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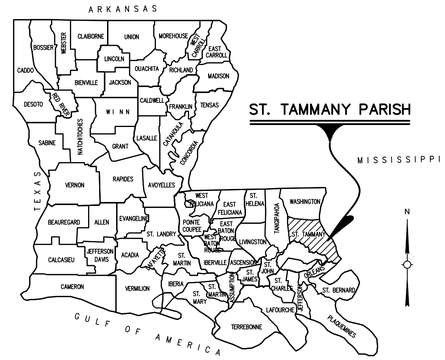
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201–202	BM–01 (2 SHTS.)	10/26/2023
203	CB–01	11/02/2000
204	CB–05	02/06/2019
205	CB–06	11/02/2000
206–208	CP–01 (3 SHTS.)	10/13/2021
208a	CSF–01	01/08/2026
209–211	DW–01 (3 SHTS.)	08/4/2022
212–213	EC–01 (2 SHTS.)	10/1/2008
214	FN–01	11/3/2011
215	HS–03	04/7/2014
216	LD–02	12/10/2025
217–222	MC–01 (6 SHTS.)	05/25/2018
223	MH–06	5/18/2011
224–228	PED–01 (5 SHTS.)	7/21/2022
229	PC–01	10/14/2025
230	PG–DRAIN (SINGLE)	9/22/2020
231	PM–01	02/28/2019
232	PM–02	02/28/2019
233	PM–06	02/28/2019
234	PM–09	02/28/2019
235–251	RS–01 (17 SHTS.)	10/14/2025
252	RW–01	11/16/2025
253	SW–01	10/25/2022
254–257	TTC–00 (A–D) (4 SHTS.)	02/07/2025
258	TTC–01	02/07/2025
259	TTC–02	02/07/2025
260	TTC–03	02/07/2025
261	TTC–04	02/07/2025
262	TTC–10	02/07/2025
263	TTC–18	02/07/2025

401 – 413 CROSS SECTIONS

TOTAL SHEETS = 123

PLANS OF PROPOSED

C0234: COLUMBIA ROUNDABOUTS
FOR
CITY OF COVINGTON
ST. TAMMANY PARISH, LOUISIANA



VICINITY MAP

END SITE 2 CONST.
MONROE ST.
STA. 302+87.81

BEGIN SITE 2 CONST.
MONROE ST.
STA. 301+22.31

END SITE 1 CONST.
N COLUMBIA ST.
STA. 104+92.67

BEGIN SITE 1 CONST.
N JEFFERSON AVE.
STA. 201+11.73

BEGIN PROJECT
N. COLUMBIA ST.
STA. 101+03.91

BEGIN SITE 2 CONST.
W 30TH AVE.
STA. 500+91.19

END SITE 2 CONST.
W 30TH AVE.
STA. 502+78.05

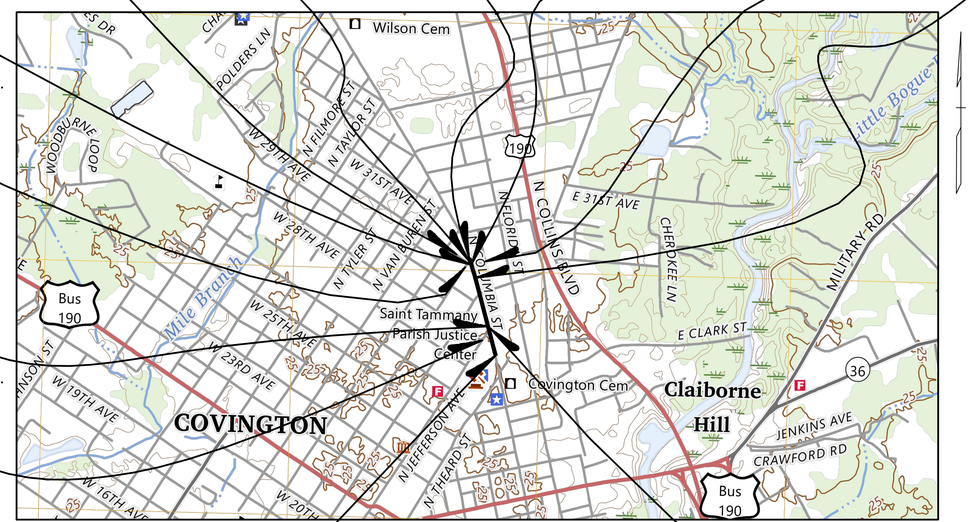
END PROJECT
N COLUMBIA ST.
STA. 115+15.80

BEGIN SITE 2 CONST.
W 30TH AVE.
STA. 400+00.00

END SITE 2 CONST.
W 30TH AVE.
STA. 402+11.92

BEGIN SITE 2 CONST.
N COLUMBIA ST.
STA. 110+59.05

END SITE 1 CONST.
N JEFFERSON AVE.
STA. 202+24.24



LAYOUT MAP

SCALE: 1 INCH = 1000 FEET

1 0 1 2 3

Scale : 1"=1000'

STANDARD SPECIFICATIONS

THE 2016 EDITION OF THE LOUISIANA DOTD STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, AS AMENDED BY THE PROJECT SPECIFICATIONS, SHALL GOVERN.

BASE STATIONS:

PID: DR9487, CORS_ID:MOON
DESIGNATION: MOON_291 LSU C4G CORS ARP
LAT.= N30°01'22.77262"
LON.= W89°54'46.88591"
NORTHING/Y= 556,639.37
EASTING/X= 3,581,993.29

PID: AJ7833, CORS_ID:HAMM
DESIGNATION: HAMMOND CORS ARP
LAT.= N30°30'47.05152"
LON.= W90°28'03.42835"
NORTHING/Y= 733,115.66
EASTING/X= 3,553,447.24

DATUM USED : VERTICAL CONTROL: NAVD88 (GEOID18) HORIZONTAL CONTROL: LA SOUTH ZONE 1702 (NAD83)

BEARINGS ARE: LOUISIANA STATE PLANE COORDINATE SYSTEM

TRAFFIC DATA SITE 1
2025 A.D.T. = 7,282
2045 A.D.T. = 9,808
D = 64.6%
K = 9.4%
T = 0.1%

TRAFFIC DATA SITE 2
2025 A.D.T. = 7,319
2045 A.D.T. = 9,858
D = 70.2%
K = 9.3%
T = 2.1%

DESIGN SPEED: 25 MPH ROADWAY CLASSIFICATION: UA

TYPE OF CONSTRUCTION: ASPHALTIC CONCRETE PAVEMENT, BASE COURSE, DRAINAGE STRUCTURES, GRADING, TRAFFIC SIGNING/STRIPING, AND CLEANING EXISTING DRAINAGE STRUCTURES

DATE	DESCRIPTION	BY

SCHEDULE OF REVISIONS

PREPARED BY:

PLANS PREPARED AND SUBMITTED BY:

TYLER H. BRANCH, P.E.
FORTE and TABLADA, INC.

DATE 4/17/2026

FORTE & TABLADA
PEOPLE | PROFESSION | CLIENTS | COMMUNITY
9107 Interline Avenue
Baton Rouge, LA 70809
T (225) 927-9321 F (225) 927-9326
WWW.FORTEANDTABLADA.COM
Consulting Engineers / Land Surveyors

LA One Call 811
www.laonecall.com

BY LOUISIANA STATE LAW THE CONTRACTOR IS RESPONSIBLE FOR FINAL VERIFICATION OF THE LOCATION OF THE UTILITIES SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CALL LOUISIANA ONE CALL (811 OR 800-272-3020) AND CITY/PARISH DEPARTMENT OF PUBLIC WORKS 48 HOURS PRIOR TO WORK COMMENCEMENT TO HAVE UTILITIES LOCATED PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE UTILITY COMPANIES AND MUNICIPALITIES FOR ALL AREAS OF CONSTRUCTION.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 1

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

TITLE SHEET

DESIGNED	MDB	
CHECKED	NAB	
DETAILED	MDB	4/17/26
CHECKED	THB	NOTED
DATE	SCALE	

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT 1 INCH, ADJUST SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

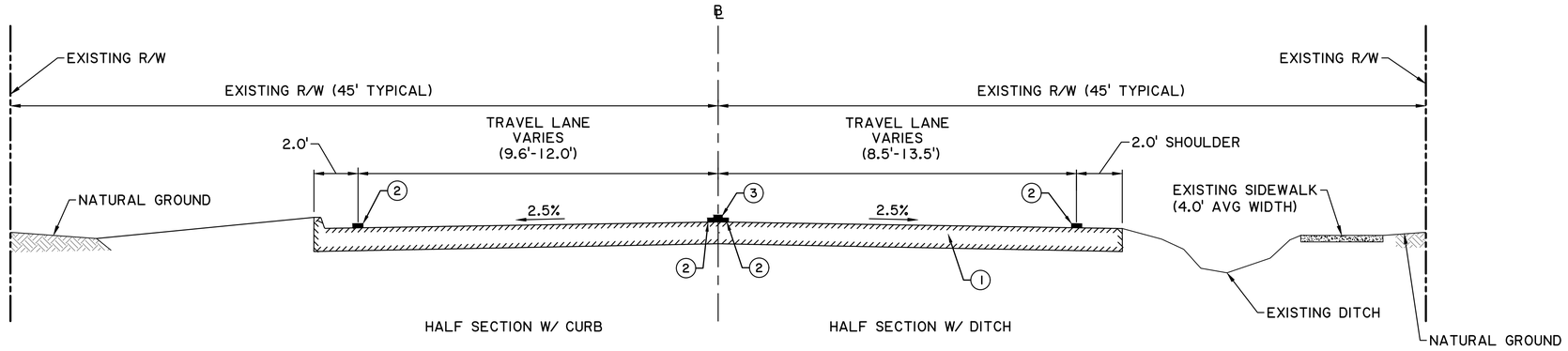
NO.	REVISION DESCRIPTION	BY	DATE

100% FINAL PLANS SUBMITTAL 6/18/2026 10:01 AM

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6/18/2026 10:02 AM

1 EXISTING ASPHALT ROADWAY
2 EXISTING PAVEMENT STRIPING
3 EXISTING PAVEMENT MARKERS



TYPICAL EXISTING SECTION

N. COLUMBIA ST. ROUNDABOUT
N.T.S.

APPLIES: STA. 101+03.91 TO STA. 104+92.67 (N COLUMBIA ST.) (SITE 1)
APPLIES: STA. 110+59.05 TO STA. 115+15.80 (N COLUMBIA ST.) (SITE 2)

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

SHEET NUMBER 2

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

TYPICAL SECTION

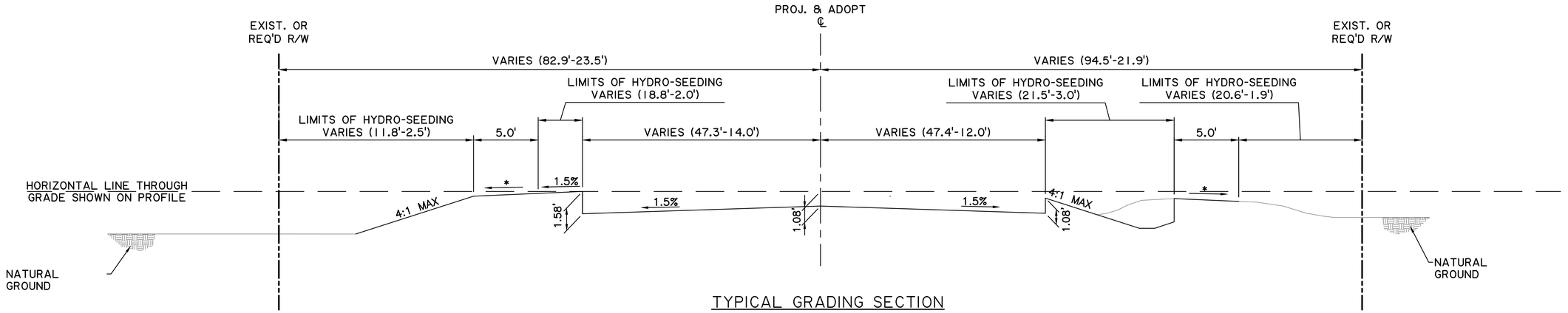
DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	N.T.S.

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
ADJUST SCALE IF THIS BAR ≠ 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
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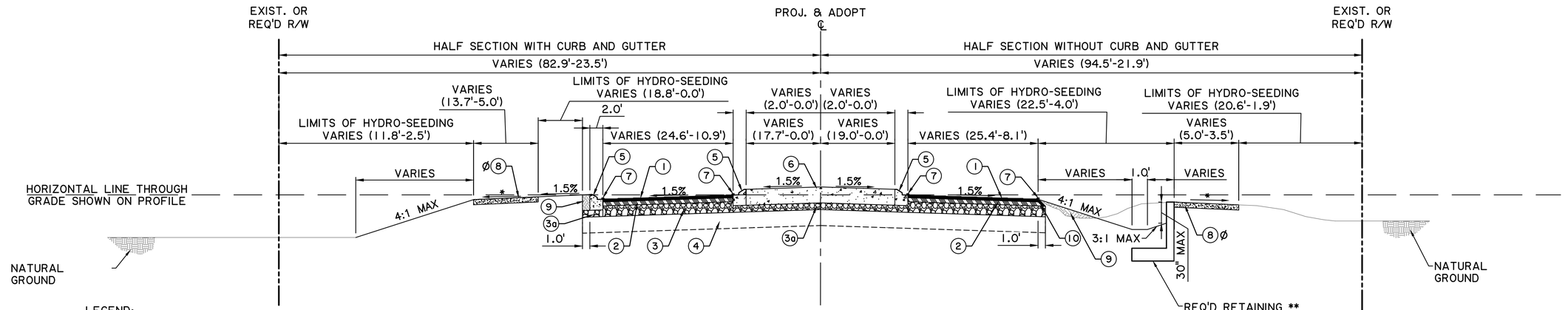


TYPICAL GRADING SECTION

N. COLUMBIA ST. ROUNDABOUT
N.T.S.

APPLIES: STA. 101+03.91 TO STA. 102+73.54 (N COLUMBIA ST.) (SITE 1)
APPLIES: STA. 104+07.17 TO STA. 104+92.67 (N COLUMBIA ST.) (SITE 1)
APPLIES: STA. 201+11.73 TO STA. 201+84.71 (N JEFFERSON AVE.) (SITE 1)

APPLIES: STA. 110+59.05 TO STA. 112+34.29 (N COLUMBIA ST.) (SITE 2)
APPLIES: STA. 113+61.94 TO STA. 114+78.98 (N COLUMBIA ST.) (SITE 2)
APPLIES: STA. 301+22.31 TO STA. 302+17.62 (W 30TH AVE.) (SITE 2)
APPLIES: STA. 400+54.45 TO STA. 401+90.97 (MONROE ST.) (SITE 2)



LEGEND:

1. REQ'D 1.5" ASPHALT CONCRETE WEARING COURSE (LEVEL 1)
2. REQ'D 3.5" ASPHALT CONCRETE BINDER COURSE (LEVEL 1)
3. REQ'D CLASS II BASE COURSE (8" THICK) (CRUSHED STONE)
3a. REQ'D CLASS II BASE COURSE (5" THICK) (CRUSHED STONE)
4. REQ'D TYPE E LIME TREATMENT (12" THICK, 9% BY VOLUME) (AS DIRECTED BY THE PROJECT ENGINEER.)
5. REQ'D COMBINATION CONCRETE CURB AND GUTTER (MOUNTABLE TYPE)
6. REQ'D 11.0" PORTLAND CEMENT CONCRETE PAVEMENT (INTEGRALLY COLORED, BRICK RED & BROOM FINISH)
7. REQ'D PAVEMENT STRIPING
8. REQ'D 4.0" THK. CONCRETE SIDEWALK
9. EMBANKMENT
10. ASPHALT SHOULDER WEDGE

* 1.5% DESIRABLE, 2.0% MAX SLOPE
(FOR ADDITIONAL DETAIL OF PROPOSED SIDEWALK, SEE PLAN AND PROFILES)

TYPICAL FINISHED SECTION

N. COLUMBIA ST. ROUNDABOUT
N.T.S.

APPLIES: STA. 101+03.91 TO STA. 102+73.54 (N COLUMBIA ST.) (SITE 1)
APPLIES: STA. 104+07.17 TO STA. 104+92.67 (N COLUMBIA ST.) (SITE 1)
APPLIES: STA. 201+11.73 TO STA. 201+84.71 (N JEFFERSON AVE.) (SITE 1)

APPLIES: STA. 110+59.05 TO STA. 112+34.29 (N COLUMBIA ST.) (SITE 2)
APPLIES: STA. 113+61.94 TO STA. 114+78.98 (N COLUMBIA ST.) (SITE 2)
APPLIES: STA. 301+22.31 TO STA. 302+17.62 (MONROE ST.) (SITE 2)
APPLIES: STA. 400+54.45 TO STA. 401+90.97 (W 30TH AVE.) (SITE 2)

** APPLIES: STA. 101+88.25 TO STA. 102+16.34 (N. COLUMBIA ST.) (SITE 1)
APPLIES: STA. 102+35.81 TO STA. 102+78.64 (N. COLUMBIA ST.) (SITE 1)

Δ QUANTITY PROVIDED FOR 25% OF PROJECT. PROJECT SITES ARE CONSIDERED DUST SENSITIVE AREAS. CONTRACTOR TO USE CENTRAL PLANT MIXING OR LIME-SLURRY TO AVOID DUST AT NO DIRECT PAY.

Ø SIDEWALK SHOWN ON TYPICAL SECTIONS REPRESENTS THE REQUIRED SIDEWALK CONDITION. REFER TO PLAN SHEETS FOR EXACT LOCATIONS, LIMITS, AND EXTENTS OF PROPOSED SIDEWALK.

NOTE: PROOF ROLLING SUBGRADE, SUBBASE, AND BASE COURSE IS REQUIRED AND MUST BE ACCEPTED BY THE PROJECT ENGINEER PRIOR TO PLACEMENT OF SUBSEQUENT LAYERS AT NO DIRECT PAY.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

SHEET NUMBER 2a

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

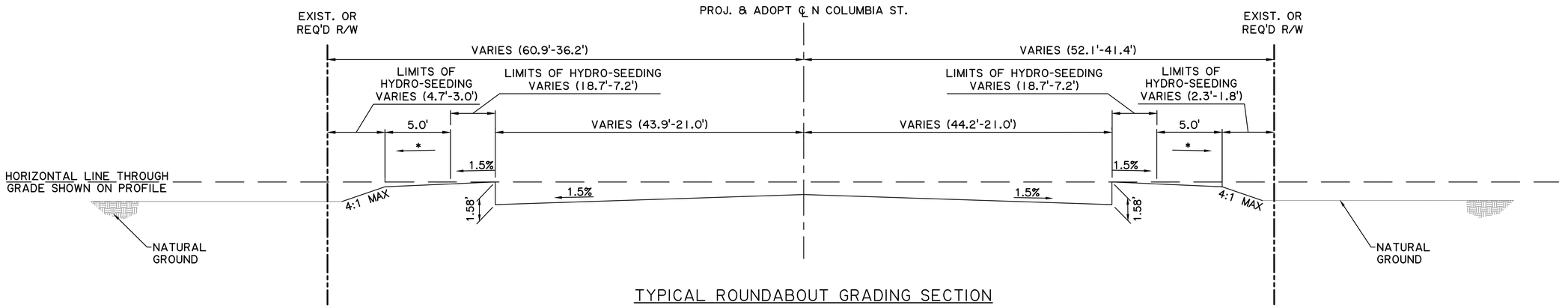
TYPICAL SECTION

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DETAILED	MDB	
CHECKED	THB	
DATE	4/17/26	
SCALE	N.T.S.	

FORTE & TABLADA

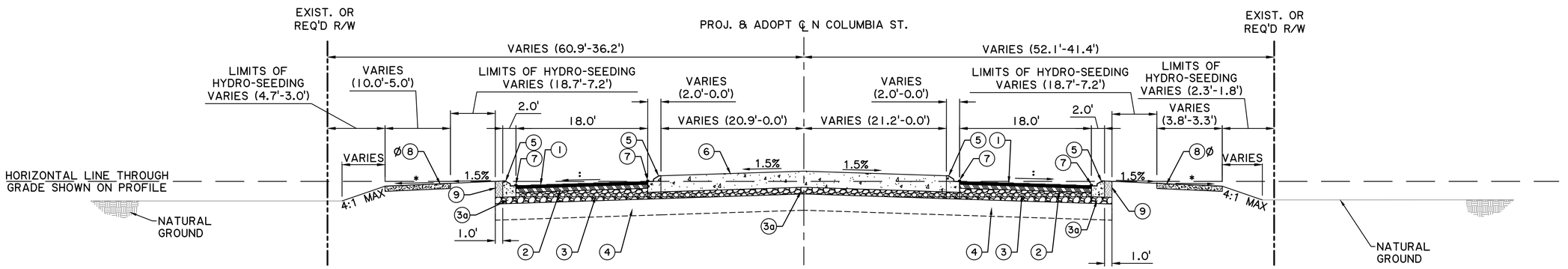
ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	BY	REVISION DESCRIPTION



TYPICAL ROUNDABOUT GRADING SECTION

N. COLUMBIA ST. ROUNDABOUT
N.T.S.
APPLIES: STA. 102+73.54 TO STA. 104+07.17 (N COLUMBIA ST.) (SITE 1)



LEGEND:

■	(1)	REQ'D 1.5" ASPHALT CONCRETE WEARING COURSE (LEVEL 1)
▨	(2)	REQ'D 3.5" ASPHALT CONCRETE BINDER COURSE (LEVEL 1)
▨	(3)	REQ'D CLASS II BASE COURSE (8" THICK) (CRUSHED STONE)
▨	(3a)	REQ'D CLASS II BASE COURSE (5" THICK) (CRUSHED STONE)
▭	(4)	REQ'D TYPE E LIME TREATMENT (12" THICK, 9% BY VOLUME) (AS DIRECTED BY THE PROJECT ENGINEER.) Δ
	(5)	REQ'D COMBINATION CONCRETE CURB AND GUTTER (MOUNTABLE TYPE)
▭	(6)	REQ'D 11.0" PORTLAND CEMENT CONCRETE PAVEMENT (INTEGRALLY COLORED, BRICK RED & BROOM FINISH)
▬	(7)	REQ'D PAVEMENT STRIPING
▨	(8)	REQ'D 4.0" THK. CONCRETE SIDEWALK
▨	(9)	EMBANKMENT
*		1.5% DESIRABLE, 2.0% MAX SLOPE (FOR ADDITIONAL DETAIL OF PROPOSED SIDEWALK, SEE PLAN AND PROFILES)
:		VARIES, 1.5% DESIRABLE (FOR ADDITIONAL DETAIL, SEE GRAPHICAL GRADING PLAN)

TYPICAL ROUNDABOUT FINISHED SECTION

N. COLUMBIA ST. ROUNDABOUT
N.T.S.
APPLIES: STA. 102+73.54 TO STA. 104+07.17 (N COLUMBIA ST.) (SITE 1)

NOTE: PROOF ROLLING SUBGRADE, SUBBASE, AND BASE COURSE IS REQUIRED AND MUST BE ACCEPTED BY THE PROJECT ENGINEER PRIOR TO PLACEMENT OF SUBSEQUENT LAYERS AT NO DIRECT PAY.

Δ QUANTITY PROVIDED FOR 25% OF PROJECT. PROJECT SITES ARE CONSIDERED DUST SENSITIVE AREAS. CONTRACTOR TO USE CENTRAL PLANT MIXING OR LIME-SLURRY TO AVOID DUST AT NO DIRECT PAY.

Ø SIDEWALK SHOWN ON TYPICAL SECTIONS REPRESENTS THE REQUIRED SIDEWALK CONDITION. REFER TO PLAN SHEETS FOR EXACT LOCATIONS, LIMITS, AND EXTENTS OF PROPOSED SIDEWALK.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 2b

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

TYPICAL SECTION

DESIGNED	MDB	DATE	4/17/26
CHECKED	NAB	SCALE	N.T.S.
DETAILED	MDB		
CHECKED	TWB		

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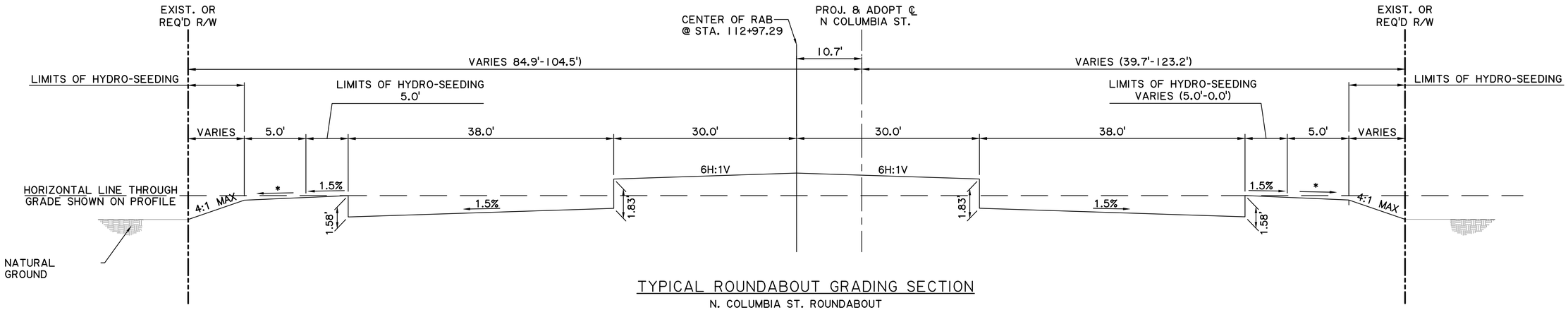
NO.	DATE	REVISION DESCRIPTION	BY

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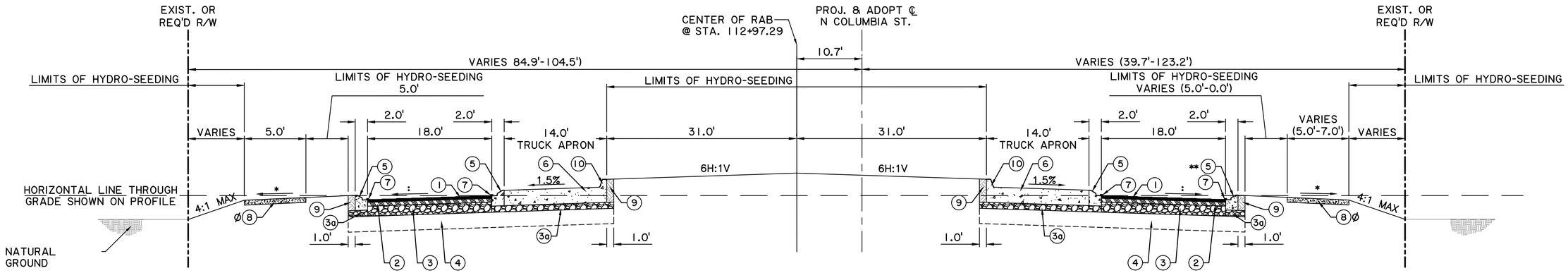
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6/18/2026 10:02 AM



TYPICAL ROUNDABOUT GRADING SECTION

N. COLUMBIA ST. ROUNDABOUT
N.T.S.
APPLIES: STA. 112+34.29 TO STA. 113+61.94 (N COLUMBIA ST.) (SITE 2)



TYPICAL ROUNDABOUT FINISHED SECTION

N. COLUMBIA ST. ROUNDABOUT
N.T.S.
APPLIES: STA. 112+34.29 TO STA. 113+61.94 (N COLUMBIA ST.) (SITE 2)

** STA. 112+34.29 TO STA. 112+62.95 CURB TO BE BARRIER TYPE FOR SIDEWALK ADJACENT TO CURB.

LEGEND:

1. REQ'D 1.5" ASPHALT CONCRETE WEARING COURSE (LEVEL 1)
2. REQ'D 3.5" ASPHALT CONCRETE BINDER COURSE (LEVEL 1)
3. REQ'D CLASS II BASE COURSE (8" THICK) (CRUSHED STONE)
3a. REQ'D CLASS II BASE COURSE (5" THICK) (CRUSHED STONE)
4. REQ'D TYPE E LIME TREATMENT (12" THICK, 9% BY VOLUME) (AS DIRECTED BY THE PROJECT ENGINEER.) Δ
5. REQ'D COMBINATION CONCRETE CURB AND GUTTER (MOUNTABLE TYPE)
6. REQ'D 9.0" PORTLAND CEMENT CONCRETE PAVEMENT (INTEGRALLY COLORED, BRICK RED & BROOM FINISH)
7. REQ'D PAVEMENT STRIPING
8. REQ'D 4.0" THK. CONCRETE SIDEWALK
9. EMBANKMENT
10. REQ'D 6.0" INTEGRAL CURB (BARRIER TYPE)

* 1.5% DESIRABLE, 2.0% MAX SLOPE (FOR ADDITIONAL DETAIL OF PROPOSED SIDEWALK, SEE PLAN AND PROFILES)

: VARIES, 1.5% DESIRABLE (FOR ADDITIONAL DETAIL, SEE GRAPHICAL GRADING PLAN)

NOTE: PROOF ROLLING SUBGRADE, SUBBASE, AND BASE COURSE IS REQUIRED AND MUST BE ACCEPTED BY THE PROJECT ENGINEER PRIOR TO PLACEMENT OF SUBSEQUENT LAYERS AT NO DIRECT PAY.

Δ QUANTITY PROVIDED FOR 25% OF PROJECT. PROJECT SITES ARE CONSIDERED DUST SENSITIVE AREAS. CONTRACTOR TO USE CENTRAL PLANT MIXING OR LIME-SLURRY TO AVOID DUST AT NO DIRECT PAY.

Ø SIDEWALK SHOWN ON TYPICAL SECTIONS REPRESENTS THE REQUIRED SIDEWALK CONDITION. REFER TO PLAN SHEETS FOR EXACT LOCATIONS, LIMITS, AND EXTENTS OF PROPOSED SIDEWALK.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 2c

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

TYPICAL SECTION

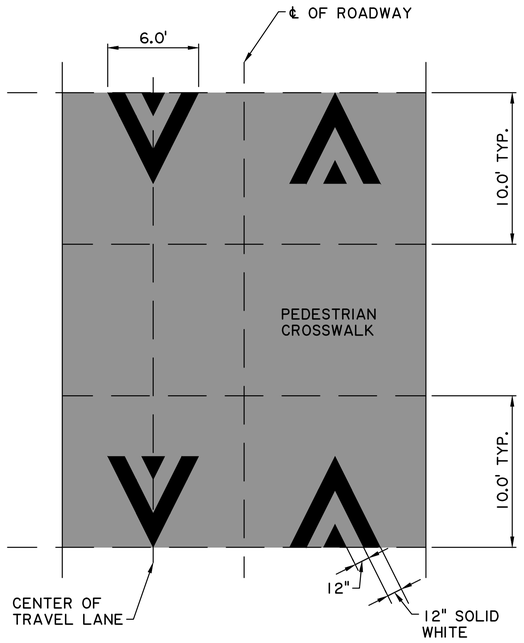
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CHECKED	NAB	SCALE	N.T.S.
DETAILED	MDB		
CHECKED	THB		

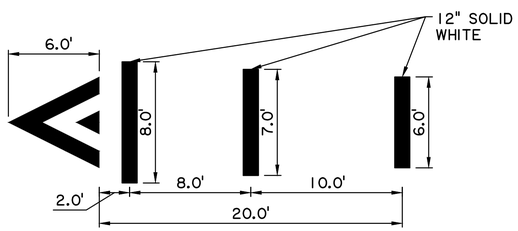
FORTE & TABLADA

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THIS BAR = 1 INCH.

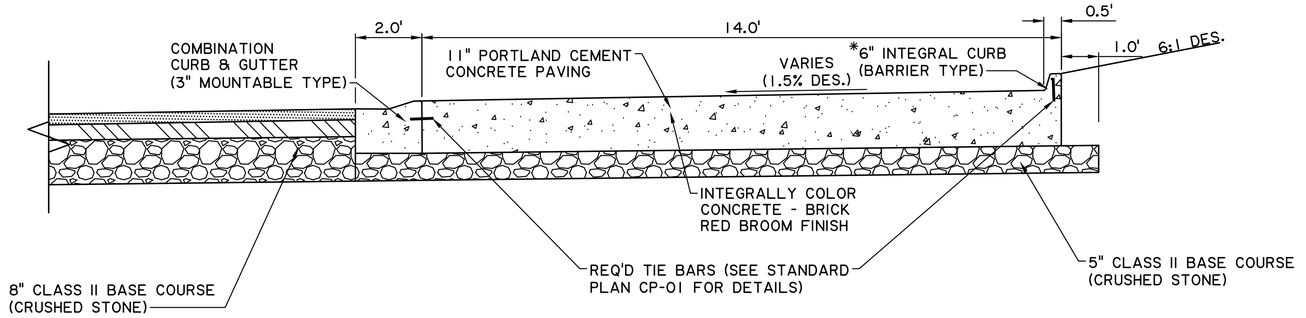
NO.	DATE	REVISION DESCRIPTION	BY

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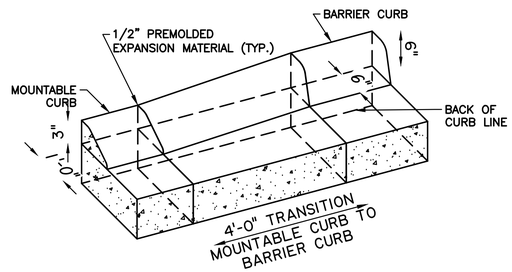




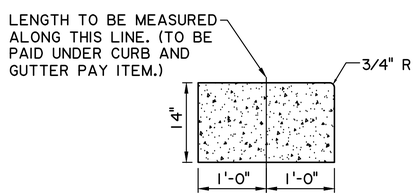
PAVEMENT STRIPING DETAILS FOR SPEED TABLES
N.T.S.



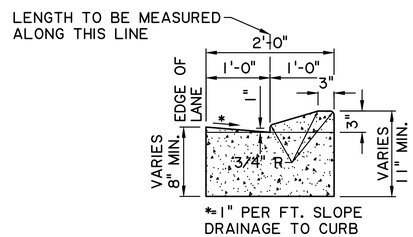
TRUCK APRON DETAIL
N.T.S.



MOUNTABLE - BARRIER CURB TRANSITION
N.T.S



CURB DETAIL (TYPE D)
(N.T.S.)



CURB DETAIL
COMBINATION CURB & GUTTER
(MOUNTABLE TYPE)
(N.T.S.)
(DRAINAGE TO CURB)

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 2d

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

TYPICAL SECTION

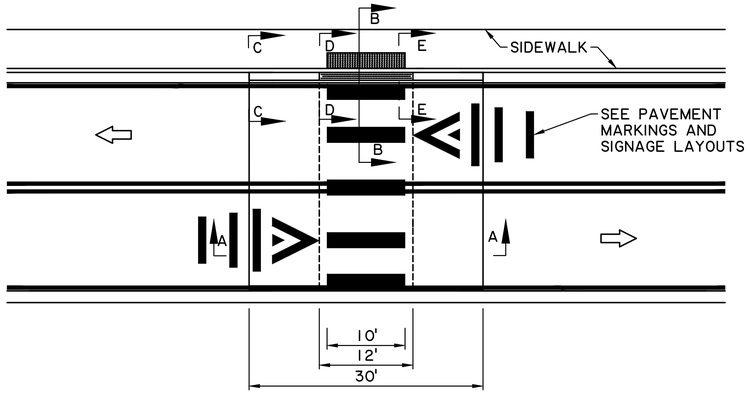
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CHECKED	NAB
DETAILED	MDB
CHECKED	TMB
DATE	4/17/26
SCALE	N.T.S.

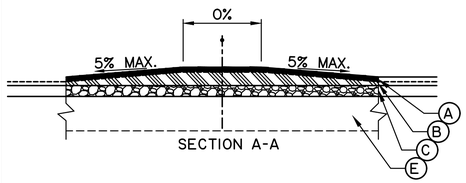
FORTE & TABLADA

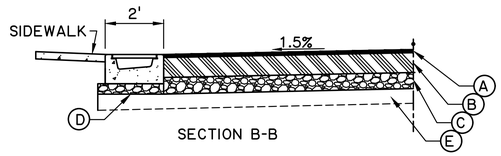
ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.
1"

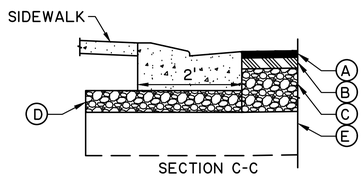
NO.	DATE	REVISION DESCRIPTION	BY

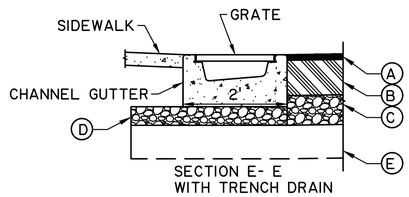
100% FINAL PLANS SUBMITTAL
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6/18/2026 10:02 AM

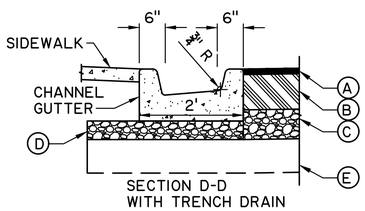


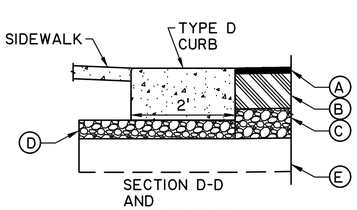












SPEED TABLE DETAILS
N.T.S.
SPEED TABLES TO BE REQUIRED AT THE LOCATIONS BELOW. SEE GRAPHICAL GRADING PLAN FOR DETAILS.

FROM STA. 107+17.66 TO STA.104+49.07 (W/ TRENCH DRAIN GUTTER)
FROM STA. 201+41.45 TO STA. 201+76.24 (W/ TYPE D CURB)

(A) REQ'D 1.5" ASPHALT CONCRETE WEARING COURSE (LEVEL 1)

(B) REQ'D ASPHALT CONCRETE BINDER COURSE (LEVEL 1) (VARIES 3.5" - 9.5")

(C) REQ'D CLASS II BASE COURSE (8" THICK) (CRUSHED STONE)

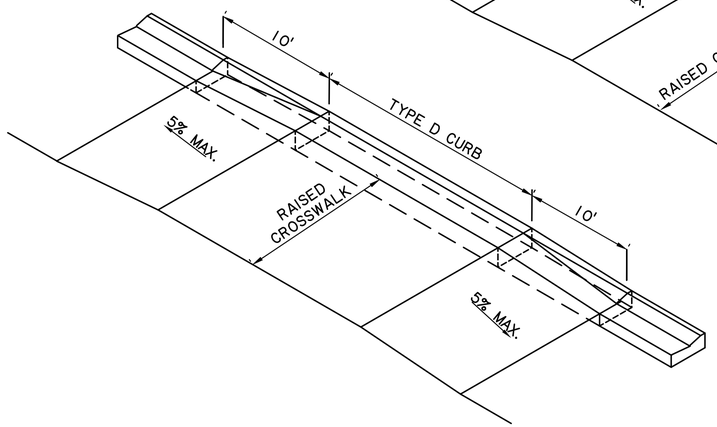
(D) REQ'D CLASS II BASE COURSE (5" THICK) (CRUSHED STONE)

(E) REQ'D TYPE E LIME TREATMENT (12" THICK, 9% BY VOLUME) (AS DIRECTED BY THE PROJECT ENGINEER.)

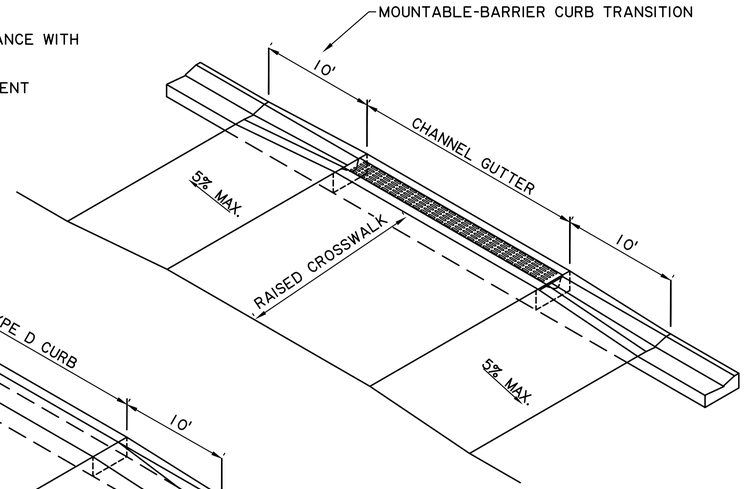
⇨ DIRECTION OF TRAFFIC

GENERAL NOTES:

1. INSTALL DETECTABLE WARNING SURFACE IN ACCORDANCE WITH STANDARD PLAN PED-01.
2. MATCH THE FINAL LIFT OF ASPHALT TO THE RAISED CROSSWALK TO THE FINAL LIFT USED ON THE ADJACENT ROADWAY.
3. SEE THE PLANS FOR PAVING DETAILS.

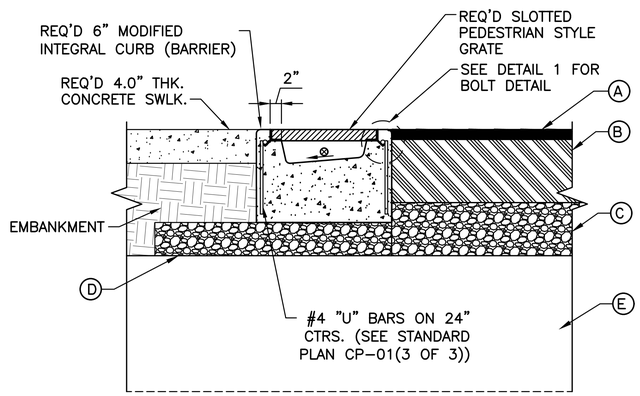


RAISED CROSSWALK WITH TYPE D CURB



RAISED CROSSWALK WITH TRENCH DRAIN (GUTTER)

RAISED CROSSWALK PERSPECTIVE VIEW DETAILS
N.T.S.

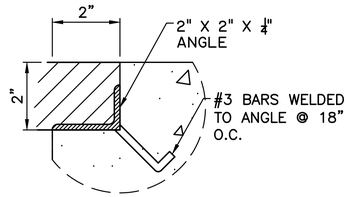


SECTION DETAIL
N.T.S.

TRENCH DRAIN (GUTTER) DETAILS
APPLIES:
FROM STA. 104+29.87 TO STA. 104+40.73 (COLUMBIA ST.)

⊗ MATCH EXISTING GUTTER GRADE

NOTE: TRENCH DRAINS TO BE PAID FOR UNDER ITEM NO. NS-700-00100. ONE TRENCH DRAIN SEGMENT WILL BE INSTALLED WITHIN THE LIMITS.



DETAIL 1
N.T.S.

(A) REQ'D 1.5" ASPHALT CONCRETE WEARING COURSE (LEVEL 1)

(B) REQ'D 9.5" ASPHALT CONCRETE BINDER COURSE (LEVEL 1)

(C) REQ'D CLASS II BASE COURSE (8" THICK) (CRUSHED STONE)

(D) REQ'D CLASS II BASE COURSE (5" THICK) (CRUSHED STONE)

(E) REQ'D TYPE E LIME TREATMENT (12" THICK, 9% BY VOLUME)

STATE OF LOUISIANA
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SHEET NUMBER 2e

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
TYPICAL SECTION

DESIGNED	MDB	DETAILED	MDB
CHECKED	NAB	CHECKED	THB
DATE	4/17/26	SCALE	N.T.S.

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
6/18/2026 10:03 AM
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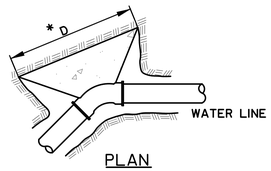
THRUSTS FOR VARIOUS FITTINGS AND TEST PRESSURES (THRUST IN POUNDS)

PIPE SIZE	90° BENDS				TEES & DEAD ENDS				45° BENDS				22½° BENDS				11¼° BENDS			
	225 TEST PR.	150 TEST PR.	100 TEST PR.	50 TEST PR.	225 TEST PR.	150 TEST PR.	100 TEST PR.	50 TEST PR.	225 TEST PR.	150 TEST PR.	100 TEST PR.	50 TEST PR.	225 TEST PR.	150 TEST PR.	100 TEST PR.	50 TEST PR.	225 TEST PR.	150 TEST PR.	100 TEST PR.	50 TEST PR.
2"	1,000	700	500	—	800	500	400	—	600	400	—	—	300	—	—	—	—	—	—	—
3"	2,300	1,500	1,000	500	1,600	1,100	800	400	1,300	900	600	—	700	500	300	—	400	—	—	—
4"	4,000	2,700	1,800	900	2,900	1,900	1,300	700	2,200	1,500	1,000	500	1,100	800	500	—	600	400	—	—
6"	11,900	8,000	5,300	2,000	8,500	5,700	3,800	1,500	6,500	4,300	2,900	1,100	3,300	2,200	1,500	600	1,700	1,100	800	—
8"	20,500	13,700	9,100	3,600	14,500	9,700	6,500	2,600	11,100	7,400	5,000	2,000	5,700	3,800	2,500	1,000	2,900	1,900	1,300	500
10"	30,800	20,600	13,700	5,600	21,800	14,600	9,700	4,000	16,700	11,100	7,400	3,100	8,500	5,700	3,800	1,600	4,300	2,900	1,900	800
12"	43,600	29,100	19,400	8,000	30,800	20,600	13,700	5,700	23,600	15,700	10,500	4,400	12,100	8,000	5,400	2,300	6,100	4,100	2,700	1,200
14"	58,500	39,000	26,000	10,900	41,400	27,600	18,400	7,700	31,700	21,100	14,100	5,900	16,200	10,800	7,200	3,100	8,200	5,400	3,600	1,600
16"	75,700	50,500	33,700	14,300	53,500	35,700	23,800	10,100	41,000	27,300	18,200	7,700	20,900	14,000	9,300	4,000	10,500	7,000	4,700	2,000
18"	95,100	63,400	42,300	18,000	67,200	44,800	29,900	12,800	51,500	34,300	22,900	9,800	26,300	17,500	11,700	5,000	13,200	8,800	5,900	2,500

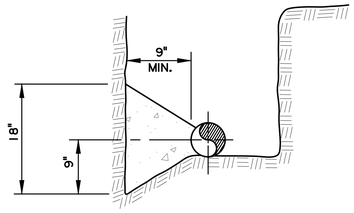
NOTE:

1. FOR AREA OF THRUSTS BLOCK IN SQ. FT. DIVIDE APPROPRIATE THRUST BY ALLOWABLE SOIL BEARING.
2. TEST PRESSURES SHALL BE AS INDICATED IN THE SPECIFICATIONS OR SPECIAL CONDITIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING THRUST BLOCKS OR ANCHORAGE FOR VARIOUS PIPE SIZE AND FITTINGS ACCORDING TO APPROPRIATE SOIL BEARING AND TEST PRESSURE. COST OF THRUST ANCHORAGE SHALL BE INCLUDED IN PRICE BID FOR FITTINGS OR PIPE.
4. USE OF TIE-ROD ANCHORS, LOCKING JOINT FITTINGS AND FLANGED FITTINGS CAN BE USED IN LIEU OF OR W/CONC. THRUST BLOCKS WITH APPROVAL OF ENGINEER.

ALLOWABLE SAFE LATERAL BEARING OF SOILS IN P.S.F.	
MUCK AND PEAT	0
SOFT CLAY	500
SAND	1,000
SAND AND GRAVEL	1,500
SAND AND GRAVEL CEMENTED W/CLAY	2,000
SHALE	5,000



PLAN

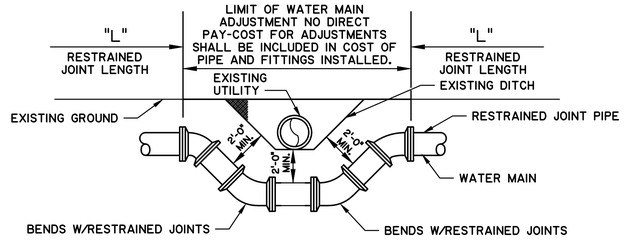


SECTION

: REQUIRED AREA DETERMINED BY PRESSURE (SEE THRUST BLOCK TABLE AND NOTES THIS PAGE.)

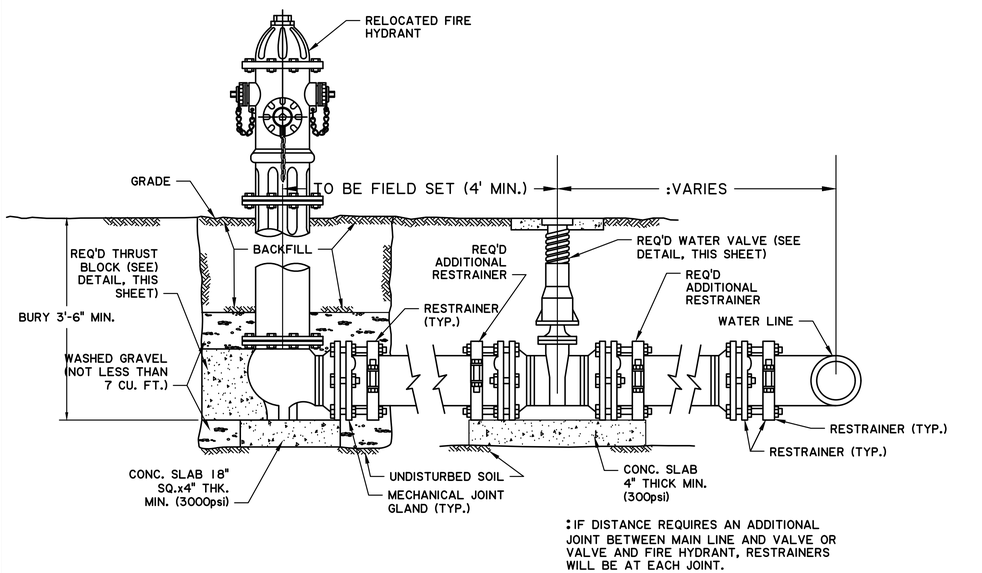
THRUST BLOCK FOR HORIZONTAL OFFSETS

(N.T.S.)



TYPICAL DITCH AND CONFLICTING UTILITY OFFSET WITH THE USE OF FITTINGS

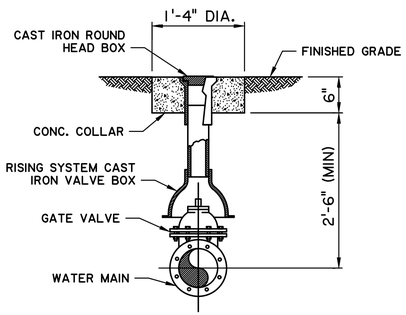
(N.T.S.)



: IF DISTANCE REQUIRES AN ADDITIONAL JOINT BETWEEN MAIN LINE AND VALVE OR VALVE AND FIRE HYDRANT, RESTRAINERS WILL BE AT EACH JOINT.

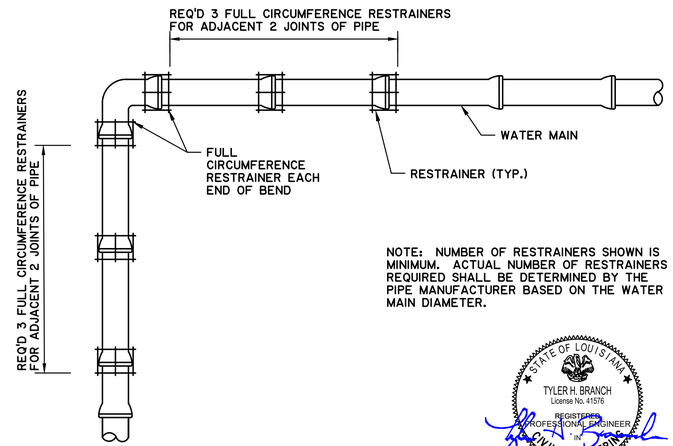
FIRE HYDRANT DETAIL

(N.T.S.)



TYPICAL VALVE DETAIL

(N.T.S.)



NOTE: NUMBER OF RESTRAINERS SHOWN IS MINIMUM. ACTUAL NUMBER OF RESTRAINERS REQUIRED SHALL BE DETERMINED BY THE PIPE MANUFACTURER BASED ON THE WATER MAIN DIAMETER.

STATE OF LOUISIANA
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DETAIL OF RESTRAINER LOCATIONS AT ALL BENDS

(N.T.S.)

SHEET NUMBER 2f

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

TYPICAL SECTION

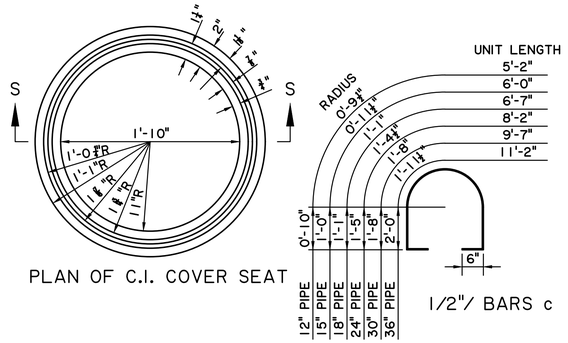
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CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	N.T.S.

