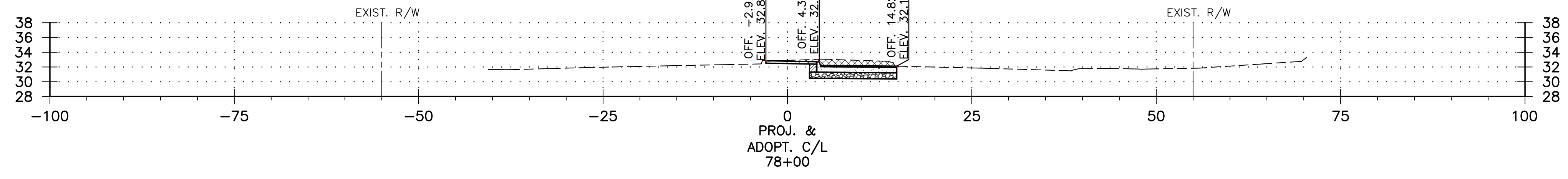
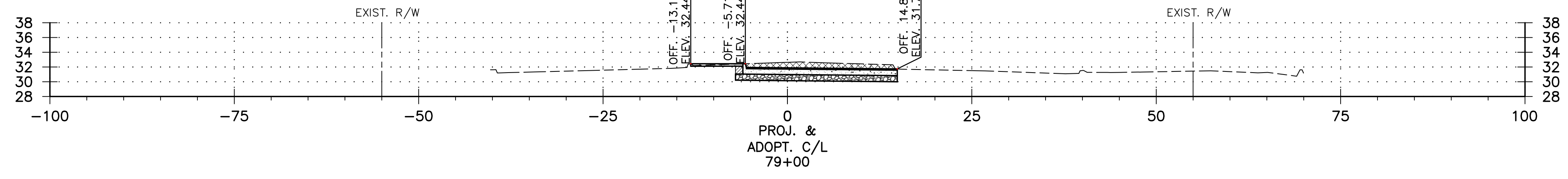
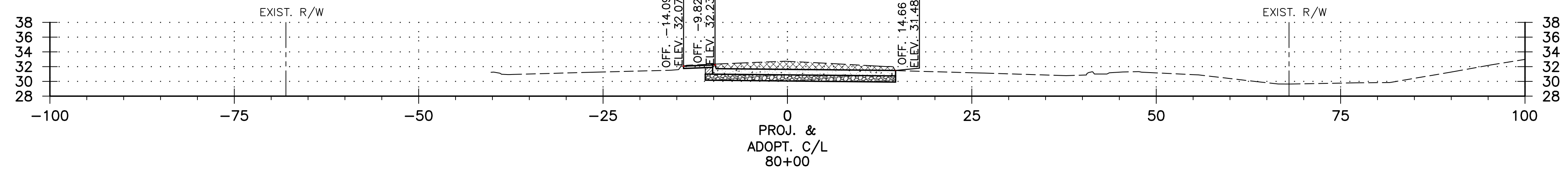
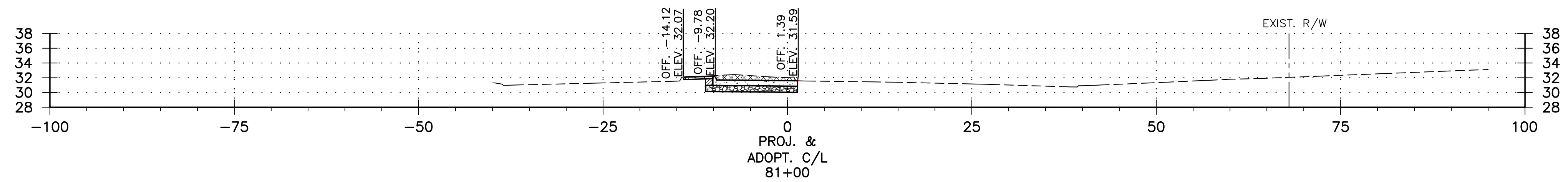
- GENERAL NOTES:**
- 4" Edge lines shall be placed on all roadways.
 - Place edge lines, centerlines and lane lines to avoid longitudinal joints as directed by the project engineer.
 - Edge lines in a curb and gutter section should be kept out of the gutter and clear from debris.
 - If rumble strips are used, striping details remain unchanged.
 - Centerlines shall be placed on roadways with a traveled way width of 16 feet or greater.
 - Where the clear width of a bridge is less than the clear width of the roadway, reflectorized pavement markers shall be placed adjacent to the edge line at 20' centers.
 - ⇒ indicates the direction of travel (not a pavement marker).
 - For non-interstate striping, use one Raised Reflectorized Pavement Marker.
 - White Reflectorized Pavement Marker faces same direction traffic and red faces opposing traffic.