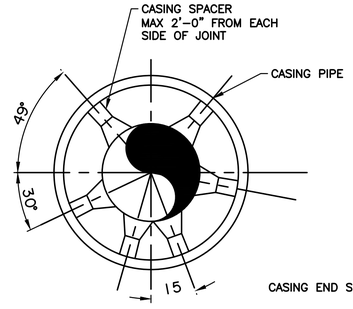
FORTE & TABLADA

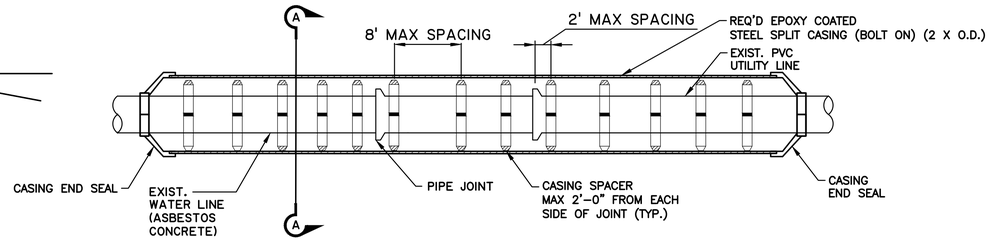
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NO.	DATE	REVISION DESCRIPTION	BY

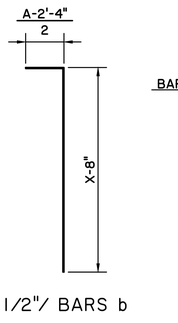
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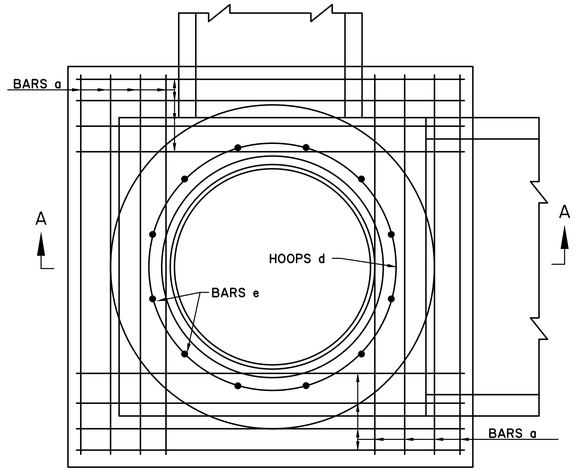


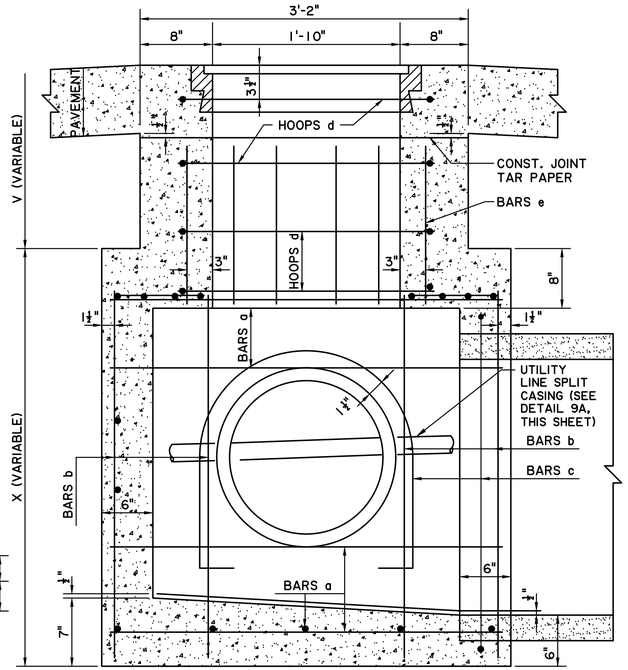


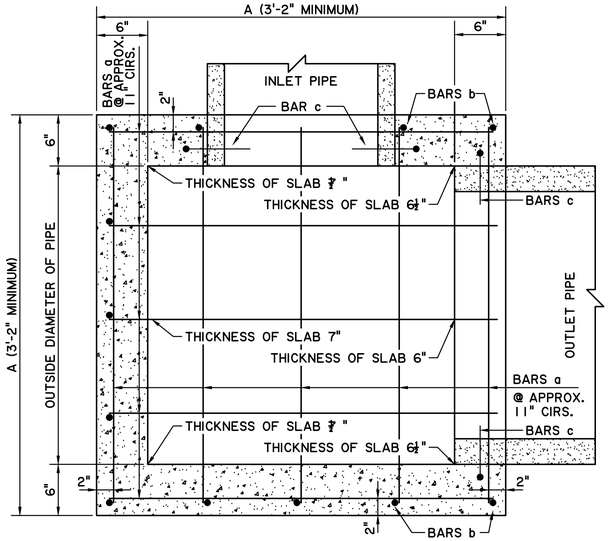


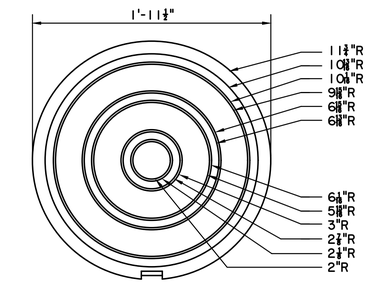
9A | DETAIL OF UTILITY LINE SPLIT CASING
SCALE: N.T.S.

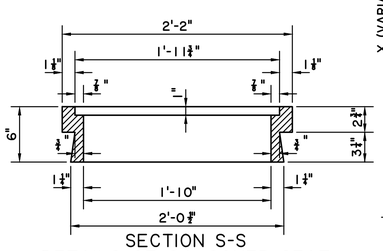


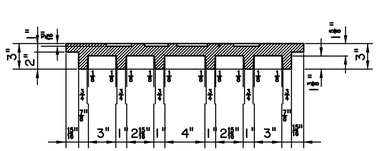


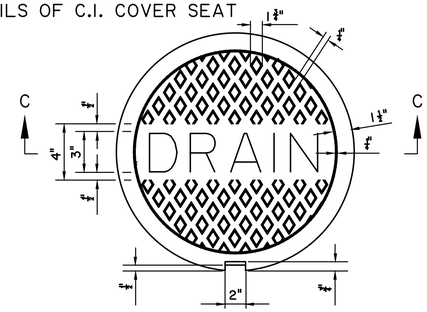












BILL OF MATERIALS FOR ONE MANHOLE					X = 4'-2" (AS DETAILED)
MARK	SIZE	SPACING	NO. REQUIRED	UNIT LENGTH	LOCATION
BARS a	1/2"ø	APPROX. 11"	10	A - 3"	LONGITUDINAL AND TRANSVERSE IN BOTTOM SLAB
BARS a	1/2"ø	APPROX. 11"	DEPENDING ON NO. & SIZE OF PIPES	A - 3"	LONGITUDINAL AND TRANSVERSE IN WALLS OF BOX
BARS a	1/2"ø	3"	DEPENDING ON NO. & SIZE OF PIPES	A - 3"	LONGITUDINAL AND TRANSVERSE IN TOP SLAB OF BOX
BARS b	1/2"ø	APPROX. 11"	DEPENDING ON NO. & SIZE OF PIPES	SEE BENDING DIAGRAM	VERTICAL IN WALLS OF BOX
HOOPS c	1/2"ø		1 EACH PIPE	SEE BENDING DIAGRAM	AROUND EACH PIPE AS SHOWN
HOOPS d	1/2"ø	9" MAX.	$\frac{V + 3"}{9"} + 1$	9'-7"	HOOPS IN WALLS OF CYLINDER
BARS e	1/2"ø	30° RADIUS	12	V + 4 1/2" - PVF. THICKNESS	VERTICAL IN WALLS OF CYLINDER
1 CAST IRON COVER SEAL WEIGHING APPROXIMATELY 161 LBS.					
1 CAST IRON COVER WEIGHING APPROXIMATELY 203 LBS.					

09 | DETAIL OF CONFLICT BOX
SCALE: N.T.S.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
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IN
CIVIL ENGINEERING

SHEET NUMBER 2g

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
TYPICAL SECTION

DESIGNED	MDB	DETAILED	MDB
CHECKED	NAB	CHECKED	THB
DATE	4/17/26	SCALE	N.T.S.

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON
ORIGINAL DRAWING.
ADJUST SCALE IF
THIS BAR ≠ 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

SUMMARY OF ESTIMATED QUANTITIES

	DESCRIPTION	PAY UNIT	COLUMBIA - N JEFFERSON	COLUMBIA - W 30TH	TOTAL QUANTITY
201-01-00100	CLEARING AND GRUBBING	LUMP	LUMP	LUMP	LUMP
202-01-00100	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP	LUMP	LUMP	LUMP
202-02-02020	REMOVAL OF ASPHALT PAVEMENT	SQ. YD.	1717.2	2264.5	3981.7
202-02-06060	REMOVAL OF CONCRETE CATCH BASIN	EACH	3	1	4
202-02-06100	REMOVAL OF CONCRETE WALKS AND DRIVES	SQ. YD.	474	551	1026
202-02-26000	REMOVAL OF MANHOLES	EACH	1	0	1
202-02-32120	REMOVAL OF PIPE (SIDE DRAIN)	LIN. FT.	55	280	335
202-02-32140	REMOVAL OF PIPE (STORM DRAIN)	LIN. FT.	383	440	823
202-02-38240	REMOVAL OF SIGNS AND SUPPORTS	EACH	8	6	14
202-03-38000	RELOCATION OF SIGN	EACH	3	3	6
202-03-38020	RELOCATION OF SIGN POLE	EACH	1	1	2
203-05-00100	EXCAVATION AND EMBANKMENT	LUMP SUM	LUMP	LUMP	LUMP
204-02-00100	TEMPORARY HAY BALES	EACH	112	161	273
204-06-00100	TEMPORARY SILT FENCING	LIN. FT.	924	1419	2343
302-02-05000	CLASS II BASE COURSE (5" THICK) (CRUSHED STONE)	SQ. YD.	763.8	1070.0	1833.8
302-02-08020	CLASS II BASE COURSE (8" THICK) (CRUSHED STONE)	SQ. YD.	1628.5	2510.3	4138.8
304-01-00100	LIME	TON	8.46	12.67	21.13
304-05-00100	LIME TREATMENT (TYPE E)	SQ. YD.	598	895	1493
402-01-00100	TRAFFIC MAINTENANCE SURFACING (AGGREGATE) (VEHICULAR MEASUREMENT)	CU. YD.	21.3	80.0	101.3
502-01-00100	ASPHALT CONCRETE	TON	471.4	725.7	1197.1
601-01-10000	PORTLAND CEMENT CONCRETE PAVEMENT (COLORED) (11" THICK)	SQ. YD.	412.2	590.4	1002.6
701-03-01002	STORM DRAIN PIPE (15" RCP/RPVCP)	LIN. FT.	118	251	369
701-03-01022	STORM DRAIN PIPE (18" RCP/RPVCP)	LIN. FT.	128	16	144
701-03-01042	STORM DRAIN PIPE (24" RCP/RPVCP)	LIN. FT.	157	40	197
701-04-01000	STORM DRAIN PIPE ARCH (15" EQUIV. RCPA)	LIN. FT.	39	226	265
701-04-01020	STORM DRAIN PIPE ARCH (18" EQUIV. RCPA)	LIN. FT.	0	191	191
701-04-01040	STORM DRAIN PIPE ARCH (24" EQUIV. RCPA)	LIN. FT.	58	280	338
701-06-00020	SIDE DRAIN PIPE ARCH (18" EQUIV. RCPA)	LIN. FT.	0	50	50
701-06-00040	SIDE DRAIN PIPE ARCH (24" EQUIV. RCPA)	LIN. FT.	58	0	58
701-07-00300	YARD DRAIN PIPE (8" PVC)	LIN. FT.	0	19	19
702-02-00100	MANHOLES (MH-06)	EACH	1	0	1
702-03-00100	CATCH BASINS (CB-01)	EACH	6	10	16
702-03-00400	CATCH BASINS (CB-05)	EACH	0	1	1
702-03-00500	CATCH BASINS (CB-06)	EACH	5	13	18
702-04-00200	ADJUSTING CATCH BASINS	EACH	1	0	1
702-10-00100	PAVED GUTTER DRAIN (SINGLE)	EACH	2	0	2
703-03-00100	PERFORATED PIPE UNDERDRAINS	LIN. FT.	71	0	71
706-01-00100	CONCRETE WALK (4" THICK)	SQ. YD.	325.9	367.7	693.6
706-02-00200	CONCRETE DRIVE (6" THICK)	SQ. YD.	143.8	697.6	841.4
706-04-00110	CURB RAMPS (TYPE 3)	SQ. YD.	0.0	40.5	40.5
706-04-00111	CURB RAMPS (TYPE 4)	SQ. YD.	0.0	53.7	53.7
707-01-00100	CONCRETE CURB (BARRIER)	LIN. FT.	91.4	195.0	286.4
707-03-00100	COMBINATION CURB AND GUTTER (OUTER EDGE OF PAVEMENT)	LIN. FT.	560.7	833.0	1393.6
707-03-00101	COMBINATION CURB AND GUTTER (CENTRAL ISLAND AND SPLITTER ISLANDS)	LIN. FT.	474.9	737.5	1212.4
713-01-00100	TEMPORARY SIGNS AND BARRICADES	LUMP SUM	LUMP	LUMP	LUMP
726-01-00100	BEDDING MATERIAL	CU. YD.	67.2	126.2	193.4
727-01-00100	MOBILIZATION	LUMP SUM	LUMP	LUMP	LUMP
729-01-00100	SIGN (TYPE A)	SQ. FT.	176.8	287.0	463.8
729-19-00100	DEAD END ROAD INSTALLATIONS (TYPE A)	EACH	0	1	1
729-22-00200	SQUARE TUBING POST WITH 2-1/4" OMNI-DIRECTIONAL ANCHOR	EACH	17	33	50
731-02-00100	REFLECTORIZED RAISED PAVEMENT MARKERS	EACH	87	126	213
732-01-01060	PLASTIC PAVEMENT STRIPING (SOLID LINE) (12" WIDTH) (THERMOPLASTIC 90 MIL)	LIN. FT.	316	0	316
732-01-05400	PLASTIC PAVEMENT STRIPING (SOLID LINE) (24" WIDTH) (THERMOPLASTIC 125 MIL)	LIN. FT.	198	340	538
732-02-02000	PLASTIC PAVEMENT STRIPING (SOLID LINE) (4" WIDTH) (THERMOPLASTIC 90 MIL)	MILE	0.295	0.398	0.693
732-02-02040	PLASTIC PAVEMENT STRIPING (SOLID LINE) (8" WIDTH) (THERMOPLASTIC 90 MIL)	MILE	0.060	0.087	0.147
732-03-02060	PLASTIC PAVEMENT STRIPING (DOTTED LINE) (24" W) (2' L) (THERMOPLASTIC 90 MIL)	MILE	0.013	0.021	0.034
735-01-00100	MAILBOXES	EACH	0	1	1
735-02-00100	MAILBOX SUPPORTS (SINGLE)	EACH	0	1	1
739-01-00100	HYDRO-SEEDING	ACRE	0.29	0.39	0.68
740-01-00100	CONSTRUCTION LAYOUT	LUMP	LUMP	LUMP	LUMP
741-29-00100	RELOCATE FIRE HYDRANT	EACH	1	0	1
741-38-00100	REMOVAL OF FIRE HYDRANT	EACH	1	1	2
805-01-00600	CLASS A1 CONCRETE (RETAINING WALL)	CU. YD.	9.93	0.00	9.93
805-18-00100	CONCRETE FINISH (CLASS 2 RUBBED FINISH)	SQ. FT.	177	0	177
806-01-00100	DEFORMED REINFORCING STEEL	LB.	780	0	780
NS-201-00005	ARBORIST SERVICES	LUMP	LUMP	LUMP	LUMP
NS-500-00340	SAW CUTTING ASPHALT CONCRETE PAVEMENT	IN.-LIN. FT.	594	654	1248
NS-600-00220	SAW CUTTING PORTLAND CEMENT CONCRETE PAVEMENT	IN.-LIN. FT.	762	2699	3461
NS-700-00100	TRENCH DRAINS	EACH	1	0	1
NS-719-00001	TREE PROTECTION FENCING	LUMP	LUMP	LUMP	LUMP
NS-719-00002	TREE TRIMMING	LUMP	LUMP	LUMP	LUMP
NS-719-00003	ROOT PRUNING	LUMP	LUMP	LUMP	LUMP
NS-741-00100	WATER LINE ADJUSTMENT	EACH	1	4	5

STATE OF LOUISIANA — TYLER R. BRANCH — REGISTERED PROFESSIONAL ENGINEER — License No. 41576 — CIVIL ENGINEERING

NO.	DATE	REVISION DESCRIPTION	BY

ATTENTION: THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.

FORTE & TABLADA

DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	NONE

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
SUMMARY OF ESTIMATED QUANTITIES

SHEET NUMBER 3

100% FINAL PLANS SUBMITTAL
6/18/2026 5:15 PM
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-PP01

LEGEND

- FOUND PROPERTY CORNER
- TEMPORARY BENCHMARK
- SET 1/2" IRON ROD
- SEWER MANHOLE
- SEWER CLEANOUT
- SEWER AIR RELEASE VALVE
- POWER POLE W/ ANCHOR
- POWER JUNCTION BOX
- POWER TRANSFORMER
- LIGHT POLE
- DRAIN INLET
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER CLEANOUT
- CURB INLET
- GAS METER
- GAS REGULATOR
- GAS RISER
- MAILBOX
- GAS VALVE
- TELEPHONE POLE
- FIBEROPTIC MARKER
- TELEPHONE PEDESTAL
- TV PEDESTAL
- TV MARKER
- TV MANHOLE TOP
- TRAFFIC CONTROL BOX
- DRAIN MANHOLE TOP
- PIPELINE VENT
- POWER DROP
- COMBINATION POLE
- POST
- CROSS CONNECT BOX
- HANDICAP
- TREE
- SHRUB
- CANOPY SUPPORT
- SIGN

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- FENCE LINE
- ROAD CENTERLINE
- ROAD EDGE
- GRAVEL EDGE
- TREE LINE
- STORM CULVERT PIPE
- OVERHEAD POWER
- PROPERTY SERVITUDE
- SEWER
- UNDERGROUND GAS LINE
- UNDERGROUND FIBER OPTIC CABLE
- UNDERGROUND TELEPHONE LINE
- WATER LINE

LEGEND - PROPOSED

- +00 00' STA. OFFSET
- SIDE DRAIN PIPE
- DETECTABLE WARNING SURFACE
- ASPHALT CONCRETE
- REMOVE ASPHALT SURFACING AND BASE
- AGGREGATE DRIVE
- RIPRAP
- EXIST. SIDEWALK (TO REMAIN)
- SPEED TABLE BOUNDS

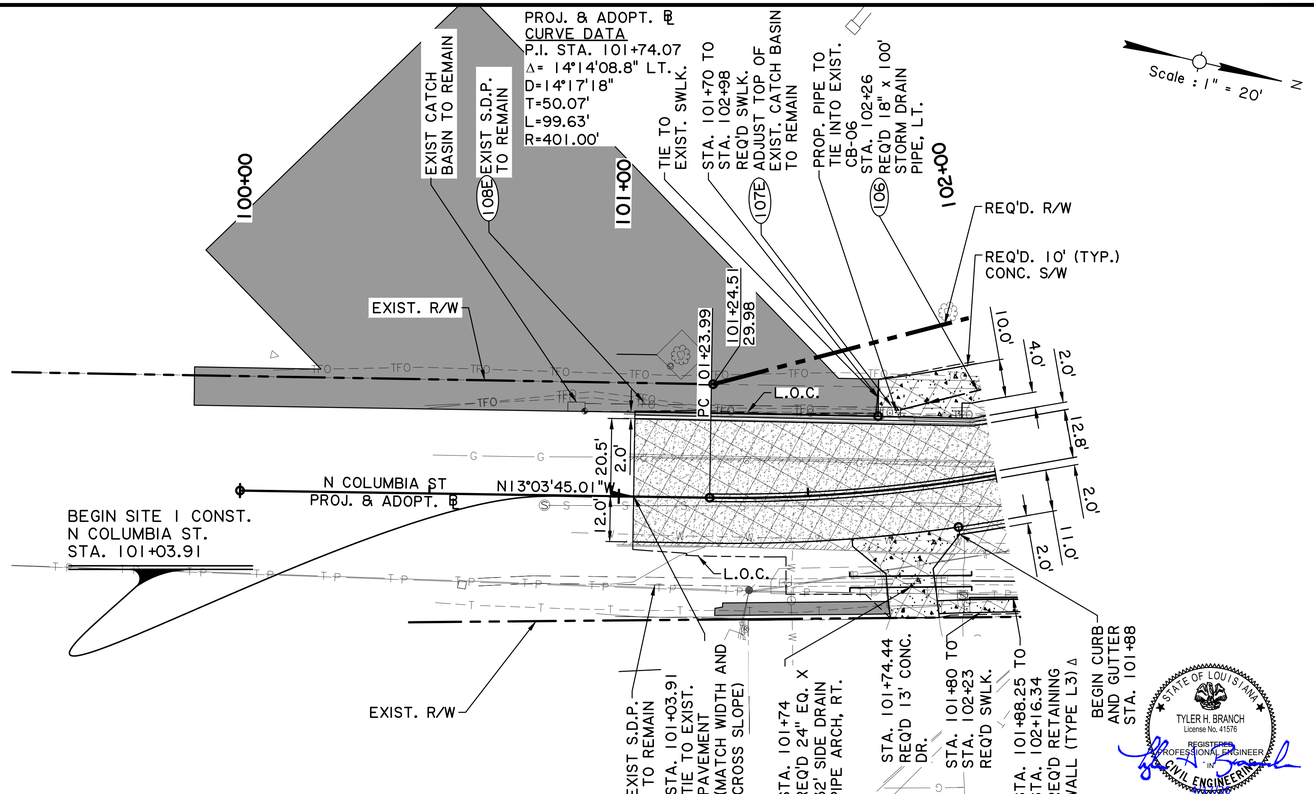
GENERAL NOTES:

1. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREIN ARE BASED ON ABOVE-GROUND STRUCTURES OR AS-BUILT DRAWINGS. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED DURING CONSTRUCTION. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES. ALL UTILITY COMPANIES WITHIN THE SURVEYED AREA WERE NOTIFIED TO LOCATE AND MARK THEIR UTILITIES.
2. ALL TREES WITHIN THE LIMITS OF CONSTRUCTION TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. TREE PROTECTION FENCING TO BE INSTALLED IN ACCORDANCE WITH SPECIAL DETAIL LD-02 "TREE PROTECTION DETAILS FOR CONSTRUCTION AROUD EXISTING TREES". TRIM TREES AND PRUNE ROOTS AS NECESSARY, AT THE DIRECTION OF THE PROJECT ENGINEER AND ARBORIST, TO PROVIDE CLEARANCE FOR CONSTRUCTION, BICYCLE, AND PEDESTRIAN FACILITIES (8 FT. VERTICAL CLEARANCE).
3. ALL EXISTING DRAINAGE STRUCTURES TO BE REMOVED UNLESS NOTED OTHERWISE ON PLANS.
4. CONSTRUCT SITE 1 BEFORE CONSTRUCTING SITE 2. PROJECT ENGINEER APPROVAL NEEDED TO WORK ON BOTH SITES SIMULTANEOUSLY.
5. ALL CATCH BASIN AND MANHOLE TOPS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR, TO ALLOW FOR POSITIVE DRAINAGE AND CONSTRUCTION CLEARANCES, PRIOR TO FABRICATION AND IN ACCORDANCE WITH PROJECT PLANS. COST TO BE INCLUDED IN CONSTRUCTION LAYOUT PAY ITEM.

UTILITY COMPANIES IN PROJECT AREA		
UNITI FIBER	FIBER	985-795-0025
CHARTER COMM.	CABLE	985-590-4164
CITY OF COVINGTON	SEWER/WATER	985-898-4700
AT&T	TELEPHONE	800-331-0500
METRONET FIBER, LLC.	TELEPHONE	832-492-6828
EATEL/REV	TELEPHONE	985-536-1111
ATMOS	GAS	1-888-286-6700
CLECO	ELECTRIC	800-622-6537

Δ SURFACES OF RETAINING WALL VISIBLE AFTER CONSTRUCTION IS COMPLETE SHALL RECEIVE A CLASS 2 RUBBED FINISH.

SCALES:
1" = 20' HOR
1" = 4' VER



STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER	4

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

PLAN AND PROFILE

DESIGNED	MDB	DETAILED	MDB	DATE	4/17/26
CHECKED	NAB	CHECKED	THB	SCALE	1" = 20'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-PP02C-PP02
6/19/2026 10:36 AM

CURVE DATA			
	1	2	3
P.I. STATION	101+74.07	103+27.90	104+55.78
Δ	14°14'08.8" LT.	29°13'16.8" RT.	18°16'37.3" LT.
D	14°17'18"	14°19'26"	32°44'26"
T	50.07'	14.27'	28.15'
L	99.63'	204.00'	55.82'
R	401.00'	400.00'	175.00'

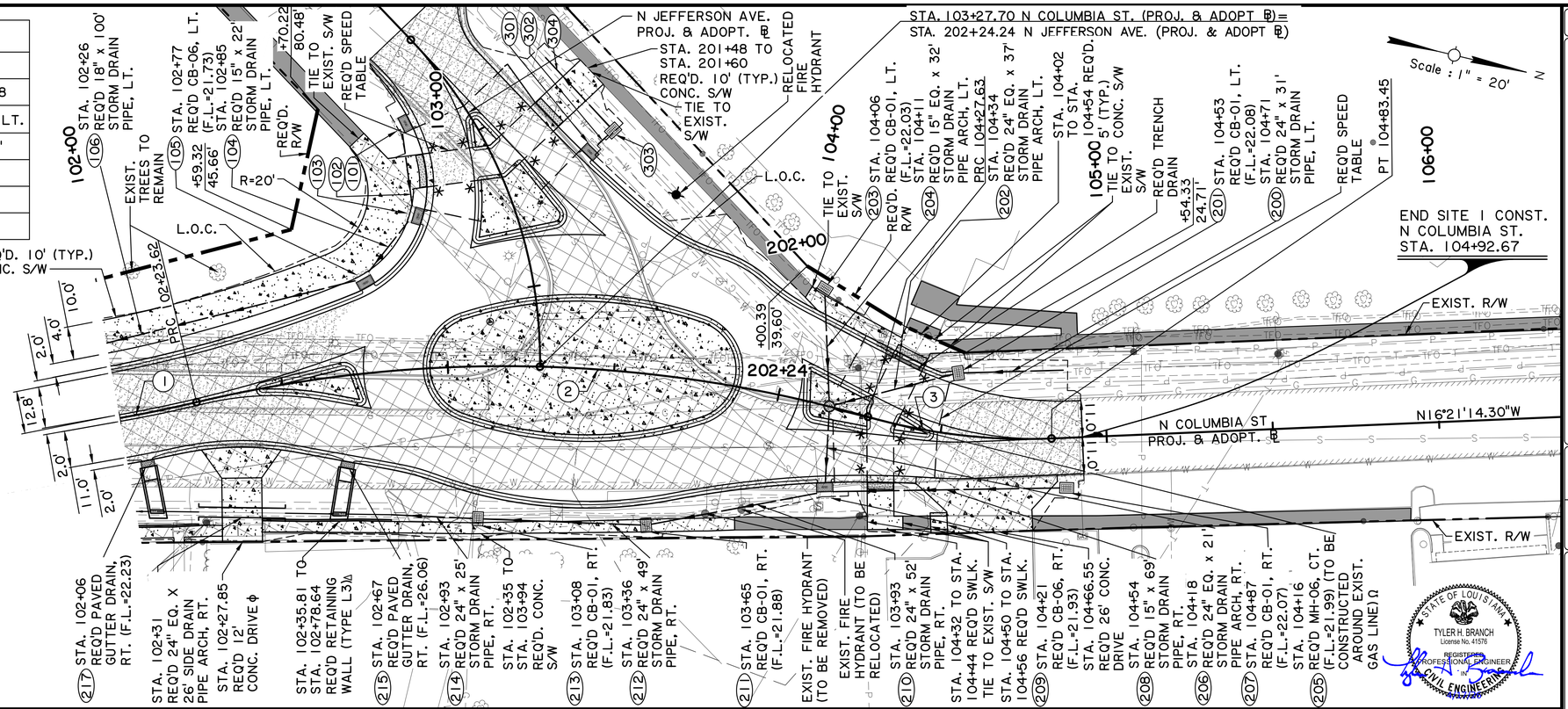
Ω CONTRACTOR TO EXERCISE CAUTION WHEN EXCAVATING AND TO PROVIDE WATER LINE TOP ELEVATION BEFORE INSTALLING DRAINAGE STRUCTURE AT NO DIRECT PAY.

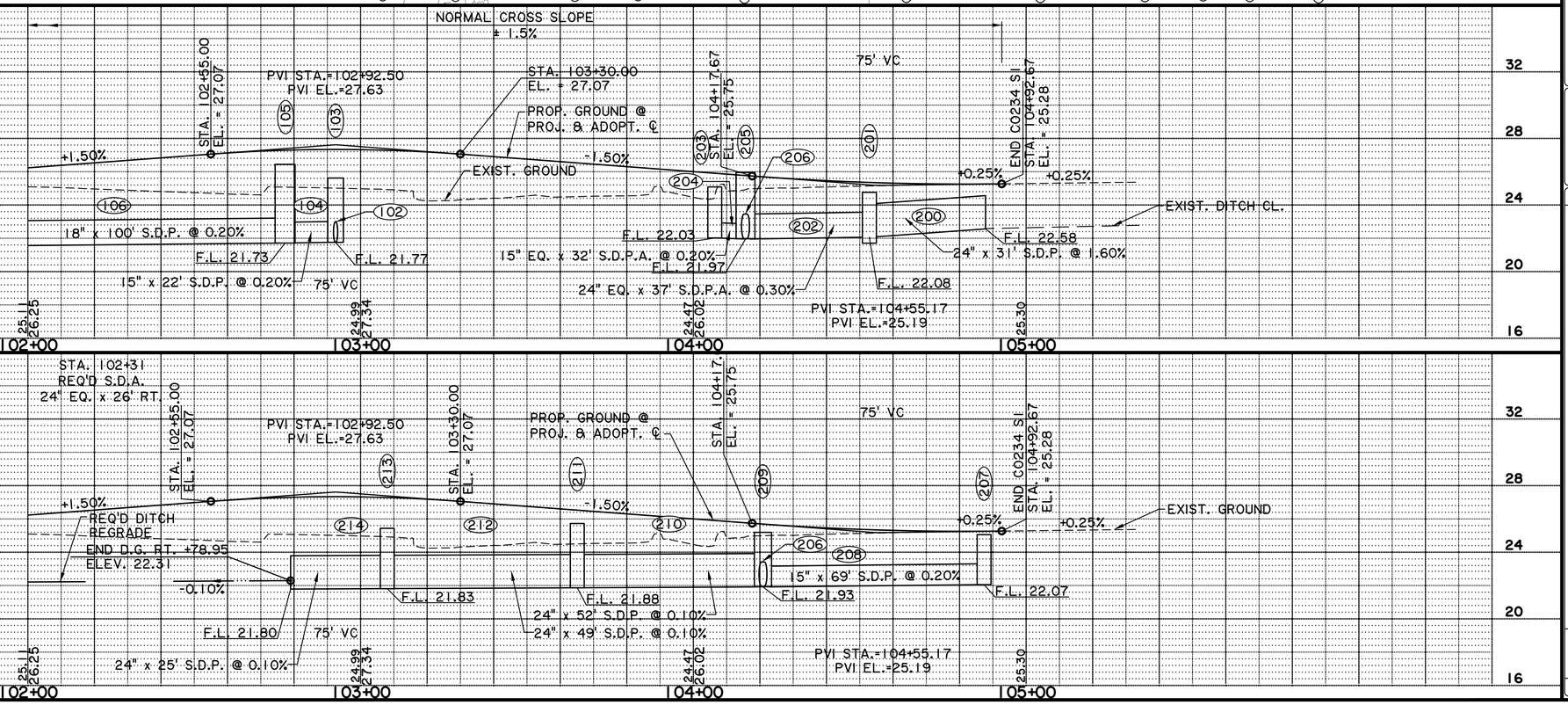
* REQ'D 10' CURB TRANSITION (SEE DETAIL, SHEET 2e)

Δ SURFACES OF RETAINING WALL VISIBLE AFTER CONSTRUCTION IS COMPLETE SHALL RECEIVE A CLASS 2 RUBBED FINISH.

ϕ NOT CONNECTED TO PRIVATE DRIVE / NO VEHICULAR ACCESS PROVIDED

SCALES:
1" = 20' HOR
1" = 4' VER





STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER	5

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

PLAN AND PROFILE

DESIGNED	MDB	
CHECKED	NAB	
DETAILED	MDB	4/17/26
CHECKED	THB	1" = 20'
	DATE	SCALE

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE ACCORDINGLY IF THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-PP03
6/18/2026 5:16 PM

* REQ'D 10' CURB TRANSITION (SEE DETAIL, SHEET 2e)

BEGIN CONSTRUCTION N JEFFERSON AVE. STA. 201+11.73

200+00 201+00 202+00 202+24 102+00 103+00 104+00

EXIST. R/W

EXIST. TO REMAIN

W 28TH AVE

PC 201+15.97

REQ'D. 10' (TYP.) CONC. S/W

STA. 201+54 REQ'D 18" x 28' STORM DRAIN PIPE, LT. TIE TO EXIST. S/W (304)

STA. 201+66 REQ'D CB-01, LT. (F.L.=21.62) (303)

STA. 201+67 REQ'D 15" EQ. x 7' STORM DRAIN PIPE ARCH, LT. (302)

STA. 201+68 REQ'D CB-06, LT. (F.L.=21.64) (301)

REQ'D. 5' (TYP.) CONC. S/W

+00.39 39.60'

REQ'D. R/W

+32.06 29.06' +54.33 24.71'

N COLUMBIA ST PROJ. & ADOPT. ℄

Scale : 1" = 20'

EXIST. R/W

STA. 104+66.55 REQ'D 26' CONC. DRIVE

L.O.C.

30.8'

12.8'

2.0'

N JEFFERSON AVE. PROJ. & ADOPT. ℄ N32°23'26.03"E

END CONSTRUCTION N JEFFERSON AVE. STA. 202+24.24

TIE TO EXIST. S/W

EXIST. R/W

+70.22 80.48'

TIE TO EXIST. S/W

R=20'

L.O.C.

REQ'D. CONC. S/W

STA. 103+27.70 N COLUMBIA ST. (PROJ. & ADOPT ℄) = STA. 202+24.24 N JEFFERSON AVE. (PROJ. & ADOPT ℄)

(101) STA. 201+35 REQ'D CB-06, RT. (F.L.=21.82)

(102) STA. 201+51 REQ'D 15" x 27' STORM DRAIN PIPE, RT.

(103) STA. 201+66 REQ'D CB-06, RT. (F.L.=21.77)

+59.32 45.66'

REQ'D. R/W

REQ'D. 10' (TYP.) CONC. S/W

CURVE DATA	
	4
P.I. STATION	201+73.01
Δ	44°36'00.0" RT.
D	41°11'39"
T	57.04'
L	108.27'
R	139.09'

SCALES:
1" = 20' HOR
1" = 4' VER

NORMAL CROSS SLOPE ± 1.5%

75' VC

STA. 201+11.73 EL. = 25.49

STA. 201+86.73 EL. = 25.61

STA. 202+03.21 EL. = 25.86

PVI STA.=202+13.73 PVI EL.=27.10

STA. 202+24.24 EL. = 27.10

-1.18% -1.18% +1.50%

EXIST. GROUND

PROP. GROUND @ PROJ. & ADOPT. ℄

F.L. 21.56 F.L. 21.62

18" x 28' S.D.P. @ 0.20%

21" VC

PVI STA.=201+49.23 PVI EL.=25.05

26.24 25.63 24.76 25.82

F.L. 21.82 F.L. 21.77

15" x 27' S.D.P. @ 0.20%

32 28 24 20 16

200+00 201+00 202+00 203+00

STATE OF LOUISIANA
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REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER	6

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

PLAN AND PROFILE

DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	1" = 20'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, ADJUST SCALE ACCORDINGLY.
THIS BAR = 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

NOTE:
ALL DRIVEWAY RADII 10'
UNLESS OTHERWISE NOTED

* CONTRACTOR TO EXERCISE CAUTION WHEN EXCAVATING AND TO PROVIDE WATER LINE TOP ELEVATION BEFORE INSTALLING DRAINAGE STRUCTURE.

STA. 112+88.05 N COLUMBIA ST. (PROJ. & ADOPT ℄)=
STA. 302+87.81 MONROE ST. (PROJ. & ADOPT ℄)=
STA. 400+00.00 W 30TH AVE. (PROJ. & ADOPT ℄)

STA. 113+03.18 N COLUMBIA ST. (PROJ. & ADOPT ℄)=
STA. 502+77.92 W 30TH AVE. (PROJ. & ADOPT ℄)

110+00
+ CENTER OF ROUNDABOUT
STA. 112+97.29
10.65' LT.

BEGIN SITE 2
CONSTRUCTION
N COLUMBIA ST.
STA. 110+59.05

EXIST. R/W

PC 110+71.55

N16°21'14.30"W

STA. 111+40 TO
STA. 112+63 REQ'D.
7' CONC. S/W

EXIST. R/W

L.O.C.

PROJ. & ADOPT. ℄
CURVE DATA
P.I. STA. 112+66.20
Δ= 34°24'27.6" RT.
D=16°22'13"
T=108.37'
L=210.18'
R=350.00'

SCALES:
1" = 20' HOR
1" = 4' VER

111+00

PRC 111+57.84

REQ'D. 5' CONC. S/W

REQ'D. R/W

112+00

MONROE ST
PROJ. & ADOPT. ℄

N COLUMBIA ST.
PROJ. & ADOPT. ℄

W 30TH AVE
PROJ. & ADOPT. ℄

113+00

SPLIT W 30TH
PROJ. & ADOPT. ℄

REQ'D DEAD END TREATMENT

L.O.C.

114+00

STA. 501+15.29
REQ'D 40' CONC.
DRIVE (COMM.)

EXIST. R/W

115+00

Scale : 1" = 20'

302+88

502+00

502+78

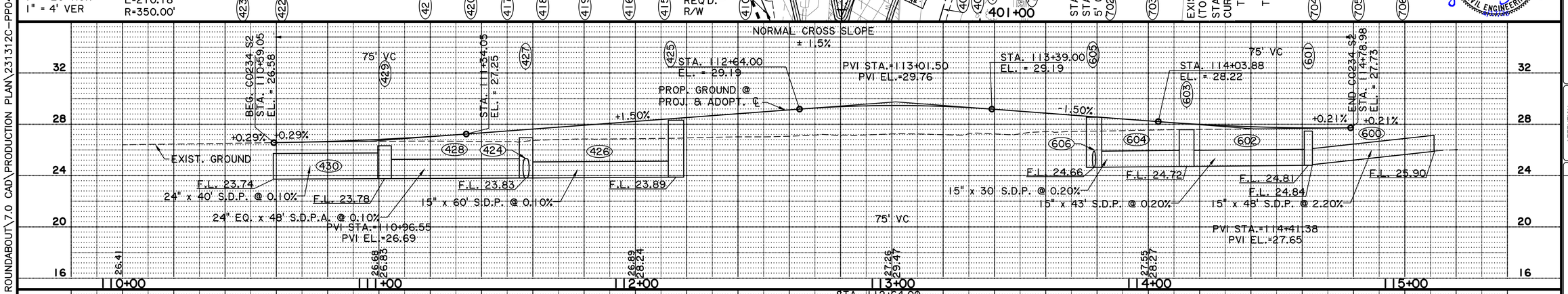
401+00

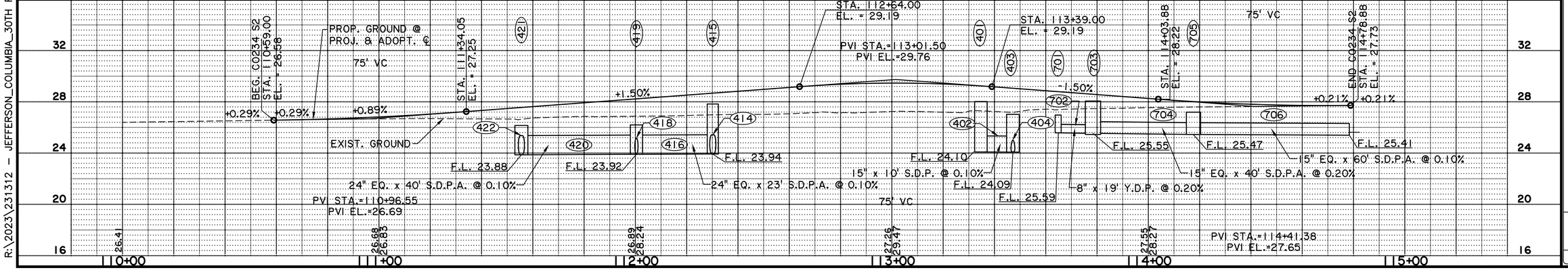
EXIST. R/W

END SITE 2
PROJECT
N COLUMBIA ST.
STA. 115+15.80

STA. 110+80 REQ'D 24" x 40' STORM DRAIN PIPE, LT. (430)
STA. 111+30 REQ'D 24" EQ. x 48' STORM DRAIN PIPE ARCH, LT. (428)
STA. 111+02 REQ'D CB-06, LT. (F.L.=23.78) (429)
STA. 111+04.38 REQ'D 73' CONC. DRIVE (COMM.)
STA. 111+99 REQ'D CURB RAMP (TYPE 4)
STA. 111+57 REQ'D CB-06, RT. (F.L.=23.86) (423)
STA. 111+56 REQ'D 24" EQ. x 16' STORM DRAIN PIPE ARCH, RT. (422)
STA. 111+56 REQ'D CB-01, RT. (F.L.=23.88) (421)
STA. 111+78 REQ'D 24" EQ. x 40' STORM DRAIN PIPE ARCH, RT. (420)
STA. 112+16 REQ'D CB-06, RT. (F.L.=23.96)* (417)
STA. 112+08 REQ'D 15" x 18' STORM DRAIN PIPE, RT. (418)
STA. 112+00 REQ'D CB-01, RT. (F.L.=23.92) (419)
STA. 112+15 REQ'D 24" EQ. x 23' STORM DRAIN PIPE ARCH, RT. (416)
STA. 112+30 REQ'D CB-01, RT. (F.L.=23.94) (415)
STA. 111+57 REQ'D 24" EQ. x 29' STORM DRAIN PIPE ARCH, CT. (424)
STA. 111+57 REQ'D CB-06, LT. (F.L.=23.83) (427)
STA. 111+87 REQ'D 15" x 60' STORM DRAIN PIPE, LT. (426)
STA. 112+01 REQ'D CURB RAMP (TYPE 3) (425)
STA. 112+16 REQ'D CB-06, (F.L.=23.89)
STA. 113+65 REQ'D CB-05, RT. (F.L.=25.59) (701)
STA. 113+20 TO STA 113+71 REQ'D 8' x 19' YARD DRAIN PIPE @ 0.20% (703)
STA. 113+78 REQ'D CB-06, RT. (F.L.=25.55)* (702)
EXIST. FIRE HYDRANT (TO BE REMOVED)
STA. 113+93 REQ'D CURB RAMP (TYPE 4)
TIE TO EXIST. S/W
STA. 114+44.15 REQ'D 29' CONC. DRIVE (COMM.)
TIE TO EXIST. S/W
PRC 113+68.02
STA. 113+98 REQ'D 15" EQ. x 40' STORM DRAIN PIPE ARCH, RT. (704)
STA. 114+18 REQ'D CB-06, RT. (F.L.=25.47) (705)
STA. 114+48 REQ'D 15" EQ. x 60' STORM DRAIN PIPE ARCH, RT. (706)
STA. 114+39 REQ'D 15" x 43' STORM DRAIN PIPE, LT. (602)
STA. 114+62 REQ'D CB-01, LT. (F.L.=24.81) (601)
STA. 114+87 REQ'D 15" x 48' STORM DRAIN PIPE, LT. (600)
STA. 113+95 REQ'D CURB RAMP (TYPE 3)
PCC 114+30.71
STA. 114+49.71 REQ'D 20' CONC. DRIVE (COMM.)
STA. 113+95 REQ'D 15" x 30' STORM DRAIN PIPE, LT. (604)
STA. 114+15 REQ'D CB-06, LT. (F.L.=24.72) (603)
STA. 114+85.32 REQ'D 40' CONC. DRIVE (COMM.)
STA. 113+79 REQ'D CB-06, LT. (F.L.=24.66) (605)
REQ'D 5' CONC. S/W
REQ'D CB-06, RT. (F.L.=25.59) (701)
STA. 113+20 TO STA. 114+06 REQ'D. 5' CONC. S/W (702)
REQ'D 8" x 19' YARD DRAIN PIPE @ 0.20% (703)
REQ'D CB-06, RT. (F.L.=25.55)* (702)
EXIST. FIRE HYDRANT (TO BE REMOVED)
STA. 113+93 REQ'D CURB RAMP (TYPE 4)
TIE TO EXIST. S/W
STA. 114+44.15 REQ'D 29' CONC. DRIVE (COMM.)
TIE TO EXIST. S/W
PRC 113+68.02
STA. 113+98 REQ'D 15" EQ. x 40' STORM DRAIN PIPE ARCH, RT. (704)
STA. 114+18 REQ'D CB-06, RT. (F.L.=25.47) (705)
STA. 114+48 REQ'D 15" EQ. x 60' STORM DRAIN PIPE ARCH, RT. (706)
STA. 114+39 REQ'D 15" x 43' STORM DRAIN PIPE, LT. (602)
STA. 114+62 REQ'D CB-01, LT. (F.L.=24.81) (601)
STA. 114+87 REQ'D 15" x 48' STORM DRAIN PIPE, LT. (600)

NORMAL CROSS SLOPE
± 1.5%





TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
CIVIL ENGINEER
STATE OF LOUISIANA

FORTE & TABLADA

SHEET NUMBER 7

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

PLAN AND PROFILE

DESIGNED	MDB	DETAILED	MDB
CHECKED	NAB	CHECKED	THB
DATE	4/17/26	SCALE	1" = 20'

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
IF NOT 1 INCH ON THIS BAR / 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL

R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-PP04

6/18/2026 10:04 AM

NOTE:
ALL DRIVEWAY RADII 10'
UNLESS OTHERWISE NOTED

BEGIN CONSTRUCTION
MONROE ST.
STA. 301+22.31

PC 301+51.22

W 30TH AVE
PROJ. & ADOPT. ℄

REQ'D. R/W

EXIST. R/W

L.O.C.

MONROE ST
PROJ. & ADOPT. ℄

N32°51'53.22"E

EXIST. R/W

REQ'D. R/W

STA. 301+71
REQ'D 18" EQ. x 60'
STORM DRAIN
PIPE ARCH, LT.
STA. 301+86
REQ'D CURB RAMP
(TYPE 3)

STA. 302+00
REQ'D CB-06, LT.
(F.L.=24.36)
STA. 302+26
REQ'D 18" EQ. x 87'
STORM DRAIN
PIPE ARCH, LT.
STA. 112+60 TO
STA. 114+05 REQ'D.
5' CONC. S/W

STA. 301+60
REQ'D 15" EQ. x 74'
STORM DRAIN
PIPE ARCH, RT.
STA. 301+86
REQ'D CURB RAMP
(TYPE 3)

STA. 302+01
REQ'D CB-06, RT.
(F.L.=24.26)

STA. 111+94 TO
STA. 112+40
REQ'D. 5' CONC.
S/W

END CONSTRUCTION
MONROE ST.
STA. 302+87.81

PCC 302+35.52

PRC 400+57.14

PRC 401+31.11

N COLUMBIA ST.
PROJ. & ADOPT. ℄

STA. 114+44.15
REQ'D 29' CONC.
DRIVE (COMM.)

L.O.C.

TIE TO
EXIST. S/W

REQ'D R/W

REQ'D. 5'
CONC.
S/W

EXIST. R/W

REQ'D. R/W

STA. 113+03.18 N COLUMBIA ST. (PROJ. & ADOPT ℄)=
STA. 502+77.92 W 30TH AVE. (PROJ. & ADOPT ℄)

STA. 112+88.05 N COLUMBIA ST. (PROJ. & ADOPT ℄)=
STA. 302+87.81 MONROE ST. (PROJ. & ADOPT ℄)=
STA. 400+00.00 W 30TH AVE. (PROJ. & ADOPT ℄)

+43.59
23.64'

+38.31
124.69'

+22.79
65.24'

+15.45
51.41'

+91.22
43.36'

+85.26
29.68'

+37.06
87.19'

+03.18
43.85'

+20.51
30.13'

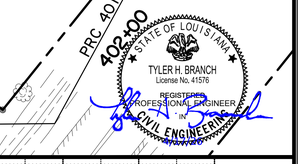
+56.37
53.59'

+73.31
36.41'

Scale : 1" = 20'

CURVE DATA		
	1	2
P.I. STATION	301+93.72	302+61.85
Δ	17°50'55.1" LT.	16°25'54.9" LT.
D	21°10'17"	31°25'36"
T	42.50'	26.32'
L	84.31'	52.29'
R	270.63'	182.32'

SCALES:
1" = 20' HOR
1" = 4' VER



NORMAL CROSS SLOPE
75' VC
± 1.5%

STA. 301+22.31
EL. = 26.75

STA. 301+97.73
EL. = 27.38

PROP. GROUND @
PROJ. & ADOPT. ℄

STA. 302+87.79
EL. = 28.73

+0.20%
+0.20%
± 50%

F.L. 24.30
F.L. 24.36
F.L. 25.05
F.L. 24.53

18" EQ. x 60' S.D.P.A. @ 0.10%
18" EQ. x 87' S.D.P.A. @ 0.20%

EXIST. DITCH CL.
EXIST. GROUND

PVI STA.=301+60.23
PVI EL.=26.82

26.63
26.70
26.88
27.92

300+00
301+00
302+00

STA. 302+87.81
EL. = 28.74

15" EQ. x 75' S.D.P.A. @ 0.20%

F.L. 24.11
F.L. 24.26

SHEET NUMBER	8

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

PLAN AND PROFILE

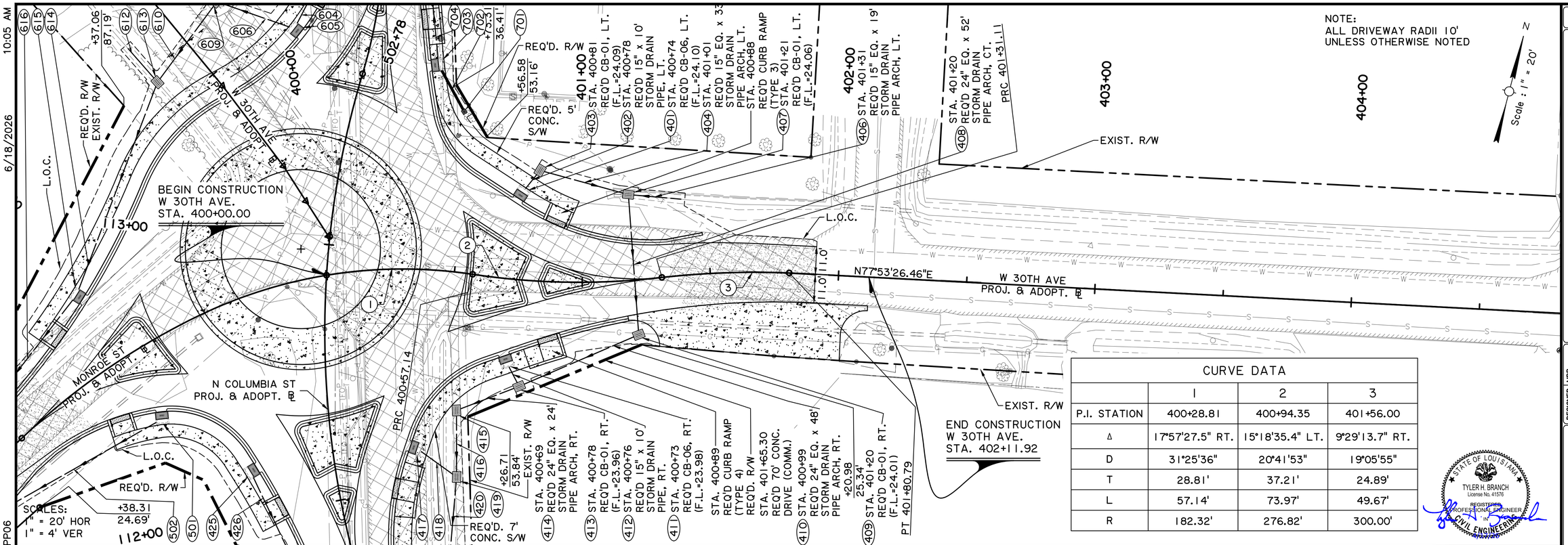
DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	TMB
DATE	4/17/26
SCALE	1" = 20'

FORTE & TABLADA

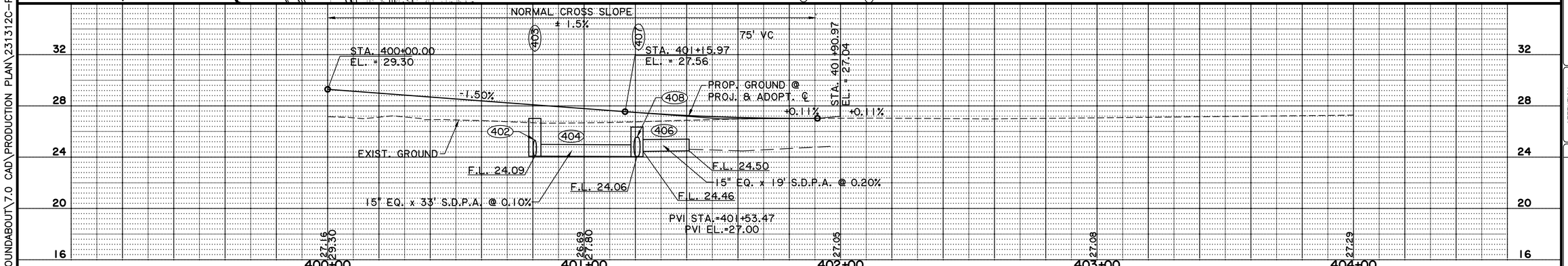
ATTENTION:
THIS BAR = 1 INCH ON
ORIGINAL DRAWING.
IF NOT 1 INCH SCALE
THIS BAR 1 INCH.

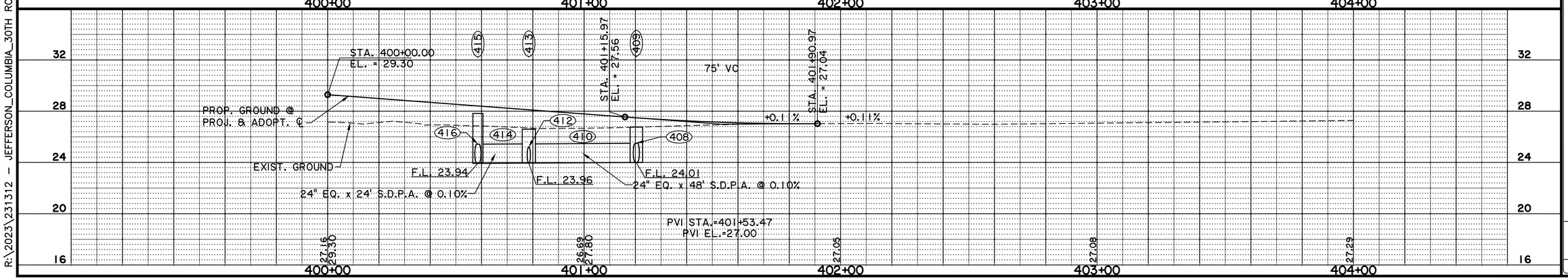
NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
6/18/2026 10:05 AM
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-PP05



CURVE DATA			
	1	2	3
P.I. STATION	400+28.81	400+94.35	401+56.00
Δ	17°57'27.5" RT.	15°18'35.4" LT.	9°29'13.7" RT.
D	31°25'36"	20°41'53"	19°05'55"
T	28.81'	37.21'	24.89'
L	57.14'	73.97'	49.67'
R	182.32'	276.82'	300.00'





TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

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SHEET NUMBER	9

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
PLAN AND PROFILE

DESIGNED	MDB	
CHECKED	NAB	
DETAILED	MDB	
CHECKED	THB	
DATE	4/17/26	
SCALE	1" = 20'	

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
IF NOT 1 INCH, ADJUST SCALE.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-PP06
6/18/2026 10:05 AM

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-PP07
6/18/2026 10:06 AM

NOTE:
ALL DRIVEWAY RADII 10'
UNLESS OTHERWISE NOTED

SCALES:
1" = 20' HOR
1" = 4' VER

N COLUMBIA ST
PROJ. & ADOPT. ℄

W 30TH AVE
PROJ. & ADOPT. ℄

S56°34'54.46"E

PI 501+08.31

STA. 501+26
REQ'D 18" EQ. X
50' SIDE DRAIN
PIPE ARCH, LT.

STA. 501+74
REQ'D 18" EQ. x 8'
STORM DRAIN
PIPE ARCH, LT.

STA. 501+79
REQ'D CB-01, LT.
(F.L.=24.60)

STA. 501+92
REQ'D 15" x 32'
STORM DRAIN
PIPE, LT.

STA. 501+25.77
REQ'D 20' CONC.
DRIVE (COMM.)

REQ'D. R/W
+03.18
43.85'

EXIST. R/W

L.O.C.

TIE TO EXIST. S/W
REQ'D. R/W
EXIST. R/W
+73.3
36.41
+56.37
53.59

+20.51
30.13

PI 502+45.02
PI 502+61.23
PI 502+77.45

+20.98
25.34'

+26.71
53.84'

+37.06
87.19'

EXIST. R/W

REQ'D SIGN TYPE A
W14-1 (30" X 30")
MOUNTED ON
SQUARE TUBING
POST

BEGIN SITE 2
CONSTRUCTION
W 30TH AVE.
STA. 500+91.19

STA. 501+83.88
SPLIT W 30TH
DEAD END
INSTALLATION

STA. 501+84
REQ'D 18" EQ. x 36'
STORM DRAIN
PIPE ARCH, CT.*

STA. 501+80
REQ'D 18" x 16'
STORM DRAIN
PIPE, RT.

STA. 501+89
REQ'D CB-01, RT.
(F.L.=24.53)

END SITE 2
CONSTRUCTION
W 30TH AVE.
STA. 502+78.05

REQ'D. R/W
302+00
REQ'D. 5'
CONC. S/W

*CONTRACTOR TO EXERCISE CAUTION WHEN EXCAVATING AND TO PROVIDE WATER LINE TOP ELEVATION BEFORE INSTALLING DRAINAGE STRUCTURE.

EXISTING CROSS SLOPE
± 2.5%

EXIST. GROUND

STA. 501+26
REQ'D S.D.A.
18" EQ. x 50' LT.

STA. 502+11.37
EL. = 27.48

STA. 502+32.36
EL. = 27.79

PVI STA.=502+55.21
PVI EL.=30.24

-0.47%
+1.50%

F.L. 24.64
18" EQ. x 8' S.D.P.A. @ 0.50%

F.L. 24.66

F.L. 24.60
15" x 32' S.D.P. @ 0.20%

46' VC

PROP. GROUND @
PROJ. & ADOPT. ℄

F.L. 25.13
18" x 16' S.D.P. @ 0.50%

F.L. 24.53

F.L. 25.05

46' VC

PROP. GROUND @
PROJ. & ADOPT. ℄

500+00 501+00 502+00

28.02 27.69 27.61

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

FORTE & TABLADA

SHEET NUMBER	10

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
PLAN AND PROFILE

DESIGNED	MDB	DATE	4/17/26
CHECKED	NAB	SCALE	1" = 20'
DETAILED	MDB		
CHECKED	THB		

ATTENTION:
THIS BAR = 1 INCH ON
ORIGINAL DRAWING.
IF NOT, SCALE ACCORDINGLY
THIS BAR = 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C - RE01
6/18/2026 10:06 AM

13 PK
13 PK
13 PK
22.3'
21.7'
30.3'

T.B.M. D
412.278' LT. OF STA. 100+63.06
.75" IRON ROD IN CONC.
WITH ALUM. CAP
ELEV. 27.48

NORTHING=722413.1260
EASTING=3670312.1830

Scale : 1" = 30'
N

200+00

BEGIN CONSTRUCTION
N JEFFERSON AVE.
STA. 201+11.73

N JEFFERSON AVE
PROJ. & ADOPT. ℄
N32°23'26.03"E

100+00

T.B.M. C
22.376' LT. OF STA. 100+90.66
NE BOLT ON CATCH BASIN
ELEV. 25.64

NORTHING=722528.1340
EASTING=3670685.7580

BEGIN SITE 1 CONST.
N COLUMBIA ST.
STA. 101+03.91

PC 101+23.99

PROJ. & ADOPT. ℄
CURVE DATA
P.I. STA. 101+74.07
Δ= 14°14'08.8" LT.
D=14°17'18"
T=50.07'
L=99.63'
R=401.00'

PRC 102+23.92

PC 201+15.97

PROJ. & ADOPT. ℄
CURVE DATA
P.I. STA. 201+73.01
Δ= 44°36'00.0" RT.
D=41°11'39"
T=57.04'
L=108.27'
R=139.09'

N COLUMBIA ST
PROJ. & ADOPT. ℄

N13°03'45.01"W

END CONSTRUCTION
N JEFFERSON AVE.
STA. 202+24.24

PROJ. & ADOPT. ℄
CURVE DATA
P.I. STA. 103+27.90
Δ= 29°13'16.8" RT.
D=14°19'26"
T=104.27'
L=204.00'
R=400.00'

PRC 104+27.63

202+24

PROJ. & ADOPT. ℄
CURVE DATA
P.I. STA. 104+55.78
Δ= 18°16'37.3" LT.
D=32°44'26"
T=28.15'
L=55.82'
R=175.00'

105+00

PT 104+83.45

N16°21'14.30"W

N COLUMBIA ST
PROJ. & ADOPT. ℄

END SITE 1 CONST.
N COLUMBIA ST.
STA. 104+92.67

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 11

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

REFERENCE POINTS AND BENCH MARK ELEVATIONS

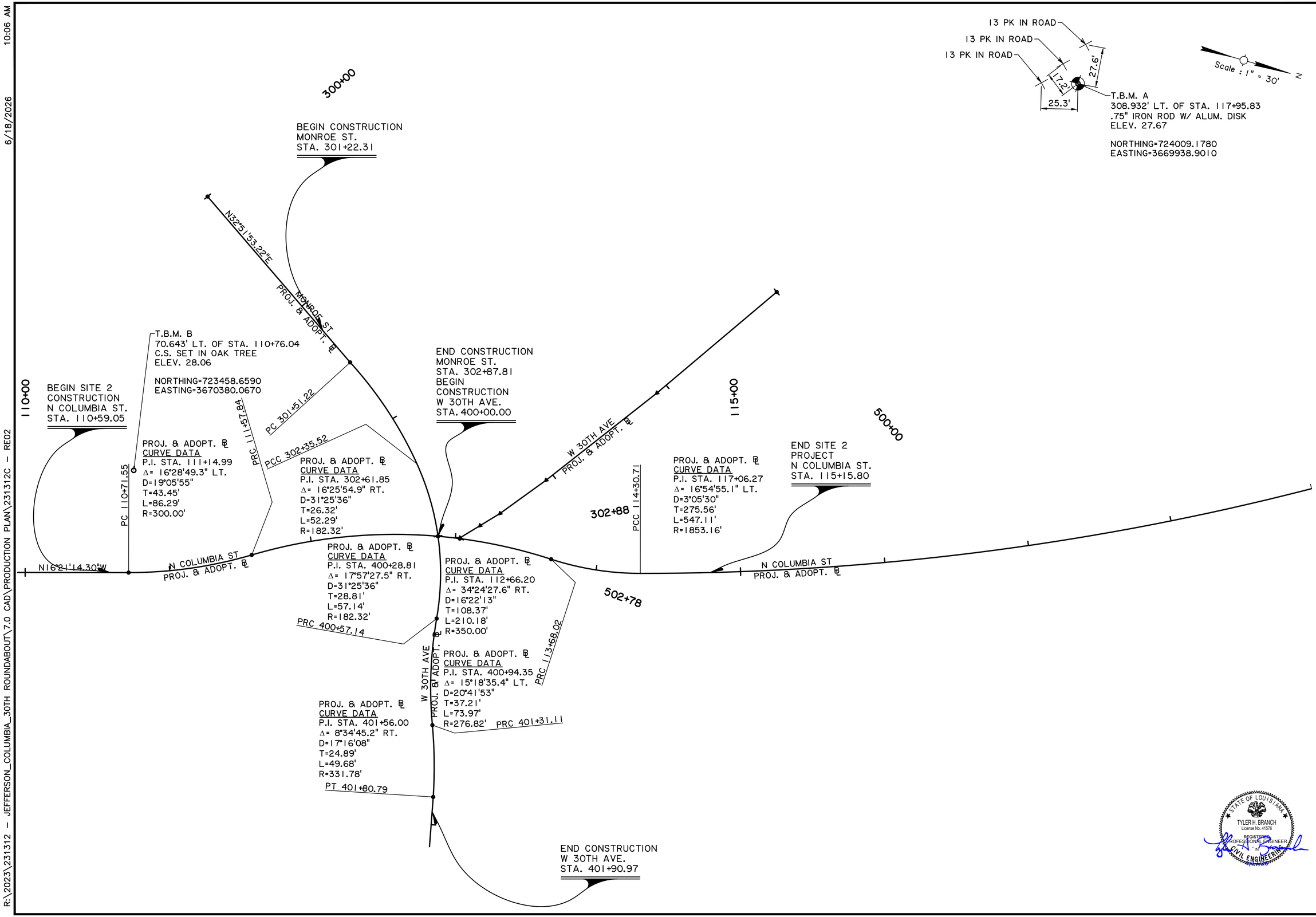
DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE 1" = 50'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY. THIS BAR = 1 INCH.
1"

NO. DATE REVISION DESCRIPTION BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C - RE02
6/18/2026 10:06 AM



SHEET NUMBER 12

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

REFERENCE POINTS AND BENCH MARK ELEVATIONS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE 1" = 50'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT ONE INCH, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

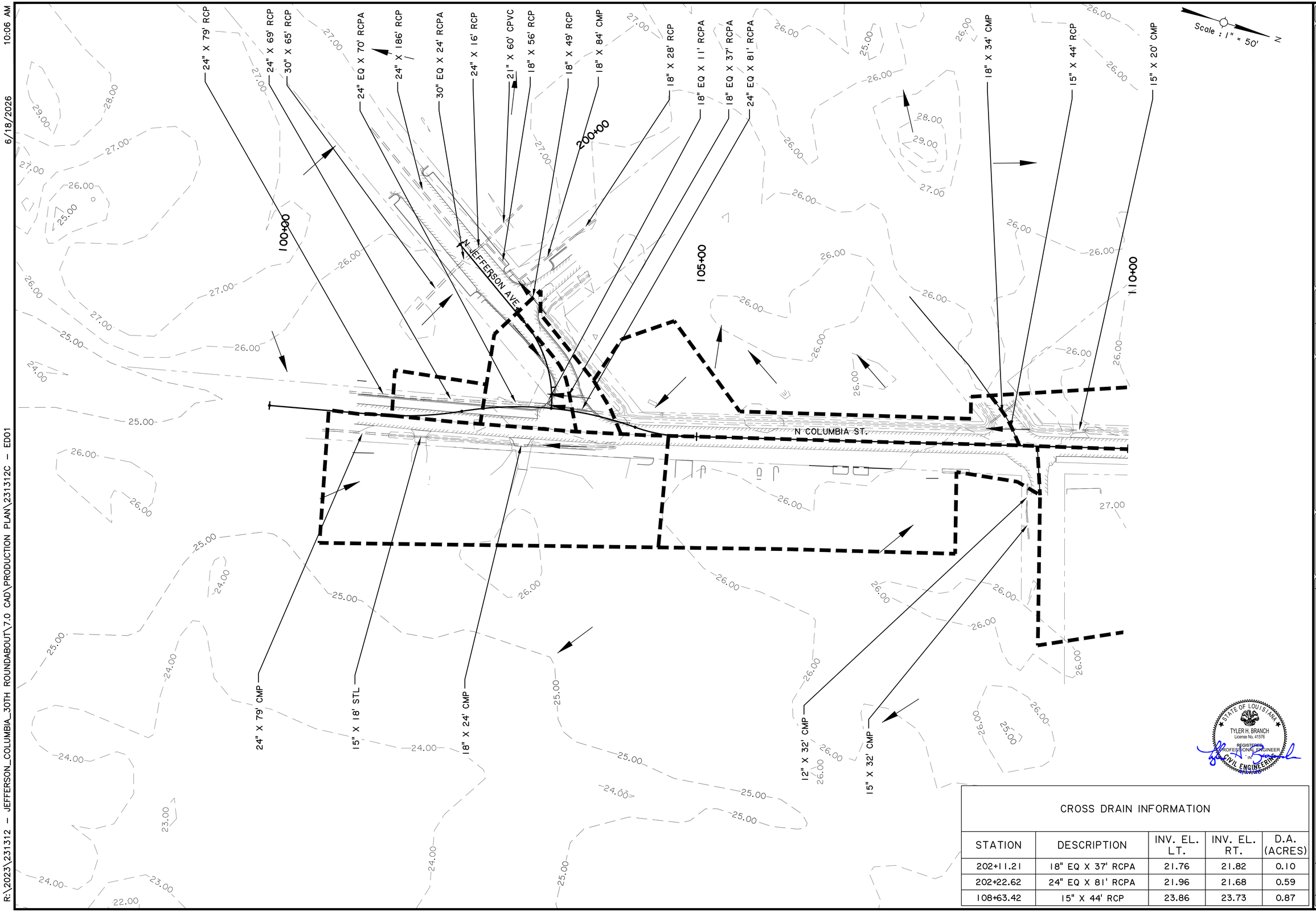
NO. | DATE | REVISION DESCRIPTION | BY

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
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CIVIL ENGINEERING

100% FINAL PLANS SUBMITTAL

R:\2023\231312 – JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C – ED01

6/18/2026 10:06 AM



CROSS DRAIN INFORMATION

STATION	DESCRIPTION	INV. EL. LT.	INV. EL. RT.	D.A. (ACRES)
202+11.21	18" EQ X 37' RCPA	21.76	21.82	0.10
202+22.62	24" EQ X 81' RCPA	21.96	21.68	0.59
108+63.42	15" X 44' RCP	23.86	23.73	0.87

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
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IN
CIVIL ENGINEERING

SHEET NUMBER 13

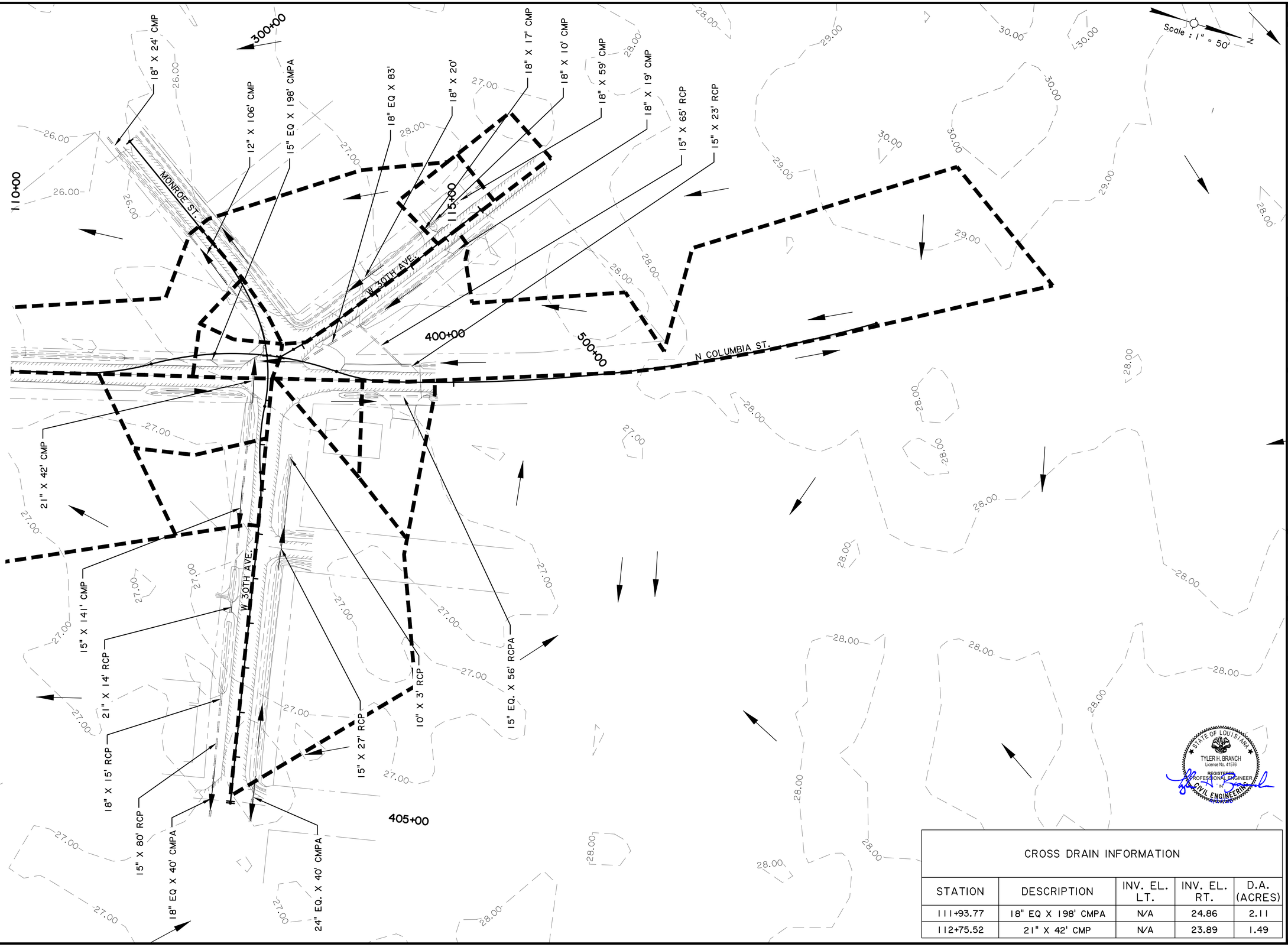
C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
EXISTING DRAINAGE

DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	1" = 50'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY. THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY



CROSS DRAIN INFORMATION				
STATION	DESCRIPTION	INV. EL. LT.	INV. EL. RT.	D.A. (ACRES)
111+93.77	18" EQ X 198' CMPA	N/A	24.86	2.11
112+75.52	21" X 42' CMP	N/A	23.89	1.49

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 14

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
EXISTING DRAINAGE

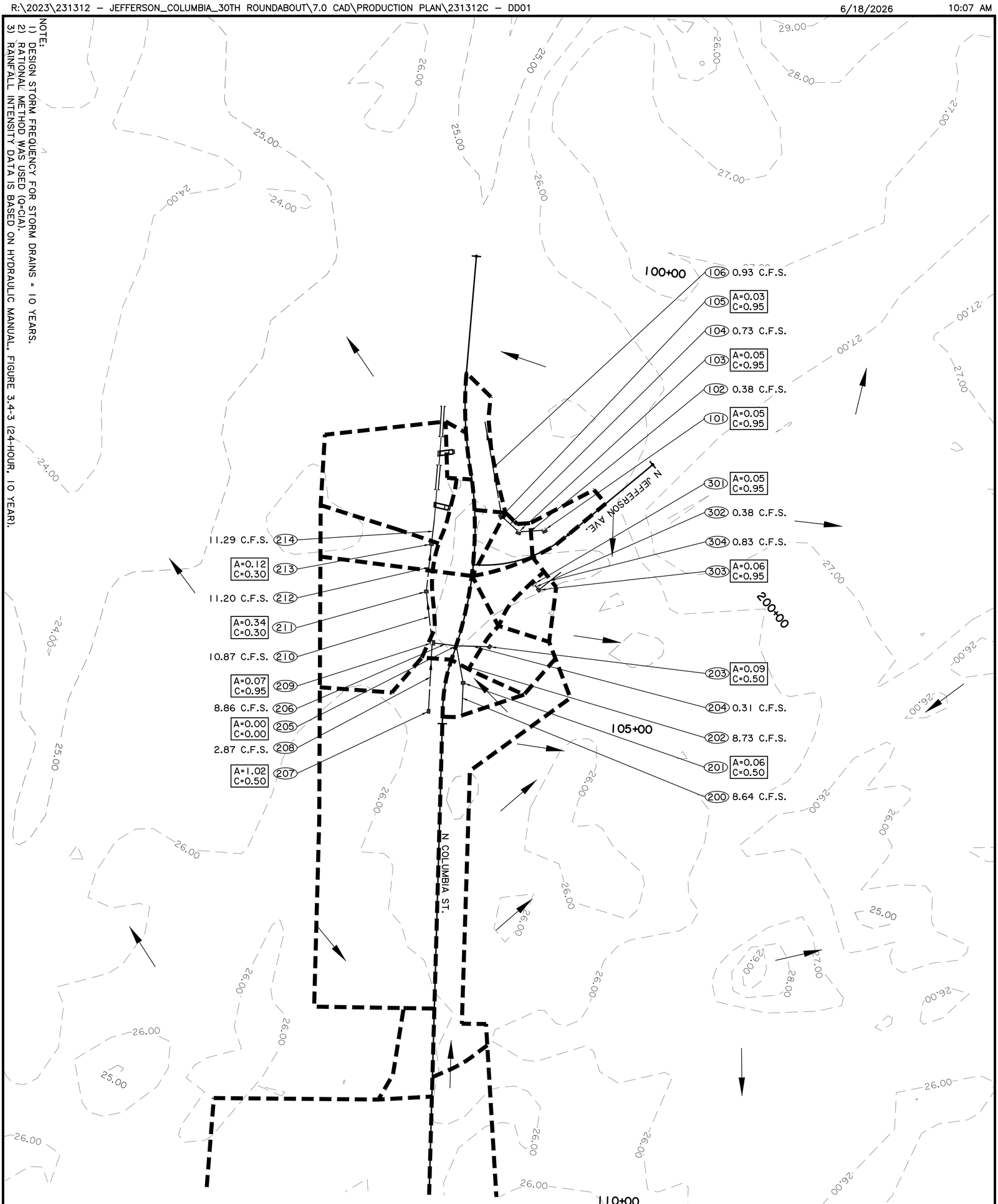
DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	1" = 50'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
ADJUST SCALE IF THIS BAR < 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

NOTE:
1) DESIGN STORM FREQUENCY FOR STORM DRAINS = 10 YEARS.
2) RATIONAL METHOD WAS USED (Q=CIA).
3) RAINFALL INTENSITY DATA IS BASED ON HYDRAULIC MANUAL, FIGURE 3.4-3 (24-HOUR, 10 YEAR).





Scale: 1" = 50'
N

NO.	DATE	REVISION DESCRIPTION	BY

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.

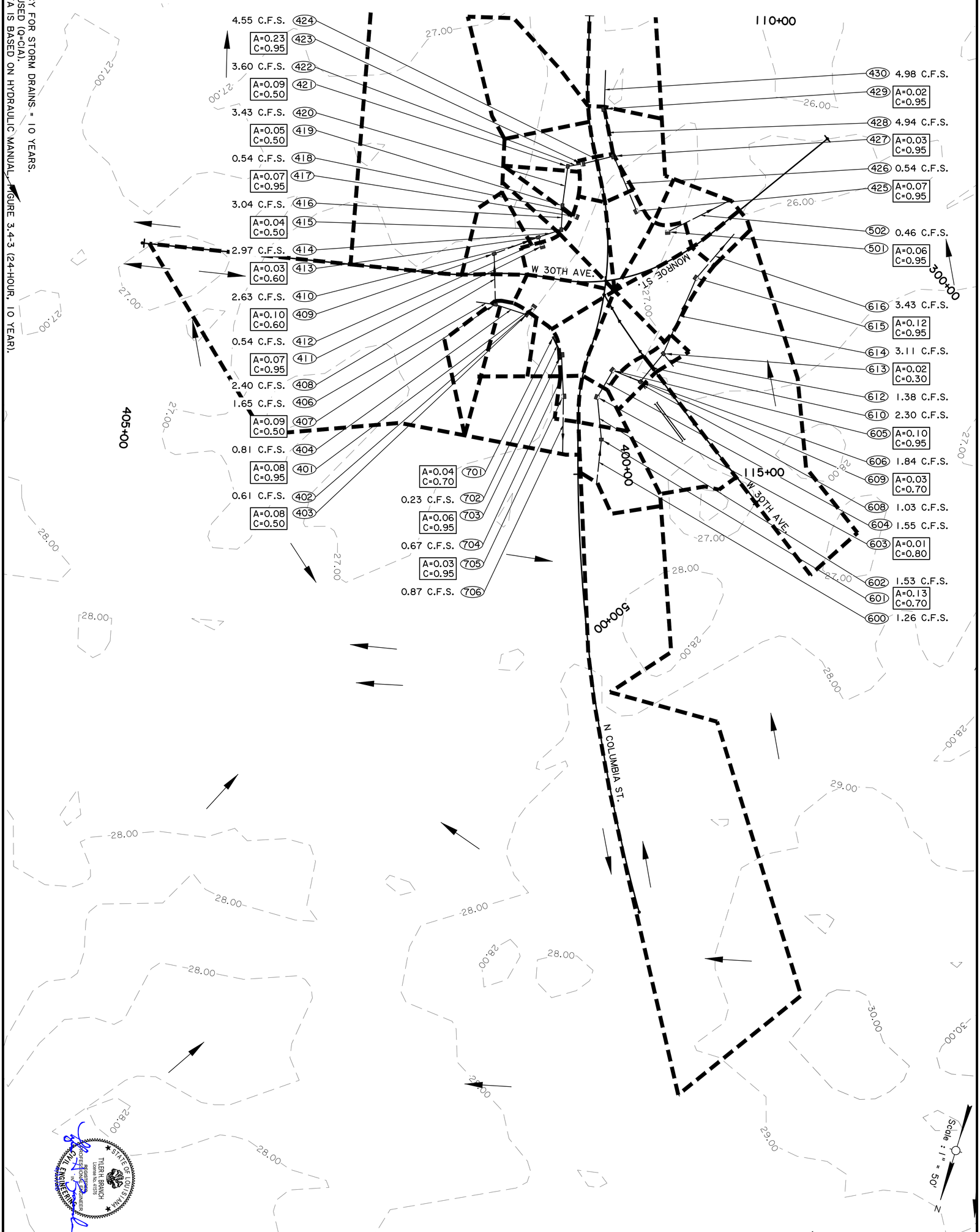
FORTE & TABLADA

DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	1" = 100'

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
DESIGN DRAINAGE

SHEET NUMBER 15

NOTE:
1) DESIGN STORM FREQUENCY FOR STORM DRAINS = 10 YEARS.
2) RATIONAL METHOD WAS USED (Q=CiA).
3) RAINFALL INTENSITY DATA IS BASED ON HYDRAULIC MANUAL, FIGURE 3.4-3 (24-HOUR, 10 YEAR).



TYLER H. BRANCH
LOUISIANA PROFESSIONAL ENGINEER
REGISTERED
No. 41578

NO.	DATE	REVISION DESCRIPTION	BY

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR ≠ 1 INCH.

FORTE & TABLADA

DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	1" = 100'

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
DESIGN DRAINAGE

SHEET NUMBER 16

6/18/2026 10:08 AM
100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-SD01

SUMMARY OF DRAINAGE STRUCTURES

STRUCTURE NUMBER	STATION	SIDE ℄	DESCRIPTION	STORM DRAIN PIPE *			STORM DRAIN PIPE ARCH **			SIDE DRAIN PIPE ARCH **		YARD DRAIN PIPE	PAVED GUTTER DRAIN	CATCH BASIN			MANHOLES	BEDDING MATERIAL
				15"	18"	24"	15" EQ.	18" EQ.	24" EQ.	18" EQ.	24" EQ.	8"	SINGLE	CB-01	CB-05	CB-06	MH-06	
				LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	EACH	CU. YDS.
SITE 1 - N COLUMBIA ST.																		
	101+74	RT.	SIDE DRAIN PIPE ARCH, 24" EQ. X 32'								32							3.5
	102+31	RT.	SIDE DRAIN PIPE ARCH, 24" EQ. X 26'								26							2.9
104	102+85	LT.	STORM DRAIN PIPE, 15" X 22'	22														1.9
105	102+77	LT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
106	102+26	LT.	STORM DRAIN PIPE, 18" X 100'		100													9.3
200	104+71	LT.	STORM DRAIN PIPE 24" X 31'			31												3.2
201	104+53	LT.	CATCH BASIN, (CB-01) (TYPE C) (ADA COMPLIANT)											1				0.8
202	104+34	LT.	STORM DRAIN PIPE ARCH, 24" EQ. X 37'						37									4.1
203	104+06	LT.	CATCH BASIN, (CB-01) (TYPE C) (ADA COMPLIANT)											1				0.8
204	104+11	LT.	STORM DRAIN PIPE ARCH, 15" EQ. X 32'				32											2.8
205	104+16	CT.	MANHOLE (MH-06)														1	0.9
206	104+18	RT.	STORM DRAIN PIPE ARCH, 24" EQ. X 21'						21									2.3
207	104+87	RT.	CATCH BASIN, (CB-01) (TYPE C) (ADA COMPLIANT)											1				0.8
208	104+54	RT.	STORM DRAIN PIPE 15" X 69'	69														6.1
209	104+21	RT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
210	103+93	RT.	STORM DRAIN PIPE 24" X 52'			52												5.3
211	103+65	RT.	CATCH BASIN, (CB-01) (TYPE C) (ADA COMPLIANT)											1				0.8
212	103+36	RT.	STORM DRAIN PIPE 24" X 49'			49												5.0
213	103+08	RT.	CATCH BASIN, (CB-01) (TYPE C) (ADA COMPLIANT)											1				0.8
214	102+93	RT.	STORM DRAIN PIPE 24" X 25'			25												2.5
215	102+67	RT.	PAVED GUTTER DRAIN (SINGLE)										1					1.0
217	102+06	RT.	PAVED GUTTER DRAIN (SINGLE)										1					1.0
SUBTOTAL				91	100	157	32	0	58	0	58	0	2	5	0	2	1	57.8
SITE 1 - N JEFFERSON AVE.																		
101	201+35	RT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
102	201+51	RT.	STORM DRAIN PIPE, 15" X 27'	27														2.4
103	201+66	RT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
301	201+68	LT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
302	201+67	LT.	STORM DRAIN PIPE ARCH, 15" EQ. X 7'				7											0.6
303	201+66	LT.	CATCH BASIN, (CB-01) (TYPE B)											1				0.8
304	201+54	LT.	STORM DRAIN PIPE, 18" X 28'		28													2.6
SUBTOTAL				27	28	0	7	0	0	0	0	0	0	1	0	3	0	9.4
SITE 1 SUBTOTAL				118	128	157	39	0	58	0	58	0	2	6	0	5	1	67.2

* ALLOWABLE MATERIAL IS RCP AND RPVCP
** ALLOWABLE MATERIAL IS RCPA



SHEET NUMBER 17

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

SUMMARY OF DRAINAGE STRUCTURES

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE NONE

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY. THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

SUMMARY OF DRAINAGE STRUCTURES

STRUCTURE NUMBER	STATION	SIDE ℄	DESCRIPTION	STORM DRAIN PIPE *			STORM DRAIN PIPE ARCH **			SIDE DRAIN PIPE ARCH **		YARD DRAIN PIPE	PAVED GUTTER DRAIN	CATCH BASIN			MANHOLES	BEDDING MATERIAL
				15"	18"	24"	15" EQ.	18" EQ.	24" EQ.	18" EQ.	24" EQ.	8"	SINGLE	CB-01	CB-05	CB-06	MH-06	
				LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	EACH	CU. YDS.
SITE 2 - N COLUMBIA ST.																		
415	112+30	RT.	CATCH BASIN, (CB-01) (TYPE C) (ADA COMPLIANT)											1				0.8
416	112+15	RT.	STORM DRAIN PIPE ARCH, 24" EQ. X 23'						23									2.5
417	112+16	RT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
418	112+08	RT.	STORM DRAIN PIPE, 15" X 18'	18														1.6
419	112+00	RT.	CATCH BASIN, (CB-01) (TYPE B)											1				0.8
420	111+78	RT.	STORM DRAIN PIPE ARCH, 24" EQ. X 40'						40									4.4
421	111+56	RT.	CATCH BASIN, (CB-01) (TYPE B)											1				0.8
422	111+56	RT.	STORM DRAIN PIPE ARCH, 24" EQ. X 16'						16									1.8
423	111+57	RT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
424	111+57	CT.	STORM DRAIN PIPE ARCH, 24" EQ. X 29'						29									3.2
425	112+16	LT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
426	111+87	LT.	STORM DRAIN PIPE, 15" X 60'	60														5.3
427	111+57	LT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
428	111+30	LT.	STORM DRAIN PIPE ARCH, 24" EQ. X 48'						48									5.3
429	111+02	LT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
430	110+80	LT.	STORM DRAIN PIPE 24" X 40'			40												4.1
600	114+87	LT.	STORM DRAIN PIPE, 15" X 48'	48														4.2
601	114+62	LT.	CATCH BASIN, (CB-01) (TYPE C) (ADA COMPLIANT)											1				0.8
602	114+39	LT.	STORM DRAIN PIPE, 15" X 43'	43														3.8
603	114+15	LT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
604	113+95	LT.	STORM DRAIN PIPE, 15" X 30'	30														2.6
605	113+79	LT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
701	113+65	RT.	CATCH BASIN, (CB-05) (TYPE D)												1			0.4
702	113+71	RT.	YARD DRAIN PIPE, 8" X 19'									19						1.3
703	113+78	RT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
704	113+98	RT.	STORM DRAIN PIPE ARCH, 15" EQ. X 40'				40											3.7
705	114+18	RT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
706	114+48	RT.	STORM DRAIN PIPE ARCH, 15" EQ. X 60'				60											5.6
SUBTOTAL				199	0	40	100	0	156	0	0	19	0	4	1	9	0	62.0
SITE 2 - N MONROE AVE.																		
501	302+01	RT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
502	301+60	RT.	STORM DRAIN PIPE ARCH, 15" EQ. X 74'				74											6.9
614	302+26	LT.	STORM DRAIN PIPE ARCH, 18" EQ. X 87'					87										8.6
615	302+00	LT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
616	301+71	LT.	STORM DRAIN PIPE ARCH, 18" EQ. X 60'					60										5.9
SUBTOTAL				0	0	0	74	147	0	0	0	0	0	0	0	2	0	23.4
SITE 2 - N MONROE AVE.																		
401	400+74	LT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
402	400+78	LT.	STORM DRAIN PIPE, 15" X 10'	10														0.9
403	400+81	LT.	CATCH BASIN, (CB-01) (TYPE B)											1				0.8
404	401+01	LT.	STORM DRAIN PIPE ARCH, 15" EQ. X 33'				33											3.1
406	401+31	LT.	STORM DRAIN PIPE ARCH, 15" EQ. X 19'				19											1.8
407	401+21	LT.	CATCH BASIN, (CB-01) (TYPE B)											1				0.8
408	401+20	CT.	STORM DRAIN PIPE ARCH, 24" EQ. X 52'						52									5.7
409	401+20	RT.	CATCH BASIN, (CB-01) (TYPE B)											1				0.8
410	400+99	RT.	STORM DRAIN PIPE ARCH, 24" EQ. X 48'						48									5.3
411	400+73	RT.	CATCH BASIN, (CB-06) (TYPE H)													1		1.0
412	400+76	RT.	STORM DRAIN PIPE, 15" X 10'	10														0.9
413	400+78	RT.	CATCH BASIN, (CB-01) (TYPE B)											1				0.8
414	400+69	RT.	STORM DRAIN PIPE ARCH, 24" EQ. X 24'						24									2.6
SUBTOTAL				20	0	0	52	0	124	0	0	0	0	4	0	2	0	25.5
SITE 2 - N MONROE AVE.																		
	501+26	LT.	SIDE DRAIN PIPE ARCH, 18" EQ. X 50'							50								5.0
606	501+92	LT.	STORM DRAIN PIPE, 15" X 32'	32														2.8
608	501+74	LT.	STORM DRAIN PIPE ARCH, 18" EQ. X 8'					8										0.8
609	501+79	LT.	CATCH BASIN, (CB-01) (TYPE B)											1				0.8
610	501+84	CT.	STORM DRAIN PIPE ARCH, 18" EQ. X 36'					36										3.6
612	501+80	RT.	STORM DRAIN PIPE, 18" X 16'		16													1.5
613	501+89	RT.	CATCH BASIN, (CB-01) (TYPE B)											1				0.8
SUBTOTAL				32	16	0	0	44	0	50	0	0	0	2	0	0	0	15.3
SITE 2 SUBTOTAL				251	16	40	226	191	280	50	0	19	0	10	1	13	0	126.2
TOTAL				369	144	197	265	191	338	50	58	19	2	16	1	18	1	193.4

* ALLOWABLE MATERIAL IS RCP AND RPVCP
** ALLOWABLE MATERIAL IS RCPA

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-SD02
6/18/2026 10:08 AM

SHEET NUMBER 18

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

SUMMARY OF DRAINAGE STRUCTURES

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE NONE

FORTE & TABLADA

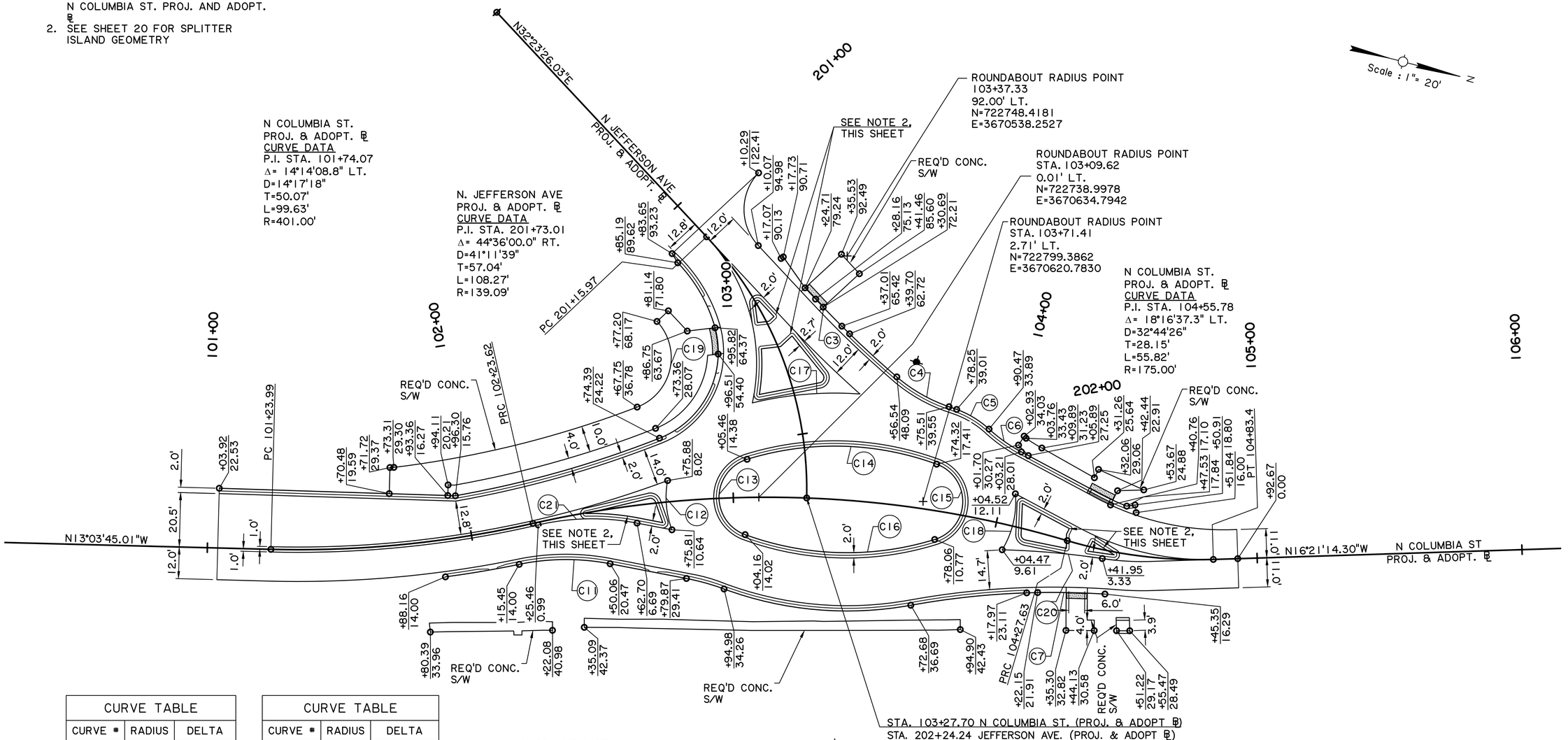
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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING

NO.	DATE	REVISION DESCRIPTION	BY

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6/18/2026 5:34 PM
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-GE01

NOTES:
1. ALL STATION/OFFSETS BASED ON N COLUMBIA ST. PROJ. AND ADOPT. ℄
2. SEE SHEET 20 FOR SPLITTER ISLAND GEOMETRY



CURVE TABLE		
CURVE #	RADIUS	DELTA
C1	400.00	11°28'59"
C2	58.00	7°24'33"
C3	386.00	2°06'48"
C4	60.00	21°48'59"
C5	37.00	22°15'54"
C6	60.00	14°17'13"
C7	300.00	4°51'13"
C8	300.00	8°24'54"
C9	134.00	30°36'28"
C10	90.00	9°23'16"
C11	88.00	22°29'38"

CURVE TABLE		
CURVE #	RADIUS	DELTA
C12	35.00	30°55'37"
C13	15.00	142°43'43"
C14	112.00	37°16'17"
C15	15.00	142°43'43"
C16	112.00	37°16'17"
C17	132.00	17°46'04"
C18	35.00	36°09'42"
C19	20.00	111°59'40"
C20	300.00	7°14'53"
C21	90.00	23°55'24"

SHEET NUMBER 19

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
GEOMETRIC LAYOUT

DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	1"=20'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT 1 INCH ON THIS BAR = / " INCH.

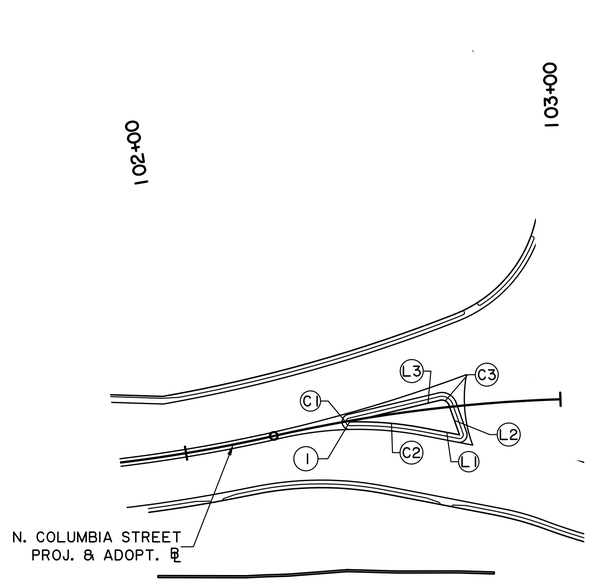
1"

NO.	DATE	REVISION DESCRIPTION	BY

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEER

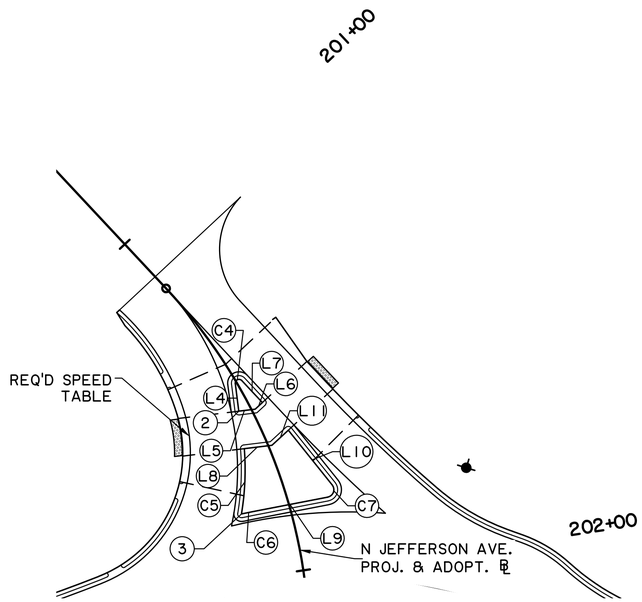
100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-GE02
6/5/2026 9:51 AM

GENERAL NOTES:
1. ALL LINE AND CURVE LABELS ARE AT THE BACK OF CURB UNLESS NOTED OTHERWISE.
2. ALL FACE OF CURB RADIUS TO BE 1' IF THERE IS NO BACK OF CURB RADIUS.



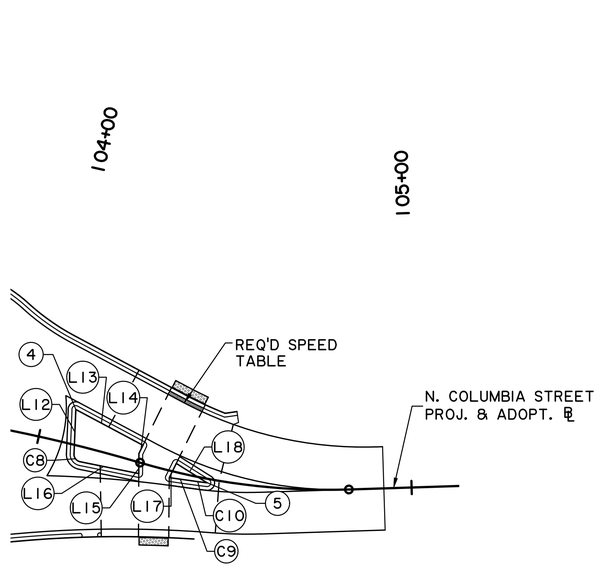
ROUNDABOUT SOUTH SPLITTER ISLAND
STA. 102+43.99 TO STA. 102+72.53
N. COLUMBIA ST.

QUANTITIES
12.7 SQ.YDS. PORTLAND CEMENT CONCRETE PAVEMENT (COLORED)
71.3 LIN. FT. CONCRETE CURB AND GUTTER (MOUNT.)



ROUNDABOUT WEST SPLITTER ISLAND
STA. 201+46.55 TO STA. 201+82.25
N JEFFERSON AVE.

QUANTITIES
40.9 SQ.YDS. PORTLAND CEMENT CONCRETE PAVEMENT (COLORED)
101.1 LIN. FT. CONCRETE CURB AND GUTTER (MOUNT.)



ROUNDABOUT NORTH SPLITTER ISLAND
STA. 104+07.83 TO STA. 104+46.01
N. COLUMBIA ST.

QUANTITIES
22.7 SQ.YDS. PORTLAND CEMENT CONCRETE PAVEMENT (COLORED)
82.0 LIN. FT. CONCRETE CURB AND GUTTER (MOUNT.)

Scale : 1"= 20'
N

CURVE TABLE			
CURVE #	RADIUS	DELTA	
C1	1.00	167°59'45"	*
C2	92.00	12°18'58"	
C3	2.00	83°51'41"	
C4	1.00	144°08'47"	
C5	72.00	13°45'43"	
C6	134.50	1°14'16"	
C7	2.00	118°36'02"	
C8	2.00	80°52'02"	
C9	302.00	1°06'39"	
C10	98.00	2°27'36"	

* MEASURED FROM FACE OF CURVE

LINE TABLE		
LINE #	LENGTH	BEARING
L1	9.49	S3° 38' 09.62"E
L2	8.32	N55° 54' 17.93"E
L3	24.52	N27° 57' 22.79"W
L4	7.33	N68° 14' 46.54"E
L5	4.37	N21° 25' 19.85"W
L6	2.58	N57° 16' 26.85"W
L7	7.94	S32° 23' 26.03"W
L8	7.34	S21° 25' 19.85"E
L9	20.29	N25° 29' 59.55"W
L10	18.53	S36° 44' 19.03"W
L11	5.89	S57° 16' 26.85"E
L12	11.76	S77° 46' 24.16"W
L13	20.09	N13° 33' 04.04"E
L14	2.42	S78° 13' 25.60"E
L15	5.30	N75° 47' 02.73"E
L16	15.81	S3° 05' 37.91"E
L17	4.18	S78° 13' 45.14"E
L18	9.59	S17° 38' 13.49"W

STATION/OFFSET TABLE			
NUMBER	ROAD	STATION	OFFSET
1	N. COLUMBIA ST.	102+43.99	0.28' RT.
2	N. JEFFERSON AVE.	201+54.04	3.47' RT.
3	N. JEFFERSON AVE.	201+81.04	12.73' RT.
4	N. COLUMBIA ST.	104+07.83	9.15' LT.
5	N. COLUMBIA ST.	104+46.01	1.06' RT.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING

SHEET NUMBER 20

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
GEOMETRIC LAYOUT

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE 1"=20'

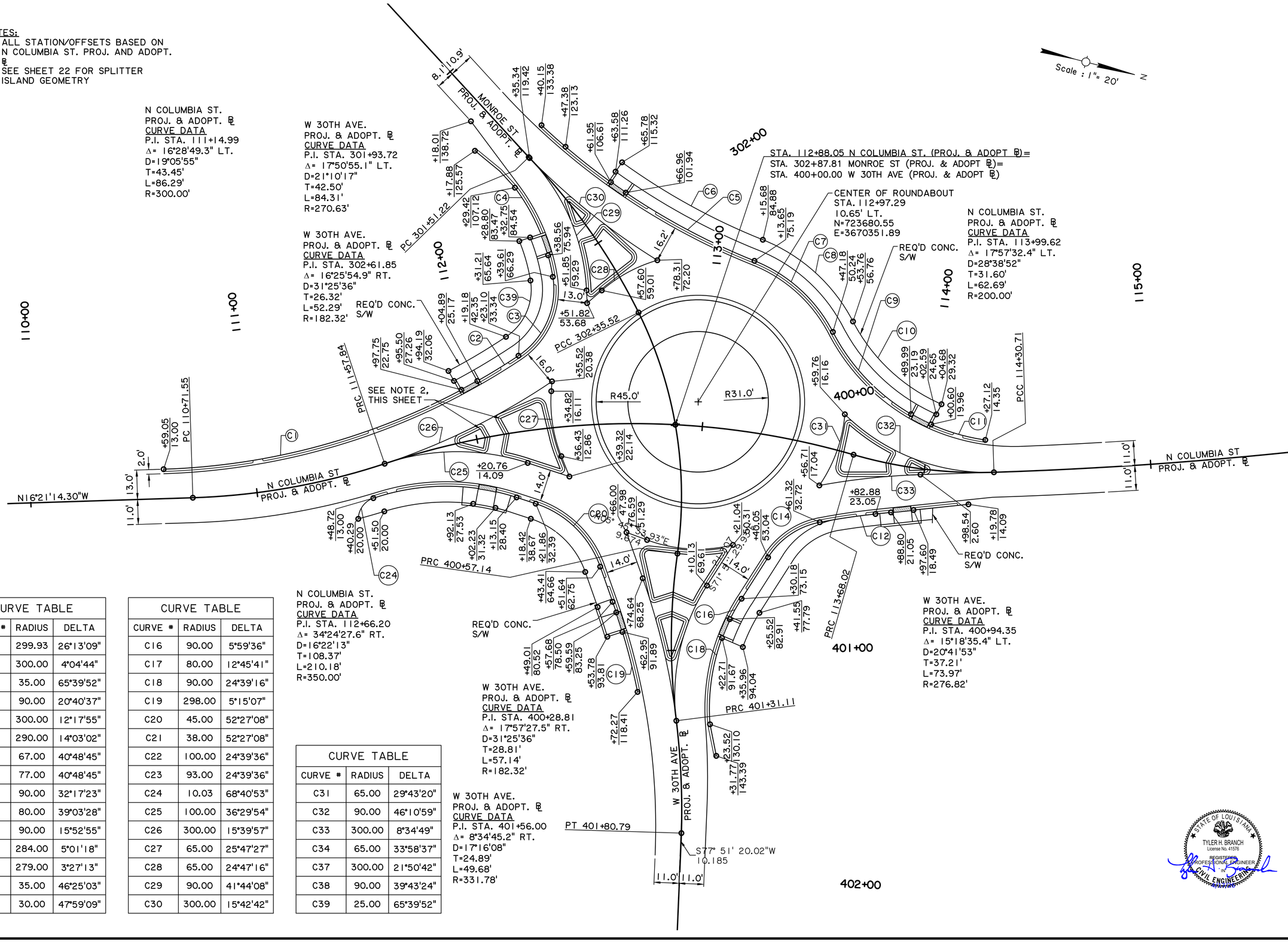
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THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

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6/18/2026 10:09 AM
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-GE04

NOTES:
1. ALL STATION/OFFSETS BASED ON N COLUMBIA ST. PROJ. AND ADOPT. ℄
2. SEE SHEET 22 FOR SPLITTER ISLAND GEOMETRY



CURVE TABLE		
CURVE #	RADIUS	DELTA
C1	299.93	26°13'09"
C2	300.00	4°04'44"
C3	35.00	65°39'52"
C4	90.00	20°40'37"
C5	300.00	12°17'55"
C6	290.00	14°03'02"
C7	67.00	40°48'45"
C8	77.00	40°48'45"
C9	90.00	32°17'23"
C10	80.00	39°03'28"
C11	90.00	15°52'55"
C12	284.00	5°01'18"
C13	279.00	3°27'13"
C14	35.00	46°25'03"
C15	30.00	47°59'09"

CURVE TABLE		
CURVE #	RADIUS	DELTA
C16	90.00	5°59'36"
C17	80.00	12°45'41"
C18	90.00	24°39'16"
C19	298.00	5°15'07"
C20	45.00	52°27'08"
C21	38.00	52°27'08"
C22	100.00	24°39'36"
C23	93.00	24°39'36"
C24	10.03	68°40'53"
C25	100.00	36°29'54"
C26	300.00	15°39'57"
C27	65.00	25°47'27"
C28	65.00	24°47'16"
C29	90.00	41°44'08"
C30	300.00	15°42'42"

CURVE TABLE		
CURVE #	RADIUS	DELTA
C31	65.00	29°43'20"
C32	90.00	46°10'59"
C33	300.00	8°34'49"
C34	65.00	33°58'37"
C37	300.00	21°50'42"
C38	90.00	39°43'24"
C39	25.00	65°39'52"

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 21

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
GEOMETRIC LAYOUT

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE 1"=20'

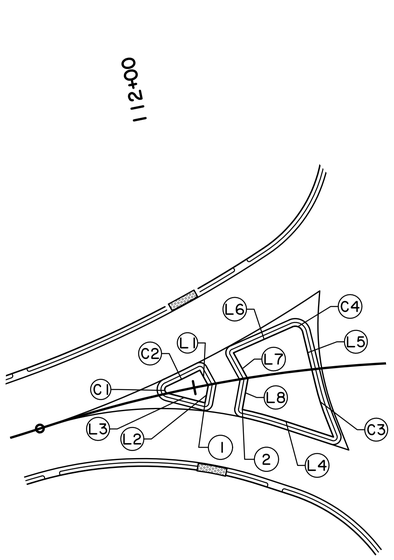
FORTE & TABLADA

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NO.	DATE	REVISION DESCRIPTION	BY

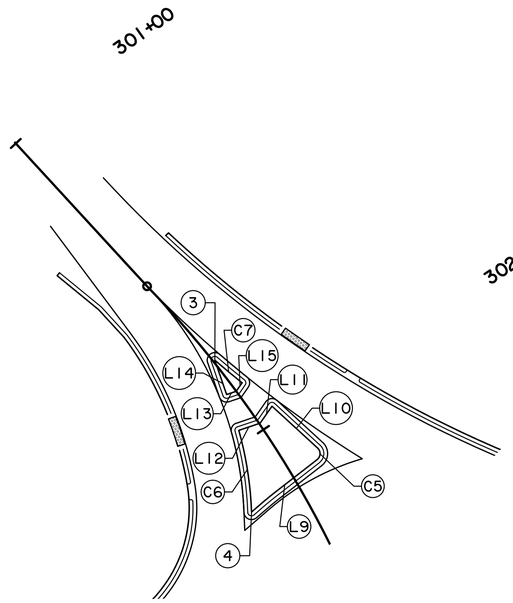
GENERAL NOTES:
1. ALL LINE AND CURVE LABELS ARE AT THE BACK OF CURB.