FOR INFORMATIONAL PURPOSES ONLY



2-27-19

SHEET NUMBER	301
DESIGNED	G. LEBLANC
CHECKED	J. COLVIN
PARISH	
CONTROL SECTION	
STATE PROJECT	
DATE	2/28/19
SHEET	
APPROVED BY	Chief Engineer
PAVEMENT MARKING DETAILS	
Centerline and Edgeline Markings	
PM-01	
TRAFFIC ENGINEERING	



SCALE: H=1"=10'
V=1"=10'

EARTHWORK 81+00.00	
EXCAVATION	89.80 CU. YD.
EMBANKMENT	2.98 CU. YD.

EARTHWORK 80+00.00	
EXCAVATION	228.59 CU. YD.
EMBANKMENT	3.30 CU. YD.

EARTHWORK 79+00.00	
EXCAVATION	197.22 CU. YD.
EMBANKMENT	4.00 CU. YD.

EARTHWORK 78+00.00	
EXCAVATION	113.56 CU. YD.
EMBANKMENT	4.00 CU. YD.

EARTHWORK 77+00.00	
EXCAVATION	0.00 CU. YD.
EMBANKMENT	0.00 CU. YD.

SHEET NUMBER 401

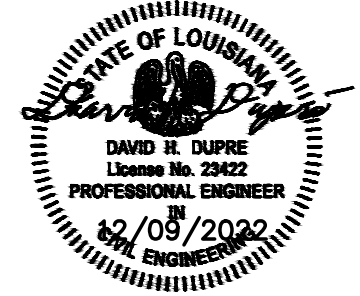
PARISH EAST BATON ROUGE PARISH
CITY PROJECT 20-CP-HC-0046
STATE PROJECT N/A

DESIGNED DHD
CHECKED DHD
DATE 12/09/2022
SHEET 1 OF 3

NO.	DATE	REVISION DESCRIPTION	BY