2. ALL FACE OF CURB RADIUS TO BE 2' IF THERE IS NO BACK OF CURB RADIUS.



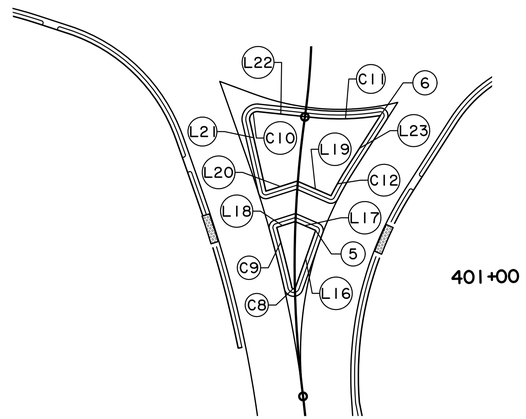
ROUNDABOUT SOUTH SPLITTER ISLAND
STA. 111+92.30 TO STA. 112+35.37
N. COLUMBIA ST.

QUANTITIES
53.3 SQ.YDS. PORTLAND CEMENT CONCRETE PAVEMENT (COLORED)
122.1 LIN. FT. CONCRETE CURB AND GUTTER (MOUNT.)



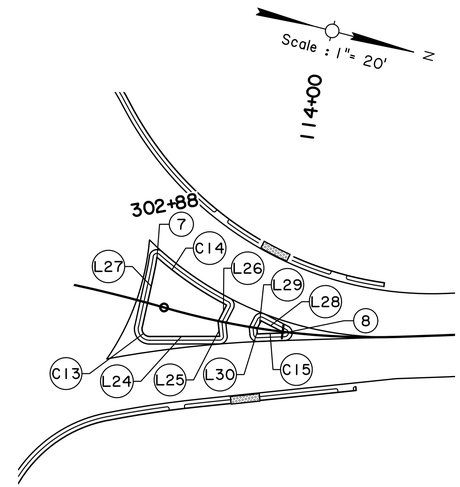
ROUNDABOUT WEST SPLITTER ISLAND
STA. 301+77.66 TO STA. 302+17.22
MONROE ST.

QUANTITIES
37.1 SQ.YDS. PORTLAND CEMENT CONCRETE PAVEMENT (COLORED)
99.6 LIN. FT. CONCRETE CURB AND GUTTER (MOUNT.)



ROUNDABOUT EAST SPLITTER ISLAND
STA. 400+54.31 TO STA. 401+02.60
W. 30TH AVE.

QUANTITIES
66.0 SQ.YDS. PORTLAND CEMENT CONCRETE PAVEMENT (COLORED)
143.0 LIN. FT. CONCRETE CURB AND GUTTER (MOUNT.)



ROUNDABOUT NORTH SPLITTER ISLAND
STA. 113+62.73 TO STA. 114+00.53
N. COLUMBIA ST.

QUANTITIES
33.4 SQ.YDS. PORTLAND CEMENT CONCRETE PAVEMENT (COLORED)
90.0 LIN. FT. CONCRETE CURB AND GUTTER (MOUNT.)

CURVE TABLE		
CURVE #	RADIUS	DELTA
C1	1.00	144°07'21"
C2	302.00	1°49'42"
C3	67.50	7°59'04"
C4	2.00	100°07'56"
C5	2.00	99°37'46"
C6	92.00	13°36'52"
C7	302.00	1°46'15"
C8	0.50	147°56'40"
C9	302.00	3°05'19"
C10	2.00	108°54'45"
C11	67.50	15°12'19"
C12	92.00	5°35'09"
C13	2.00	102°23'42"
C14	92.00	13°55'03"
C15	302.00	1°21'24"

LINE TABLE		
LINE #	LENGTH	BEARING
L1	4.60	N46° 40' 08.10"E
L2	4.67	N85° 54' 04.40"E
L3	10.18	S0° 08' 55.20"E
L4	14.43	N3° 33' 30.28"E
L5	14.52	S61° 47' 38.46"W
L6	16.95	S38° 20' 17.74"E
L7	7.90	N46° 40' 08.10"E
L8	8.16	N85° 54' 04.40"E
L9	14.52	S52° 21' 19.79"E
L10	16.35	N28° 00' 54.44"E
L11	5.47	N69° 41' 46.14"W
L12	5.95	N33° 13' 07.76"W
L13	2.67	N33° 13' 07.76"W
L14	9.57	N56° 36' 05.16"E
L15	2.72	N69° 41' 46.14"W
L16	15.98	S85° 04' 31.29"E
L17	5.87	N8° 54' 49.28"E
L18	5.12	N32° 15' 54.41"W
L19	9.71	N8° 54' 49.28"E
L20	8.68	N32° 15' 54.41"W

LINE TABLE		
LINE #	LENGTH	BEARING
L21	19.02	N62° 34' 30.64"E
L22	14.52	S8° 30' 47.72"E
L23	15.89	N71° 54' 29.93"W
L24	18.47	S14° 37' 30.07"E
L25	3.90	N69° 31' 51.21"E
L26	4.91	S77° 25' 14.40"E
L27	14.52	S87° 46' 11.83"W
L28	6.97	S12° 53' 02.48"W
L29	2.41	S77° 25' 14.40"E
L30	1.32	N69° 31' 51.21"E

STATION/OFFSET TABLE			
NUMBER	ROAD	STATION	OFFSET
1	N. COLUMBIA ST.	112+02.03	4.50' RT.
2	N. COLUMBIA ST.	112+11.58	8.0' RT.
3	MONROE ST.	301+77.66	0.51' LT.
4	MONROE ST.	302+17.22	14.20' RT.
5	W. 30TH AVE.	400+87.04	5.40' RT.
6	W. 30TH AVE.	400+54.31	19.7' RT.
7	N. COLUMBIA ST.	113+62.73	12.26' LT.
8	N. COLUMBIA ST.	114+00.53	0.27' RT.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 22

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
GEOMETRIC LAYOUT

DESIGNED	MDB	DETAILED	MDB	DATE	4/17/26
CHECKED	NAB	CHECKED	THB	SCALE	1"=20'

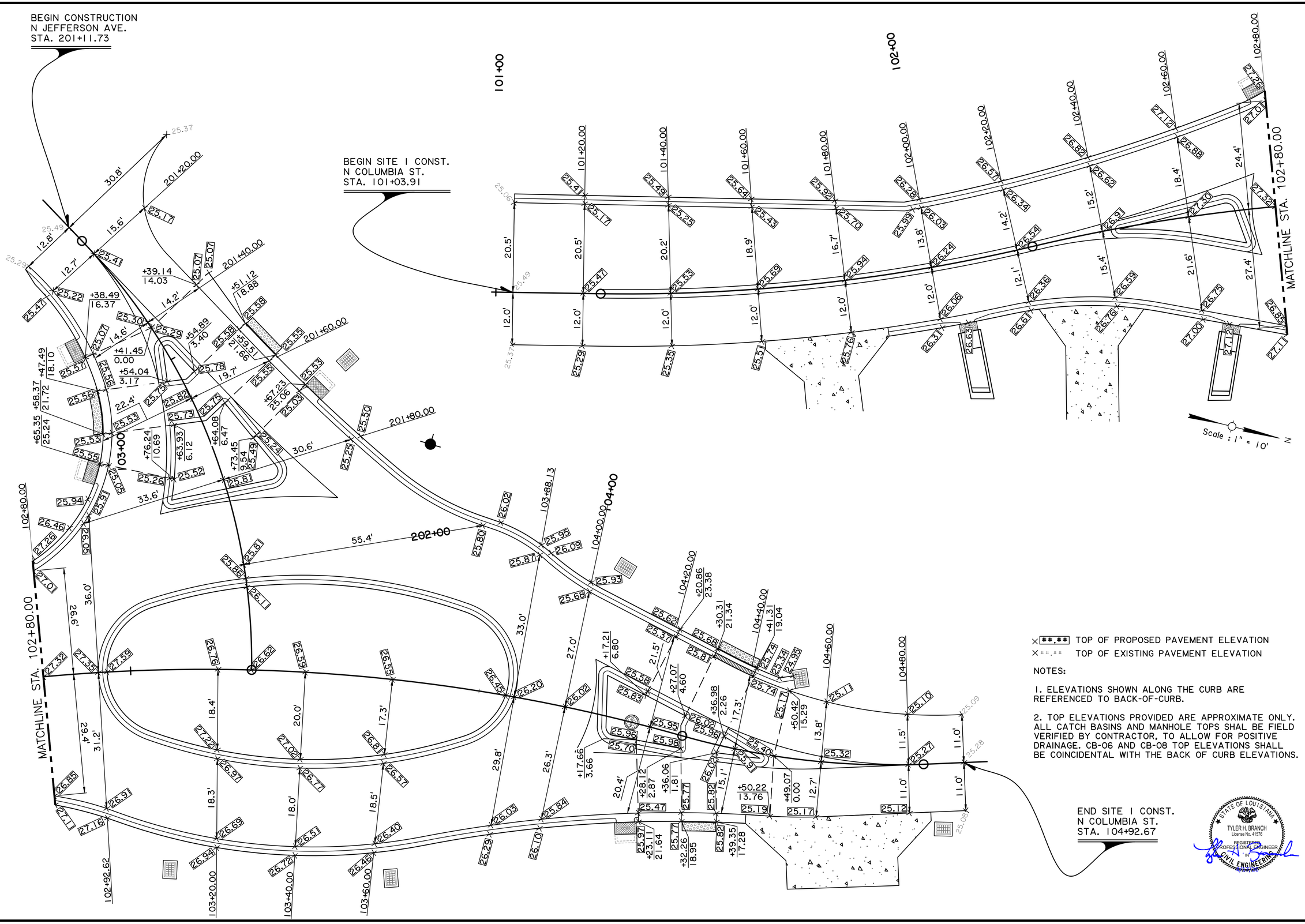
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL

R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-GE05 6/18/2026 10:09 AM



×**.** TOP OF PROPOSED PAVEMENT ELEVATION

×##.## TOP OF EXISTING PAVEMENT ELEVATION

NOTES:

1. ELEVATIONS SHOWN ALONG THE CURB ARE REFERENCED TO BACK-OF-CURB.

2. TOP ELEVATIONS PROVIDED ARE APPROXIMATE ONLY. ALL CATCH BASINS AND MANHOLE TOPS SHAL BE FIELD VERIFIED BY CONTRACTOR, TO ALLOW FOR POSITIVE DRAINAGE. CB-06 AND CB-08 TOP ELEVATIONS SHALL BE COINCIDENTAL WITH THE BACK OF CURB ELEVATIONS.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER	23

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

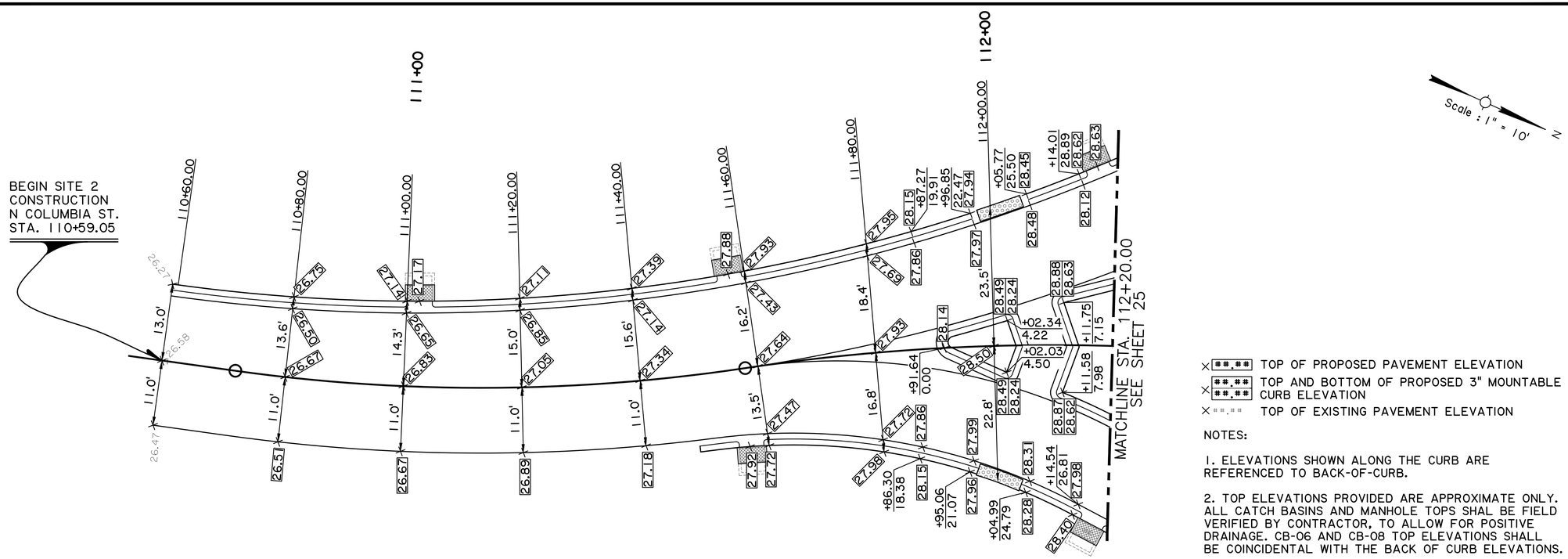
GRAPHICAL GRADING PLANS

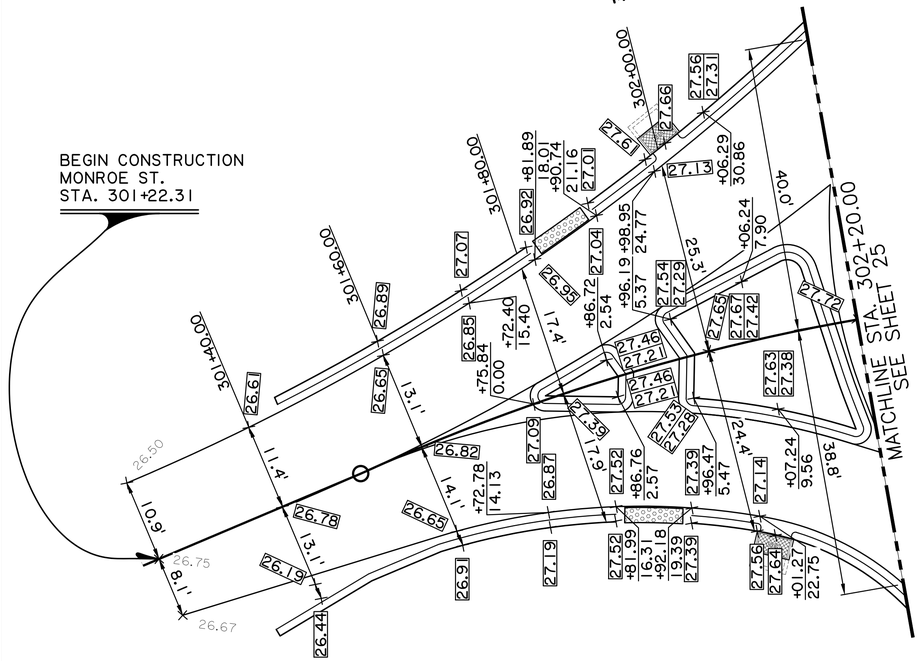
DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	1" = 50'

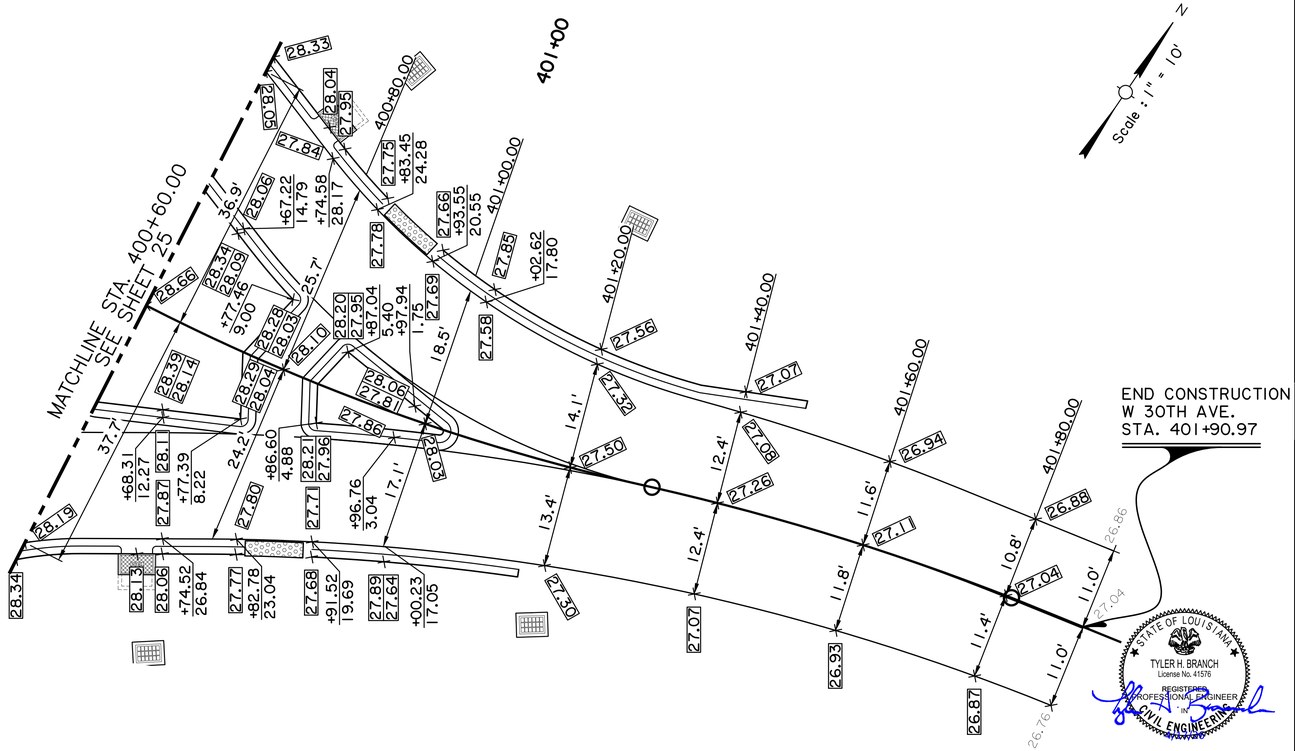
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR = 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY







× ##.## TOP OF PROPOSED PAVEMENT ELEVATION

× ##.## / ##.## TOP AND BOTTOM OF PROPOSED 3" MOUNTABLE CURB ELEVATION

× ##.## TOP OF EXISTING PAVEMENT ELEVATION

NOTES:

1. ELEVATIONS SHOWN ALONG THE CURB ARE REFERENCED TO BACK-OF-CURB.

2. TOP ELEVATIONS PROVIDED ARE APPROXIMATE ONLY. ALL CATCH BASINS AND MANHOLE TOPS SHAL BE FIELD VERIFIED BY CONTRACTOR, TO ALLOW FOR POSITIVE DRAINAGE. CB-06 AND CB-08 TOP ELEVATIONS SHALL BE COINCIDENTAL WITH THE BACK OF CURB ELEVATIONS.

SHEET NUMBER 24

CO234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

GRAPHICAL GRADING PLANS

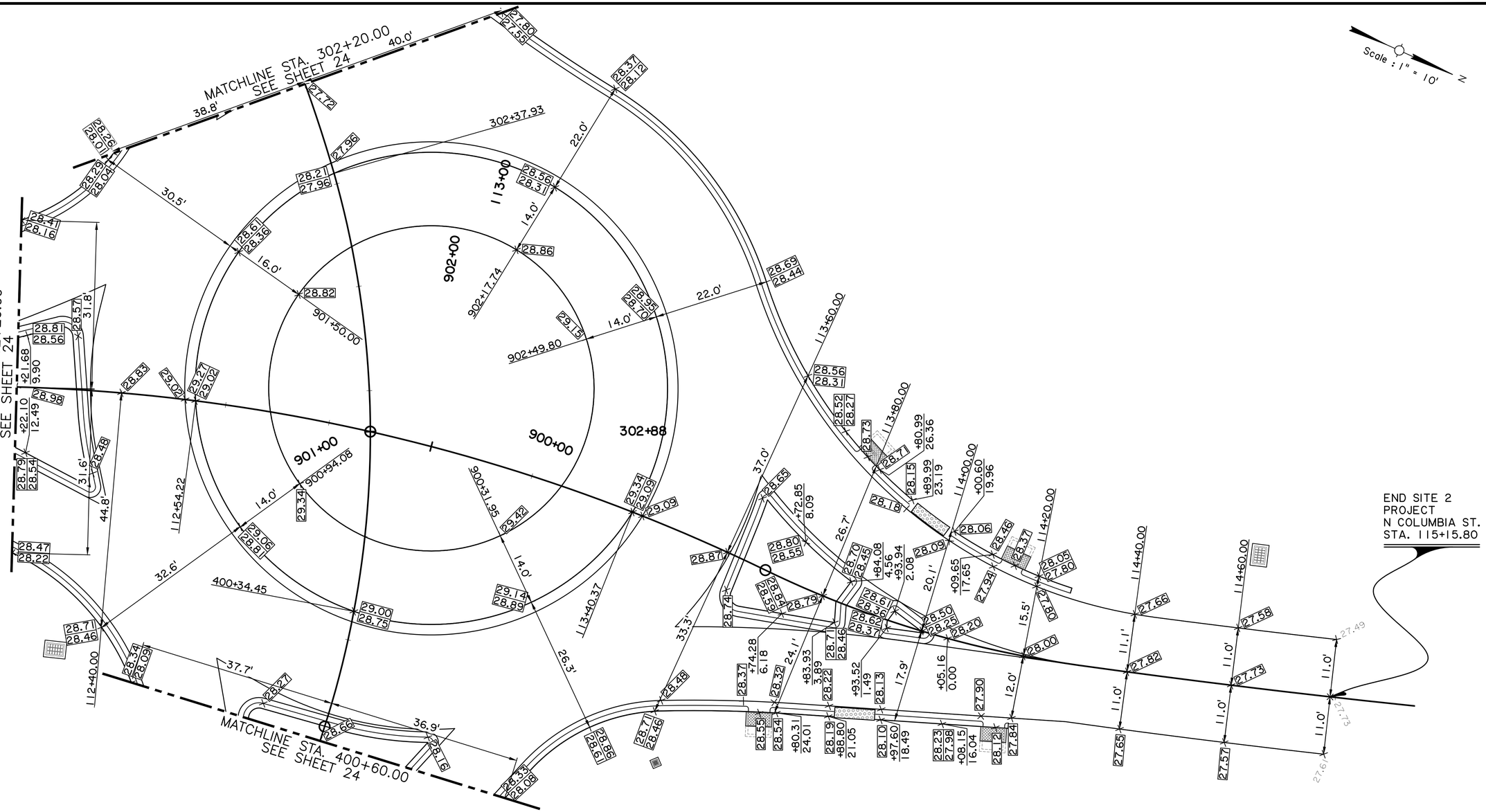
DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE 1" = 50'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR = 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
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6/18/2026 10:10 AM



× **.** TOP OF PROPOSED PAVEMENT ELEVATION

× **.** / **.** TOP AND BOTTOM OF PROPOSED 3" MOUNTABLE CURB ELEVATION

× **.** TOP OF EXISTING PAVEMENT ELEVATION

NOTES:

1. ELEVATIONS SHOWN ALONG THE CURB ARE REFERENCED TO BACK-OF-CURB.

2. TOP ELEVATIONS PROVIDED ARE APPROXIMATE ONLY. ALL CATCH BASINS AND MANHOLE TOPS SHAL BE FIELD VERIFIED BY CONTRACTOR, TO ALLOW FOR POSITIVE DRAINAGE. CB-06 AND CB-08 TOP ELEVATIONS SHALL BE COINCIDENTAL WITH THE BACK OF CURB ELEVATIONS.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 25

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

GRAPHICAL GRADING PLANS

DESIGNED	MDB	DETAILED	MDB
CHECKED	NAB	CHECKED	THB
DATE	4/17/26	SCALE	1" = 50'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR = 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-PM01
6/18/2026 5:17 PM

BEGIN CONSTRUCTION
N JEFFERSON AVE.
STA. 201+11.73

BEGIN SITE 1 CONST.
N COLUMBIA ST.
STA. 101+03.91

END SITE 1
PROJECT
N COLUMBIA ST.
STA. 104+92.67

END CONSTRUCTION
N JEFFERSON AVE.
STA. 202+24.24

101+00 102+00 103+00 104+00 105+00 202+00 202+24

NO TRUCK ROUTE
LOCAL DELIVERIES ONLY
REMOVE & REPLACE SIGN ASSEBMLY

NO PARKING HERE TO CORNER
R7-11 12"x18"

N Columbia St.
D1-1d VARIES x 18"

N Jefferson Ave
D1-1d VARIES x 18"

10.0' TYP.
8.0'

12" SOLID WHITE
24" SOLID WHITE
4" SOLID WHITE
8" SOLID WHITE
24" DOTTED WHITE
8" SOLID YELLOW
4" SOLID YELLOW
ASTM D4280 WHITE/RED SPACED AT 5' CENTERS
ASTM D4280 YELLOW SPACED AT 20' CENTERS

Scale : 1" = 20'

1 R6-1 54"x18" / R1-2 48"x48"x48" / R6-5p 30"x30"
2 W3-2 30"x30"
3 R6-5p 30"x30" / R2-1 30"x36"
4 R4-7 24"x30"
5 W11-2 36"x36" / W16-7PL 24"x18"

TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 26

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

PAVEMENT MARKING AND SIGNAGE LAYOUT

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE 1"=20'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, ADJUST SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
6/18/2026 10:10 AM
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NO TRUCK ROUTE

LOCAL DELIVERIES ONLY

REMOVE & REPLACE SIGN ASSEMBLY

BEGIN CONSTRUCTION
MONROE ST.
STA. 301+22.31

ASTM D4280
WHITE/RED
SPACED AT 6'

N Columbia St.
D1-1d
VARIES x 18"

Monroe St.
D1-1d
VARIES X 18"

END CONSTRUCTION
MONROE ST.
STA. 302+87.81

STA. 501+83.88
W 30TH AVE.
DEAD END ROAD
INSTALLATION
(TYPE A)

BEGIN CONSTRUCTION
W 30TH AVE.
STA. 400+00.00

BEGIN SITE 2
CONSTRUCTION
N COLUMBIA ST.
STA. 110+59.05

END SITE 2
PROJECT
N COLUMBIA ST.
STA. 115+15.80

W 30th Ave
D1-1d
VARIES x 18"

N Columbia St.
D1-1d
VARIES x 18"

END CONSTRUCTION
W 30TH AVE.
STA. 402+11.92

24" SOLID WHITE
4" SOLID WHITE
24" TYPE B DOTTED WHITE
8" SOLID WHITE
8" SOLID YELLOW
4" SOLID YELLOW
10.0' TYP.

111+00
112+00
113+00
114+00
115+00
302+00
302+88
401+00
402+00

Scale : 1"= 20'

R1-2
48"x48"x48"

W3-2
30"x30"

R6-5p
30"x30"

R2-1
30"x36"

R4-7
24"x30"

W11-2
36"x36"

W16-7PL
24"x12"

R6-1
54"x18"

R6-4
30"x24"

TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 27

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

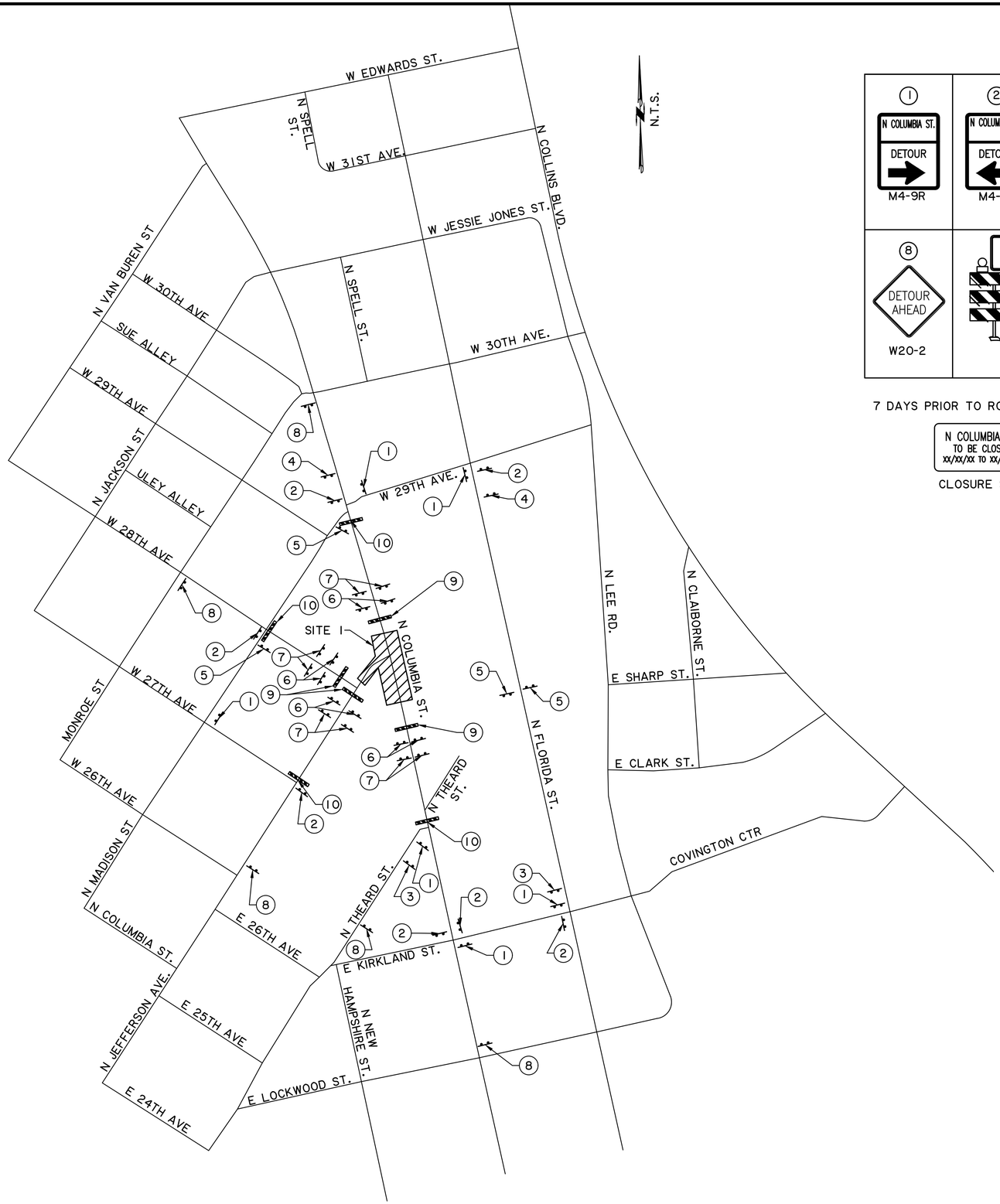
PAVEMENT MARKING AND SIGNAGE LAYOUT

DESIGNED	MDB	DETAILED	MDB
CHECKED	NAB	CHECKED	THB
DATE	4/17/26	SCALE	1"=20'

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY



DURATION OF ROAD CLOSURE

1	2	3	4	5	6	7
N COLUMBIA ST. DETOUR →	N COLUMBIA ST. DETOUR ←	N COLUMBIA ST. DETOUR →	N COLUMBIA ST. DETOUR ←	N COLUMBIA ST. DETOUR ↑	ROAD CLOSED 100 FT	ROAD CLOSED AHEAD
M4-9R	M4-9L	M4-8 M5-1R	M4-8 M5-1L	M4-8 M6-3	W20-3	W20-3

8	9	10
DETOUR AHEAD	ROAD CLOSED / ROAD CLOSED	ROAD CLOSED LOCAL TRAFFIC ONLY / ROAD CLOSED LOCAL TRAFFIC ONLY
W20-2	R11-2 ON 2 TYPE III BARRICADES	R11-3A ON 2 TYPE III BARRICADES

7 DAYS PRIOR TO ROAD CLOSURE

N COLUMBIA ST.
TO BE CLOSED
XX/XX/XX TO XX/XX/XX

CLOSURE SIGN

DURING CLOSURE

N COLUMBIA ST.
CLOSED
DETOUR N FLORIDA ST.

CLOSURE SIGN

WORK ZONE

GENERAL NOTES

1. ALL MUTCD AND LADOTD TTC STANDARD PLANS SHALL BE FOLLOWED AS REQUIRED.
2. THE CONTRACTOR SHALL BE REQUIRED TO NOTIFY IN WRITING ALL STATE, PARISH, LOCAL POLICE, EMERGENCY SERVICES, AND SCHOOL BOARD, SEVEN (7) DAYS IN ADVANCE OF ROAD CLOSURE.
3. ALL MATERIALS SHALL BE APPROVED BY PROJECT ENGINEER AND ON SITE PRIOR TO ROAD CLOSURE.
4. REFER TO NOTE 4 ON SHEET 4 ABOUT SITE CLOSURES.
5. CONTRACTOR SHALL PROVIDE A PEDESTRIAN DETOUR PLAN ACCORDING TO THE CURRENT MUTCD AND PROWAG FOR BOTH PROJECT SITES. SITE SPECIFIC PLANS SHALL BE SUBMITTED TO THE PROJECT ENGINEER A MINIMUM OF 3 WEEKS IN ADVANCE OF THE PLANNED WORK.
6. CONTRACTOR SHALL MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS TO BUSINESSES AND OTHER PUBLIC FACILITIES AT ALL TIMES. DURING NON-CONSTRUCTION WORK HOURS, CONTRACTOR SHALL PROVIDE ADA COMPLIANT ACCESS FOR PEDESTRIANS WITHIN THE LIMITS OF THE WORK ZONE.
7. DURING CONSTRUCTION WORK HOURS, CONTRACTOR SHALL PROVIDE FLAGMAN TO ACCOMMODATE PEDESTRIAN PASSAGE TO OPEN BUSINESS(ES) WITHIN THE WORK ZONE LIMITS.
8. THE PROJECT ENGINEER'S APPROVAL IS REQUIRED IF THE PEDESTRIAN DETOUR PLAN DEVIATES FROM THE REQUIREMENTS LISTED HERE.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 28

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

DETOUR LAYOUT MAP

DESIGNED	MDB	DATE	4/17/26
CHECKED	NAB	SCALE	N.T.S.
DETAILED	MDB		
CHECKED	THB		

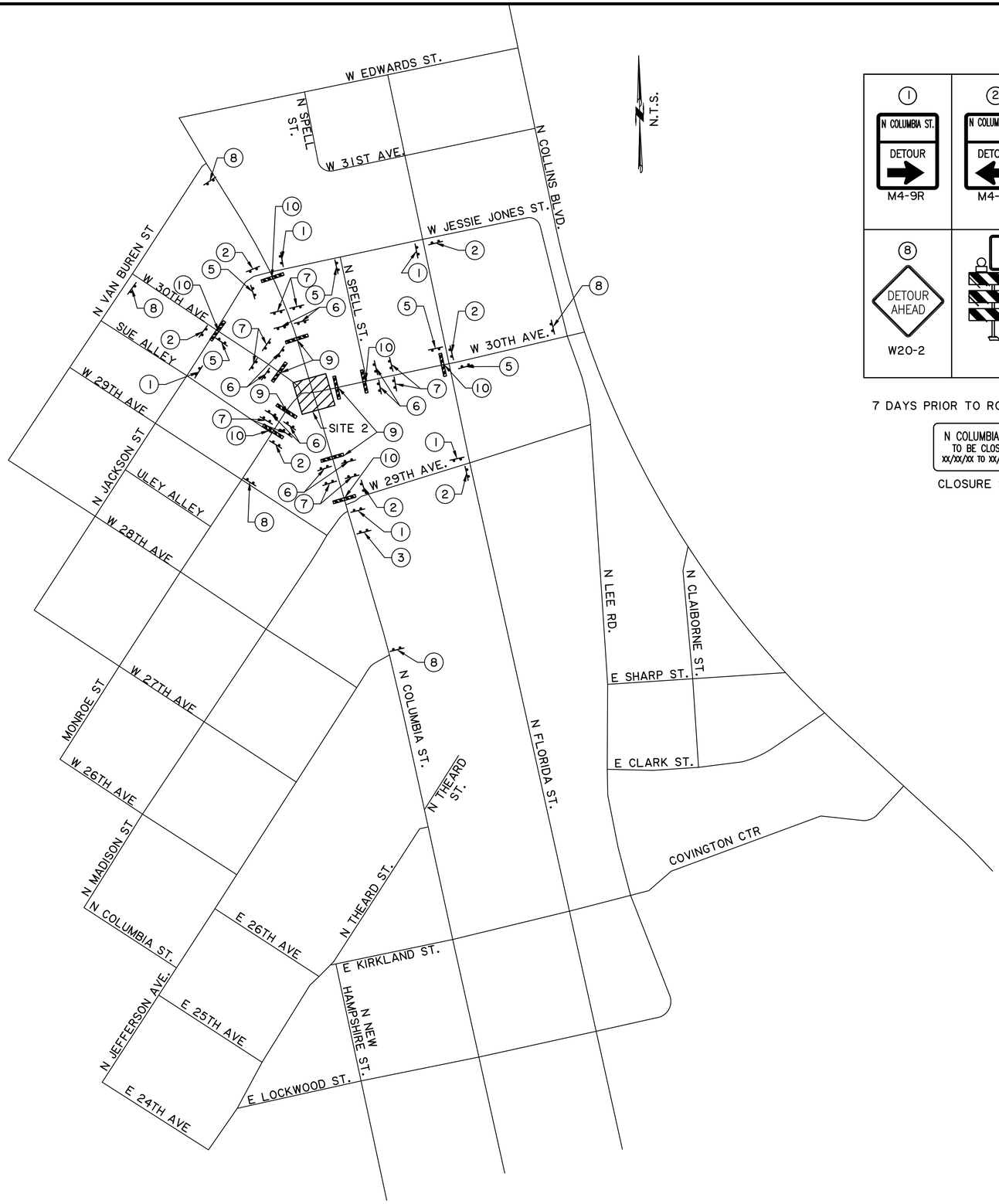
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT 1 INCH, ADJUST SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

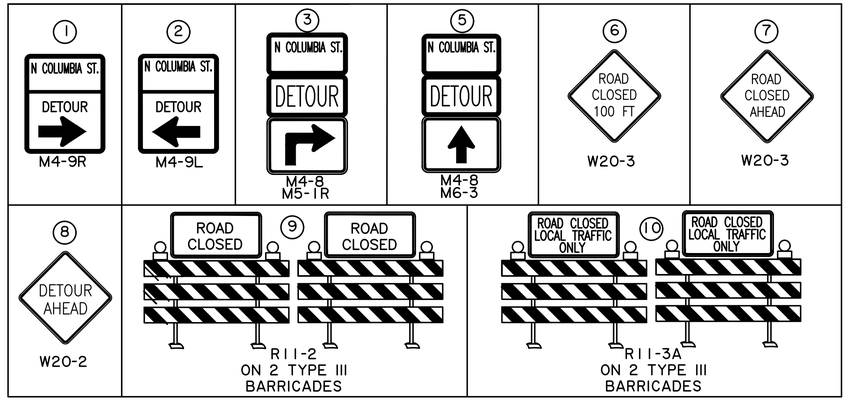
NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
6/19/2026 10:09 AM
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6/19/2026 10:09 AM
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C - TC02



DURATION OF ROAD CLOSURE



7 DAYS PRIOR TO ROAD CLOSURE

N COLUMBIA ST.
TO BE CLOSED
XX/XX/XX TO XX/XX/XX

CLOSURE SIGN

DURING CLOSURE

N COLUMBIA ST.
CLOSED
DETOUR N FLORIDA ST.

CLOSURE SIGN

WORK ZONE

GENERAL NOTES

1. ALL MUTCD AND LADOTD TTC STANDARD PLANS SHALL BE FOLLOWED AS REQUIRED.
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7. DURING CONSTRUCTION WORK HOURS, CONTRACTOR SHALL PROVIDE FLAGMAN TO ACCOMMODATE PEDESTRIAN PASSAGE TO OPEN BUSINESS(ES) WITHIN THE WORK ZONE LIMITS.
8. THE PROJECT ENGINEER'S APPROVAL IS REQUIRED IF THE PEDESTRIAN DETOUR PLAN DEVIATES FROM THE REQUIREMENTS LISTED HERE.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 28a

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

DETOUR LAYOUT MAP

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED TWB
DATE 4/17/26
SCALE N.T.S.

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. ADJUST SCALE IF THIS BAR = / 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 – JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C – BLO1
6/18/2026 10:11 AM

REFERENCE NOTES - GEO TEMPLATE WITH LAB BLANK.GDT - 12/12/24 16:37 - C:\USERS\SBERMAN\ONEDRIVE - ECS CORPORATE SERVICES\65 DATA_PROJECTS\1700-1799\65-1701 (A) COLUMBIA STREET ROUNDABOUT - COVINGTON, LA D3\LAB\1701 COLU

REFERENCE NOTES FOR BORING LOGS

ECS Southeast, LLC
11211 Industriplex Blvd, Suite 300
Baton Rouge, LA 70809

CLIENT Forte and Tablada **PROJECT NAME** Columbia Street Roundabouts

PROJECT NUMBER 65-1701

MATERIAL[1,2,3]

- ASPHALT: Asphalt
- CL: LEAN CLAY low to medium plasticity
- FILL1: Fill (made ground)
- ML: USCS Silt
- SM: USCS Silty Sand

DRILLING SAMPLING SYMBOLS & ABBREVIATIONS

SS	Split Spoon Sampler	PM	Pressuremeter Test
ST	Shelby Tube Sampler	RD	Rock Bit Drilling
WS	Wash Sample	RC	Rock Core, NX, BX, AX
BS	Bulk Sample of Cuttings	REC	Rock Sample Recovery %
PA	Power Auger (no sample)	RQD	Rock Quality Designation %
HSA	Hollow Stem Auger		

PARTICLE SIZE IDENTIFICATION

DESIGNATION		PARTICLE SIZES
Boulders		12 inches (300 mm) or larger
Cobbles		3 inches to 12 inches (75 mm to 300 mm)
Gravel:	Coarse	3/4 inch to 3 inches (19 mm to 75 mm)
	Fine	4.75 mm to 19 mm (No. 4 sieve to 3/4 inch)
Sand:	Coarse	2.00 mm to 4.75 mm (No. 10 to No. 4 sieve)
	Medium	0.425 mm to 2.00 mm (No. 40 to No. 10 sieve)
	Fine	0.074 mm to 0.425 mm (No. 200 to No. 40 sieve)
Silt & Clay ("Fines")		<0.074 mm (smaller than a No. 200 sieve)

COHESIVE SILTS & CLAYS

UNCONFINED COMPRESSIVE STRENGTH, QP[4]	SPT[5] (BPF)	CONSISTENCY[7] (COHESIVE)
<0.25	<2	Very Soft
0.25 - <0.50	3 - 4	Soft
0.50 - <1.00	5 - 8	Firm
1.00 - <2.00	9 - 15	Stiff
2.00 - <4.00	16 - 30	Very Stiff
4.00 - 8.00	31 - 50	Hard
>8.00	>50	Very Hard

RELATIVE AMOUNT[7]	COARSE GRAINED (%)[8]	FINE GRAINED (%)[8]
Trace	< 5	< 5
With	10 - 20	10 - 25
Adjective *(ex: "Silty")*	25 - 45	30 - 45

GRAVELS, SANDS & NON-COHESIVE SILTS

SPT[5]	DENSITY
<5	Very Loose
5 - 10	Loose
11 - 30	Medium Dense
31 - 50	Dense
>50	Very Dense

WATER LEVELS[6]

- WL (First Encountered)
- WL (Completion)
- WL (Seasonal High Water)
- WL (Stabilized)

FILL AND ROCK

FILL | POSSIBLE FILL | PROBABLE FILL | ROCK

[1]Classifications and symbols per ASTM D 2488-17 (Visual-Manual Procedure) unless noted otherwise.

[2]To be consistent with general practice, "POORLY GRADED" has been removed from GP, GP-GM, GP-GC, SP, SP-SM, SP-SC soil types on the boring logs.

[3]Non-ASTM designations are included in soil descriptions and symbols along with ASTM symbol [Ex: (SM-FILL)].

[4]Typically estimated via pocket penetrometer or Torvane shear test and expressed in tons per square foot (tsf).

[5]Standard Penetration Test (SPT) refers to the number of hammer blows (blow count) of a 140 lb. hammer falling 30 inches on a 2 inch OD split spoon sampler required to drive the sampler 12 inches (ASTM D 1586). "N-value" is another term for "blow count" and is expressed in blows per foot (bpf). SPT correlations per 7.4.2 Method B and need to be corrected if using an auto hammer.

[6]The water levels are those levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in granular soils. In clay and cohesive silts, the determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally employed.

[7]Minor deviation from ASTM D 2488-17 Note 14.

[8]Percentages are estimated to the nearest 5% per ASTM D 2488-17.

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BORING NO. P-01
LAT: 30.484023°
LONG: -90.096647°
SURFACE EL.: 27.0'

DEPTH, FT	WATER LEVEL SYMBOL	SAMPLES	BLOWS PER 6 INCHES	STRATUM DESCRIPTION	STRATUM DEPTH, FT	CLASSIFICATION: UNIT DRY WT. PCF	CLASSIFICATION: PASSING NO. 200 SIEVE, %	CLASSIFICATION: WATER CONTENT, %	CLASSIFICATION: LIQUID LIMIT	CLASSIFICATION: PLASTIC LIMIT	CLASSIFICATION: PLASTICITY INDEX (PI)	SHEAR STRENGTH (KSF)
0			8-5-4 (9)	SANDY SILT (ML), loose, dark gray			59	21				
				SILT (ML), soft to medium stiff, gray, with clay	2.0		100	21				□
5			3-3-6 (9)	LEAN CLAY (CL), stiff, gray, with silt	4.0		100	19	31	14	17	
				Boring completed at 6-feet.	6.0							

SHEAR STRENGTH: □ Penetrometer, ◇ Torvane, △ Hand Vane; Unconfined ▼, Triaxial ●, Miniature Vane ▲; KSF 0.5 1.0 1.5 2.0 2.5

NOTES:
1. Terms and symbols defined on reference notes.
2. Grass groundcover, 8-in (FILL) Silty Sand with gravel and shells

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada **LOG OF BORING NO. P-01**
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA | Project No. 65-1701 | PM/PE

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 29

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
GEOTECHNICAL BORINGS

DESIGNED MDB | CHECKED NAB | DETAILED MDB | CHECKED THB | DATE 4/17/26 | SCALE N.T.S.

FORTE & TABLADA

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6/18/2026 10:11 AM

BORING NO. P-02
LAT: 30.484377°
LONG: -90.096927°
SURFACE EL.: 27.0'

DEPTH, FT	BLOWS PER 6 INCHES	STRATUM DESCRIPTION	STRATUM DEPTH, FT	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)
	37-13-8 (21)	SILT (ML), very stiff, gray, with clay			100	16			
	2-1-1 (2)	LEAN CLAY (CL), soft to medium stiff, gray and tan, with silt and trace sand	2.0		100	24	43	19	24
5	1-3-4 (7)				85	20	41	16	25
		Boring completed at 6-feet.	6.0						

SHEAR STRENGTH (KSF): □ Penetrometer ◇ Torvane △ Hand Vane; Unconfined ▼ Triaxial ● Miniature Vane ▲; 0.5 1.0 1.5 2.0 2.5

NOTES:
1. Terms and symbols defined on reference notes.
2. Pavement Section: 3-in Asphalt Surface, 11-in Sand Base Course with gravel

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada
LOG OF BORING NO. P-02
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA
Project No. 65-1701
PM/PE

BORING NO. P-03
LAT: 30.484261°
LONG: -90.096695°
SURFACE EL.: 27.0'

DEPTH, FT	BLOWS PER 6 INCHES	STRATUM DESCRIPTION	STRATUM DEPTH, FT	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)
	11-8-6 (14)	SANDY SILT (ML), stiff, gray			64	16			
	2-1-0 (1)	SILT (ML), very soft, gray and tan, with clay	2.0		100	20			
5	0-2-5 (7)	LEAN CLAY (CL), medium stiff, gray and tan, with silt	4.0		100	20	28	15	13
		Boring completed at 6-feet.	6.0						

SHEAR STRENGTH (KSF): □ Penetrometer ◇ Torvane △ Hand Vane; Unconfined ▼ Triaxial ● Miniature Vane ▲; 0.5 1.0 1.5 2.0 2.5

NOTES:
1. Terms and symbols defined on reference notes.
2. Pavement Section: 3-in Asphalt Surface, 5-in Asphalt Base, 6-in Sand Base Course with shells

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada
LOG OF BORING NO. P-03
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA
Project No. 65-1701
PM/PE

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING

SHEET NUMBER 30

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
GEOTECHNICAL BORINGS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

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ST. TAMMANY PARISH
CITY OF COVINGTON
GEOTECHNICAL BORINGS

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DATE 4/17/26
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BORING NO. P-04
LAT: 30.483893°
LONG: -90.096548°
SURFACE EL.: 27.0'

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	STRATUM DESCRIPTION	STRATUM DEPTH, FT	CLASSIFICATION: UNIT DRY WT, PCF	CLASSIFICATION: PASSING NO. 200 SIEVE, %	CLASSIFICATION: WATER CONTENT, %	CLASSIFICATION: LIQUID LIMIT	CLASSIFICATION: PLASTIC LIMIT	CLASSIFICATION: PLASTICITY INDEX (PI)
0				7-7-5 (12)	SILTY SAND (SM), loose, dark gray			44	20			
						2.0						
				0-0-1 (1)	SILT (ML), very soft, gray			100	20			
						4.0						
5				4-6-9 (15)	LEAN CLAY (CL), stiff to very stiff, gray and tan, with silt			100	17	29	14	15
						6.0						
					Boring completed at 6-feet.							

SHEAR STRENGTH
□ Penetrometer ◇ Torvane △ Hand Vane
Unconfined ▼ Triaxial ● Miniature Vane ▲
KSF: 0.5 1.0 1.5 2.0 2.5

NOTES:
1. Terms and symbols defined on reference notes.
2. Grass groundcover, 7-in (FILL) Sand with gravel

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada
LOG OF BORING NO. P-04
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA
Project No. 65-1701
PM/PE

BORING NO. P-05
LAT: 30.484136°
LONG: -90.096915°
SURFACE EL.: 26.0'

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	STRATUM DESCRIPTION	STRATUM DEPTH, FT	CLASSIFICATION: UNIT DRY WT, PCF	CLASSIFICATION: PASSING NO. 200 SIEVE, %	CLASSIFICATION: WATER CONTENT, %	CLASSIFICATION: LIQUID LIMIT	CLASSIFICATION: PLASTIC LIMIT	CLASSIFICATION: PLASTICITY INDEX (PI)
0					FILL, Silty Sand with gravel				7			
				4-1-3 (4)	LEAN CLAY (CL), medium stiff to stiff, light gray and tan, with silt	2.0		100	18	28	15	13
5				2-4-6 (10)				100	21	34	16	18
					Boring completed at 6-feet.	6.0						

SHEAR STRENGTH
□ Penetrometer ◇ Torvane △ Hand Vane
Unconfined ▼ Triaxial ● Miniature Vane ▲
KSF: 0.5 1.0 1.5 2.0 2.5

NOTES:
1. Terms and symbols defined on reference notes.
2. Pavement Section: 2-in Asphalt Surface, 18-in Soil Cement Base

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada
LOG OF BORING NO. P-05
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA
Project No. 65-1701
PM/PE

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
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BORING NO. P-07
LAT: 30.484259°
LONG: -90.096336°
SURFACE EL.: 27.0'

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	STRATUM DESCRIPTION	STRATUM DEPTH, FT	CLASSIFICATION: UNIT DRY WT, PCF	CLASSIFICATION: PASSING NO. 200 SIEVE, %	CLASSIFICATION: WATER CONTENT, %	CLASSIFICATION: LIQUID LIMIT	CLASSIFICATION: PLASTIC LIMIT	CLASSIFICATION: PLASTICITY INDEX (PI)
0				2-1-1 (2)	SILT (ML), soft, dark gray			100				
						2.0						
				0-3-3 (6)	LEAN CLAY (CL), medium stiff to stiff, gray and tan, with silt				21	34	16	18
5				1-6-6 (12)				100	18	36	22	14
						6.0						
					Boring completed at 6-feet.							

SHEAR STRENGTH (KSF): ☐ Penetrometer ◇ Torvane △ Hand Vane; Unconfined ▼ Triaxial ● Miniature Vane ▲; 0.5 1.0 1.5 2.0 2.5

NOTES:
1. Terms and symbols defined on reference notes.
2. Pavement Section: 2-in Asphlat Surface, 4-in Sand Base Course with gravel

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada
LOG OF BORING NO. P-07
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA
Project No. 65-1701
PM/PE

BORING NO. P-08
LAT: 30.483939°
LONG: -90.097002°
SURFACE EL.: 26.0'

DEPTH, FT	WATER LEVEL	SYMBOL	SAMPLES	BLOWS PER 6 INCHES	STRATUM DESCRIPTION	STRATUM DEPTH, FT	CLASSIFICATION: UNIT DRY WT, PCF	CLASSIFICATION: PASSING NO. 200 SIEVE, %	CLASSIFICATION: WATER CONTENT, %	CLASSIFICATION: LIQUID LIMIT	CLASSIFICATION: PLASTIC LIMIT	CLASSIFICATION: PLASTICITY INDEX (PI)
0					SANDY SILT (ML), dark gray			53	18			
				4-4-5 (9)	SILT (ML), stiff, gray and tan, with clay	2.0		100	18			
					LEAN CLAY (CL), stiff, light brown	4.0						
5				2-4-8 (12)				85	19	43	14	29
					Boring completed at 6-feet.	6.0						

SHEAR STRENGTH (KSF): ☐ Penetrometer ◇ Torvane △ Hand Vane; Unconfined ▼ Triaxial ● Miniature Vane ▲; 0.5 1.0 1.5 2.0 2.5

NOTES:
1. Terms and symbols defined on reference notes.
2. Pavement Section: 2-in Asphalt Surface, 18-in Soil Cement Base

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada
LOG OF BORING NO. P-08
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA
Project No. 65-1701
PM/PE

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TYLER H. BRANCH
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ST. TAMMANY PARISH
CITY OF COVINGTON
GEOTECHNICAL BORINGS

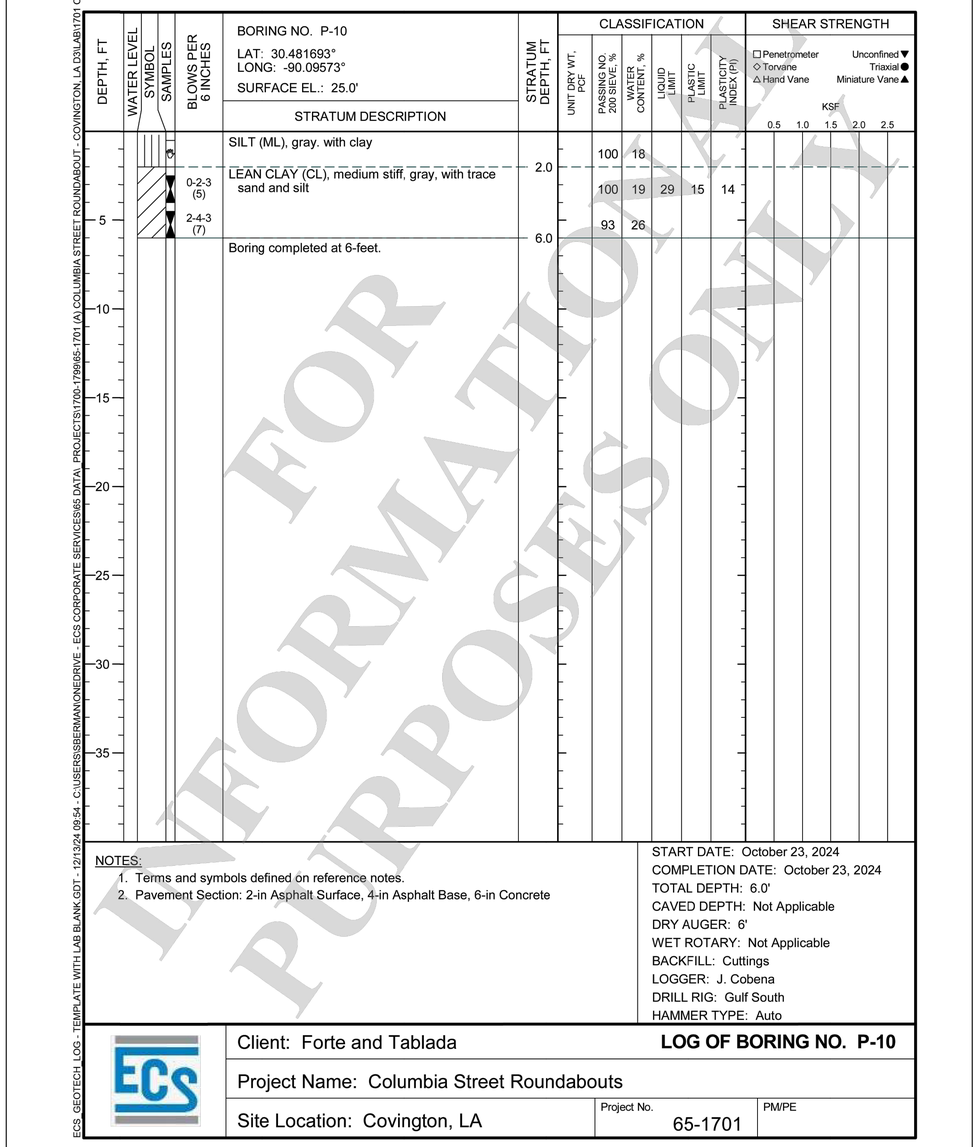
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DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

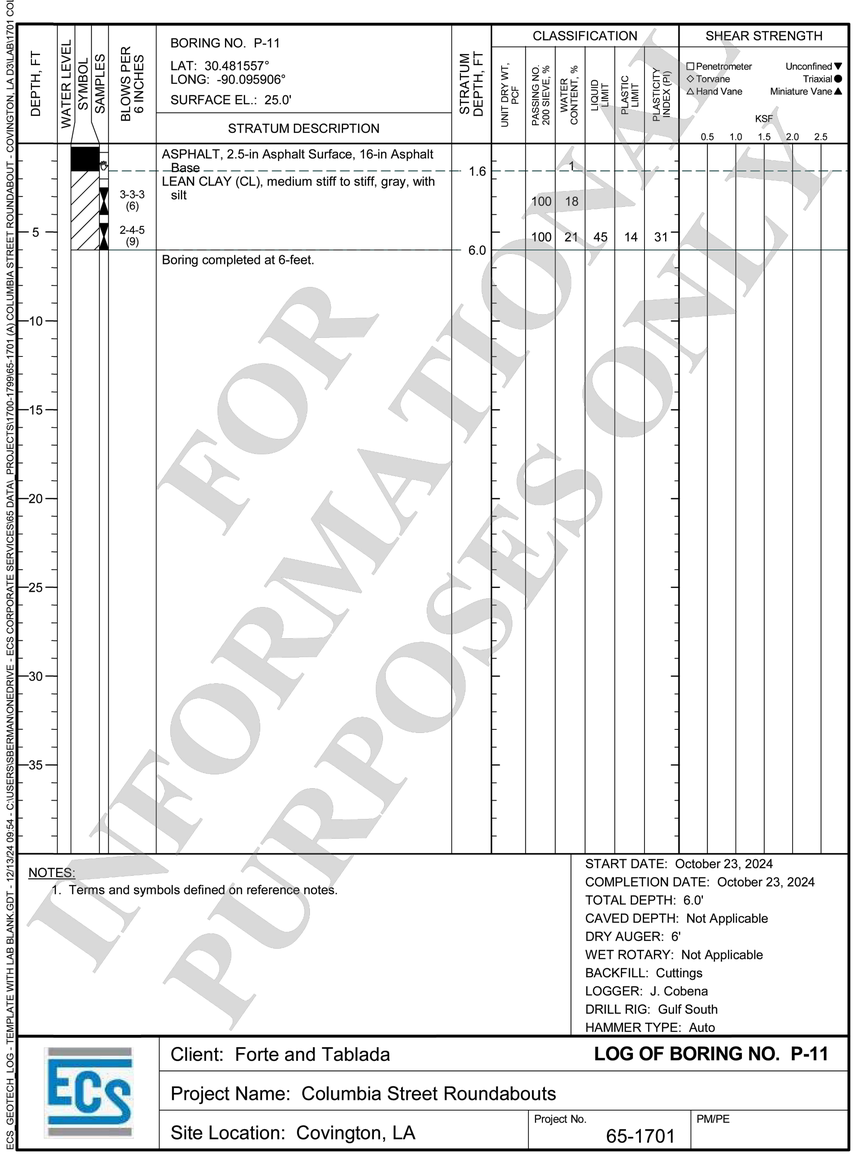
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REGISTERED PROFESSIONAL ENGINEER
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SHEET NUMBER 33

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
GEOTECHNICAL BORINGS

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DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

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6/18/2026 10:12 AM

BORING NO. P-12
LAT: 30.481571°
LONG: -90.096071°
SURFACE EL.: 25.0'

DEPTH, FT	STRATUM DESCRIPTION	STRATUM DEPTH, FT	BLOWS PER 6 INCHES	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)
0	ASPHALT, 2.5-in Asphalt Surface, 16-in Asphalt Base					4			
	SILT (ML), medium stiff to stiff, gray, with clay	1.6	0-0-4 (4)		100	16			
5			3-4-5 (9)		100	21			
	Boring completed at 6-feet.	6.0							

SHEAR STRENGTH: ☐ Penetrometer ◇ Torvane △ Hand Vane; Unconfined ▼ Triaxial ● Miniature Vane ▲; KSF 0.5 1.0 1.5 2.0 2.5

NOTES:
1. Terms and symbols defined on reference notes.

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada
LOG OF BORING NO. P-12
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA
Project No. 65-1701
PM/PE

BORING NO. P-13
LAT: 30.482004°
LONG: -90.095899°
SURFACE EL.: 25.0'

DEPTH, FT	STRATUM DESCRIPTION	STRATUM DEPTH, FT	BLOWS PER 6 INCHES	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)
0	SILT WITH SAND (ML), brown and gray	2.0			83	22			
	LEAN CLAY (CL), soft to medium stiff, gray and tan, with silt		0-2-1 (3)		100	21			
5			1-2-3 (5)		100	22	44	16	28
	Boring completed at 6-feet.	6.0							

SHEAR STRENGTH: ☐ Penetrometer ◇ Torvane △ Hand Vane; Unconfined ▼ Triaxial ● Miniature Vane ▲; KSF 0.5 1.0 1.5 2.0 2.5

NOTES:
1. Terms and symbols defined on reference notes.
2. Pavement Section: 2-in Asphalt Surface, 6-in Asphalt base, 4-in Concrete

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada
LOG OF BORING NO. P-13
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA
Project No. 65-1701
PM/PE

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SHEET NUMBER 34

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
GEOTECHNICAL BORINGS

FORTE & TABLADA

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CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

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TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING

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6/18/2026 10:12 AM

BORING NO. P-14
LAT: 30.481368°
LONG: -90.09572°
SURFACE EL.: 25.0'

DEPTH, FT	STRATUM DESCRIPTION	STRATUM DEPTH, FT	BLOWS PER 6 INCHES	UNIT DRY WT, PCF	PASSING NO. 200 SIEVE, %	WATER CONTENT, %	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)
0	LEAN CLAY (CL), brown and gray, with silt				100	17	30	18	12
	LEAN CLAY (CL), stiff, gray and tan, with silt	2.0	2-3-6 (9)			21	31	17	14
5			3-5-5 (10)		100	22			
	Boring completed at 6-feet.	6.0							
10									
15									
20									
25									
30									
35									

SHEAR STRENGTH (KSF): 0.5, 1.0, 1.5, 2.0, 2.5
□ Penetrometer ◇ Torvane △ Hand Vane — Unconfined ▼ Triaxial ● Miniature Vane ▲

NOTES:
1. Terms and symbols defined on reference notes.
2. Pavement Section: 2-in Asphalt Surface, 4-in Asphalt Base, 6-in Concrete

START DATE: October 23, 2024
COMPLETION DATE: October 23, 2024
TOTAL DEPTH: 6.0'
CAVED DEPTH: Not Applicable
DRY AUGER: 6'
WET ROTARY: Not Applicable
BACKFILL: Cuttings
LOGGER: J. Cobena
DRILL RIG: Gulf South
HAMMER TYPE: Auto

Client: Forte and Tablada
LOG OF BORING NO. P-14
Project Name: Columbia Street Roundabouts
Site Location: Covington, LA
Project No. 65-1701
PM/PE

ECS_GEOTECH_LOG - TEMPLATE WITH LAB BLANK.GDT - 12/13/24 09:54 - C:\USERS\SBERMAN\ONEDRIVE - ECS CORPORATE SERVICES\ECS DATA_PROJECTS\1700-1799\65-1701 (A) COLUMBIA STREET ROUNDABOUT - COVINGTON, LA.D3\LAB\1701 COLUMN

FOR INFORMATIONAL PURPOSES ONLY

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 35

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
GEOTECHNICAL BORINGS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

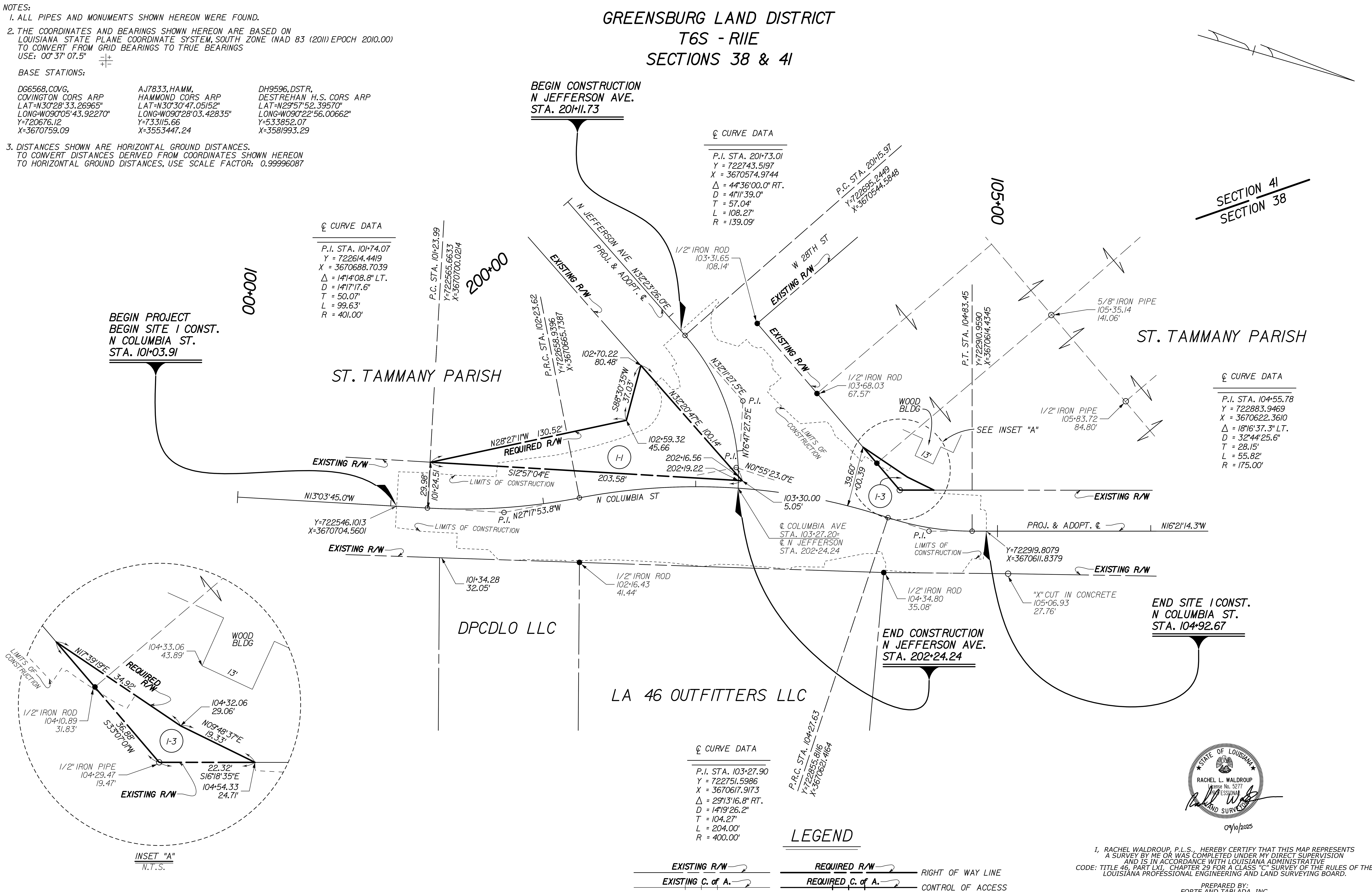
NOTES:
1. ALL PIPES AND MONUMENTS SHOWN HEREON WERE FOUND.
2. THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED ON LOUISIANA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD 83 (2011) EPOCH 2010.00) TO CONVERT FROM GRID BEARINGS TO TRUE BEARINGS USE: 00° 37' 07.5"

BASE STATIONS:

DG6568,COVG,	AJ7833,HAMM,	DH9596,DSTR,
COVINGTON CORS ARP	HAMMOND CORS ARP	DESTREHAN H.S. CORS ARP
LAT=N30°28'33.26965"	LAT=N30°30'47.05152"	LAT=N29°57'52.39570"
LONG=W090°05'43.92270"	LONG=W090°28'03.42835"	LONG=W090°22'56.00662"
Y=720676.12	Y=733115.66	Y=533852.07
X=3670759.09	X=3553447.24	X=3581993.29

3. DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES. TO CONVERT DISTANCES DERIVED FROM COORDINATES SHOWN HEREON TO HORIZONTAL GROUND DISTANCES, USE SCALE FACTOR: 0.99996087

GREENSBURG LAND DISTRICT
T6S - R11E
SECTIONS 38 & 41



PARCEL	OWNER	ACQUISITION		AREA	AREA
I-3	ST. TAMMANY PARISH GOVERNMENT	INST. NO. 1201308	JUNE 9, 2000	0.006 Ac.	266.6 SF
I-2-C-1				DELETED	
I-1	ST. TAMMANY PARISH GOVERNMENT	INST. NO. 1031172	JANUARY 17, 1997	0.117 Ac.	50911 SF

LEGEND

EXISTING R/W	REQUIRED R/W	RIGHT OF WAY LINE
EXISTING C. of A.	REQUIRED C. of A.	CONTROL OF ACCESS
EXIST R/W & EXIST C. of A.	REQ'D R/W & REQ'D C. of A.	RIGHT OF WAY & CONTROL OF ACCESS
		LIMITS OF CONSTRUCTION
		LOT LINE
		APPARENT PROPERTY LINE
		EXISTING SERVITUDE LINE
		SECTION LINE

STATE OF LOUISIANA
RACHEL L. WALDROUP
License No. 5277
PROFESSIONAL LAND SURVEYOR
09/10/2025

I, RACHEL WALDROUP, P.L.S., HEREBY CERTIFY THAT THIS MAP REPRESENTS A SURVEY BY ME OR WAS COMPLETED UNDER MY DIRECT SUPERVISION AND IS IN ACCORDANCE WITH LOUISIANA ADMINISTRATIVE CODE: TITLE 46, PART LXI, CHAPTER 29 FOR A CLASS "C" SURVEY OF THE RULES OF THE LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD.

PREPARED BY:
FORTE AND TABLADA, INC.
9107 INTERLINE AVE, BATON ROUGE, LA 70809
(225) 927-9321

FILE NO. XX-XX-X-XXX | R/W SHEET NO. 1

SHEET NUMBER 36

PARISH	CONTROL SECTION	STATE PROJECT
ST. TAMMANY	N/A	N/A

COMPUTED	RAW	DETAILED	THI	DATE	08/22/2025
CHECKED	RLW	CHECKED	RLW	SCALE	1"=30'

RIGHT OF WAY MAP
CITY OF COVINGTON PROJ. NO. C0234:
COLUMBIA ROUNDABOUTS
ST TAMMANY PARISH

FORTE & TABLADA INC.

DATE	REVISION DESCRIPTION	BY
6/3/2026	DELETED PARCEL I-2-C-1	RLW

6/3/2026 14:45
R:\2023\231312 - Jefferson_Columbia_30th Roundabout\12.0 Survey\Right of Way\4_Final Right of Way Map\Base ROW Map 01.dgn
Final Right-of-Way Map

Final Right of Way Map
R:\2023\231312 - Jefferson_Columbia_30th Roundabout\12.0 Survey\Right of Way\4_Final Right of Way Map\Base ROW Map 02+dgn
9/10/2025 17:13

NOTES:
1. ALL PIPES AND MONUMENTS SHOWN HEREON WERE FOUND.
2. THE COORDINATES AND BEARINGS SHOWN HEREON ARE BASED ON LOUISIANA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE (NAD 83 (2011) EPOCH 2010.00) TO CONVERT FROM GRID BEARINGS TO TRUE BEARINGS USE: 00°37'06.1"

BASE STATIONS:

DG6568, COVG, COVINGTON CORS ARP	AJ7833, HAMM, HAMMOND CORS ARP	DH9596, DSTR, DESTREHAN H.S. CORS ARP
LAT=N30°28'33.26965"	LAT=N30°30'47.05152"	LAT=N29°57'52.39570"
LONG=W090°05'43.92270"	LONG=W090°28'03.42835"	LONG=W090°22'56.00662"
Y=720676.12	Y=733115.66	Y=533852.07
X=3670759.09	X=3553447.24	X=3581993.29

3. DISTANCES SHOWN ARE HORIZONTAL GROUND DISTANCES. TO CONVERT DISTANCES DERIVED FROM COORDINATES SHOWN HEREON TO HORIZONTAL GROUND DISTANCES, USE SCALE FACTOR: 0.99996123

GREENSBURG LAND DISTRICT
T6S - R11E
SECTIONS 38 & 41

℄ CURVE DATA "A"
P.I. STA. 111+14.99
Y = 723516.9461
X = 3670436.6117
Δ = 16°28'49.3" LT.
D = 19°05'54.9"
T = 43.45'
L = 86.29'
R = 300.00'

℄ CURVE DATA "B"
P.I. STA. 112+66.20
Y = 723644.5067
X = 3670354.2963
Δ = 34°24'27.6" RT.
D = 16°22'12.8"
T = 108.37'
L = 210.18'
R = 350.00'

℄ CURVE DATA "C"
P.I. STA. 113+99.36
Y = 723784.4262
X = 3670358.1394
Δ = 17°57'32.4" LT.
D = 28°38'52.4"
T = 31.60'
L = 62.69'
R = 200.00'

℄ CURVE DATA "D"
P.I. STA. 115+15.64
Y = 723896.2853
X = 3670325.2478
Δ = 03°15'06.5" LT.
D = 03°05'30.4"
T = 84.99'
L = 169.86'
R = 1853.16'

℄ CURVE DATA "E"
P.I. STA. 301+46.56
Y = 723577.0723
X = 3670263.7385
Δ = 01°46'44.6" LT.
D = 19°05'54.9"
T = 4.66'
L = 9.32'
R = 300.00'

℄ CURVE DATA "F"
P.I. STA. 301+93.72
Y = 723617.3859
X = 3670288.2006
Δ = 17°50'55.1" RT.
D = 2°10'17.1"
T = 42.50'
L = 84.31'
R = 270.63'

℄ CURVE DATA "G"
P.I. STA. 302+61.85
Y = 723662.4369
X = 3670340.2267
Δ = 16°25'54.9" RT.
D = 3°25'35.9"
T = 26.32'
L = 52.29'
R = 182.32'

℄ CURVE DATA "H"
P.I. STA. 400+28.81
Y = 723685.2628
X = 3670390.4103
Δ = 17°57'27.5" RT.
D = 3°25'35.9"
T = 28.81'
L = 57.14'
R = 182.32'

℄ CURVE DATA "I"
P.I. STA. 400+94.35
Y = 723692.7364
X = 3670455.9982
Δ = 15°18'35.4" LT.
D = 20°41'53.1"
T = 37.21'
L = 73.97'
R = 276.82'

℄ CURVE DATA "J"
P.I. STA. 401+56.00
Y = 723715.7366
X = 3670513.6813
Δ = 09°29'13.7" RT.
D = 19°05'54.9"
T = 24.89'
L = 49.67'
R = 300.00'

300+00 BEGIN SITE 2 CONST. MONROE ST. STA. 301+22.31
500+00
502+00
111+00
115+00
401+00
402+00

N32°55'10.5"E PROJ. & ADOPT. ℄ MONROE ST
EXISTING R/W
P.R.C. STA. 111+57.84 Y=723553.4508 X=3670413.0550
P.C. STA. 110+71.55 Y=723475.2584 X=3670448.8446
Y=723573.1623 X=3670281.2071
P.C. STA. 301+41.91
P.R.C. STA. 301+51.22 Y=723581.1059 X=3670266.1473
•43.59 23.64'
℄ COLUMBIA AVE STA. 112+88.05= ℄ MONROE ST 302+87.81
P.C.C. STA. 114+30.71 Y=723814.7461 X=3670349.2240
1/2" IRON ROD 500+52.15 38.11'
SPLIT W 30TH AVE
EXISTING R/W
S56°34'54.5"E
SURV. & ABAND. ℄
LIMITS OF CONSTRUCTION
"AA"
P.C.C. STA. 302+35.53 Y=723645.2049 X=3670320.3268
N12°29'44"E 132.23'
REQUIRED R/W
S33°04'26"W 123.82'
1" IRON ROD 501+73.77 35.53'
113+37.06 87.19'
S54°37'37.9"E
46.48' S56°57'37"E
1/2" IRON ROD 113+12.88 50.81'
301+38.31 24.69'
P.I.
(E)
(F)
(G)
2-3
S55°25'11"W 51.99'
N35°11'06"E 129.21'
N8°00'22"W 16.27'
112+15.45 51.41'
N4°41'55"W 28.65'
112+22.79 65.24'
111+91.22 43.36'
S87°51'26"W 15.19'
2-1
REQUIRED R/W
1/2" IRON ROD 302+71.84 1.31'
P.I.
S56°49'35"E 22.03'
"CC"
"BB"
"DD"
S52°16'53.2"E
S47°47'32.6"E
2-5
SEE INSET "B"
EXISTING R/W
24.41'
84.26'
EXHAUST SYSTEMS INC
RBLN PROPERTIES LLC
BEGIN SITE 2 CONSTRUCTION N COLUMBIA ST STA. 110+59.05
END PROJECT END SITE 2 N COLUMBIA ST STA. 114+78.98
N16°21'14.3"W
Y=723463.2710 X=3670452.3820
N COLUMBIA ST
S16°21'45"E 160.29'
24.59'
107.18'
P.I.
(A)
PROJ. & ADOPT. ℄ (B)
P.R.C. STA. 400+57.14 Y=723688.5242 X=3670419.0321
112+38.71
53.84'
1/2" IRON ROD 112+67.04 0.05'
P.I.
(H)
112+66.89 54.66'
43.09'
45.72'
SEE INSET "A"
(C)
(D)
Y=723860.8766 X=3670335.0042
EXISTING R/W
LIMITS OF CONSTRUCTION
1/2" IRON ROD 110+75.07 27.70'
1" IRON PIPE 111+19.56 33.58'
JAMES MANTON JR, et ux
33.94'
N16°53'26"W
REQUIRED R/W
2-2
68.87'
S55°19'40"W 73.17'
N13°45'47"E
112+61.99 54.51'
1/2" IRON PIPE
(I)
(J)
P.I.
2-4
60'
113+75.07 53.96'
36'
BRICK BLDG
1/2" IRON ROD 114+63.95 25.72'
401+20.98 25.34'
P.R.C. STA. 401+31.11 Y=723706.5597 X=3670490.5403
P.T. STA. 401+80.79 Y=723721.1661 X=3670537.9761
P.R.C. STA. 113+68.02 Y=723752.2346 X=3670357.2716
HIBISCUS PROPERTIES LLC
EXISTING R/W
W 30TH AVE

INSET "B" N.T.S.
114+03.18 43.85'
N55°50'51"W 24.96'
EXISTING R/W
REQUIRED R/W
N33°09'09"E 18.97'
2-5
EXISTING R/W
S18°36'04"E 31.78'
114+20.51 30.13'
1/2" IRON PIPE 113+84.26 24.41'

INSET "A" N.T.S.
1/2" IRON ROD 113+53.84 42.42'
EXISTING R/W
N17°08'22"W 19.76'
2-4
S78°23'36"W 11.39'
EXISTING R/W
REQUIRED R/W
23.74' S45°39'59"E
113+73.31 36.41'
113+56.37 53.59'

LEGEND

EXISTING R/W / REQUIRED R/W	RIGHT OF WAY LINE
EXISTING C. of A. / REQUIRED C. of A.	CONTROL OF ACCESS
EXIST R/W & EXIST C. of A. / REQ'D R/W & REQ'D C. of A.	RIGHT OF WAY & CONTROL OF ACCESS
	LIMITS OF CONSTRUCTION
	LOT LINE
	APPARENT PROPERTY LINE
	EXISTING SERVITUDE LINE
	SECTION LINE

2-5	EXHAUST SYSTEMS, INC.	INST. NO. 1118961	MARCH 17, 2000	0.006 Ac.	245.5 SF
2-4	HIBISCUS PROPERTIES, LLC	INST. NO. 1992682	AUGUST 14, 2015	0.003 Ac.	112.0 SF
2-3	ZACHARY S. CARR	INST. NO. 2069019	JULY 3, 2017	0.066 Ac.	2877.3 SF
2-2	JAMES H. MANTON JR, et ux	INST. NO. 1228992	DECEMBER 28, 2000	0.027 Ac.	1161.0 SF
2-1	RBLN PROPERTIES, LLC	INST. NO. 1703263	OCTOBER 22, 2008	0.141 Ac.	6151.3 SF
PARCEL	OWNER	ACQUISITION		AREA	AREA

PI. STA. TABLE "W 30TH SPLIT"

"AA"	STA. 501+08.31	Δ = 01°57'16.6" RT.	Y=723790.4770	X=3670226.3560
"BB"	STA. 502+05.79	Δ = 02°20'44.7" RT.	Y=723734.0460	X=3670305.8420
"CC"	STA. 502+45.02	Δ = 04°29'20.5" RT.	Y=723710.0480	X=3670336.8710
"DD"	STA. 502+77.45	Δ = 38°48'45.3" LT.	Y=723688.2640	X=3670360.8890

STATE OF LOUISIANA
RACHEL L. WALDROUP
License No. 5277
PROFESSIONAL LAND SURVEYOR
09/10/2025

I, RACHEL WALDROUP, P.L.S., HEREBY CERTIFY THAT THIS MAP REPRESENTS A SURVEY BY ME OR WAS COMPLETED UNDER MY DIRECT SUPERVISION AND IS IN ACCORDANCE WITH LOUISIANA ADMINISTRATIVE CODE: TITLE 46, PART LXI, CHAPTER 29 FOR A CLASS "C" SURVEY OF THE RULES OF THE LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD.

PREPARED BY:
FORTE AND TABLADA, INC.
9107 INTERLINE AVE, BATON ROUGE, LA 70809
(225) 927-9321

SHEET NUMBER 37

PARISH	CONTROL SECTION	STATE PROJECT
ST. TAMMANY	N/A	N/A

COMPUTED	CHECKED	DETAILED	CHECKED	DATE	SCALE
RAW	RLW	THI	RLW	08/22/2025	1"=30'

RIGHT OF WAY MAP
CITY OF COVINGTON PROJ. NO. C0234:
COLUMBIA ROUNDABOUTS
ST TAMMANY PARISH

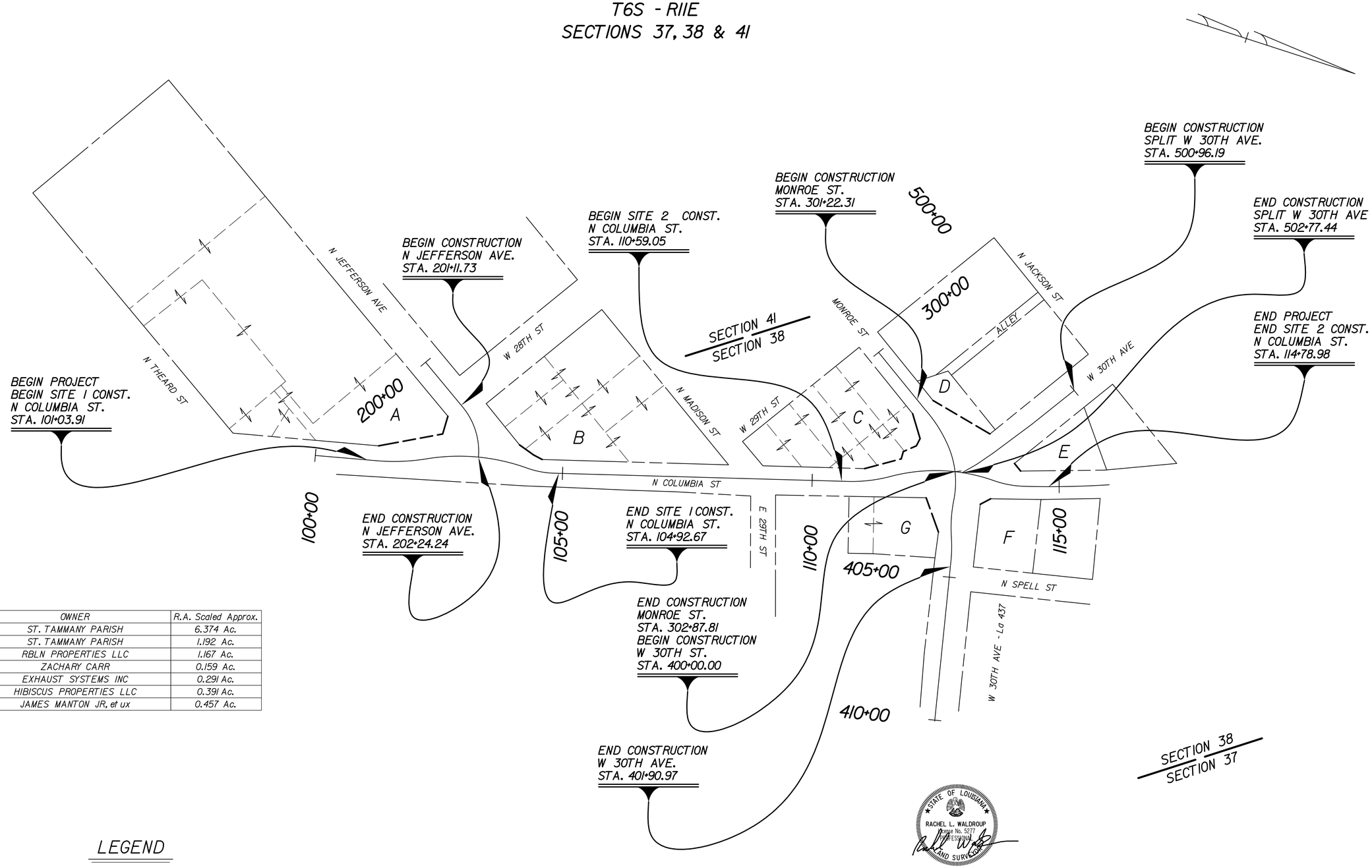
FORTE & TABLADA INC.

BY	REVISION DESCRIPTION	DATE

FILE NO. XX-XX-X-XXX
R/W SHEET NO. 2

Final Right-of-Way Map
R:\2023\231312 - Jefferson_Columbia_30th Roundabout\12.0 Survey\Right of Way\Final Right of Way Map\Base ROW Map 03+dgn 12/17/2025 12:43

GREENSBURG LAND DISTRICT
T6S - RIIE
SECTIONS 37, 38 & 41



NO.	OWNER	R.A. Scaled Approx.
A	ST. TAMMANY PARISH	6.374 Ac.
B	ST. TAMMANY PARISH	1.192 Ac.
C	RBLN PROPERTIES LLC	1.167 Ac.
D	ZACHARY CARR	0.159 Ac.
E	EXHAUST SYSTEMS INC	0.291 Ac.
F	HIBISCUS PROPERTIES LLC	0.391 Ac.
G	JAMES MANTON JR, et ux	0.457 Ac.

LEGEND

EXISTING R/W / REQUIRED R/W	RIGHT OF WAY LINE
EXISTING C. of A. / REQUIRED C. of A.	CONTROL OF ACCESS
EXIST R/W & EXIST C. of A. / REQ'D R/W & REQ'D C. of A.	RIGHT OF WAY & CONTROL OF ACCESS
	LIMITS OF CONSTRUCTION
	LOT LINE
	APPARENT PROPERTY LINE
	EXISTING SERVITUDE LINE
	SECTION LINE

PARCEL	OWNER	ACQUISITION	AREA	AREA

STATE OF LOUISIANA
RACHEL L. WALDROUP
License No. 5277
PROFESSIONAL
LAND SURVEYOR
09/10/2025

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PREPARED BY:
FORTE AND TABLADA, INC.
9107 INTERLINE AVE, BATON ROUGE, LA 70809
(225) 927-9321

FILE NO. XX-XX-X-XXX | R/W SHEET NO. 3

SHEET NUMBER 38

PARISH	CONTROL SECTION	STATE PROJECT
ST. TAMMANY	N/A	N/A

COMPUTED	CHECKED	DETAILED	CHECKED	DATE	SCALE
RAW	RLW	THI	RLW	08/22/2025	1"=30'

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

RIGHT OF WAY MAP
CITY OF COVINGTON PROJ. NO. C0234:
COLUMBIA ROUNDABOUTS
ST TAMMANY PARISH

FORTE & TABLADA INC.

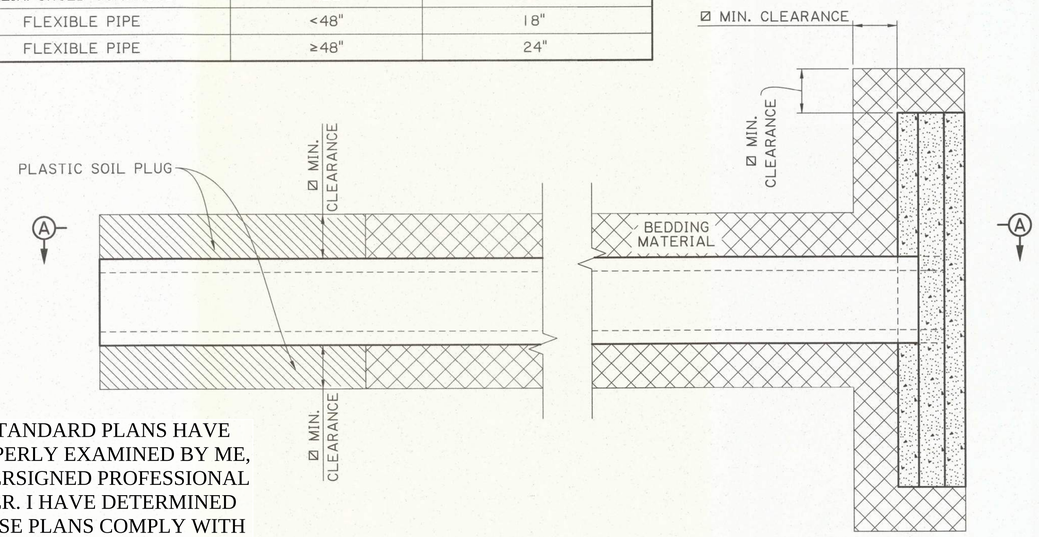
DATE	REVISION DESCRIPTION	BY
11/6/25	CORRECTED R.A. FOR TRACT NO. "E"	RLW
12/17/25	REVISED R.A. FOR TRACT NO. "B"	RLW

09:45
10/23/2023

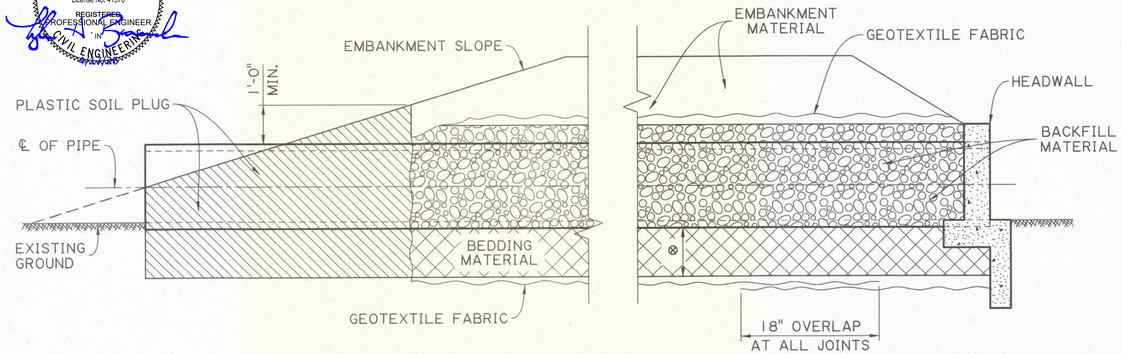
GENERAL NOTES :

1. REINFORCED CONCRETE PIPE AND FLEXIBLE PIPE ARE SHOWN AS TYPICAL STRUCTURES. DETAILS ALSO APPLY TO REINFORCED CONCRETE BOX CULVERT, REINFORCED CONCRETE PIPE ARCH, CORRUGATED METAL PIPE ARCH, AND CORRUGATED STRUCTURAL PLATE STRUCTURES.
2. CONSTRUCTION COVER REQUIREMENTS MAY EXCEED FINAL COVER.
3. CROSS DRAIN DETAILS APPLY TO ALL REACHES OF PIPE UNDER RIGID OR FLEXIBLE ROADWAYS.
4. FOR STRUCTURES INSTALLED OUTSIDE THE LIMITS OF THE ROADWAY, THE 12" OF FINAL BACKFILL ABOVE TYPE B BACKFILL UP TO THE EXISTING GROUND SHALL BE PLASTIC SOIL BLANKET MATERIAL. IF THE EMBANKMENT TO BE INSTALLED IS GREATER THAN 12" ABOVE EXISTING GROUND IN THE AREA OVER THE STRUCTURE, THEN THE PLASTIC SOIL BLANKET IS NOT REQUIRED AND TYPE B BACKFILL MAY EXTEND TO EXISTING GROUND.

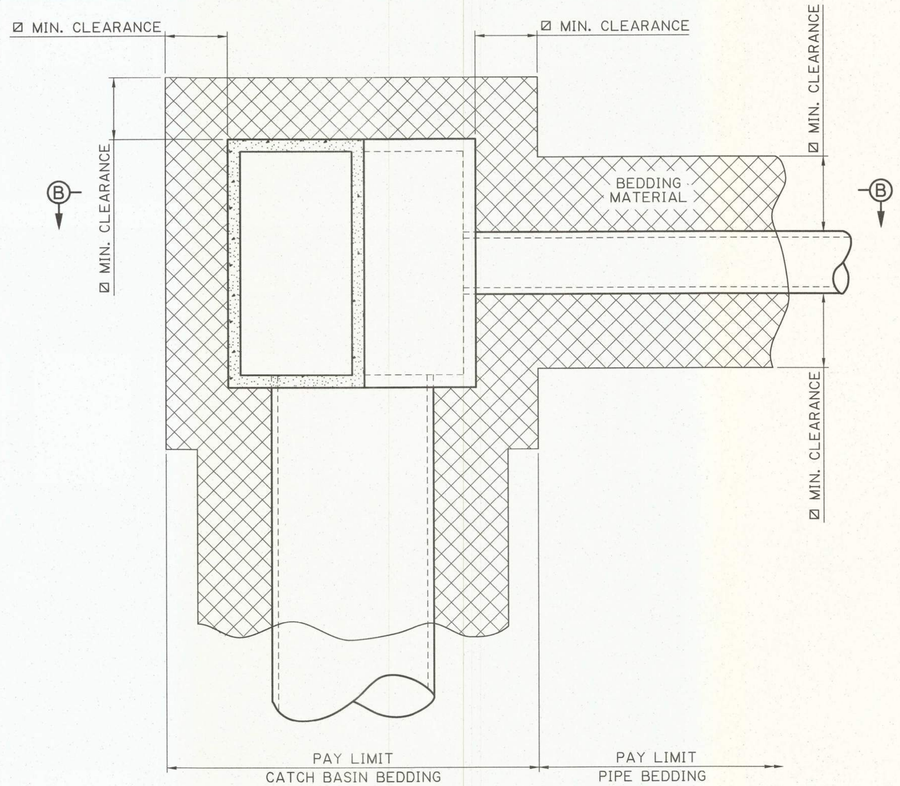
Ø MINIMUM TRENCH CLEARANCE		
TYPE OF STRUCTURE	INSIDE DIAMETER	MIN. CLEARANCE
REINFORCED CONCRETE	ALL	18"
FLEXIBLE PIPE	<48"	18"
FLEXIBLE PIPE	≥48"	24"



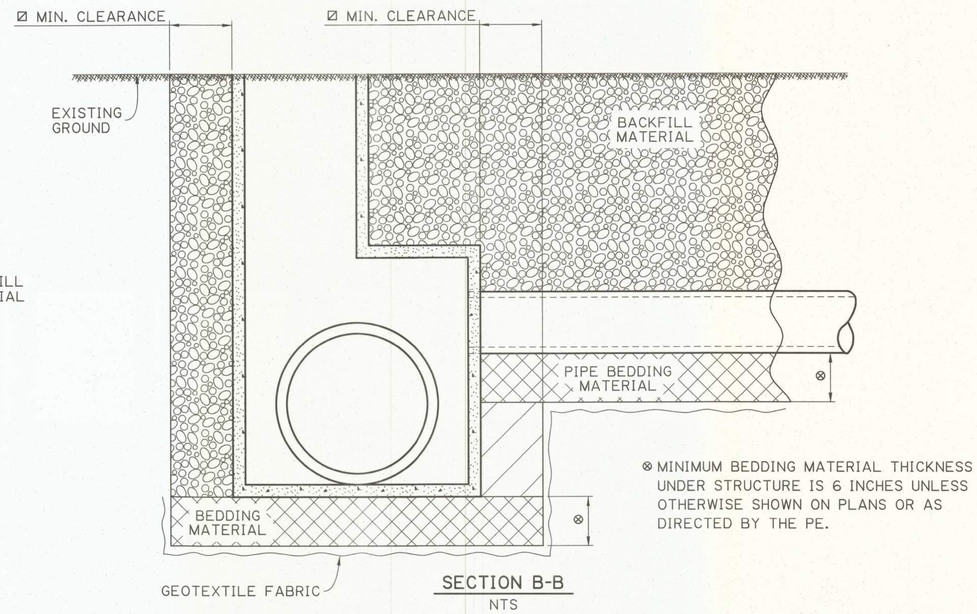
TYPICAL CROSS DRAIN INSTALLATION
WITH AND WITHOUT HEADWALL
(EMBANKMENT MATERIAL NOT SHOWN FOR CLARITY)
NTS



SECTION A-A
WITH AND WITHOUT HEADWALL
NTS



TYPICAL CATCH BASIN AND STORM DRAIN INSTALLATION
NTS



SECTION B-B
NTS

⊗ MINIMUM BEDDING MATERIAL THICKNESS UNDER STRUCTURE IS 6 INCHES UNLESS OTHERWISE SHOWN ON PLANS OR AS DIRECTED BY THE PE.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41578
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

SHEET NUMBER	201
PARISH	
CONTROL SECTION	
STATE PROJECT	
DESIGN C. NICKEL / CHECK J. RAUSER	
DETAIL L. HASTINGS / CHECK A. NICKEL	
REVIEW C. NICKEL	SERIES # 1 OF 2

STATE OF LOUISIANA
CHRISTOPHER J. NICKEL
License No. 30572
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
10/23/2023

APPROVED BY CHIEF ENGINEER:
DATE: 10/26/2023

DRAINAGE STRUCTURES
BEDDING & BACKFILL
BM-01
STANDARD PLAN

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
PAVEMENT & GEOTECHNICAL SERVICES

10/23/2023 09:18

⍁ MINIMUM TRENCH CLEARANCE		
TYPE OF STRUCTURE	INSIDE DIAMETER	MIN. CLEARANCE
REINFORCED CONCRETE	ALL	18"
FLEXIBLE PIPE	<48"	18"
FLEXIBLE PIPE	≥48"	24"

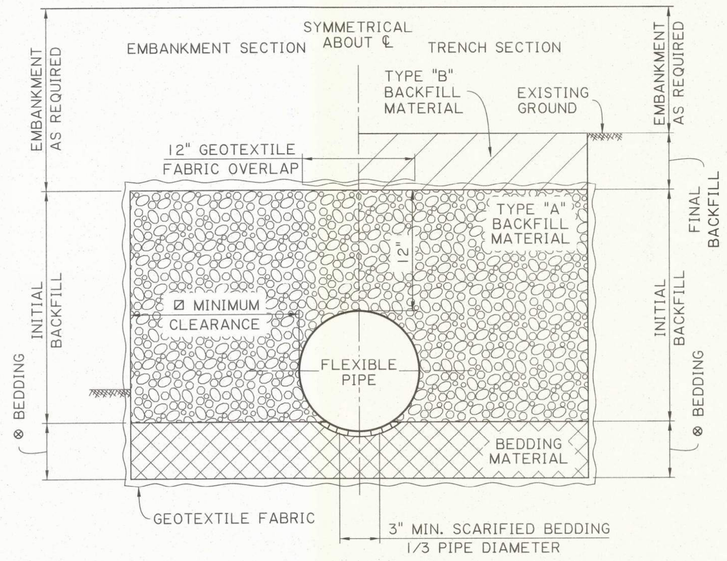
THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

⊗ MINIMUM BEDDING MATERIAL THICKNESS UNDER STRUCTURE IS 6 INCHES UNLESS OTHERWISE SHOWN ON PLANS OR AS DIRECTED BY THE PE.

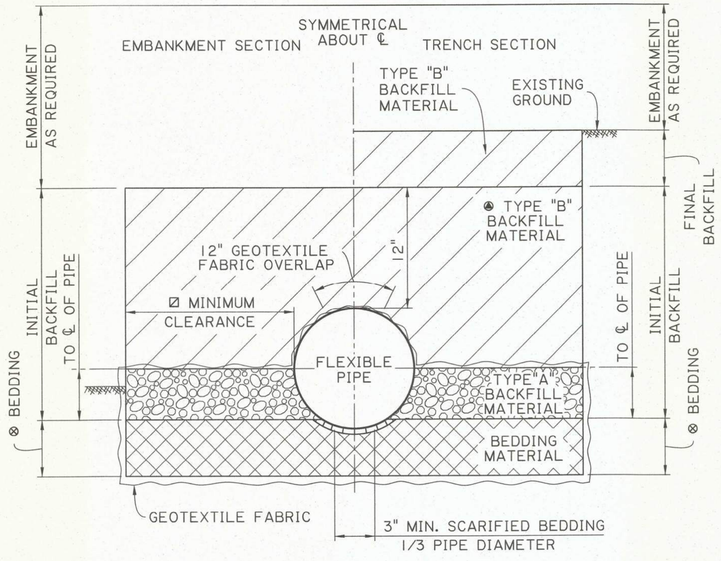
⚠ NO BEDDING MATERIAL REQUIRED UNLESS OTHERWISE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE PE.

㊱ REFER TO NOTE 3 ON SHEET 1 OF THIS SERIES.