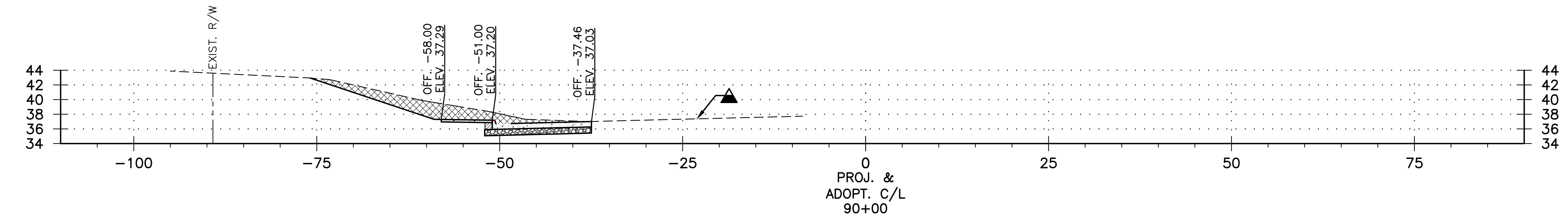


CROSS SECTIONS
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD

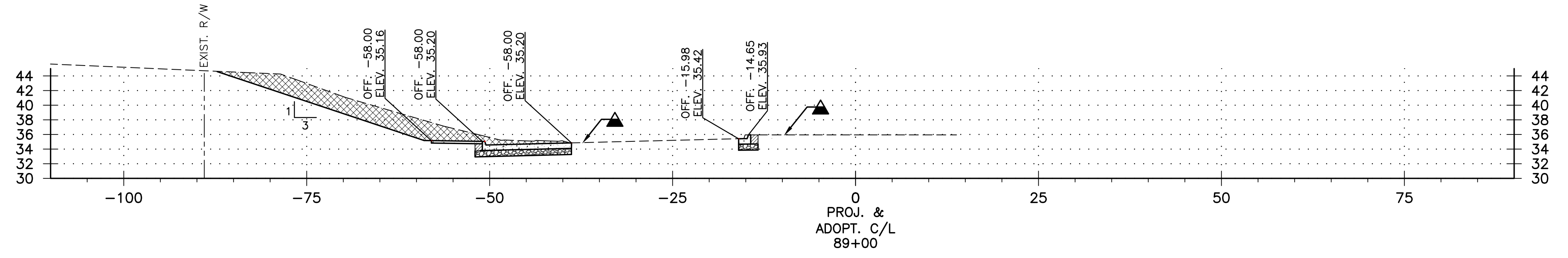


MEYER ENGINEERS, LTD.

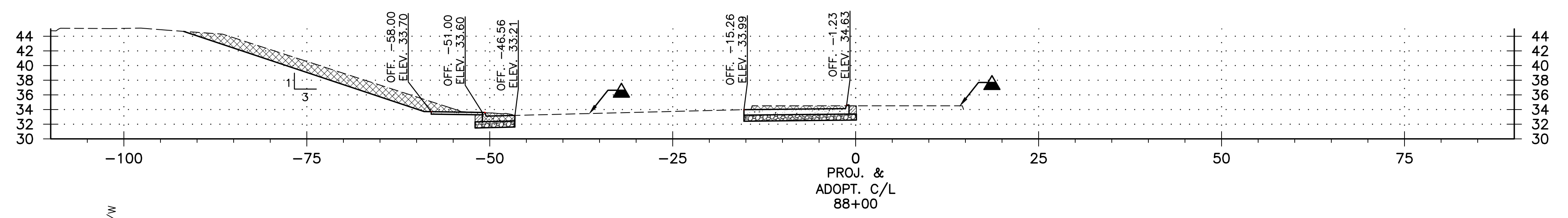
SCALE: H=1"=10'
V=1"=10'



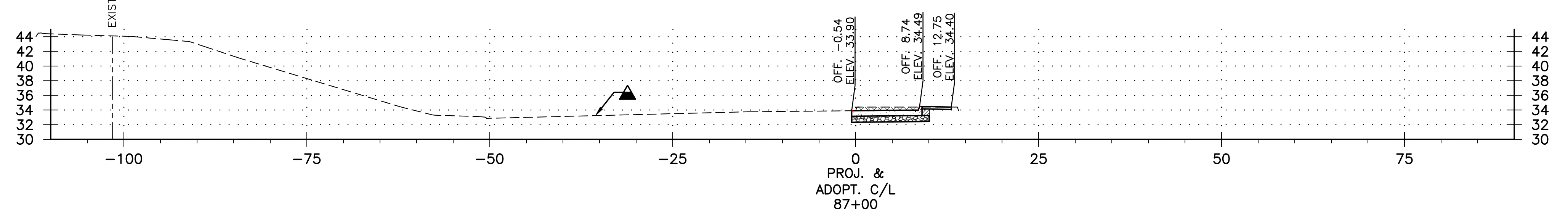
EARTHWORK 90+00.00	
EXCAVATION	173.10 CU. YD.
EMBANKMENT	3.25 CU. YD.



EARTHWORK 89+00.00	
EXCAVATION	355.04 CU. YD.
EMBANKMENT	8.11 CU. YD.



EARTHWORK 88+00.00	
EXCAVATION	336.93 CU. YD.
EMBANKMENT	7.26 CU. YD.



EARTHWORK 87+00.00	
EXCAVATION	80.48 CU. YD.
EMBANKMENT	3.30 CU. YD.

▲ EXISTING GRADES ARE ASSUMED. BASED ON 2.5% CROSS SLOPE. VERIFY ELEVATIONS AND LAYOUT IN FIELD.

EAST BATON ROUGE PARISH
20-CP-HC-0046
N/A

DESIGNED DHD
CHECKED DHD
TJG
CHECKED DHD
DATE 12/09/2022
SHEET 2 OF 3

NO.	DATE	REVISION DESCRIPTION	BY



CROSS SECTIONS
JEFFERSON HIGHWAY AT BLUEBONNET BOULEVARD



MEYER ENGINEERS, LTD.