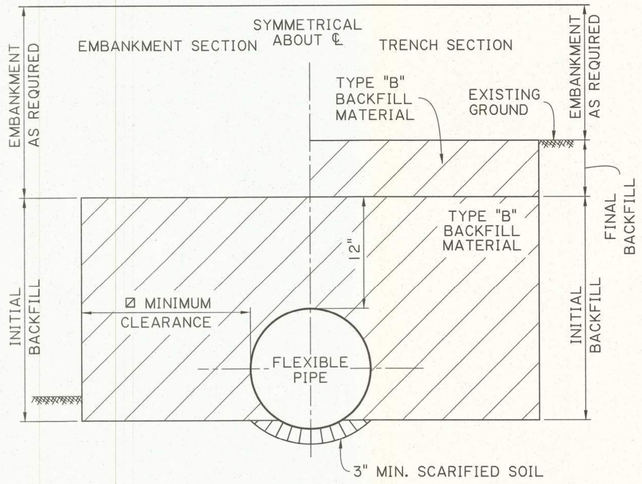
FLEXIBLE PIPE CROSS DRAIN

TRENCH AND EMBANKMENT INSTALLATIONS
SCALE: 1½"=1'-0"



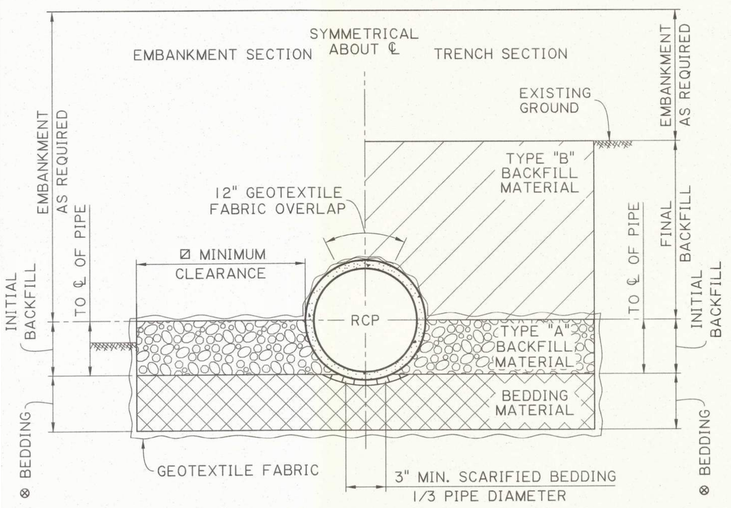
FLEXIBLE PIPE STORM DRAIN

TRENCH AND EMBANKMENT INSTALLATIONS
SCALE: 1½"=1'-0"



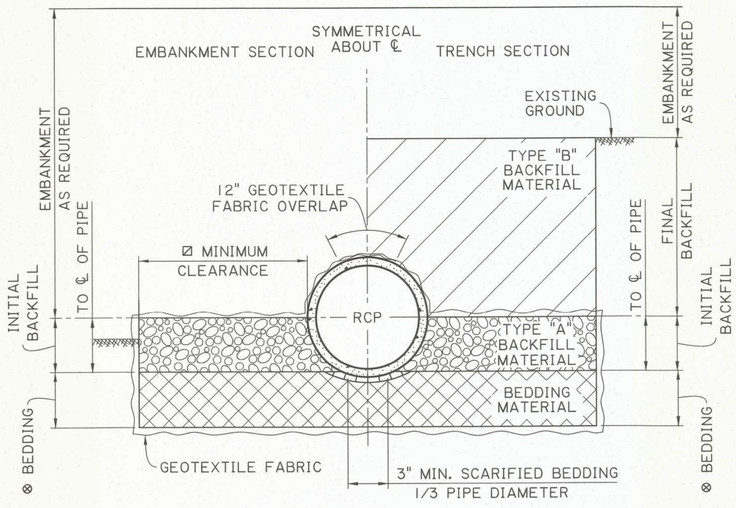
⚠ FLEXIBLE PIPE SIDE DRAIN

TRENCH AND EMBANKMENT INSTALLATIONS
SCALE: 1½"=1'-0"



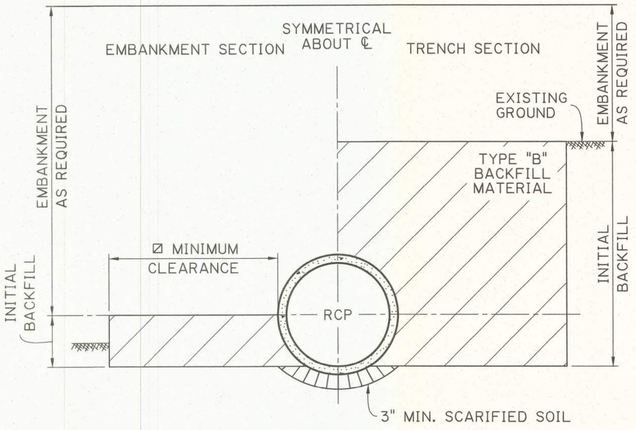
REINFORCED CONCRETE PIPE CROSS DRAIN

TRENCH AND EMBANKMENT INSTALLATIONS
SCALE: 1½"=1'-0"



REINFORCED CONCRETE PIPE STORM DRAIN

TRENCH AND EMBANKMENT INSTALLATIONS
SCALE: 1½"=1'-0"



⚠ REINFORCED CONCRETE PIPE SIDE DRAIN

TRENCH AND EMBANKMENT INSTALLATIONS
SCALE: 1½"=1'-0"

SHEET NUMBER	202

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	C. NICKEL
CHECK	J. RAUSER
DETAIL	L. HASTINGS
CHECK	A. NICKEL
REVIEW	C. NICKEL
SERIES #	2 OF 2

STATE OF LOUISIANA
CHRISTOPHER J. NICKEL
License No. 30572
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
10/23/2023

APPROVED BY CHIEF ENGINEER: DATE: 10/26/2023

DRAINAGE STRUCTURES

TYPICAL SECTIONS FOR CROSS DRAINS & SIDE DRAINS

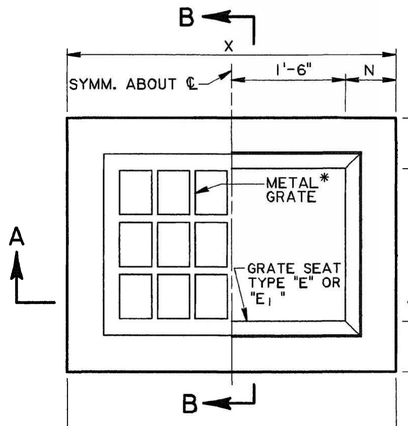
STANDARD PLAN BM-01

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

PAVEMENT & GEOTECHNICAL SERVICES

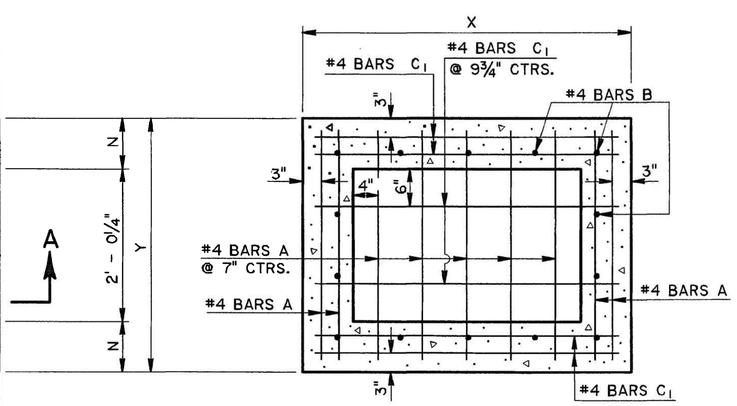
5/4/2020 14:23

DIMENSIONS			
DEPTH OF BASIN	N	X	Y
FT.	IN.	FT.- IN.	FT.- IN.
0 - 8	7	4-2	3-2¼
8.1 - 12	8	4-4	3-4¼



PLAN

* GRATE TO BE TYPE "B" OR "C"
TYPE "B" SHOWN.

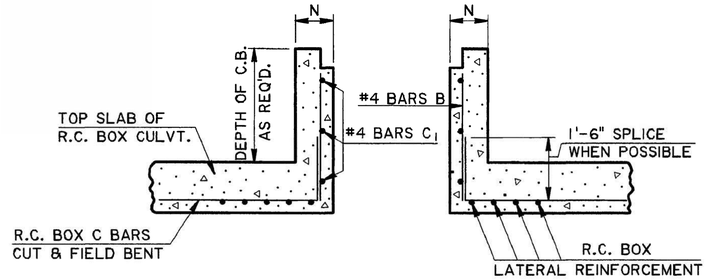


HORIZONTAL SECTION

SHOWING BOTTOM SLAB REINFORCING STEEL

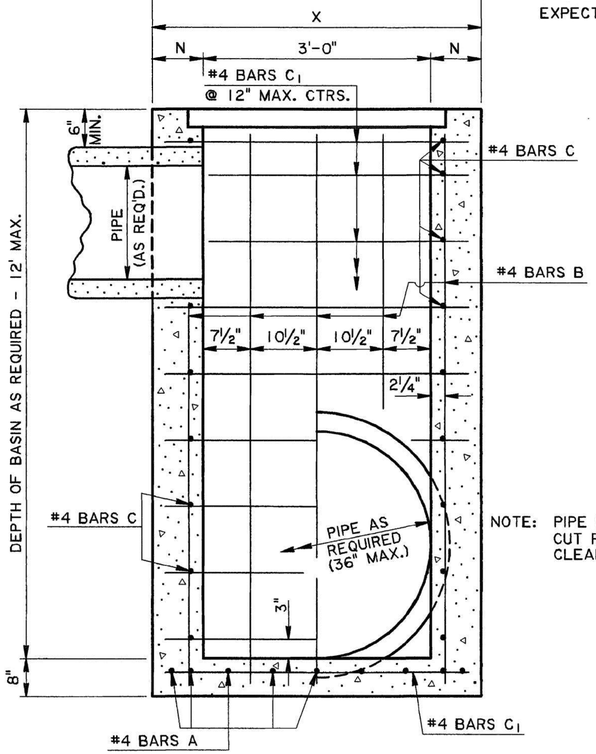
NOTE: TYPE "B" GRATE TO BE USED WHERE NO PEDESTRIAN TRAFFIC IS EXPECTED.

TYPE "C" GRATE TO BE USED WHERE PEDESTRIAN TRAFFIC IS EXPECTED.



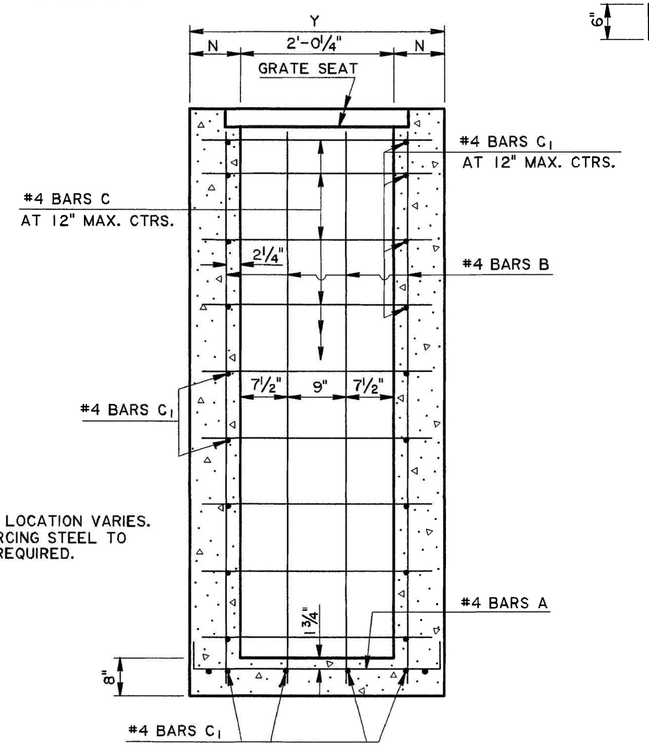
LONGITUDINAL SECTION

SHOWING CATCH BASIN
USED WITH R.C. BOX CULVERT.

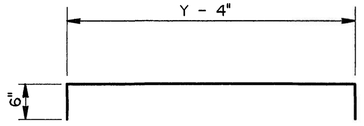


SECTION A-A

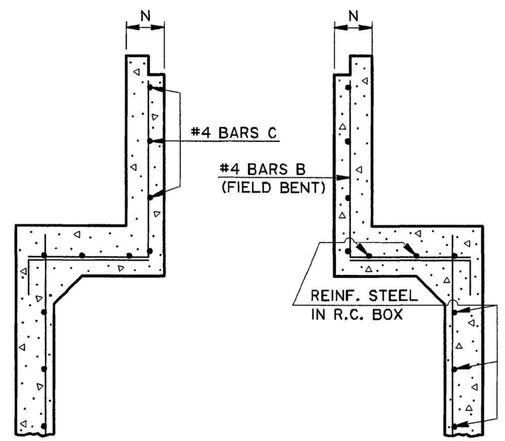
NOTE: PIPE SIZE & LOCATION VARIES. CUT REINFORCING STEEL TO CLEAR, AS REQUIRED.



SECTION B-B



#4 BARS A



TRANSVERSE SECTION

SHOWING CATCH BASIN
USED WITH R.C. BOX CULVERT.

GENERAL NOTES:

SECTION 702 OF THE CURRENT DOTD STANDARD SPECIFICATIONS SHALL APPLY.

DIMENSIONS RELATING TO REINFORCING STEEL ARE TO BAR CENTERS.

VERTICAL REINFORCING STEEL MAY BE SPLICED. SPLICE LENGTH IS 35 DIAMETERS.

FOR DETAILS OF GRATE AND SEAT, SEE STD. PLAN MC-01 (TYPE B or C).

SEE PLANS FOR TYPE OF GRATE TO BE USED FOR EACH CATCH BASIN.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41575
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

SHEET NUMBER 203

PARISH | FEDERAL PROJECT | STATE PROJECT

DESIGNED PAA | DETAILED KAJ | CHECKED WMR | DATE 1-31-97 | SHEET 1 OF 1

DATE: 11-2-05

BY	REVISION DESCRIPTION	DATE	APPROVED BY CHIEF ENGINEER
JCM	Converted Metric CB-01M to English CB-01	11-2-00	

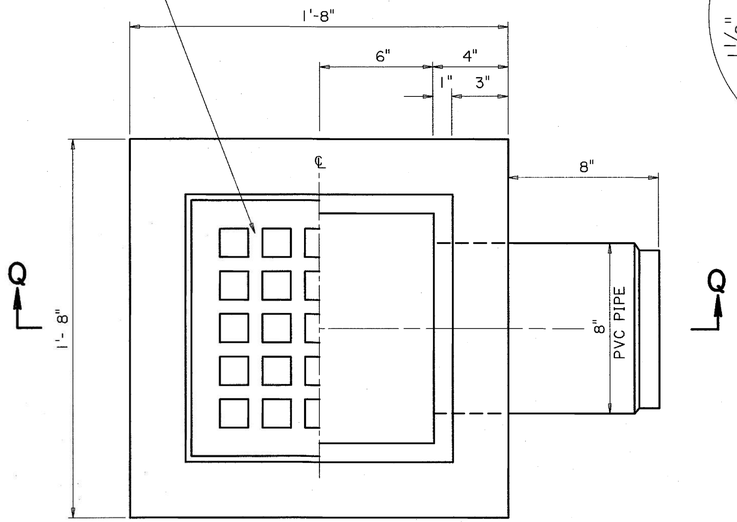
CONCRETE OPEN TOP CATCH BASIN
Max. Pipe: 36" x 24"
Max. Depth: 12'
To Be Used In Conjunction With Std. Plan MC-01

STANDARD PLAN CB-01

HYDRAULICS SECTION

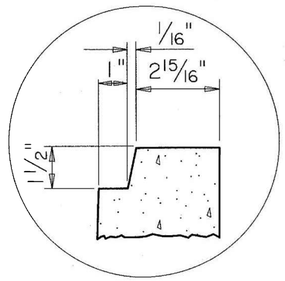
IP_PWP:dms09544\CB-01.dgn

FOR DETAILS OF CAST IRON GRATE, SEE STD. PLAN MC-01, TYPE D.



PLAN

WEIGHT APPROX. 460 LBS PLUS GRATE
RIGHT HALF OF GRATE NOT SHOWN FOR CLARITY



INSET A

(TYPICAL)

NOTE:

STANDARD PLAN MC-01 (DETAILS OF GRATES, FRAMES, SEATS LIDS, ETC.), MAY BE OBTAINED FROM:

HYDRAULICS & STANDARD PLANS
DEPARTMENT OF TRANSPORTION
AND DEVELOPMENT
P.O. BOX 94245
CAPITOL STATION
BATON ROUGE, LA 70804

PRECAST OPTION

NOTES:

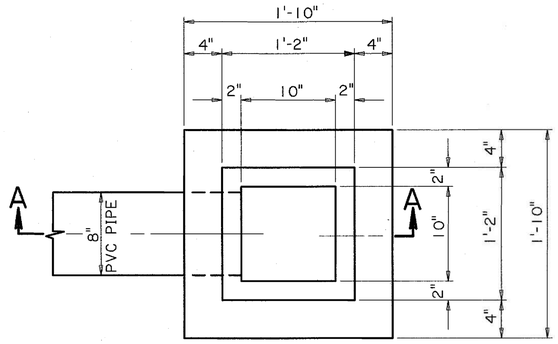
CONCRETE TO BE CLASS A1.

CATCH BASIN TO BE SUPPLIED COMPLETE, INCLUDING C.I. GRATE.

THE CATCH BASIN SUPPLIER SHALL BE RESPONSIBLE FOR SELECTION AND PLACEMENT OF ANY PICK-UP AND HANDLING DEVICES. SETTING TOLERANCE TO BE +0 & -1".

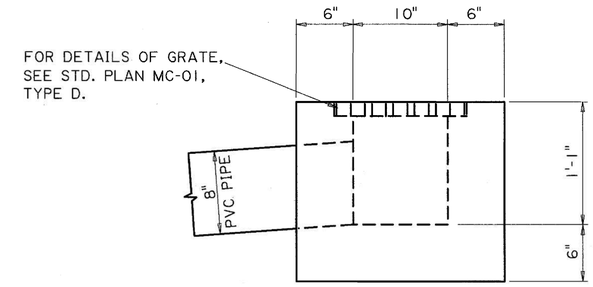
CAST-IN-PLACE OPTION

CLASS "M" CONCRETE

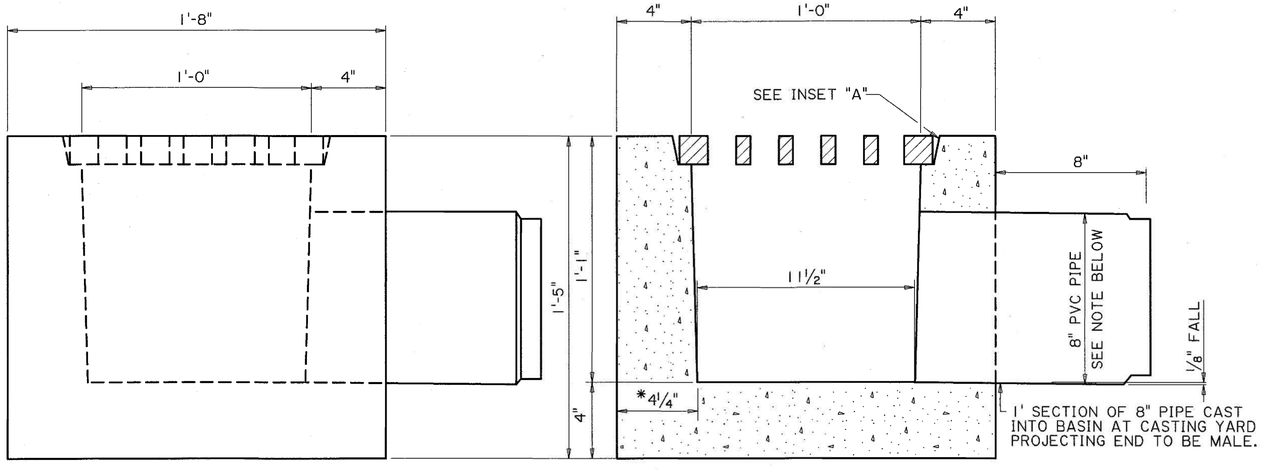


PLAN

GRATE NOT SHOWN



ELEVATION



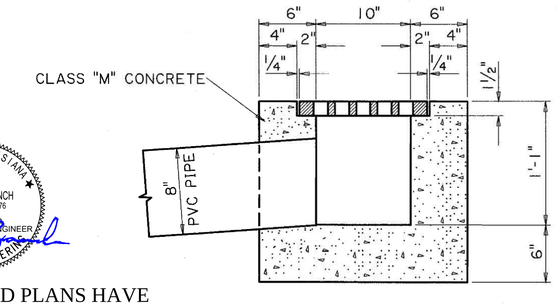
ELEVATION

*4" UNIFORM WALLS MAY BE USED, AT SUPPLIERS OPTION

SECTION Q-Q

NOT TO BE USED WHERE SUBJECT TO VEHICULAR TRAFFIC

AN 8" RESILIENT BOOT CONNECTOR (SUCH AS A-LOK, Z-LOK OR QUIK-LOK) IS ALLOWED AS AN ALTERNATE TO CAST-IN-PLACE PIPE DETAIL



SECTION A-A

NOT TO BE USED WHERE SUBJECT TO VEHICULAR TRAFFIC

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

SHEET NUMBER 204

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN CDJ | DETAIL TL | REVIEW 5-17-17
CHECK JCM | CHECK MH | SERIES # 1 OF 1

STATE OF LOUISIANA
MITRA HASHEMIEH
REG. No. 28546
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
2/5/2019

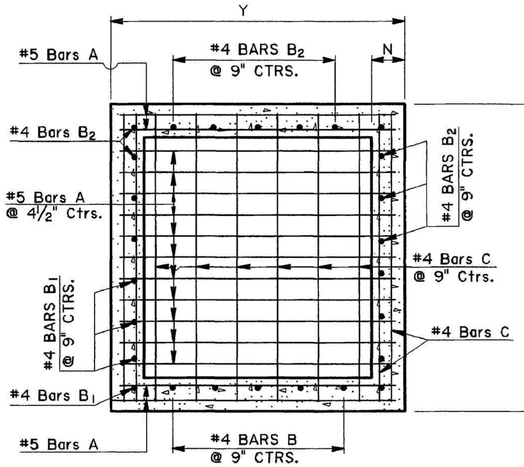
APPROVED BY CHIEF ENGINEER:
DATE: 2/6/2019

CONCRETE CATCH BASIN
YARD DRAIN TYPE - PRECAST OR CAST-IN-PLACE MAX. PIPE: 8"
To be used in conjunction with Std. Plan MC-01

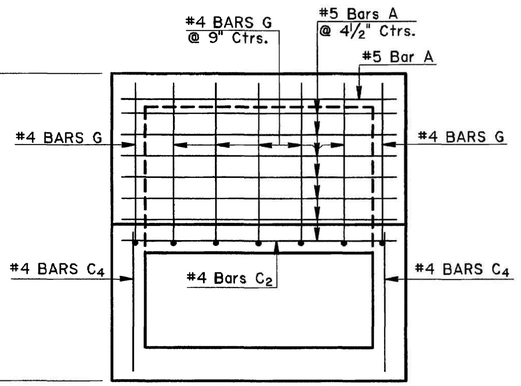
STANDARD PLAN NO. CB-05

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

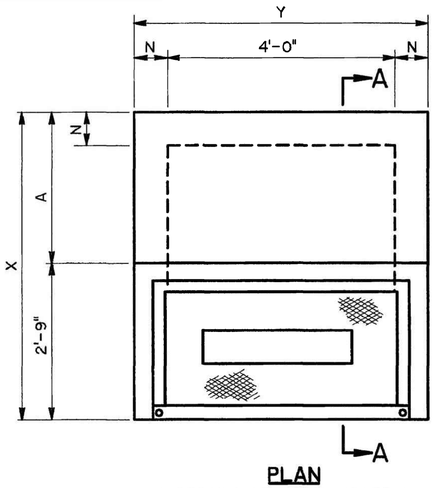
HYDRAULICS SECTION



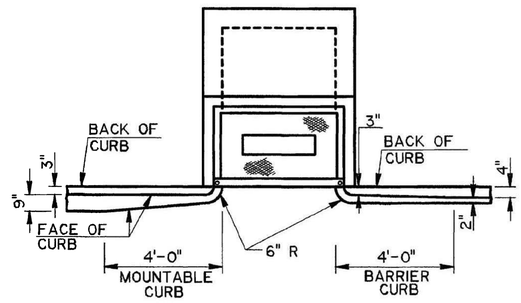
SECTION
SHOWING BOTTOM SLAB REINFORCING STEEL



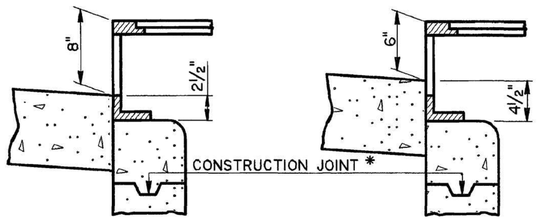
PLAN
SHOWING TOP SLAB REINFORCING STEEL



PLAN
FOR DETAILS OF METAL GRATE AND COVER, SEE STD. PLAN MC-01, TYPE "H".



TRANSITION IN CURB WIDTH
(TYPICAL)

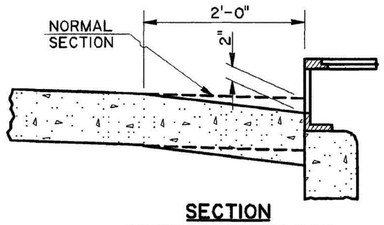


INLET CONFIGURATION

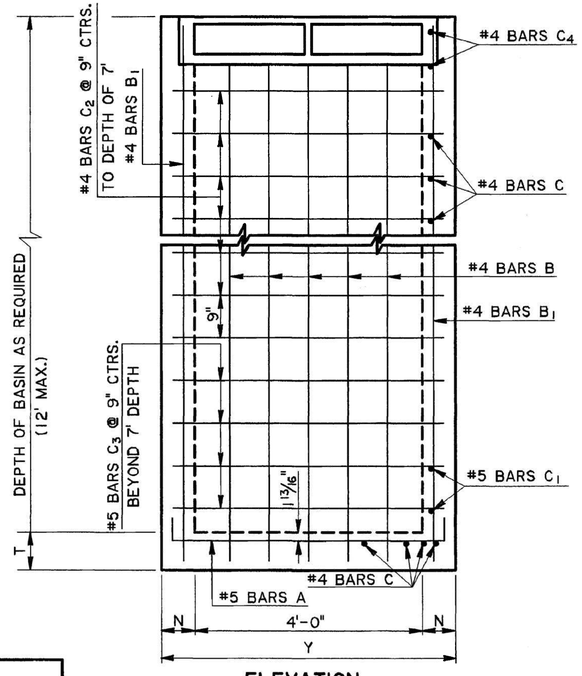
WHEN USED WITH 6" BARRIER CURB

WHEN USED WITH 4" MOUNTABLE CURB

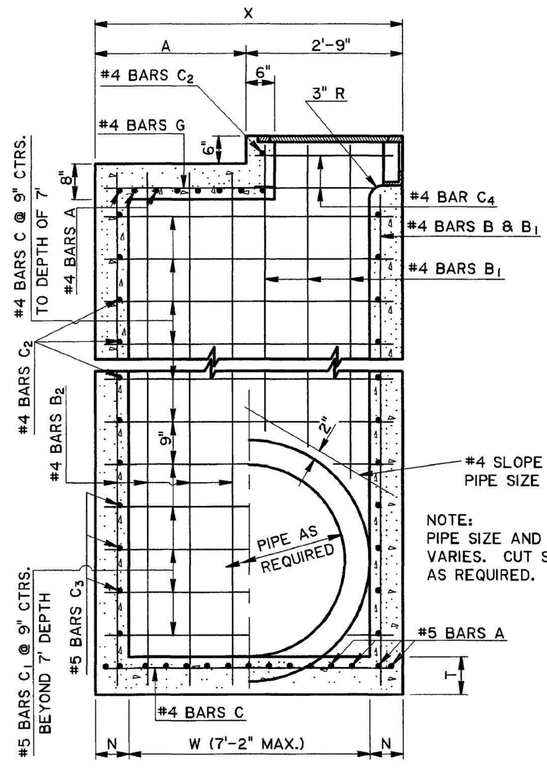
*NOTE:
THE BASIN SHALL NOT BE CONSTRUCTED ABOVE BOTTOM OF PAVEMENT ELEVATION UNTIL THE PAVING ADJACENT TO THE BASIN IS IN PLACE.



SECTION
SHOWING PAVEMENT SUMP
TYPICAL

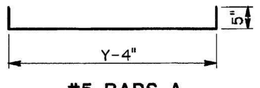


ELEVATION

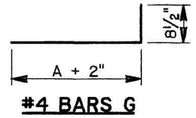


SECTION A-A

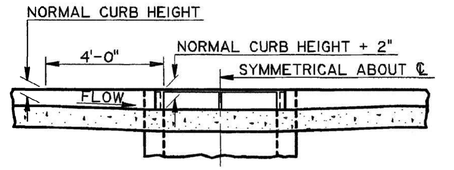
NOTE:
PIPE SIZE AND LOCATION VARIES. CUT STEEL TO CLEAR AS REQUIRED.



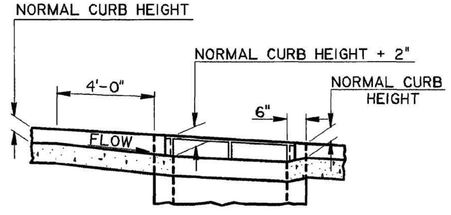
#5 BARS A



#4 BARS G



TRANSITION IN CURB HEIGHT
CATCH BASIN AT LOW POINT



TRANSITION IN CURB HEIGHT
CATCH BASIN ON A GRADE

CONCRETE CATCH BASIN

PIPE DIA. ①	W ②	T	DEPTH LESS THAN 8'				DEPTH FROM 8' TO 12'			
			X	Y	N	A	X	Y	N	A
In	Ft-In	In	Ft-In	Ft-In	In	Ft-In	Ft-In	Ft-In	In	Ft-In
15 to 24	2-6	8	3-8	5-2	7	0-11	3-10	5-4	8	1-1
30	3-1	8	4-3	5-2	7	1-6	4-5	5-4	8	1-8
36	3-8	8	4-10	5-2	7	2-1	5-0	5-4	8	2-3
42	4-3	8	5-5	5-2	7	2-8	5-7	5-4	8	2-10
48	4-10	8	6-0	5-2	7	3-3	6-2	5-4	8	3-5
54	5-5	9	6-7	5-2	7	3-10	6-9	5-4	8	4-0
60	6-0	9	7-2	5-2	7	4-5	7-4	5-4	8	4-7
72	7-2	9	8-4	5-2	7	5-7	8-6	5-4	8	5-9

① REFERS TO SIDEWALL PIPE OR "TRUNKLINE". FRONTWALL OR "CROSSING PIPE" MAY NOT EXCEED 42".

② W AND X DIMENSIONS MAY BE VARIED FOR SKEWED PIPE, BUT W SHALL NOT EXCEED 7'-2".

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 205

PARISH	FEDERAL PROJECT	STATE PROJECT

DESIGNED CDJ HJB | DETAILED KAJ WMR | CHECKED | DATE 1-31-97 | SHEET 1 OF 1

BY	REVISION DESCRIPTION	DATE	APPROVED BY CHIEF ENGINEER
J C M	Converted Metric CB-06M to English CB-06	11-2-00	

DATE: 11-2-00

CONCRETE CATCH BASIN
CURB OPENING
4" MOUNTABLE OR 6" BARRIER CURB
MAX. PIPES: 42" X 72", MAX. DEPTH: 12'

STANDARD PLAN CB-06

HYDRAULICS SECTION

9/21/2020 09:46

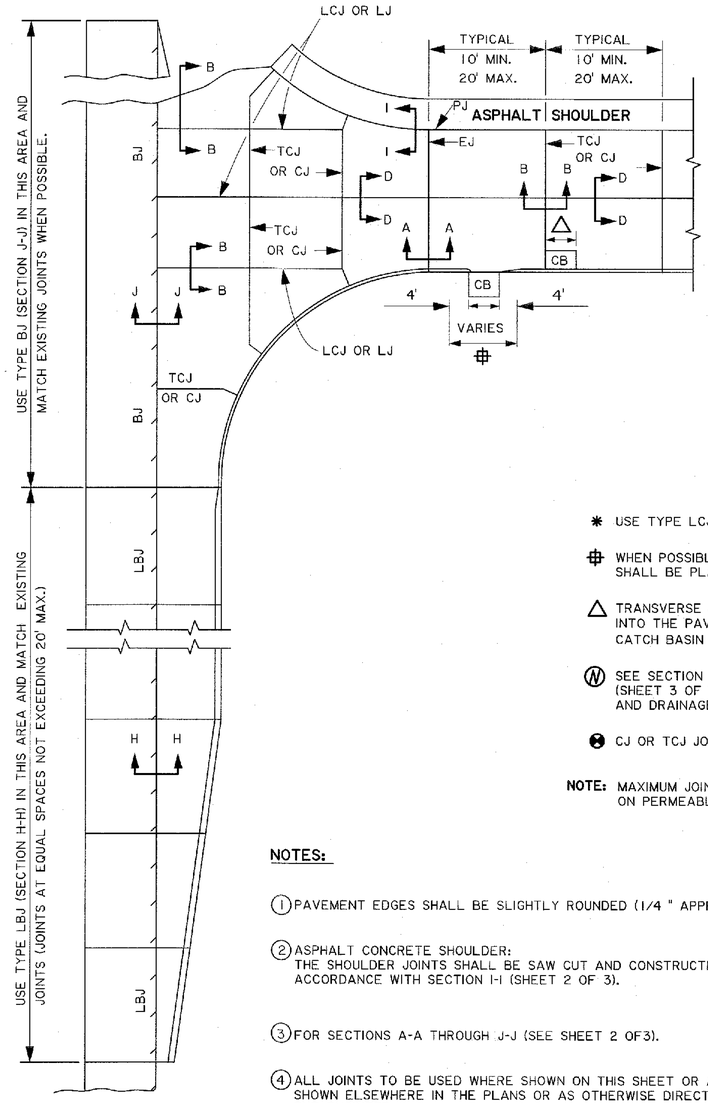
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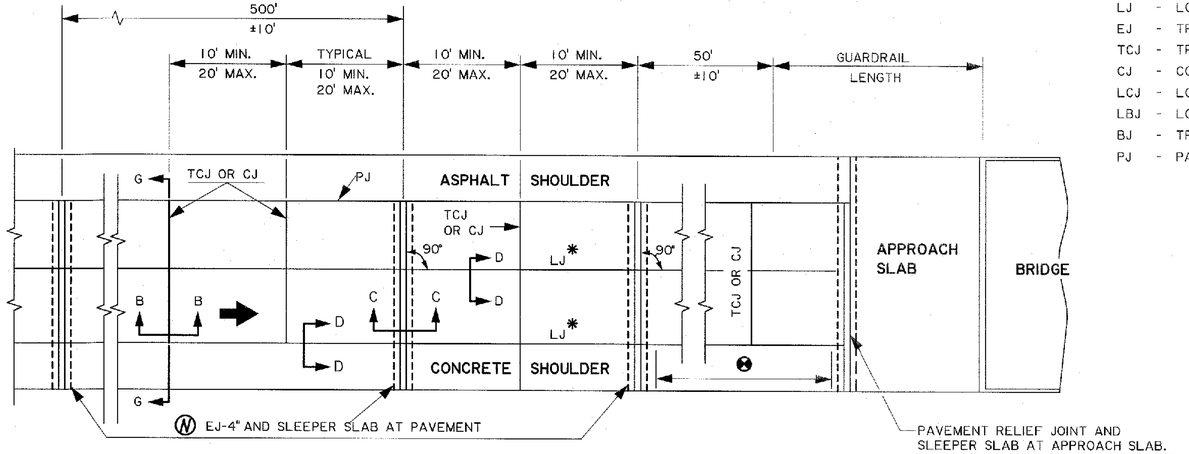
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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

PLAN VIEW

ROADWAY SHOWING JOINTS





JOINT ABBREVIATIONS:

- LJ - LONGITUDINAL JOINT
- EJ - TRANSVERSE EXPANSION JOINT
- TCJ - TRANSVERSE CONTRACTION JOINT
- CJ - CONSTRUCTION JOINT
- LCJ - LONGITUDINAL CONSTRUCTION JOINT
- LBJ - LONGITUDINAL BUTT JOINT
- BJ - TRANSVERSE BUTT JOINT
- PJ - PAVEMENT EDGE SEAL JOINT

* USE TYPE LCJ JOINT WITH SPLIT SLAB CONSTRUCTION.

⌗ WHEN POSSIBLE, AT CATCH BASINS NO JOINTS SHALL BE PLACED IN THE LIMITS SHOWN.

△ TRANSVERSE JOINTS NEAR CATCH BASIN (CB-07, 08 & 09) THAT EXTEND INTO THE PAVEMENT SHALL BE ADJUSTED TO COINCIDE WITH ONE EDGE OF THE CATCH BASIN OR THE CENTER OF THE CATCH BASIN. SEE DETAIL E (SHEET 3 OF 3).

Ⓝ SEE SECTION C-C (SHEET 2 OF 3) AND DETAIL "G" (SHEET 3 OF 3) FOR EJ-4" JOINT, SLEEPER SLAB AND DRAINAGE DETAILS. (REQUIRED (3) PLACES.)

⊗ CJ OR TCJ JOINTS AT 20' MAX. CTRS.

NOTE: MAXIMUM JOINT SPACING AT 18' WHEN PAVEMENT IS PLACED ON PERMEABLE BASE. (SEE SECTION 307)

TABLE I - SCHEDULE OF DIMENSIONS

(ALL DIMENSIONS ARE IN INCHES)

SLAB THICKNESS	SMOOTH DOWEL ⊗ BARS			DEFORMED TIE ⊠ BARS			KEYWAY ⊛	
"T"	SIZE (DIA.)	LENGTH	SPACING	SIZE (DIA.)	LENGTH	SPACING	A ±1/4"	B ±1/4"
8	1 1/4	18	12	1/2	24	24	2 1/2	1 1/4
9	1 1/4	18	12	1/2	24	24	2 1/2	1 1/4
10	1 1/2	18	12	1/2	24	24	2 1/2	1 1/4
11	1 1/2	18	12	5/8	30	24	2 1/2	1 1/4
12	1 1/2	18	12	5/8	30	24	3	1 1/2
13	1 1/2	18	12	5/8	30	24	3	1 1/2
14	1 1/2	18	12	5/8	30	24	3	1 1/2

NOTES:

(1) PAVEMENT EDGES SHALL BE SLIGHTLY ROUNDED (1/4 " APPROX.).

(2) ASPHALT CONCRETE SHOULDER:
THE SHOULDER JOINTS SHALL BE SAW CUT AND CONSTRUCTED IN ACCORDANCE WITH SECTION I-I (SHEET 2 OF 3).

(3) FOR SECTIONS A-A THROUGH J-J (SEE SHEET 2 OF3).

(4) ALL JOINTS TO BE USED WHERE SHOWN ON THIS SHEET OR AS SHOWN ELSEWHERE IN THE PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER.

(5) ON TYPE EJ ALTERNATE JOINTS, SPOT WELD ALTERNATE ENDS OF DOWEL BARS TO DOWEL BASKETS AND PLACE EXPANSION TUBES ON FREE ENDS OF DOWEL BARS.

(6) FOR DESIGN SPEEDS GREATER THAN 45MPH:
SAW CUT AND CONSTRUCT THE TYPE LJ, TCJ, AND CJ JOINTS AS IN DETAILS "A, B OR C" TO A DEPTH OF T/3 INCHES. THOROUGHLY CLEAN THE JOINT FACES BY SANDBLASTING; FOLLOWED BY AN OIL-FREE AIR JET IMMEDIATELY PRIOR TO SEALING WITH A POURED OR EXTRUDED SEALANT CONFORMING TO SECTION 1005.

(7) FOR DESIGN SPEEDS OF 45MPH OR LESS:

A. SAW CUT AND SEAL TYPE LJ JOINTS AS DESCRIBED IN NOTE 6.

B. CONSTRUCT TYPE TCJ OR CJ JOINTS AS DESCRIBED IN NOTE 6 OR CONSTRUCT WITH A REMOVABLE FORMING DEVICE AS SPECIFIED IN DETAIL "C" (SHEET 3 OF 3). THOROUGHLY CLEAN THE JOINT FACES BY SAND-BLASTING; FOLLOWED BY AN OIL-FREE AIR JET IMMEDIATELY PRIOR TO SEALING WITH A POURED OR EXTRUDED SEALANT CONFORMING TO SECTIONS 601 AND 1005.
WITH A COMBINATION JOINT FORMER/SEALER AS SHOWN IN DETAIL "D" (SHEET 3 OF 3), THE SEALER SHALL CONFORM TO SECTION 1005 AND BE INSTALLED IN ACCORDANCE WITH SECTION 601 AND NO ADDITIONAL SEALANT IS REQUIRED.

(8) EXCEPT AS NOTED BELOW, DOWEL BARS & TIE BARS SHALL BE HELD IN PLACE BY SUPPORTS SIMILAR TO THE ONES SHOWN, OR APPROVED EQUALS. APPROVED MECHANICAL PLACEMENT OF DOWEL BARS AND TIE BARS WILL BE ALLOWED WITH ALL PAVING METHODS.

(9) INSTALL GEOTEXTILE FABRIC (TYPE B, C, OR D) UNDER ALL TCJ, CJ, AND EJ ALTERNATE JOINTS WHEN CONCRETE PAVEMENT IS PLACED ON PERMEABLE BASE. WHEN DOWEL BARS ARE MECHANICALLY IMPLANTED, THE GEOTEXTILE FABRIC SHALL BE ANCHORED TO THE BASE COURSE WITH PINS.

(10) WHEN CONSTRUCTING CONCRETE CURB AND GUTTER ADJACENT TO NEW P.C.C. PAVEMENT, USE TYPE LCJ JOINT. WHEN ADJACENT TO EXISTING P.C.C. PAVEMENT, USE TYPE LBJ JOINT. THE FIRST LOAD TRANSFER DEVICE SHALL BE INSTALLED 18" FROM THE PAVEMENT EDGE.

(11) TRANSVERSE EXPANSION JOINTS ARE NOT TO BE USED FOR CONSTRUCTION JOINTS.

(12) CONCRETE SHOULDERS:

A. CONSTRUCT TCJ JOINTS IN ACCORDANCE WITH SECTION B-B (SHEET 2 OF 3).

B. CONSTRUCT LCJ JOINTS IN ACCORDANCE WITH TYPE LCJ DETAIL AND LJ JOINTS IN ACCORDANCE WITH TYPE LJ DETAIL. SEE SECTION D-D (SHEET 2 OF 3).

C. USE THE MAXIMUM SHOULDER THICKNESS WHEN DETERMINING DOWEL BAR AND TIE BAR SIZES IN TABLE I.

D. WHEN SKEWED JOINTS ARE USED ON MAINLINE PAVING THE SHOULDER TCJ JOINTS MAY BE SKEWED OR CONSTRUCTED AT 90°.

E. SHOULDER JOINTS AND JOINT MATERIALS SHALL MATCH THE MAINLINE.

F. HEIGHT OF DOWEL BASKET SHALL BE BASED ON THE THINNEST SHOULDER THICKNESS. VARYING HEIGHT DOWEL BASKETS WILL BE ALLOWED TO KEEP THE DOWEL BAR LOCATED WITHIN TOLERANCE.

(13) TIE BARS SHALL NOT BE PLACED WITHIN 18" OF CONTRACTION OR EXPANSION JOINTS.

NOT TO SCALE

ROAD DESIGN

SHEET NUMBER 206

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	CHECK	DETAIL	CHECK	REVISION	SERIES # 1 OF 3
T. LAM	D. SMITH	T. LAM	D. SMITH		

STATE OF LOUISIANA
DAVID S. SMITH
License No. 32565
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
10/11/21

APPROVED BY CHIEF ENGINEER: DATE: 10/13/2021

PORTLAND CEMENT CONCRETE PAVEMENT DETAILS

STANDARD PLAN CP-01

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

NOTES:

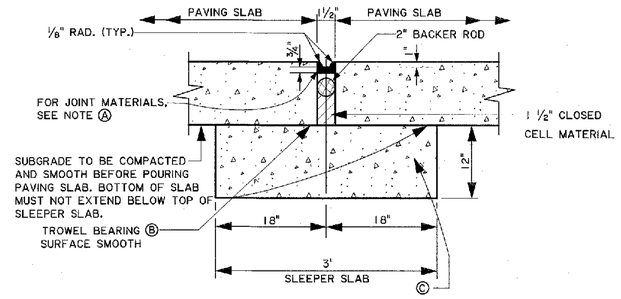
Ⓐ ONE OR TWO COMPONENT SILICONE CONFORMING TO SECTION 1005.

Ⓑ TAR PAPER EQUIVALENT TO 30 lbs./100 ft² SHALL BE PLACED BETWEEN THE SLEEPER SLAB AND THE PAVING SLAB.

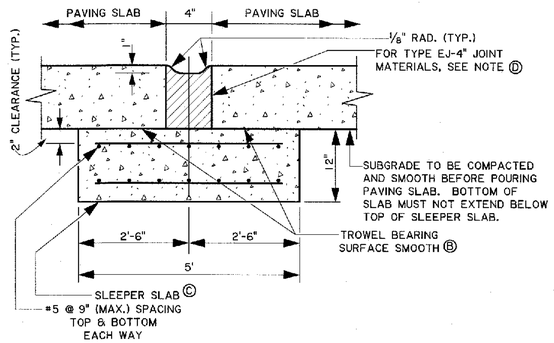
Ⓒ SLEEPER SLAB SHALL BE CONSTRUCTED OF CLASS "A1" OR PAVEMENT TYPE CONCRETE AND INCLUDED IN THE COST OF THE PAVEMENT. PROVIDE DEFORMED GRADE 60 REINFORCING STEEL.

Ⓓ JOINT SHALL BE FILLED WITH A PREFORMED POLYURETHANE FOAM TYPE FILLER CONFORMING TO SECTION 1005.

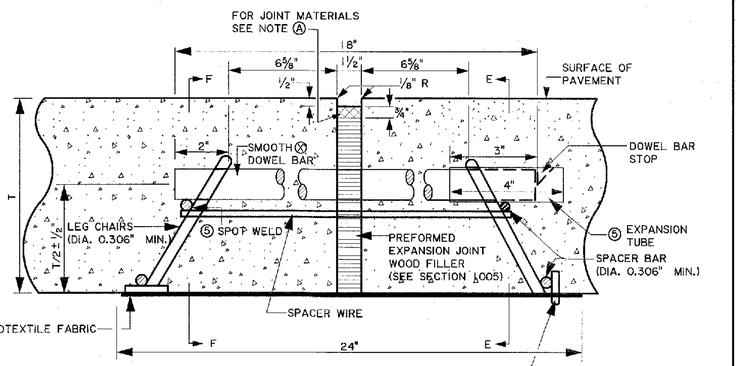
Ⓔ SEE DETAIL "G" - EJ-4" BASE DRAIN OUTLET FOR UNDERDRAIN DETAILS (SHEET 3 OF 3)



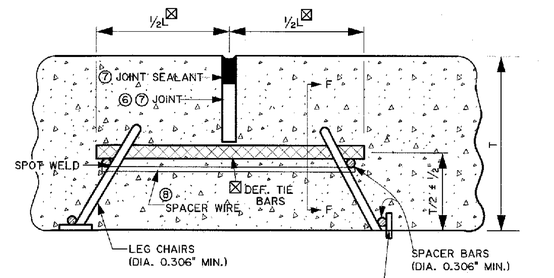
SECTION A-A
TYPE EJ-1½"



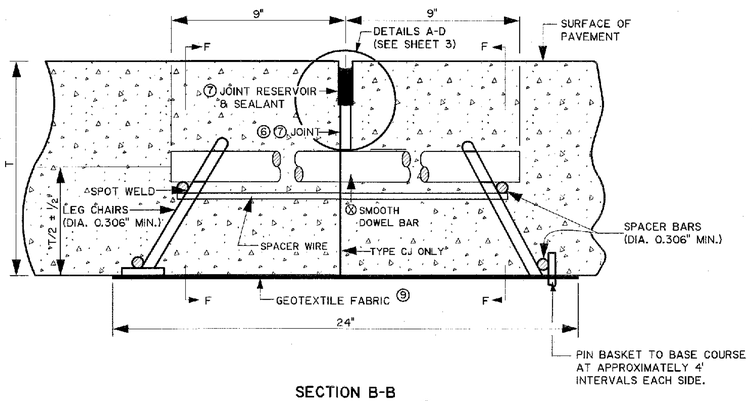
SECTION C-C
TYPE EJ-4" JOINT
AND SLEEPER SLAB



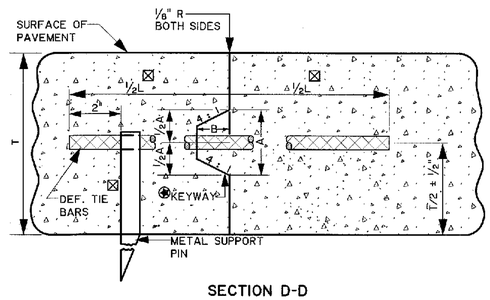
TYPE EJ ALTERNATE ⑧
(TRANSVERSE EXPANSION JOINT)
(NOT ALLOWED FOR DESIGN SPEED > 45 MPH)
⊗ SEE TABLE I (SHEET 1 OF 3)



SECTION D-D
TYPE LJ (WITHOUT KEYWAY)
(LONGITUDINAL JOINT)
(REQUIRED WHEN PAVEMENT WIDTH EXCEEDS 15') (SEE NOTE ⑥)
⊠ SEE TABLE I (SHEET 1 OF 3)



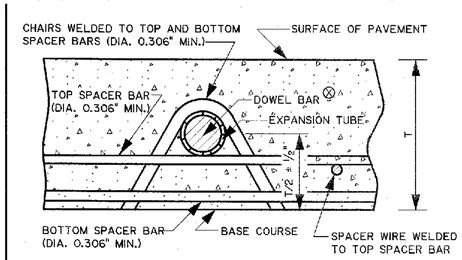
SECTION B-B
TYPE TCJ OR CJ ⑧
(TRANSVERSE CONTRACTION JOINT OR CONSTRUCTION JOINT)
⊗ SEE TABLE I (SHEET 1 OF 3)



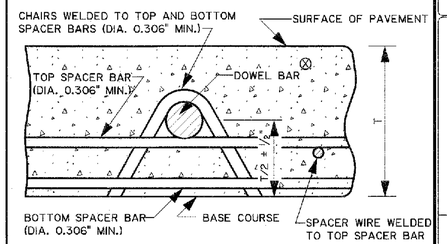
SECTION D-D
TYPE LCJ (WITH KEYWAY)
(LONGITUDINAL CONSTRUCTION JOINT)

⊛ FOR KEYWAY DIMENSIONS A & B SEE TABLE I. IN LIEU OF THE KEYWAY, ONE OF THE FOLLOWING OPTIONS WILL BE ALLOWED:
A. INSTALL TIE BARS OF THE SIZE SHOWN IN TABLE I, AT ½ THE SPACING.
B. INSTALL TIE BARS ¼" LARGER THAN THE TIE BAR DIAMETER SHOWN IN TABLE I, AT THE SAME SPACING.

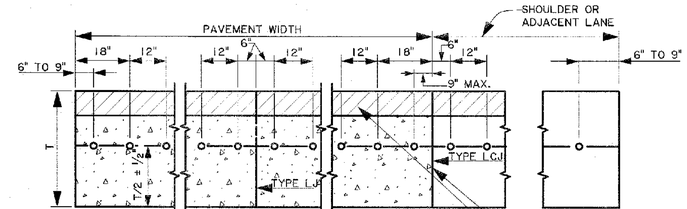
⊠ SEE TABLE I (SHEET 1 OF 3)



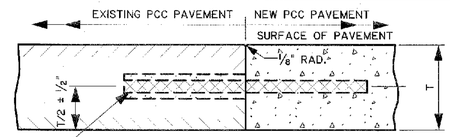
SECTION E-E
⊗ SEE TABLE I (SHEET 1 OF 3)



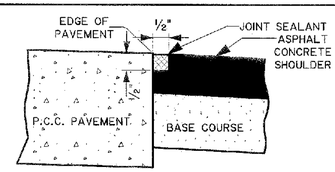
SECTION F-F
⊗ SEE TABLE I (SHEET 1 OF 3)



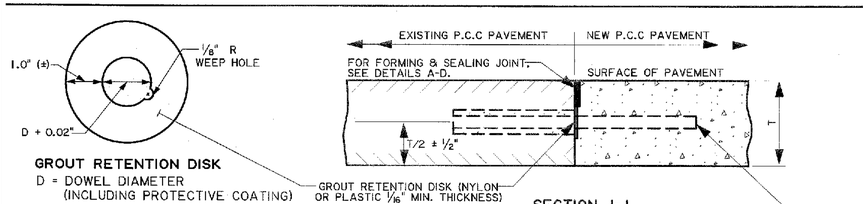
SECTION G-G
DOWEL BAR SPACING FOR TYPE TCJ, CJ, AND EJ JOINTS



SECTION H-H
TYPE LBJ
(LONGITUDINAL BUTT JOINT)
⊠ DEFORMED TIE BARS OF THE SIZE, LENGTH AND ONE HALF THE SPACING SPECIFIED IN TABLE I SHALL BE USED. THE BARS SHALL BE INSTALLED IN EXISTING PAVEMENT BY DRILLING HOLES ⅛" LARGER THAN THE BAR DIAMETER TO A REQUIRED DEPTH OF ½ THE BAR LENGTH. THE HOLES SHALL BE DRILLED AND FILLED IN ACCORDANCE WITH SECTION 601 BEFORE INSERTION OF THE TIE BARS.



SECTION I-I
TYPE PJ
(HOT POURED SEALANT SECTION 1005)



SECTION J-J
TYPE BJ
(TRANSVERSE BUTT JOINT)
⊗ SMOOTH DOWEL BARS OF THE SIZE, LENGTH AND SPACING SPECIFIED IN TABLE I SHALL BE USED. THE BARS SHALL BE INSTALLED IN EXISTING PAVEMENT BY DRILLING HOLES ⅛" LARGER THAN THE BAR DIAMETER TO A REQUIRED DEPTH OF ½ THE BAR LENGTH. THE HOLES SHALL BE DRILLED AND FILLED IN ACCORDANCE WITH SECTION 601 BEFORE INSERTION OF THE DOWEL BARS.

NOT TO SCALE

SHEET NUMBER 207

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN T. LAM | CHECK D. SMITH | DETAIL T. LAM | CHECK D. SMITH | REVIEW | SERIES = 2 OF 3

STATE OF LOUISIANA
DAVID S. SMITH
License No. 32065
PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING
10/11/21

APPROVED BY CHIEF ENGINEER:
DATE: 10/13/2021

PORTLAND CEMENT CONCRETE PAVEMENT DETAILS

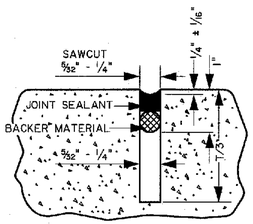
STANDARD | CP-01

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

ROAD DESIGN

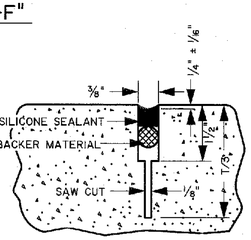
NOTE: SEE STANDARD PLAN DW-01 AND PLANS FOR CURB PLACEMENT DETAILS.

DETAILS "A-F"

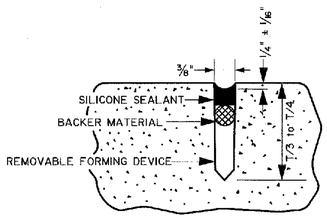


DETAIL "A"

USE THIS DETAIL IN CONJUNCTION WITH TYPE TCJ (SECTION B-B) AND TYPE LJ JOINT (SECTION D-D) AND NOTES ⑥ & ⑦ ON SHEET #1.



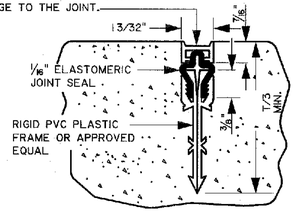
DETAIL "B"



DETAIL "C"

NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.

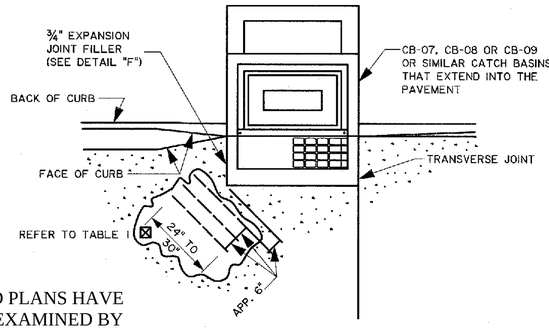
REMOVE CAP AFTER CONCRETE HAS HARDENED SUFFICIENTLY TO PERMIT REMOVAL WITHOUT DAMAGE TO THE JOINT.



DETAIL "D"

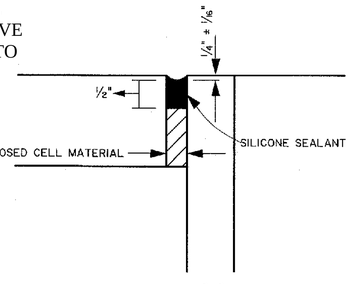
NOT ALLOWED WHEN THE PAVEMENT IS PLACED ON PERMEABLE BASES

NOT ALLOWED FOR DESIGN SPEEDS GREATER THAN 45 MPH.



DETAIL "E"

TRANSVERSE JOINT AT CATCH BASIN



DETAIL "F"

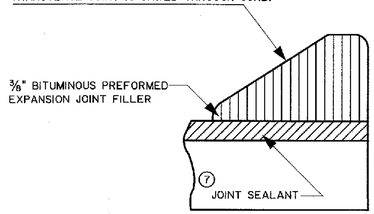
AFTER CATCH BASIN TOP IS POURED, THE TOP OF THE 3/4 " JOINT FILLER IS TO BE REMOVED TO THE DEPTH SHOWN PRIOR TO SEALING. THE CURB FACES ADJACENT TO THE BASIN SHALL ALSO BE SEALED. JOINT FACES SHALL BE CLEANED IN ACCORDANCE WITH SECTION 601.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

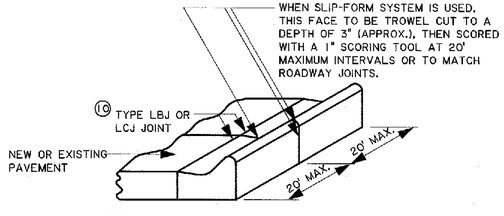
STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

NOTE:

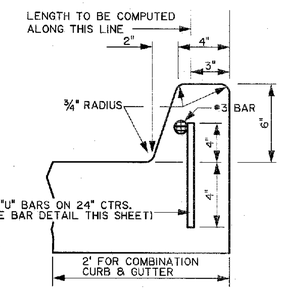
WHEN CURB IS POURED MONOLITHICALLY WITH PAVEMENT, THE BITUMINOUS PREFORMED EXPANSION JOINT FILLER SHALL EXTEND TO THE TOP OF JOINT INSERT. WHEN TRANSVERSE JOINTS ARE CONSTRUCTED BY SAWING, THE INITIAL SAW CUT SHALL EXTEND THRU THE CURBED SECTION (CURB AND UNDERLYING PAVEMENT). THE SUBSEQUENT WIDENING CUT FOR THE JOINT SEALANT RESERVOIR SHALL EXTEND INTO THE CURB FOR A DISTANCE NECESSARY TO ENSURE THE SPECIFIED RESERVOIR DEPTH IS BEING MAINTAINED AT THE GUTTER LINE. ALL CURB FACES REGARDLESS OF CURB TYPE SHALL BE SEALED WHEN TRANSVERSE JOINT IS SAWED THROUGH CURB.



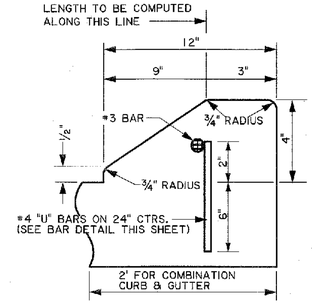
JOINT FILLER DETAIL FOR INTEGRAL CONCRETE CURB (MOUNTABLE OR BARRIER TYPE)



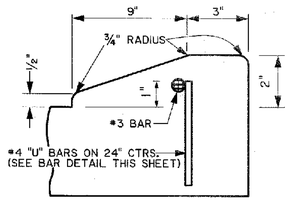
DETAIL SHOWING JOINTS IN CONCRETE CURB AND GUTTER (EXTEND ALL TCJ THROUGH CURB & GUTTER)



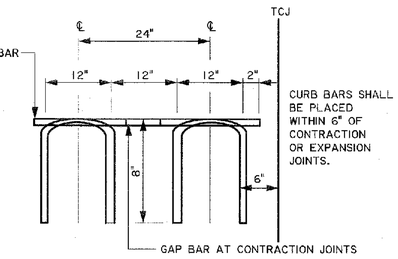
(BARRIER TYPE)



(MOUNTABLE TYPE)



MODIFIED BARRIER OR MOUNTABLE CURB THRU DRIVEWAY



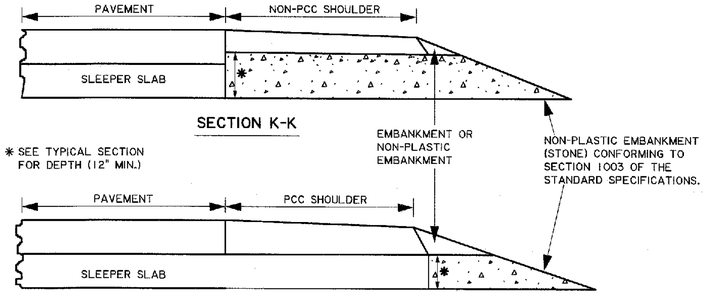
BAR DETAIL

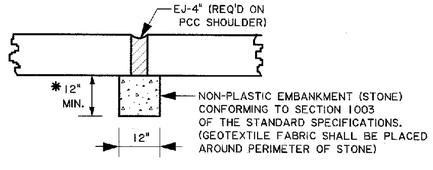
SHOWING DIMENSIONS AND SPACING OF #4 "U" BARS AND LONGITUDINAL BARS FOR CONC. CURB

CURB DETAILS

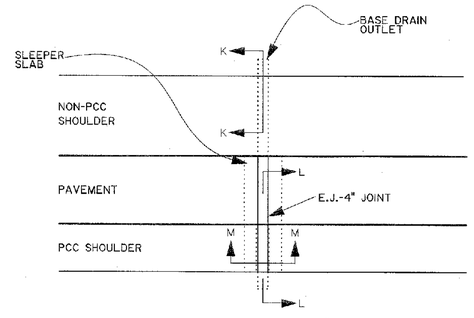
NOTES:

- POUR CURB INTEGRAL WITH PCC PAVEMENT OR GUTTER TO INSURE MONOLITHIC CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE ENGINEER. CURB BARS ARE NOT REQUIRED WHERE CURB IS CONSTRUCTED MONOLITHIC WITH THE PAVEMENT.
- ALL BARS SHOWN SHALL BE DEFORMED REINFORCING STEEL.
- WHEN REPLACING OR ADDING CONCRETE CURB TO EXISTING PAVEMENT, CONNECT THE NEW CONCRETE CURB TO THE PAVEMENT WITH THE DEFORMED REINFORCING STEEL SHOWN BY DRILLING HOLES INTO THE EXISTING PAVEMENT 1/8" LARGER THAN THE BAR DIAMETER. ANCHOR THE BARS WITH AN APPROVED EPOXY RESIN SYSTEM FROM THE DOTD AML. APPLY EPOXY ADHESIVE, COMPLYING WITH AASHTO M235, TYPE V, TO THE SURFACE AREA WHERE THE CONCRETE CURB WILL BE PLACED. INCLUDE ALL COST RELATED TO THE CONSTRUCTION OF THE CURB, INCLUDING THE DRILLED HOLES, DEFORMED REINFORCING BARS, AND EPOXY, IN THE UNIT PRICE FOR THE CURB ITEM.





A BASE DRAIN OUTLET WILL BE REQUIRED AT E.J.-4" JOINTS UNLESS A SHOULDER UNDER DRAIN SYSTEM IS SPECIFIED ON THE PLANS, IN WHICH CASE, THE SHOULDER UNDER DRAIN FOR THE E.J. JOINT SHALL BE CONNECTED TO THE NEAREST STORM SEWER OR DISCHARGED THROUGH A HEADWALL. THE COST FOR THE BASE DRAIN OUTLET FOR THE E.J. JOINT IS TO BE INCLUDED IN THE COST OF THE PAVEMENT.



PLAN - BASE DRAIN OUTLET AT 4" E.J. EJ-4" JOINTS

DETAIL "G" - EJ-4" BASE DRAIN OUTLET

NOT TO SCALE

SHEET NUMBER	208
PARISH	
CONTROL SECTION	
STATE PROJECT	
DESIGN T. LAM / CHECK D. SMITH	
DETAIL T. LAM / CHECK D. SMITH	
REVIEW	SERIES # 3 OF 3

STATE OF LOUISIANA
DAVID S. SMITH
License No. 30555
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
10 | 11 | 21

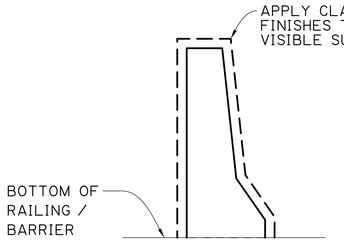
APPROVED BY CHIEF ENGINEER: DATE: 10/13/2021

PORTLAND CEMENT CONCRETE PAVEMENT DETAILS

STANDARD SHEET NO. CP-01

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

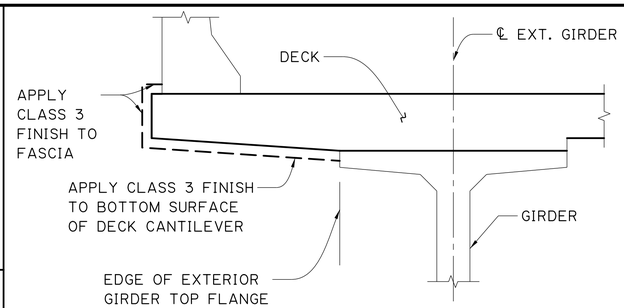
ROAD DESIGN



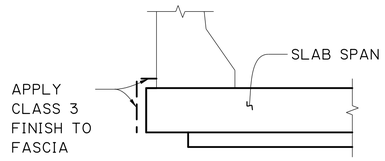
DETAIL 1
NTS

NOTE:
VISIBLE CONCRETE PORTIONS OF HANDRAILING SHALL BE FINISHED WITH A CLASS 2 & CLASS 3 SURFACE FINISH. SEE PLANS FOR DETAILS WHEN THESE COMPONENTS ARE REQUIRED.

BRIDGE RAILING / PERMANENT ROADWAY BARRIER / PIER PROTECTION



DECK



SLAB

DETAIL 2
NTS

DECK / SLAB

NOTES:

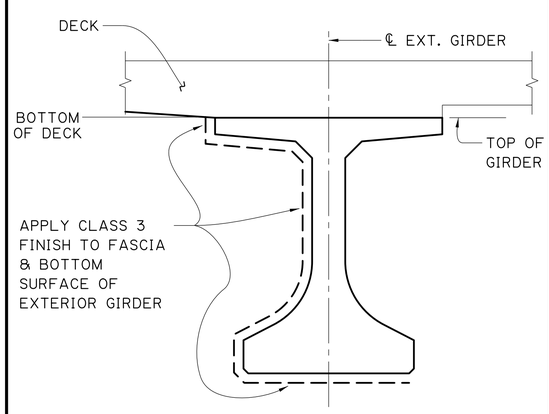
1. DETAILS SHOWN ARE TYPICAL AND FOR ILLUSTRATIVE PURPOSES ONLY. ACTUAL SURFACE SHAPES MAY VARY. REFER TO PROJECT PLANS FOR REQUIRED LOCATION OF SURFACE FINISHES.
2. THE TERM "VISIBLE" USED HEREIN IS TAKEN TO MEAN VISIBLE AFTER CONSTRUCTION IS COMPLETE, FINISHED GROUND LINES ARE IN PLACE, AND WITH RESPECT TO THE WATER SURFACE ELEVATION AT THE TIME OF APPLICATION.

⊗ 3. EXTEND CLASS 3 FINISH TO 1'-0" BELOW FINISHED GROUND LINE.

△ 4. THE "SURFACE FINISH WATER ELEVATION" ▽ IS THE WATER SURFACE ELEVATION AT THE TIME OF CONCRETE SURFACE FINISH APPLICATION. EXTEND SURFACE FINISH TO THIS ELEVATION.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

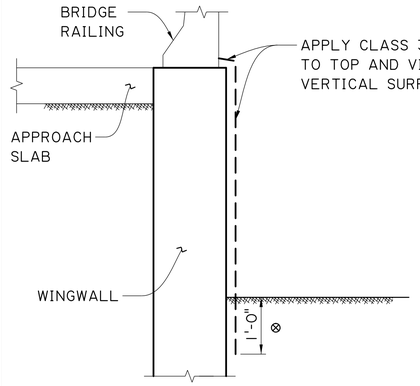
STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING



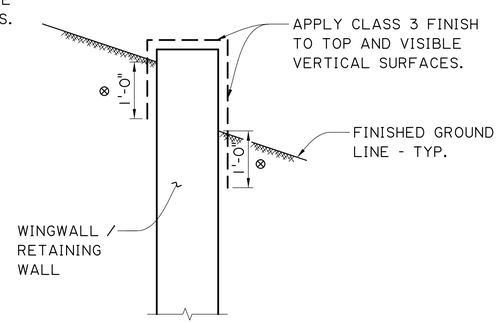
DETAIL 3
NTS

NOTE:
GIRDER TYPE VARIES. LG GIRDER SHOWN FOR ILLUSTRATION PURPOSE ONLY.

EXTERIOR CONCRETE GIRDER



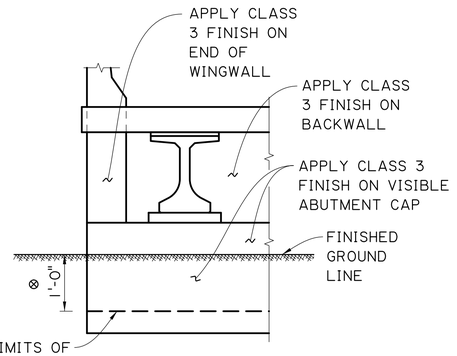
SECTION
WINGWALL PARALLEL TO ROADWAY



SECTION
WINGWALL PERPENDICULAR TO ROADWAY OR CAST-IN-PLACE RETAINING WALL

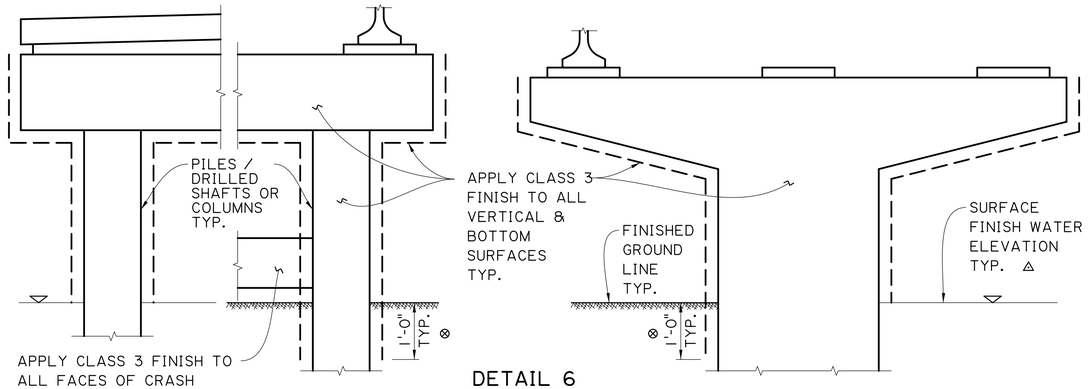
DETAIL 4
NTS

WINGWALL & CAST-IN-PLACE RETAINING WALL



DETAIL 5
NTS

BACKWALL & ABUTMENT CAP



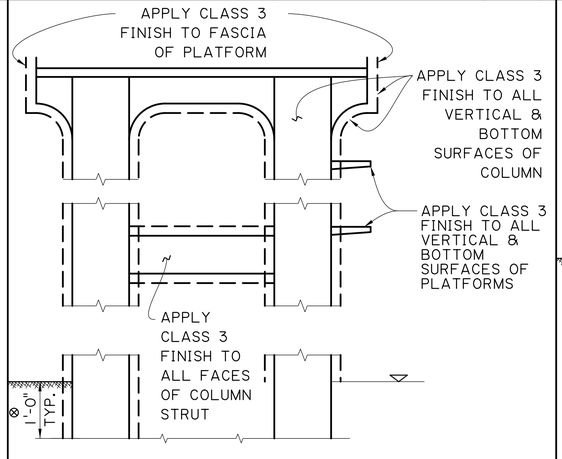
HALF SECTION
SLAB SPAN BRIDGE

HALF SECTION
GIRDER BRIDGE

DETAIL 6
NTS

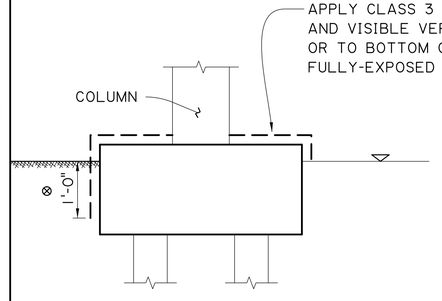
SECTION
HAMMERHEAD BENT

COLUMN BENT, PILE BENT, & HAMMERHEAD BENT



DETAIL 7
NTS

CONCRETE TOWER



DETAIL 8
NTS

EXPOSED FOOTING

SHEET NUMBER	208a
PARISH	
CONTROL SECTION	
STATE PROJECT	
DESIGN A.LANCASTER	DETAIL A. WILLIAMS	REVIEW K. KEMP
CHECK K. KEMP	CHECK WEI PENG	SERIES # 1 OF 1

APPROVED BY CHIEF ENGINEER: DATE: 1/06/2026

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY

CONCRETE SURFACE FINISH CLASS 2 & CLASS 3

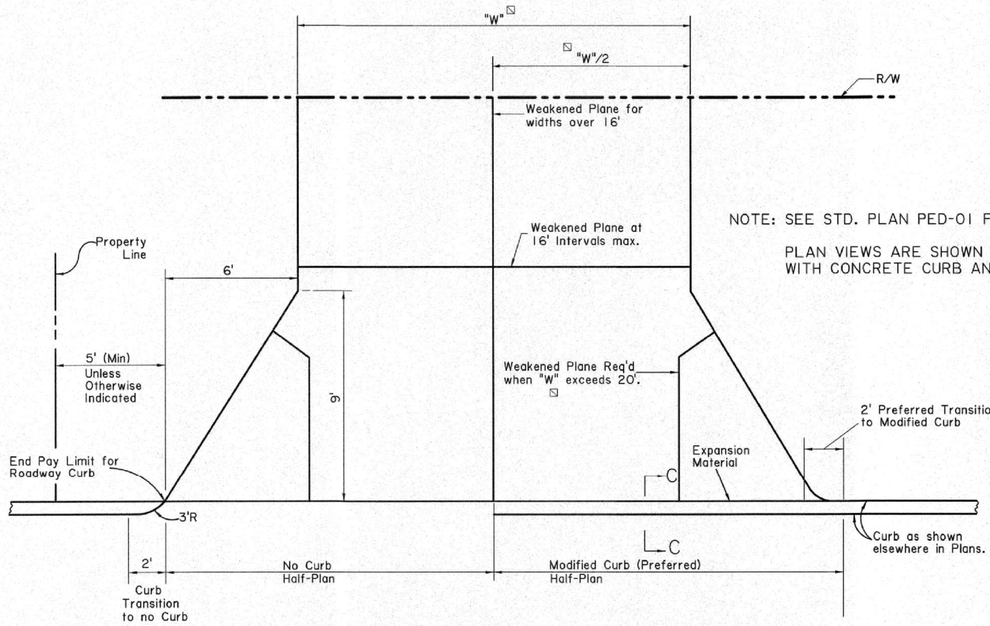
CSF-01

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

IP_PWP:d1243945/CSF-01.dgn

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PLAN OF RESIDENTIAL DRIVEWAY

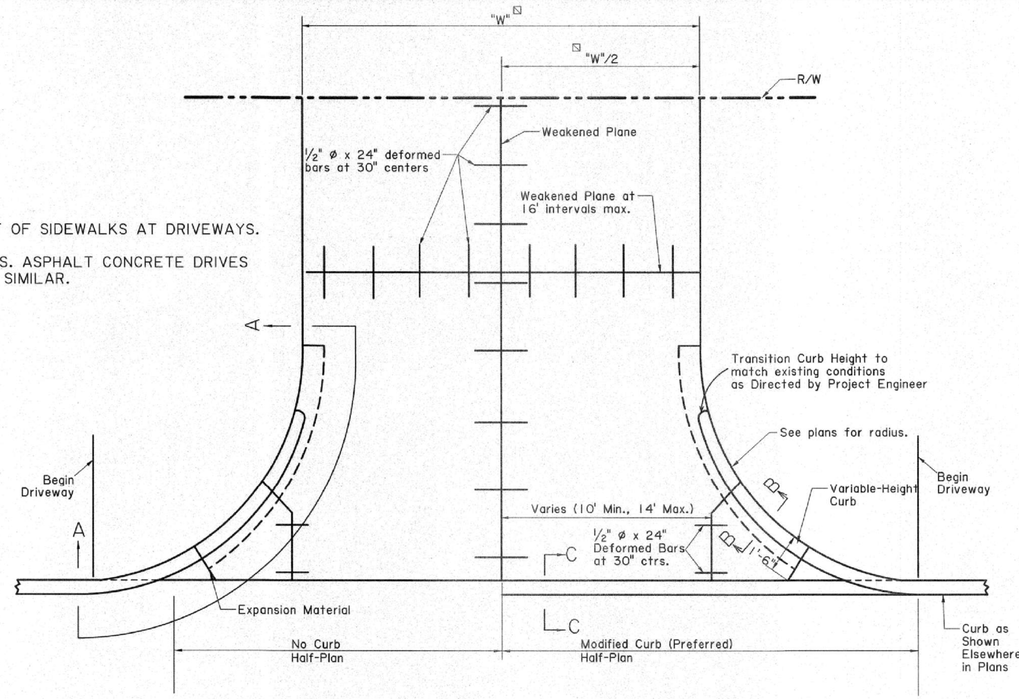
NOTE: SEE STD. PLAN PED-01 FOR TREATMENT OF SIDEWALKS AT DRIVEWAYS.

PLAN VIEWS ARE SHOWN FOR PCC DRIVES. ASPHALT CONCRETE DRIVES WITH CONCRETE CURB AND GUTTER ARE SIMILAR.

NOTE: MODIFIED CURB TO BE PAID FOR AS CURB AND WILL BE USED AS SHOWN IN THE PLANS OR WHEN DIRECTED BY THE PROJECT ENGINEER.

RADII TRANSITION SHAPE MAY BE USED IN LIEU OF A FLARE.

▨ "W" = Width as per plans

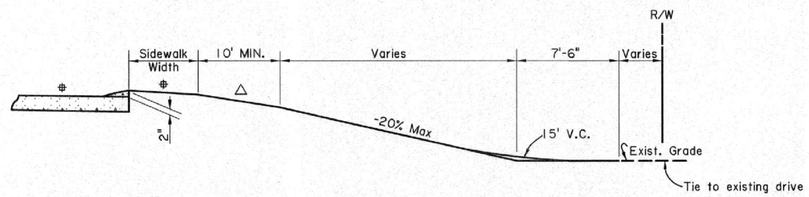


PLAN OF COMMERCIAL DRIVEWAY

NOTE: MODIFIED CURB TO BE PAID FOR AS CURB AND WILL BE USED AS SHOWN IN THE PLANS OR WHEN DIRECTED BY THE PROJECT ENGINEER.

WHEN CURB IS REQUIRED ALONG RADII OF DRIVEWAY, PAYMENT FOR TOE WALL AND CURB WILL BE INCLUDED IN THE PRICE FOR DRIVEWAY ITEMS.

WHEN CURB IS NOT REQUIRED ALONG RADII, TRANSITION CURB AS SHOWN ON RESIDENTIAL DRIVEWAY.



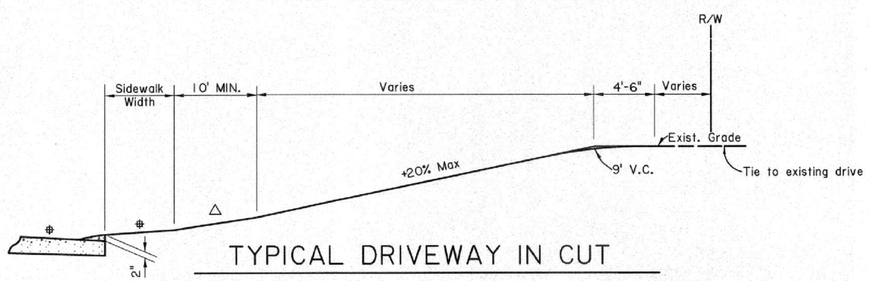
TYPICAL DRIVEWAY IN FILL

NOTES:

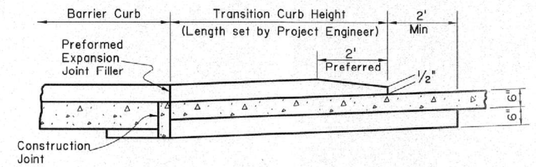
1. DRIVEWAY PROFILES SHOWN ASSUME A SIDEWALK ADJACENT TO THE CURB.

△ 2. MAXIMUM DRIVEWAY GRADE SHALL BE 20% (25% FOR SPECIAL CASES). MAXIMUM BREAK IN GRADE WITHOUT A VERTICAL CURVE SHALL BE 10% FOR CRESTS AND 9% FOR SAGS, AT NOT LESS THAN 10' INTERVALS.

⊕ 3. ROADWAY AND SIDEWALK SLOPES VARY AS PER PLANS.

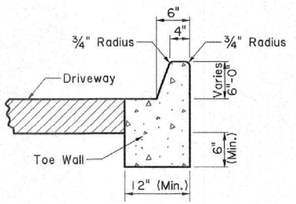


TYPICAL DRIVEWAY IN CUT



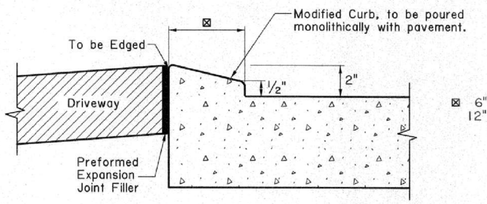
SECTION A-A

(Weakened Plane not shown.)



SECTION B-B

NOTE: For PCC Driveway, Curb, Toe Wall & Driveway to be poured monolithically.



▨ 6" to match Barrier Curb
12" to match Mountable Curb

SECTION C-C

NOTE: See Std. Plan CP-01 for Curb construction

STATE OF LOUISIANA
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SHEET NUMBER 209

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	P. TONEY	DETAIL	P. TONEY	REVIEW	D. SMITH
CHECK	R. MCMILLAN	CHECK	R. MCMILLAN	SERIES #	1 OF 3

STATE OF LOUISIANA
AIDAN EYMARD
License No. 46220
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
8/2/2022

APPROVED BY CHIEF ENGINEER: DATE: 8/4/2022

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

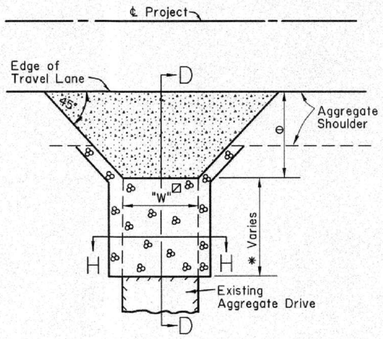
DRIVEWAYS ON CURBED ROADWAYS

STANDARD PLAN DW-01

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

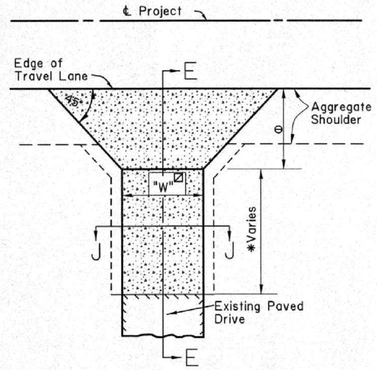
STANDARD PLAN

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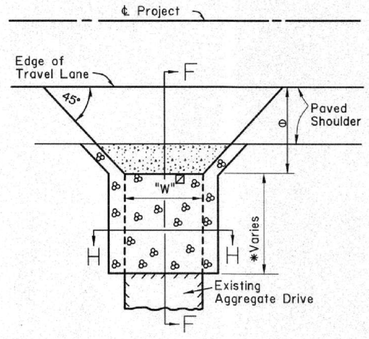
TYPE "A"

Paved Driveway Flare
Along Aggregate Shoulder



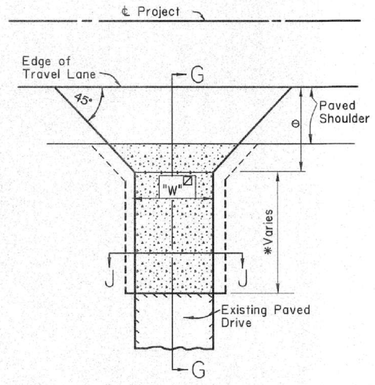
TYPE "B"

Paved Driveway Flare
Along Aggregate Shoulder
Connecting Existing Paved Drive



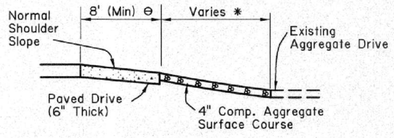
TYPE "C"

Paved Driveway Flare
Along Paved Shoulder

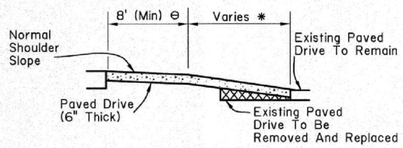


TYPE "D"

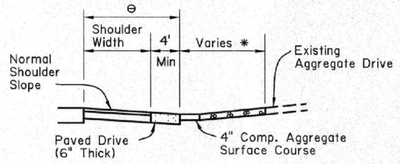
Paved Driveway Flare
Along Paved Shoulder
Connecting Existing Paved Drive



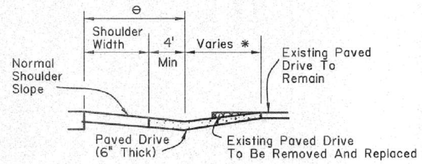
SECTION D-D



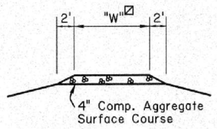
SECTION E-E



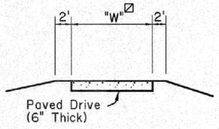
SECTION F-F



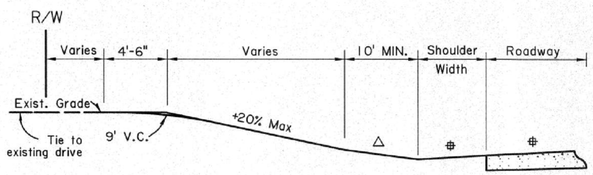
SECTION G-G



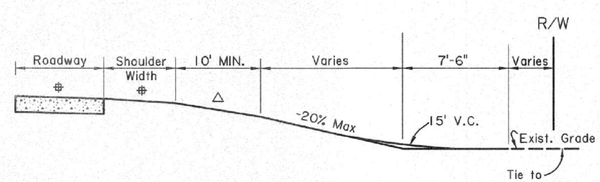
SECTION H-H



SECTION J-J



TYPICAL DRIVEWAY IN CUT



TYPICAL DRIVEWAY IN FILL

☑ "W" = Width as per plans

NOTES:

1. PORTLAND CEMENT CONCRETE DRIVES WILL BE CONSTRUCTED TO REPLACE OR CONNECT TO EXISTING CONCRETE DRIVES.

* 2. SEE PLANS: APPLIES WHERE EXISTING DRIVE IS TO BE REMOVED FOR ROADWAY CONSTRUCTION AND/OR TO ACHIEVE VERTICAL GEOMETRY REQUIREMENTS.

⊖ 3. PAVEMENT SHALL EXTEND 8' MINIMUM FROM EDGE OF PAVED ROADWAY SURFACE (TRAVEL LANE) FOR SINGLE-FAMILY RESIDENTIAL/NON-COMMERCIAL AGRICULTURE TYPE CONNECTIONS, AND 25' FOR TRAFFIC GENERATOR (COMMERCIAL) TYPE CONNECTIONS, OR AS PER THE PLANS. PAVED DRIVEWAY FLARE SHALL EXTEND 4' MINIMUM FROM EDGE OF PAVED SHOULDER. RADII TRANSITION SHAPE MAY BE USED IN LIEU OF FLARE.

4. COMPACTION OF SUBGRADE AND GRADING WORK FOR CONSTRUCTION OF DRIVES SHALL BE SATISFACTORY TO THE ENGINEER AND PAYMENT SHALL BE INCLUDED IN THE DRIVEWAY ITEMS.

△ 5. MAXIMUM DRIVEWAY GRADE SHALL BE 20% (25% FOR SPECIAL CASES). MAXIMUM BREAK IN GRADE WITHOUT A VERTICAL CURVE SHALL BE 10% FOR CRESTS AND 9% FOR SAGS, AT NOT LESS THAN 10' INTERVALS.

⊕ 6. ROADWAY AND SHOULDER SLOPES VARY AS PER PLANS

LEGEND

ASPHALT

AGGREGATE

REMOVAL

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING

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SHEET NUMBER 210

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	P. TONEY
CHECK	R. MCMILLAN
DETAIL	P. TONEY
CHECK	R. MCMILLAN
REVIEW	D. SMITH
SERIES #	2 OF 3

STATE OF LOUISIANA
AIDAN EYMARD
License No. 46220
PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING
8/2/2022

APPROVED BY CHIEF ENGINEER: DATE: 8/4/2022

DRIVEWAYS ON NON-CURBED ROADWAYS

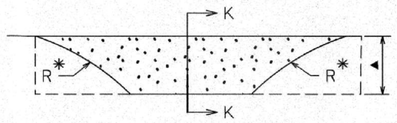
STANDARD PLAN DW-01

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

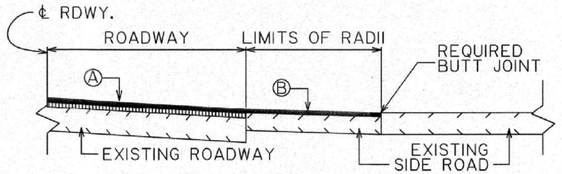
STANDARD PLAN

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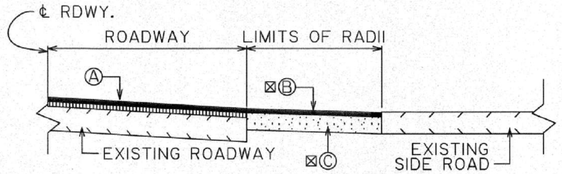
TURNOUT TIE-IN DETAILS FOR OVERLAY PROJECTS



DETAIL OF APRON AT TURNOUT (TYPICAL)



SECTION K-K (PAVED SIDE ROAD)



SECTION K-K (UNPAVED SIDE ROAD)

Ⓐ ASPHALT CONCRETE (COURSES AND TYPES SHOWN ON ROADWAY TYPICAL SECTION)

Ⓑ ASPHALT CONCRETE (THICKNESS SHALL MATCH ROADWAY WEARING SURFACE)

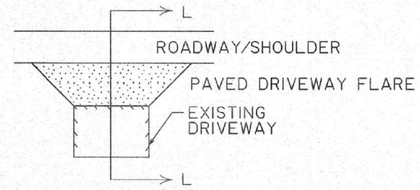
⊠Ⓒ ASPHALT CONCRETE BASE COURSE

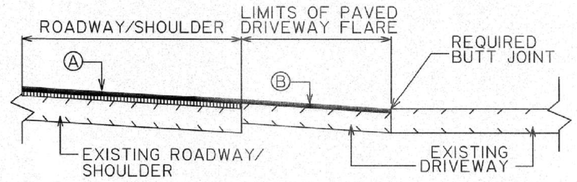
* MATCH EXISTING RADIUS

▲ VERTICAL TRANSITION FROM ROADWAY TO BUTT JOINT TIE-IN WHERE NEEDED

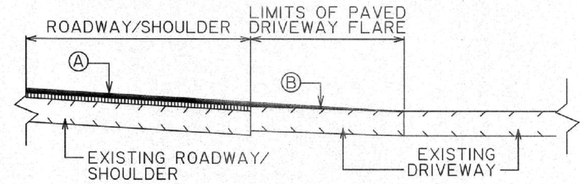
⊠ TOTAL THICKNESS OF WEARING COURSE AND BASE COURSE SHALL BE A MINIMUM OF 6"

DRIVEWAY TIE-IN DETAILS FOR OVERLAY PROJECTS





SECTION L-L (ALTERNATE 1)



SECTION L-L (ALTERNATE 2)

Ⓐ ASPHALT CONCRETE (COURSES AND TYPES SHOWN ON ROADWAY TYPICAL SECTION)

Ⓑ ASPHALT CONCRETE (THICKNESS SHALL MATCH ROADWAY WEARING COURSE)

NOTES:

1. DRIVE WIDTHS AND FLARE DIMENSIONS TO BE ADJUSTED TO MATCH EXISTING CONDITIONS AS DIRECTED BY THE PROJECT ENGINEER.
2. TYPE OF TIE-IN AND LENGTH OF OVERLAY TRANSITION TO BE SET BY PROJECT ENGINEER TO ACHIEVE A SUITABLE CONNECTION FOR EXISTING DRIVE.
3. REFER TO SHEET 2 OF DW-01 FOR SUGGESTED TIE-IN CRITERIA OF STEEP GRADES.

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
8/4/2022

SHEET NUMBER 211

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN P. TONEY | DETAIL P. TONEY | REVIEW D. SMITH
CHECK R. MCMILLAN | CHECK R. MCMILLAN | SERIES # 3 OF 3

STATE OF LOUISIANA
AIDAN EYMARD
License No. 46220
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
9/2/2022

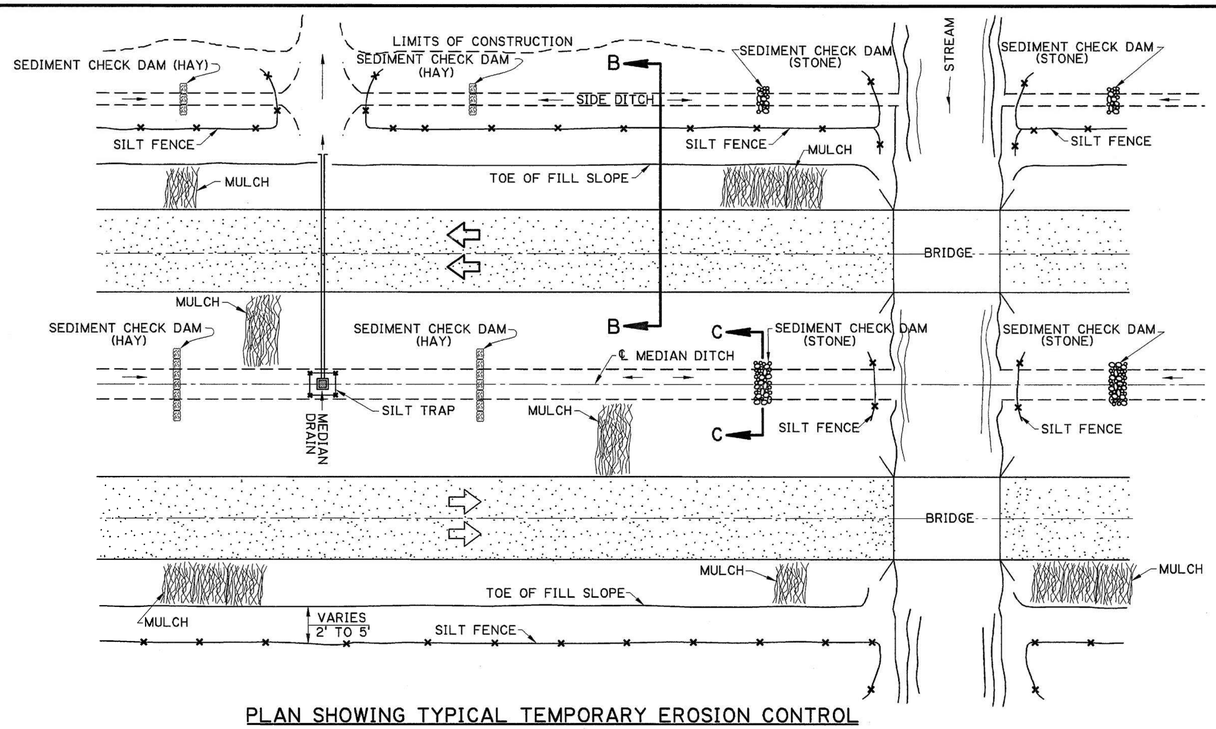
APPROVED BY CHIEF ENGINEER: DATE: 8/4/2022

TURNOUT AND DRIVEWAY TIE-IN DETAILS

STANDARD PLAN DW-01

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

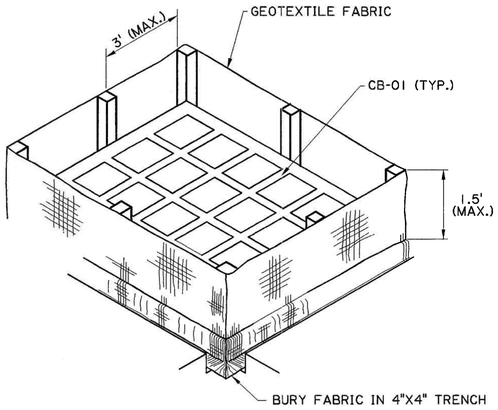


PLAN SHOWING TYPICAL TEMPORARY EROSION CONTROL

MULCHES

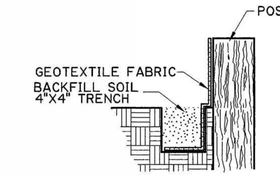
MULCHES ARE THE APPLICATION OF MATS OF MATERIAL PLACED ON THE SOIL SURFACE TO PREVENT EROSION BY PROTECTING THE SOIL SURFACE FROM RAINDROP IMPACT AND TO REDUCE THE VELOCITY OF OVERLAND FLOW. MULCHES CAN BE ORGANIC OR SYNTHETIC. MULCHES SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR TEMPORARY EROSION CONTROL. 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

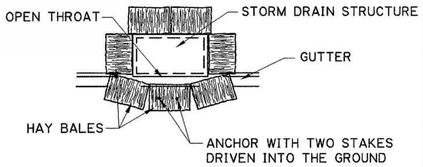


ISOMETRIC VIEW SHOWING GEOTEXTILE FABRIC

(BACKFILL SOIL NOT SHOWN)



SECTION THRU TRENCH SHOWING GEOTEXTILE FABRIC



PLAN SHOWING HAY BALES

PAY ITEM: TEMPORARY HAY OR STRAW BALES

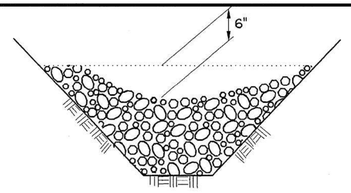
TEMPORARY INLET SILT TRAP

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. THE GEOTEXTILE FABRIC SHALL CONFORM TO PROJECT SPECIFICATIONS FOR GEOTEXTILE FABRIC (CLASS G).
2. 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.
3. 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 ½" STAPLES.
4. THE TRAP SHOULD BE INSPECTED REGULARLY AND AFTER EACH STORM. THE SEDIMENT SHOULD BE REMOVED AND EACH STAKE SHOULD BE FIRMLY IN THE GROUND.
5. HAY BALES SHALL BE PLACED SO THAT THE BINDING WIRE OR TWINE IS NOT IN CONTACT WITH THE GROUND.

STATE OF LOUISIANA
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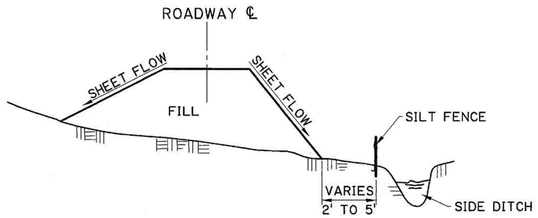
SECTION C-C

TEMPORARY SEDIMENT CHECK DAM (STONE)

PAY ITEM: TEMPORARY SEDIMENT CHECK DAM (STONE)

NOTES:
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 STORM WATER FLOWS, THEREBY REDUCING EROSION 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:

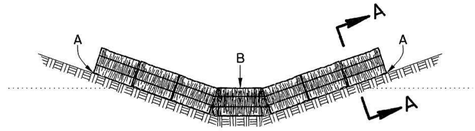
1. USE IN SMALL OPEN CHANNELS WHICH DRAIN 10 ACRES OR LESS
2. DO NOT USE IN A LIVE STREAM
3. USE IN A TEMPORARY DITCH OR SWALE WHICH, BECAUSE OF THEIR SHORT LENGTH OF SERVICE, CANNOT RECEIVE A NON- ERODIBLE LINING
4. USE IN PERMANENT DITCHES OR SWALES WHICH WILL NOT RECEIVE A PERMANENT LINING FOR AN EXTENDED PERIOD OF TIME
5. USE IN TEMPORARY OR PERMANENT DITCHES OR SWALES WHICH NEED PROTECTION DURING THE ESTABLISHMENT OF GRASS LININGS
6. FOR STONE SPECIFICATIONS, SEE PROJECT SPECIFICATIONS FOR RIPRAP, (CLASS 2 LB)



SECTION B-B

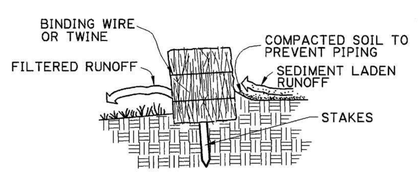
TEMPORARY SILT FENCE APPLICATION

(FOR CONSTRUCTION DETAILS AND SPECIFICATIONS SEE SHEET 2 OF 2.)



POINTS A SHOULD BE HIGHER THAN POINT B.

ELEVATION



SECTION A-A

TEMPORARY SEDIMENT CHECK DAM (HAY)

PAY ITEM: 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. THE HAY BALES SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR TEMPORARY EROSION CONTROL.
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

SHEET NUMBER	212

PARISH	FEDERAL PROJECT	STATE PROJECT
DESIGNED JCM CHECKED	DETAILED KAJ CHECKED JCM	DATE 1-14-94 SHEET 1 OF 2

NO.	REVISION DESCRIPTION	BY	DATE
	REMOVE SPECIFIC PAY ITEM NOS., GENERAL REVISIONS	MH	10-1-08

APPROVED BY CHIEF ENGINEER: [signature]
DATE: 10-1-08

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

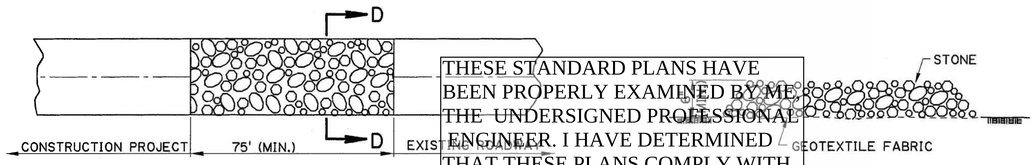
TEMPORARY EROSION CONTROL DETAILS

STANDARD PLAN EC-01

HYDRAULICS SECTION

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10/13/2020 15:24



PLAN

SECTION D-D

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TEMPORARY STONE CONSTRUCTION ENTRANCE

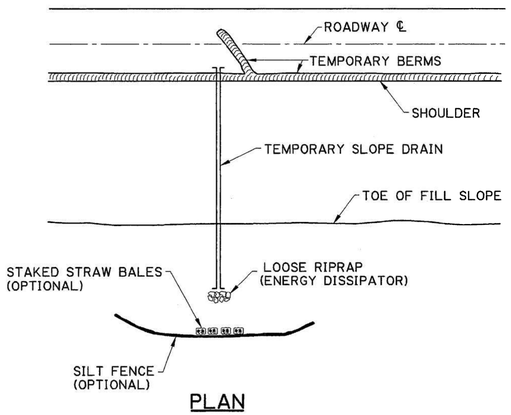
PAY ITEM: TEMPORARY STONE CONSTRUCTION ENTRANCE

NOTES:

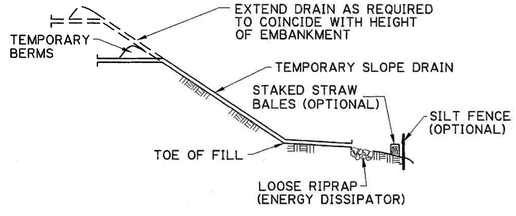
TEMPORARY STONE CONSTRUCTION ENTRANCE AND/OR WASH RACK

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 ENTRANCE AND/OR WASH RACKS ARE:

1. THE STONE LAYER MUST BE AT LEAST 6 INCHES THICK.
2. THE STONE SHALL CONFORM TO PROJECT SPECIFICATIONS FOR RIPRAP (CLASS 2 LB).
3. THE LENGTH OF THE PAD MUST BE A LEAST 75 FEET AND IT MUST EXTEND THE FULL WIDTH OF THE VEHICULAR INGRESS AND EGRESS.
4. A GEOTEXTILE FABRIC UNDERLINER IS REQUIRED. THE GEOTEXTILE FABRIC SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR GEOTEXTILE FABRIC (CLASS D).
5. 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.



PLAN



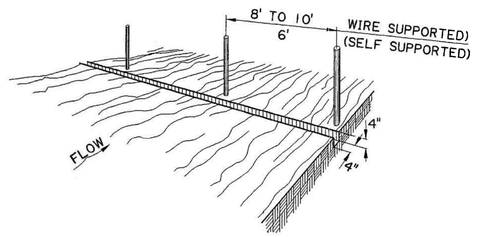
ELEVATION

TEMPORARY SLOPE DRAIN

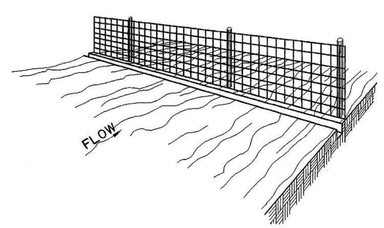
A TEMPORARY SLOPE DRAIN IS A DEVICE USED TO CARRY WATER FROM THE CONSTRUCTION WORK AREA TO A LOWER ELEVATION. SLOPE DRAINS MAY BE PLASTIC SHEET, METAL OR PLASTIC PIPE, STONE GUTTERS, FIBER MATS, OR CONCRETE OR ASPHALT DITCHES. A FEW BASIC DESIGN GUIDELINES FOR THE USE OF A TEMPORARY SLOPE DRAIN ARE:

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 - 3 MILS THICK MIN.
   CORRUGATED PIPE - 12" MINIMUM
   PLASTIC SHEETING - 4' WIDE MINIMUM
   PLASTIC SHEETING - 3 MILS THICK MIN.
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 A SILT FENCE, HAY BALES, OR OTHER APPROVED SEDIMENT CONTROL DEVICES.
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 SILT TRAPS CLEANED IF NECESSARY.

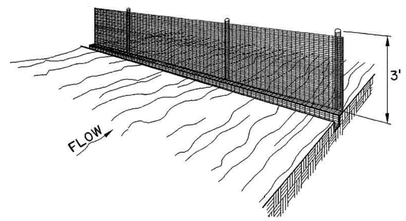
1. SET POSTS AND EXCAVATE A 4" X 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.



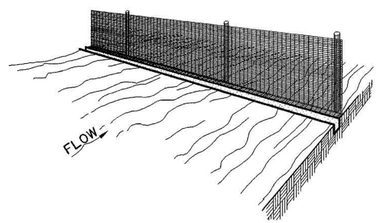
2. STAPLE WIRE FENCING TO THE POSTS.



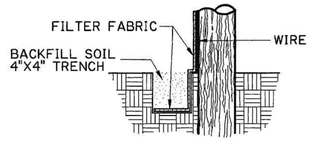
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT EXCAVATED SOIL.



EXTENSION OF FABRIC INTO THE TRENCH.



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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 SUPPORTED BY POSTS AND STRETCHED ACROSS AN AREA TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT. THE SILT FENCING SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS FOR TEMPORARY EROSION CONTROL. 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 THERE 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

SHEET NUMBER	213				
PARISH	FEDERAL PROJECT	STATE PROJECT			
DESIGNED JCM	DETAILED KAJ	DATE 1-14-94			
CHECKED	CHECKED JCM	SHEET 2 OF 2			
	BY	DATE 10-1-08	REVISION DESCRIPTION	APPROVED BY CHIEF ENGINEER:	
	MH	10-1-08	REMOVE SPECIFIC PAY ITEM NOS., GENERAL REVISIONS		

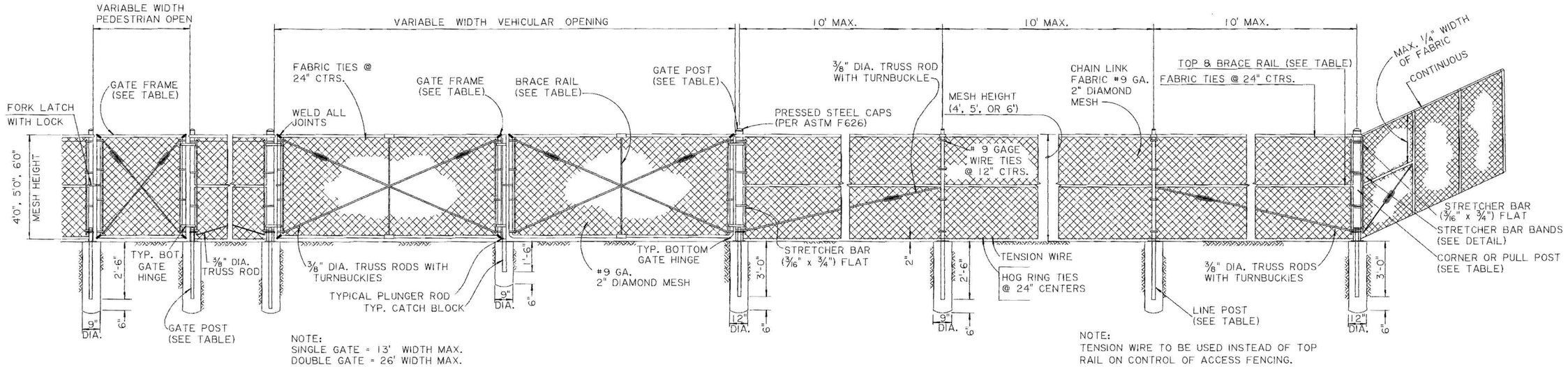
STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

TEMPORARY EROSION CONTROL DETAILS

STANDARD PLAN EC-01

HYDRAULICS SECTION

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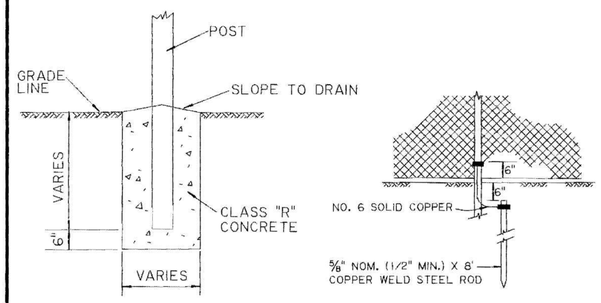


NOTE:
SINGLE GATE = 13' WIDTH MAX.
DOUBLE GATE = 26' WIDTH MAX.

NOTE:
TENSION WIRE TO BE USED INSTEAD OF TOP RAIL ON CONTROL OF ACCESS FENCING.

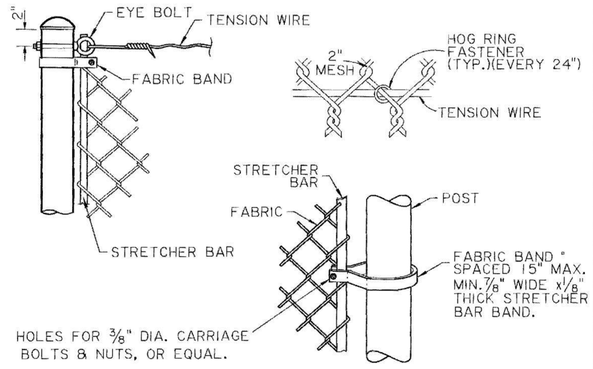
CHAIN LINK FENCE (4', 5', AND 6')

NOTE: ALL CONC. FOOTING SHALL BE CROWNED 2" ABOVE GRADE LINE.

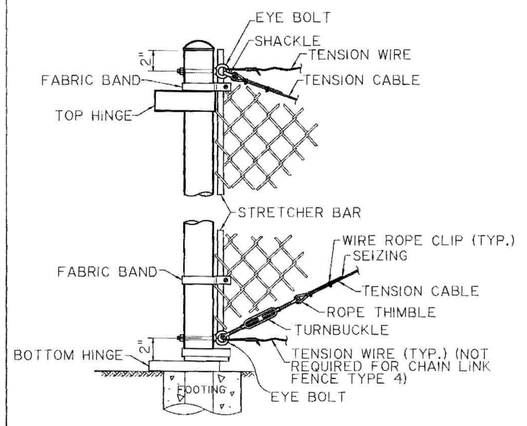


DETAIL OF POST FOOTING

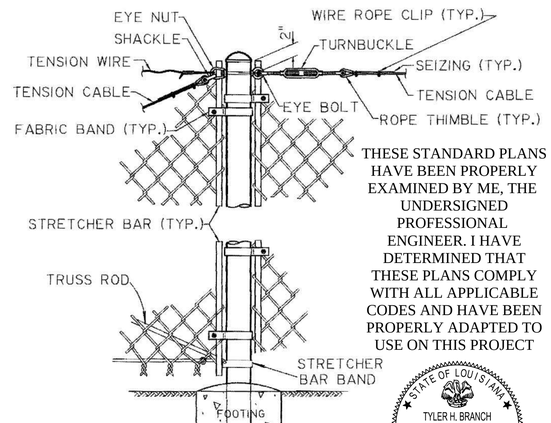
DETAIL OF GROUND WIRES FOR FENCES



FABRIC & TENSION WIRE DETAILS



GATE POST DETAIL



BRACE & TRUSS CONNECTION AT LINE POST

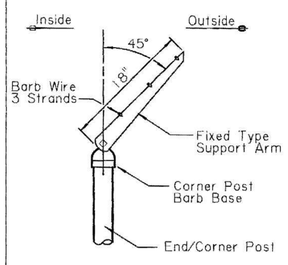
NOTES:

1. THE FENCE INSTALLATION AND DETAILS SHOWN ARE TYPICAL AND MAY VARY IN ACCORDANCE WITH DIFFERENT MANUFACTURERS, PROVIDED THEY MEET THE STANDARD SPECIFICATIONS.
2. TYPICAL INSTALLATION PLAN MAY VARY AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. LOCATION OF GATES TO BE SHOWN ON PLANS.
3. GROUNDING ROD ASSEMBLIES ARE TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
4. ALL BOLTS TO BE UPSET TO DISCOURAGE VANDALISM.
5. ALL CONNECTION METHODS TO BE APPROVED BY THE PROJECT ENGINEER.
6. LOCATION OF GATES TO BE SHOWN ON PLANS.
7. LATERAL FENCE TO BE SAME CONSTRUCTION AS FRONTAL FENCE.
8. CONTROL OF ACCESS FENCE SHALL BE 5 FT IN HEIGHT UNLESS OTHERWISE NOTED IN THE PLANS.
9. AT EACH LOCATION WHERE AN ELECTRIC TRANSMISSION, DISTRIBUTION, OR SECONDARY LINE CROSSES A FENCE, THE CONTRACTOR SHALL FURNISH AND INSTALL A GROUND CONFORMING TO ARTICLE 250 OF THE NATIONAL ELECTRIC CODE. A GROUND SHALL ALSO BE INSTALLED AT A MAXIMUM SPACING OF 500 FT. ALONG THE FENCE. GROUNDING WILL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE COST OF THE FENCE.
10. SEE AASHTO M-181 FOR ADDITIONAL REQUIREMENTS.

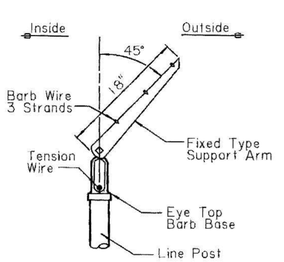
POST & RAIL TABLE

	STANDARD		ALTERNATES			
	OUTSIDE DIA. (INCHES)	LBS. (PER LIN.FT.)	DIMENSION (INCHES)	SECTION	LBS. (PER LIN.FT.)	ASTM F1043 GROUP
LINE POST	2 3/8	3.65	2.375	ROUND	3.12	
			2.25 X 1.70	H	3.26	III
			2.25 X 1.70	HEAVY C	2.78	II
			1.875 X 1.625	STD. C	2.40	II
BRACE RAIL	1 5/8	2.27	1.660	ROUND	1.84	
COR. POST	2 7/8	5.79	2.875	ROUND	4.64	
GATE POST	4.0	9.10	3.500	ROUND	5.71	IC
GATE FRAME	1 7/8	2.72	1.900	ROUND	2.28	

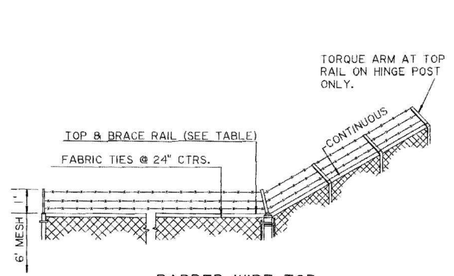
7 FT FENCE



CORNER POST SUPPORT ARM



LINE POST SUPPORT ARM



BARBED WIRE TOP

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 214

DESIGNED	ROAD DESIGN	PARISH	FEDERAL PROJECT	STATE PROJECT
CHECKED				
DETAILED	ROAD DESIGN			01-07-11
CHECKED				
DATE	11-3-11			
SHEET	1 OF 1			

REVISION DESCRIPTION — BY — DATE

APPROVED BY CHIEF ENGINEER — DATE

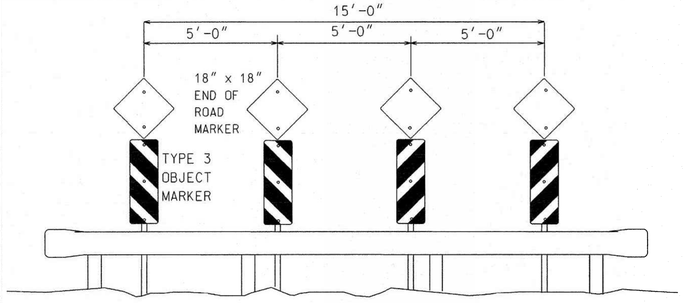
CHAIN LINK FENCE & GATES
4 FT., 5 FT., 6 FT. & 7 FT.

STANDARD PLAN: FN-01

ROAD DESIGN

03-NOV-2011 09:08

IP_PWP:dms10583\FN-01.dgn



END-OF-ROADWAY INSTALLATION

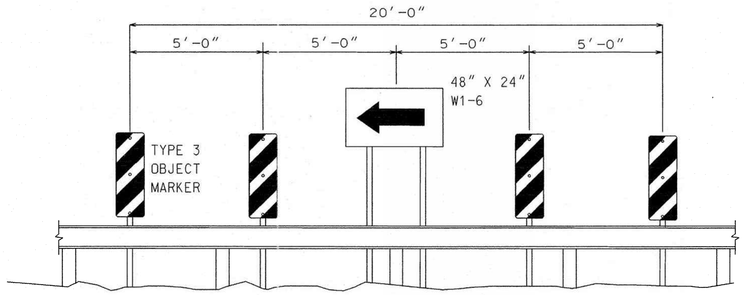
DEAD END ROAD INSTALLATION

(TYPE A - WITH GUARD RAIL, TYPE D - WITHOUT GUARDRAIL)

For End of Road installation Object Marker stripes shall slope downward toward the center.

Guardrail to be installed in accordance with guardrail Standard Plans.

Typical installation requires 25 ft. of rail with flared end sections.



TURN INSTALLATION

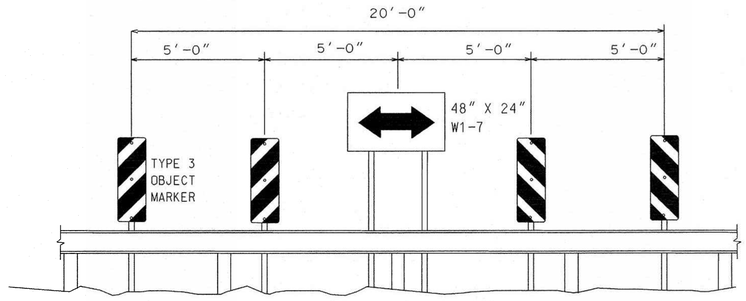
DEAD END ROAD INSTALLATION

(TYPE B - WITH GUARD RAIL, TYPE C - WITHOUT GUARDRAIL)

For Turn installations Object Marker stripes shall slope downward toward the direction of travel.

Guard rail to be installed in accordance with guardrail Standard Plans.

Typical installation requires 25 ft. of rail with flared end sections.



T-INTERSECTION INSTALLATION

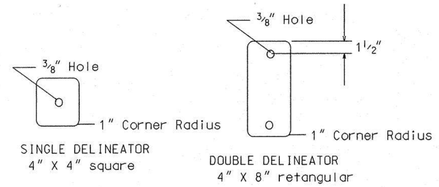
DEAD END ROAD INSTALLATION

(TYPE B - WITH GUARD RAIL, TYPE C - WITHOUT GUARDRAIL)

For T-intersection installations Object Marker stripes shall slope away from center.

Guardrail to be installed in accordance with guardrail Standard Plans.

Typical installation requires 25 ft. of rail with flared end sections.



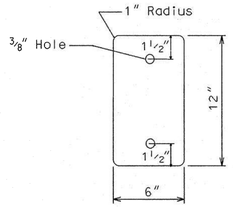
DETAIL OF DELINEATORS

Colors shall be red, white, or yellow.
The sheeting shall be in accordance with DOTD Standard Specification

For alternate Delineator/Flexible Post systems see the DOTD Approved Materials List. Alternates shall have an equivalent area of sheeting and shall not be less than 3 in. wide.

The mounting height shall be the same as for Milepost Markers.

Post penetration in ground shall be a minimum of 2 ft.

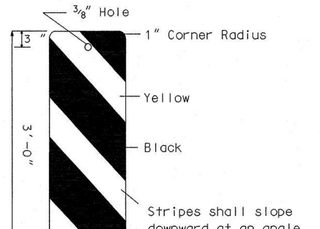


DETAIL OF TYPE 2 OBJECT MARKER

The face shall be yellow. The sheeting shall be in accordance with DOTD Standard Specification. The typical mounting height from the ground line to the bottom of the object marker shall be 36 in.

Post penetration in ground shall be a minimum of 2 ft.

Type 2 Object Markers are typically used in the right-of-way to mark objects for mowing operations.



Stripes shall slope downward at an angle of 45° toward the side of the object on which traffic is to pass.

Note: For mile markers on conventional roads. See the details shown on the Special Signing Details sheets-B. This is in accordance with MUTCD signs D10-4 & D10-5 in Figure 2H-4.

DETAIL OF TYPE 3 OBJECT MARKER

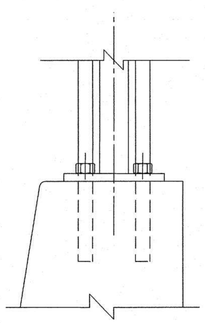
The markings on the Object Markers shall be diagonal, black and yellow stripes. The sheeting shall be in accordance with DOTD Standard Specifications.

Post penetration in ground shall be a minimum of 3 ft.

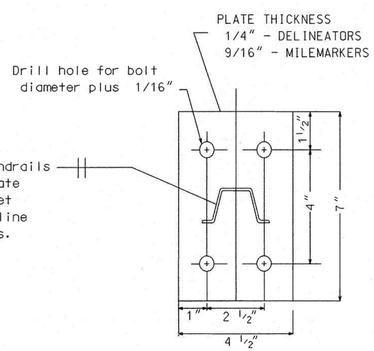
Type 3 Object Markers are typically used to mark objects in the roadway (travel lanes and shoulder) and to mark guard rail installation (see guard rail Standard Plans) .

When used for marking objects in the roadway or objects that are 8 ft. or less from the shoulder or curb, the mounting height to the bottom of the object marker should be at least 4 ft. above the surface of the nearest traffic lane.

When used to mark objects more than 8 ft. from the shoulder or curb, the mounting height to the bottom of the object marker should be at least 4 ft. above the ground.



SECTION



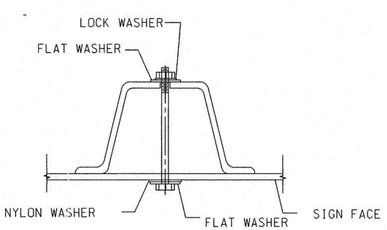
PLAN

Anchor Bolts
1/4 in. plate - 5/16 in. x 4 in. bolt
9/16 in. plate - 1/2 in. x 5 in. bolt

For bolt anchors see DOTD Approved Materials List.

Steel base plate and channel posts shall be galvanized after fabrication.

DETAIL FOR MOUNTING SIGN POST TO CONCRETE BARRIER RAIL



Steel U-channel sign post shall have 3/8 in. dia. holes drilled in channel on 1 in. centers from top of post. Steel tube post (Min. 2.23 lb/ft) may be used in lieu of U-channel posts.

Post Weight: 2.0 lbs/ft - DELINEATORS and TYPE 2 OBJECT MARKERS
2.5 lbs/ft - MILEMARKERS and TYPE 3 OBJECT MARKERS
3.0 lbs/ft - WARNING SIGNS, W1-6, W1-7

Fasteners shall be either bolts or rivets.

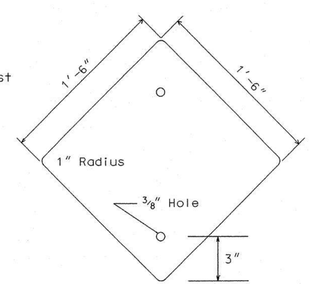
Bolts shall be 5/16 in. diameter electroplated steel hex head bolts with one nylon washer, two flat washers, one lock washer, and one vandal resistant hex nut.

Rivets shall be vandal resistant 1/4 in. diameter aluminum blind rivets with smooth, low profile heads on each end.

DETAIL FOR MOUNTING SIGN TO U-CHANNEL POST

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT



DETAIL OF END OF ROAD MARKER

Colors shall be red.

The sheeting shall be in accordance with DOTD Standard Specification.

The minimum mounting height from the ground line to the bottom of the marker shall be 5 ft.

Post penetration in ground shall be a minimum of 3 ft.

MOUNTING DETAILS

SHEET NUMBER 215

PARISH

FEDERAL PROJECT

STATE PROJECT

DESIGNED J. COLVIN
CHECKED P. ALLAIN

DETAILED M.D.ORDOGNE
CHECKED J. COLVIN

DATE 02/13/2013

SHEET

REVISION DESCRIPTION	BY	DATE: 4-7-2014

APPROVED BY CHIEF ENGINEER: Jamie P. Williams

DATE

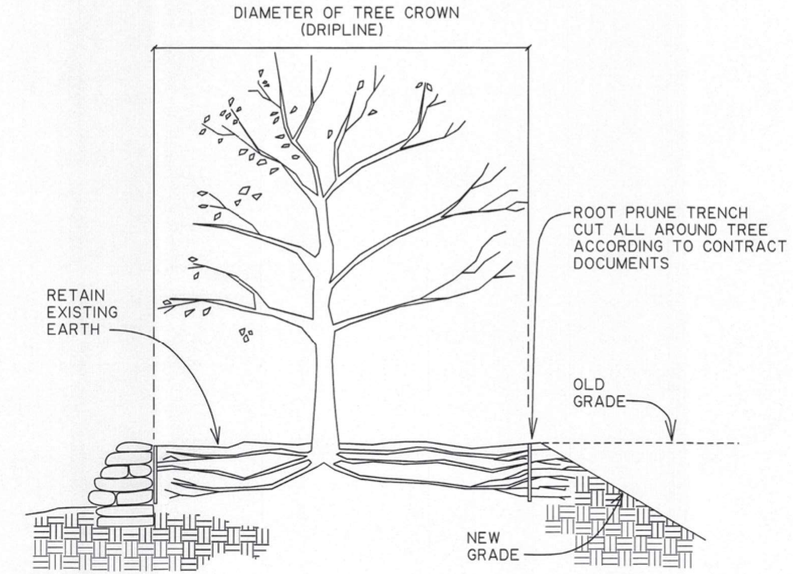
STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

OBJECT MARKERS AND DEAD END ROAD INSTALLATION

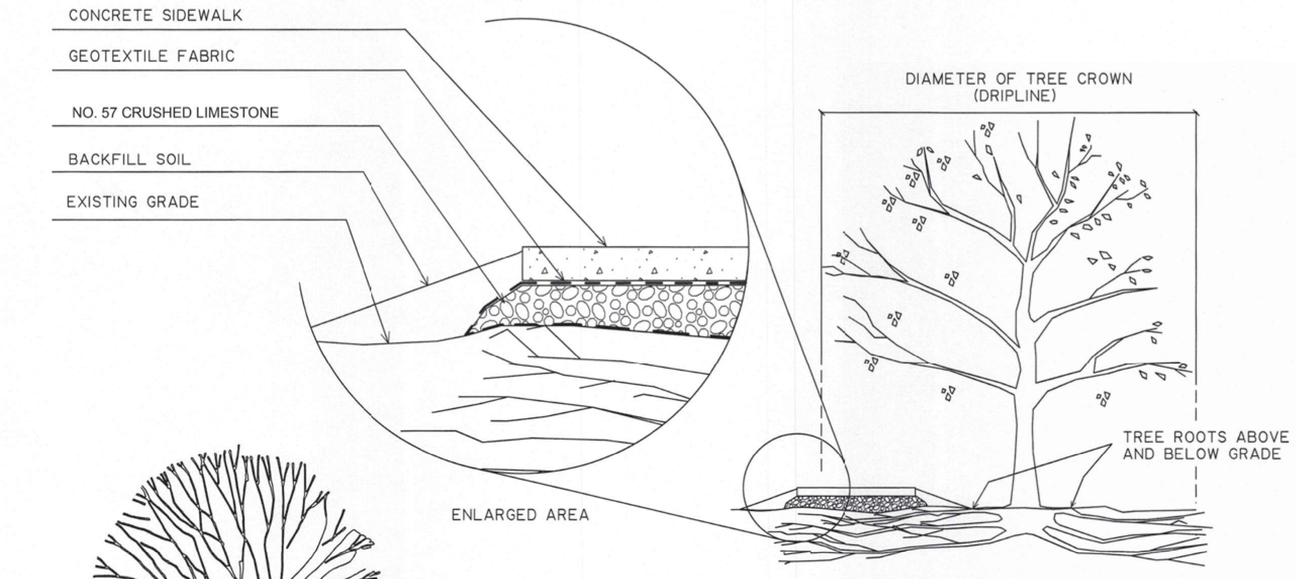
STANDARD PLAN HS-03

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT dotd

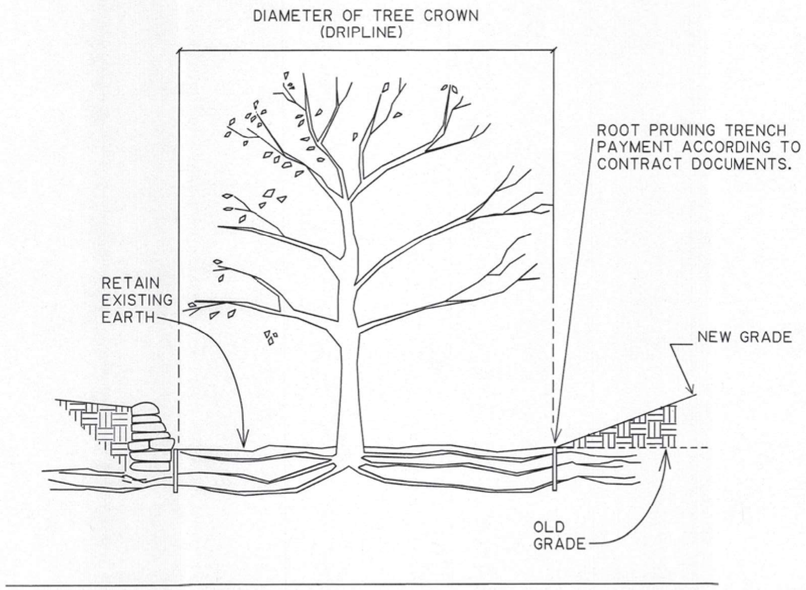
TRAFFIC ENGINEERING



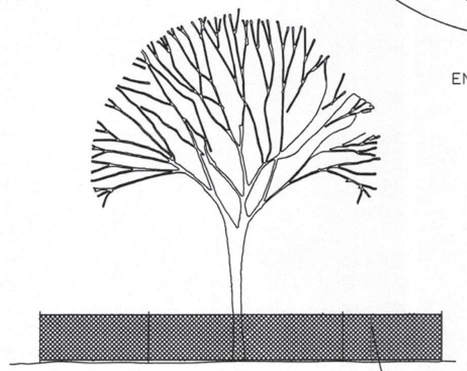
CUTTING GRADE AROUND EXISTING TREE

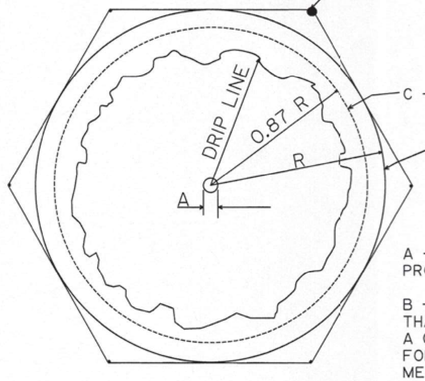


SIDEWALK WITHIN CRITICAL PROTECTION ZONE



FILLING GRADE AROUND EXISTING TREE





CONSTRUCTION / BARRIER FENCING TO BE MIN. 4' HT. AND ANCHORED WITH 'U' OR 'T' STYLE STEEL FENCE POSTS. THE BARRICADES SHALL BE PLACED TO ENCOMPASS THE CRITICAL PROTECTION ZONE (CPZ) OF THE TREE.

C - MIN. BOUNDARY

B - BOUNDARY

A - DIAMETER IN INCHES 4'-6" ABOVE GRADE OF PROTECTED TREE

B - CRITICAL PROTECTION ZONE (CPZ) THAT AREA SURROUNDING A TREE WITHIN A CIRCLE INSCRIBED BY A RADIUS OF ONE FOOT FOR EACH INCH OF THE TREE'S DIAMETER MEASURED AT 4'-6" ABOVE GRADE

C - MIN. 75% OF B AREA

CONSTRUCTION FENCING
FOR TREE PROTECTION

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

NOTE:

GREAT CARE MUST BE TAKEN NOT TO COMPACT, CUT, OR FILL THE EARTH WITHIN THE CROWN AREA OF EXISTING TREES. MOST TREE ROOTS ARE LOCATED IN THE TOP 6 TO 18 INCHES OF THE SOIL AND OFTEN SPREAD FARTHER THAN THE DRIP LINE OF THE TREE. COMPACTION CAN CAUSE SEVERE ROOT DAMAGE AND REDUCE THE MOVEMENT OF WATER AND AIR THROUGH THE SOIL. TO AVOID COMPACTING THE EARTH, DO NOT OPERATE EQUIPMENT OR STORE MATERIALS WITHIN THE DIAMETER OF THE TREE CROWN (DRIPLINE).

TREE PROTECTION DETAILS FOR CONSTRUCTION AROUND EXISTING TREES

SHEET NUMBER 216

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN | DETAIL: HJP | REVIEW | SERIES * 1 OF 1

CHECK | CHECK: RJD

APPROVED BY CHIEF ENGINEER:

DATE: 12/10/2025

NO. | DATE | REVISION OR CHANGE ORDER DESCRIPTION | BY

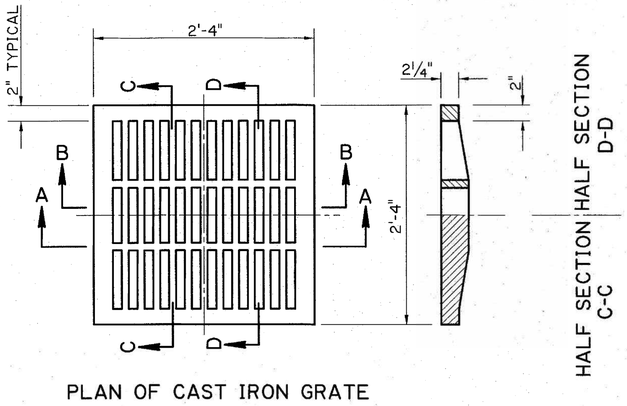
STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

TREE PROTECTION DETAILS FOR CONSTRUCTION AROUND EXISTING TREES

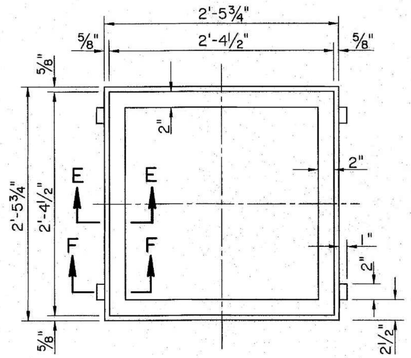
LD-02

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

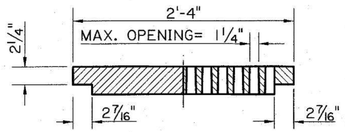
STANDARD PLAN



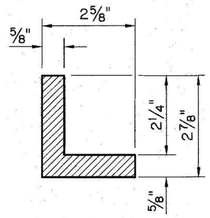
PLAN OF CAST IRON GRATE



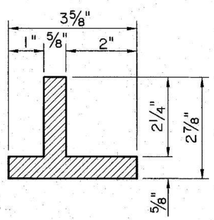
PLAN OF CAST IRON FRAME



HALF SECTION A-A | HALF SECTION B-B



SECTION E-E

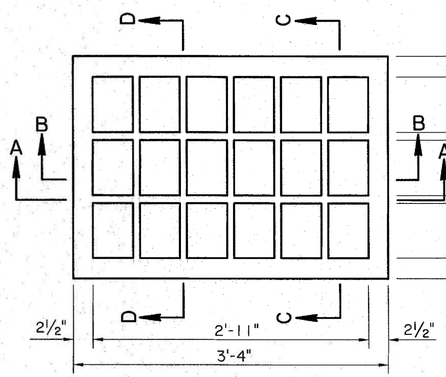


SECTION F-F

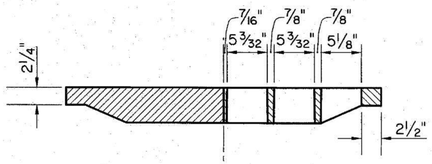
TYPE "A"

CAST IRON GRATE & FRAME

MIN. OPENING = 290 SQ. IN. AREA



PLAN OF CAST IRON GRATE



HALF SECTION A-A | HALF SECTION B-B

HALF SECTION C-C | HALF SECTION D-D

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA — TYLER H. BRANCH — License No. 41576 — REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

TYPE "B"

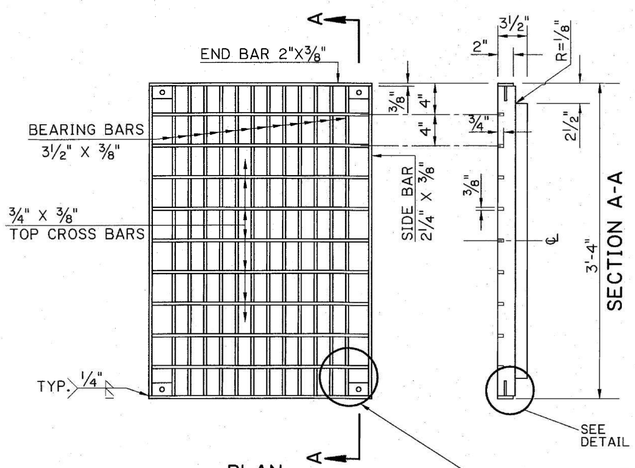
CAST IRON GRATE

NOTE: UNLESS OTHERWISE STATED, TYPE "E" FRAME WILL BE USED WITH THIS GRATE.

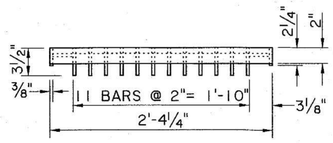
TYPE "C"

STEEL DRAIN GRATE

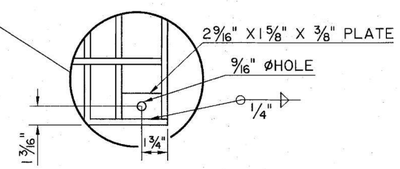
NOTES:
1. GRATES TO BE GALVANIZED AFTER FABRICATION.
2. UNLESS OTHERWISE STATED, TYPE "E," FRAME IS TO BE USED WITH THESE GRATES. (SEE SHEET 2)
3. SUPPLIER OF GRATE ALSO IS TO FURNISH PRE-FITTED GRATE FRAME.



PLAN



ELEVATION



HOLD-DOWN PLATE

WELDED & SEALED DRAIN GRATE

ALL JOINTS FULL DEPTH ¼" FILLET WELDS WITH SEAL WELDS TOP AND BOTTOM UNLESS NOTED OTHERWISE.

ALL BEARING BARS TO BE SET FLUSH ON GRATE FRAME.

WEIGHT OF DRAIN GRATE = 233 LBS. ± 5%

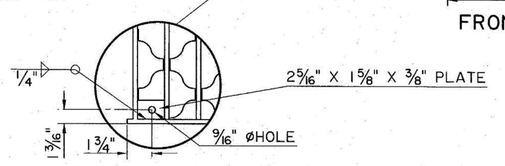
RIVETED RETICULINE DRAIN GRATE (ALTERNATE)

ALL JOINTS FULL DEPTH ¼" FILLET WELDS WITH SEAL WELDS TOP AND BOTTOM UNLESS NOTED OTHERWISE.

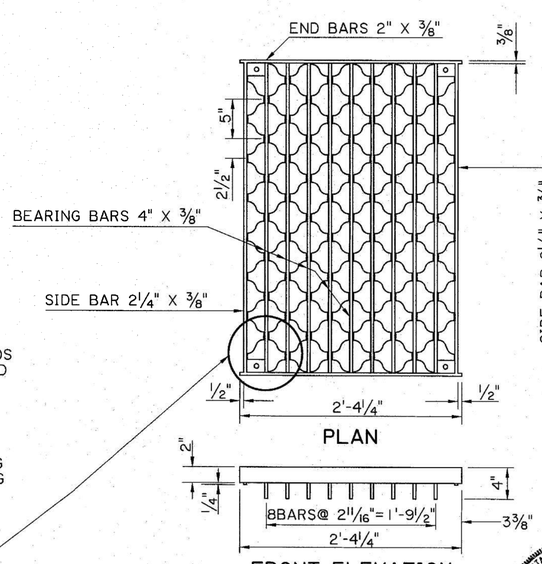
ALL BEARING BARS TO BE SET FLUSH ON GRATE FRAME.

CENTER TO CENTER OF BEARING BARS EQUAL 2 5/16" PLUS BEARING BAR THICKNESS.

WEIGHT OF DRAIN GRATE = 266 LBS. ± 5%

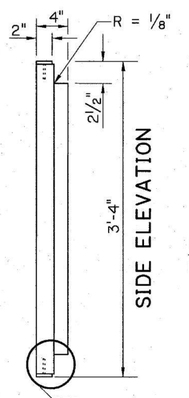


HOLD-DOWN PLATE

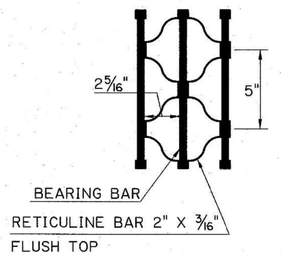


PLAN

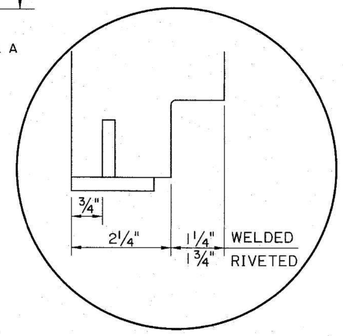
FRONT ELEVATION



SIDE ELEVATION



DRAIN GRATE DETAIL (ALTERNATE)



DETAIL A

STATE OF LOUISIANA — ALDEN M. ALLEN — REG. No. 20252 — REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING — 5-25-2018

SHEET NUMBER	217
PARISH	
CONTROL SECTION	
STATE PROJECT	
DESIGNED AMA / CHECKED AMA	
DETAILED TL / CHECKED AMA	
SERIES NUMBER	9/01/17 1 OF 6

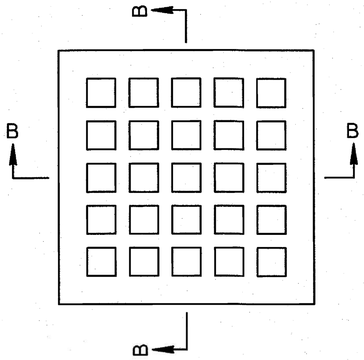
REVISION DESCRIPTION — BY — DATE: 5/25/18

APPROVED BY CHIEF ENGINEER:

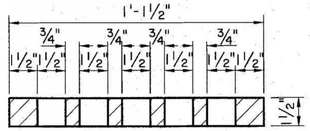
DETAILS OF GRATES, GRATE FRAMES AND COVERS FOR CATCH BASINS AND MANHOLES

STANDARD PLAN | MC-01

DOTD HYDRAULICS SECT.



PLAN

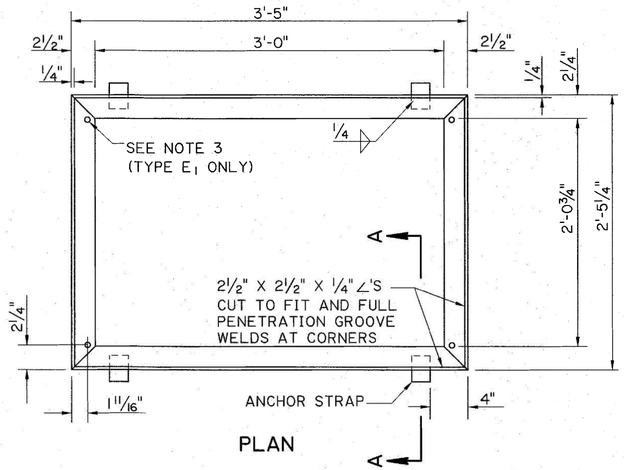


SECTION B-B

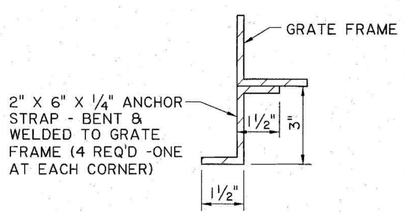
TYPE "D"

CAST IRON GRATE

WEIGHT OF CASTING = 49 LBS



PLAN

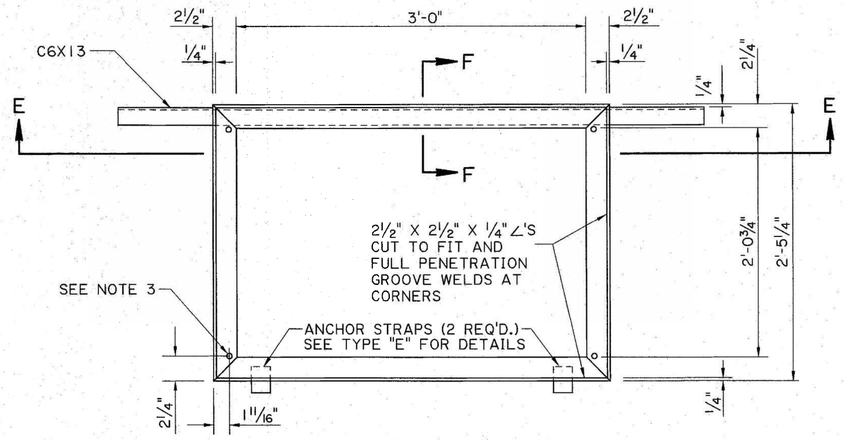


SECTION A-A

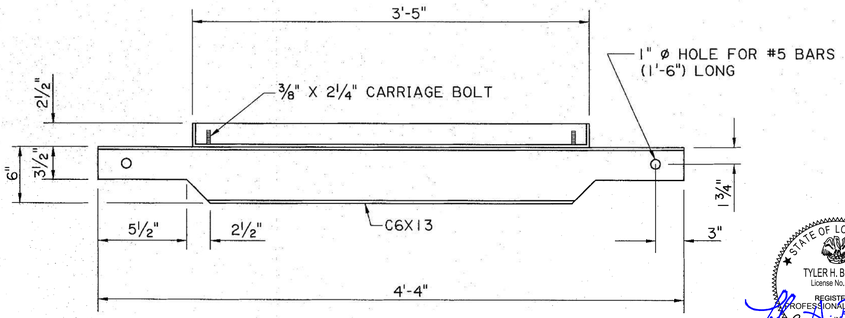
TYPE "E" AND "E1"

STEEL GRATE FRAME

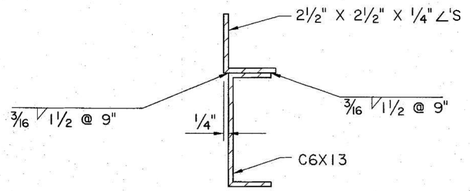
NOTES:
1. GRATE FRAME TO BE GALVANIZED AFTER FABRICATION
2. WEIGHT OF GRATE FRAME = 52 LBS
3. SQUARE PUNCH HOLE PRIOR TO GALVANIZING. ADD A ⅜ ø x 2¼" LONG -16 UNC ROUND HEAD SQUARE NECK CARRIAGE BOLT WITH JAM NUT, HEX HEAD NUT, AND FLAT WASHER (ALL STAINLESS STEEL) AFTER FRAME IS GALVANIZED.



PLAN



SECTION E-E



SECTION F-F

TYPE "F"

STEEL GRATE FRAME

NOTES:
1. GRATE FRAME TO BE GALVANIZED AFTER FABRICATION
2. WEIGHT OF GRATE FRAME = 52 LBS ± 5%
3. SQUARE PUNCH HOLE PRIOR TO GALVANIZING. ADD A ⅜ ø x 2¼" LONG -16 UNC ROUND HEAD SQUARE NECK CARRIAGE BOLT WITH JAM NUT, HEX HEAD NUT, AND FLAT WASHER (ALL STAINLESS STEEL) AFTER FRAME IS GALVANIZED.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

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STATE OF LOUISIANA
ALDEN M. ALLEN
REG. No. 20252
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
5-25-2018

SHEET NUMBER 218

PARISH | CONTROL SECTION | STATE PROJECT

DESIGNED AMA | DETAILED TL
CHECKED AMA | CHECKED AMA
SERIES NUMBER 9/01/17 2 OF 6

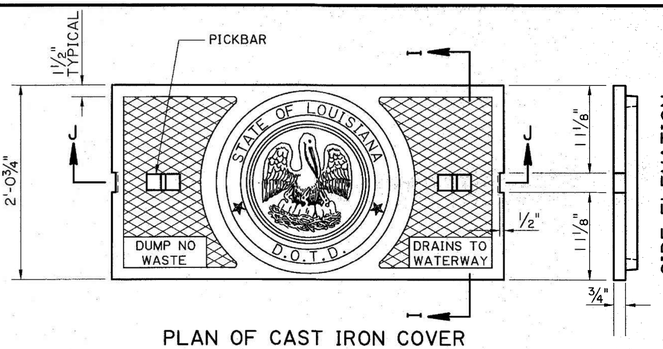
REVISION DESCRIPTION | BY | DATE: 5/25/18

APPROVED BY CHIEF ENGINEER: | DATE

DETAILS OF GRATES, GRATE FRAMES AND COVERS FOR CATCH BASINS AND MANHOLES

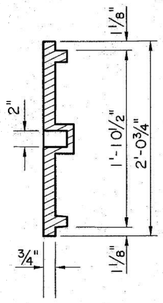
STANDARD PLAN MC-01

DOTD HYDRAULICS SECT.

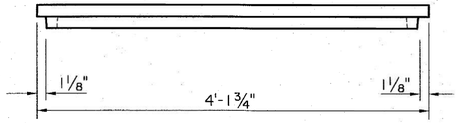


PLAN OF CAST IRON COVER

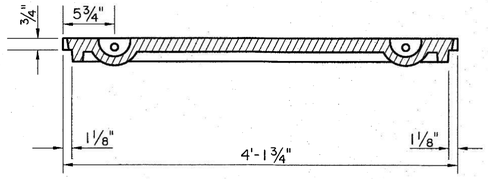
SIDE ELEVATION



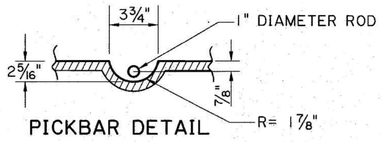
SECTION I-I



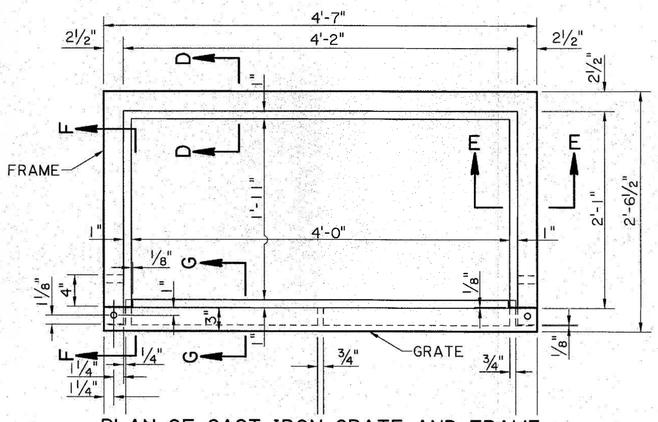
FRONT ELEVATION OF CAST IRON COVER



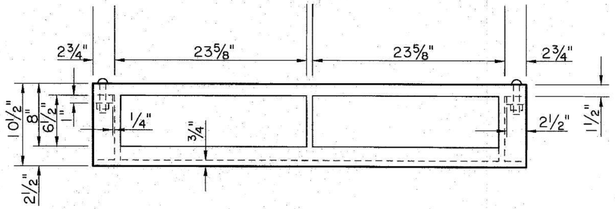
SECTION J-J



PICKBAR DETAIL



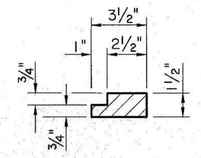
PLAN OF CAST IRON GRATE AND FRAME



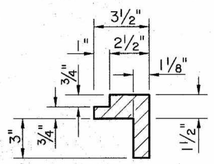
FRONT ELEVATION OF CAST IRON GRATE

TYPE "H" AND "H1"

CAST IRON COVER, GRATE AND FRAME

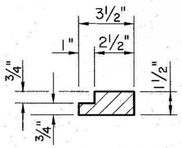


FOR CATCH BASIN "H"

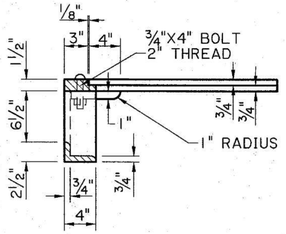


FOR PAVED GUTTER "H1"

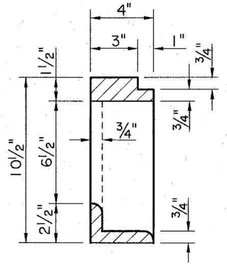
SECTION D-D



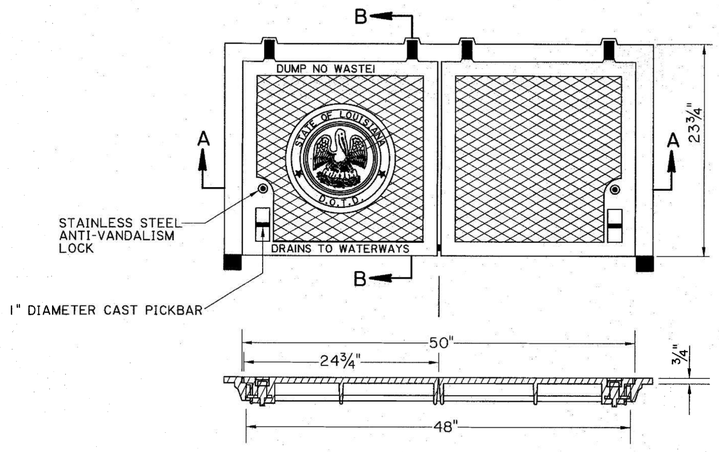
SECTION E-E



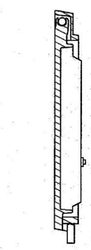
SECTION F-F



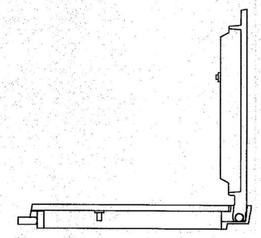
SECTION G-G



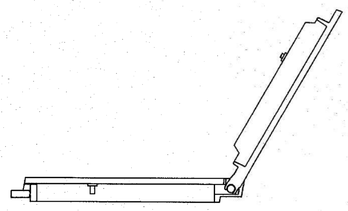
SECTION A-A



SECTION B-B



COVER AT 90 DEGREES
SAFETY STOP POSITION



COVER FULLY OPEN
TO 120 DEGREES

TYPE "Hs"

CAST IRON COVER AND FRAME SHOWN (SEE GRATE ABOVE)

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STATE OF LOUISIANA
ALDEN M. ALLEN
REG. No. 20252
REGISTERED
PROFESSIONAL ENGINEER
5-25-2018

SHEET NUMBER 219

PARISH | CONTROL SECTION | STATE PROJECT

DESIGNED AMA
CHECKED AMA
DETAILED TL
CHECKED AMA
SERIES NUMBER 9/01/17 3 OF 6

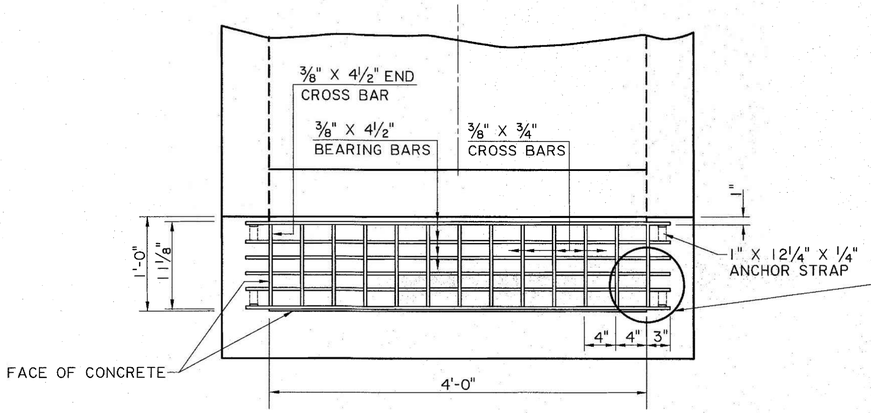
REVISION DESCRIPTION | BY | DATE: 5/25/18

APPROVED BY CHIEF ENGINEER:

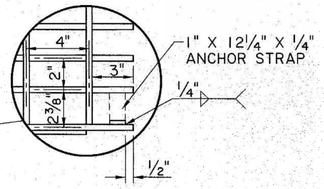
DETAILS OF GRATES, GRATE FRAMES AND COVERS FOR CATCH BASINS AND MANHOLES

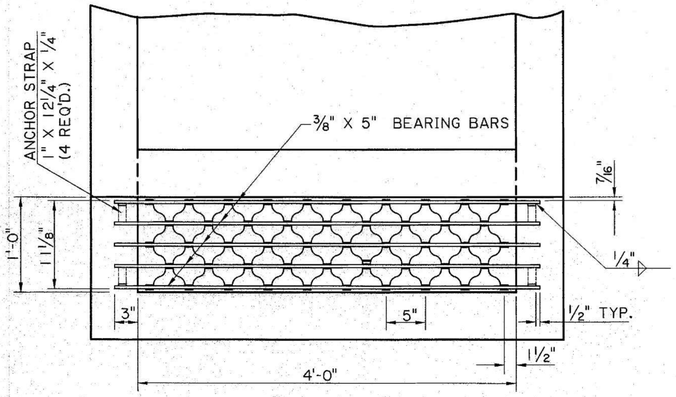
STANDARD PLAN MC-01

DOTD HYDRAULICS SECT.

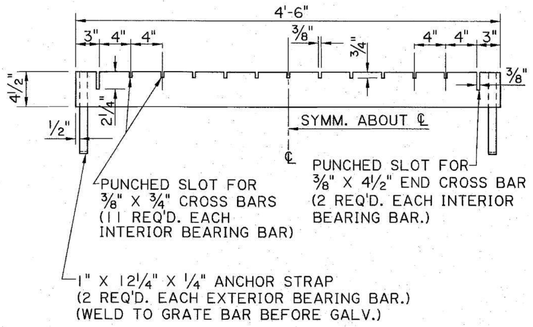


PLAN





PLAN

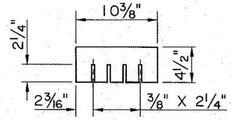


ELEVATION

WELDED & SEALED DRAIN GRATE

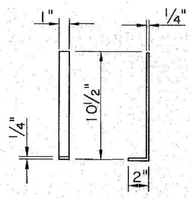
ALL JOINTS FULL DEPTH 1/4" FILLET WELDS WITH SEAL WELD TOP AND BOTTOM UNLESS NOTED OTHERWISE.

WEIGHT OF DRAIN GRATE = 185 LBS. ± 5%



PUNCHED SLOTS @ 2" CTRS.

3/8"X4 1/2" END CROSS BAR
(2 REQ'D. PER GRATE)

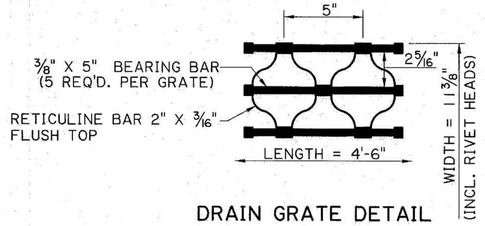


STEEL ANCHOR STRAP
(4 REQ'D. PER GRATE)

TYPE " I "

STEEL DRAIN GRATE

GRATE TO BE GALVANIZED AFTER FABRICATION.



DRAIN GRATE DETAIL
(ALTERNATE)

RIVETED RETICULINE DRAIN GRATE (ALTERNATE)

CENTER TO CENTER OF BEARING BARS EQUAL 2 11/16".

WEIGHT OF DRAIN GRATE = 176 LBS. ± 5%

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STATE OF LOUISIANA
ALDEN M. ALLEN
REG. No. 20252
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5-25-2018

SHEET NUMBER 220

PARISH	CONTROL SECTION	STATE PROJECT

DESIGNED AMA
CHECKED AMA
DETAILED TL
CHECKED AMA
SERIES NUMBER 9/01/17 4 OF 6

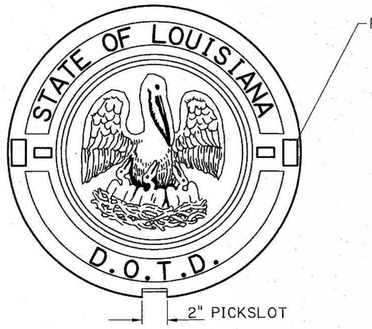
REVISION DESCRIPTION	BY	DATE: 5/25/18

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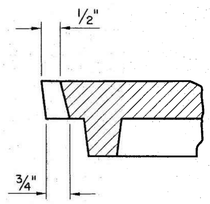
DETAILS OF GRATES, GRATE FRAMES AND COVERS FOR CATCH BASINS AND MANHOLES

STANDARD PLAN MC-01

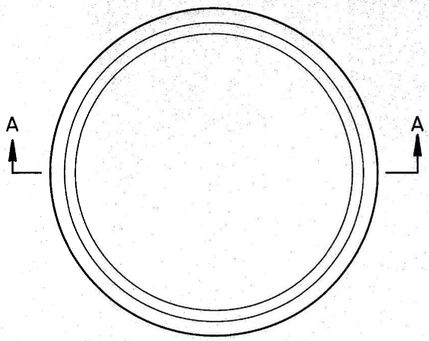
DOTD HYDRAULICS SECT.



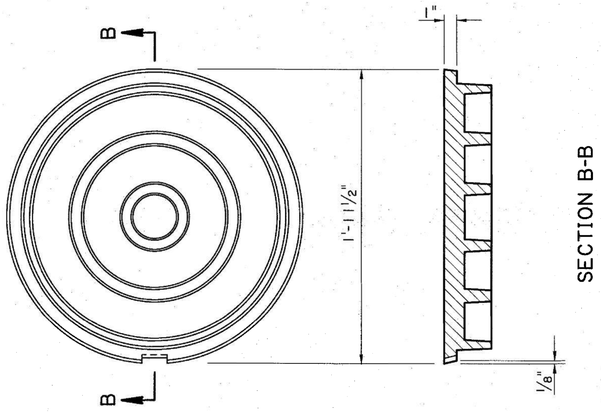
PLAN OF CAST IRON COVER



PICKSLOT DETAIL

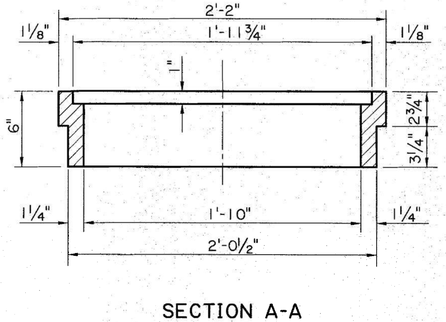


PLAN OF CAST IRON FRAME



BOTTOM OF CAST IRON COVER

SECTION B-B

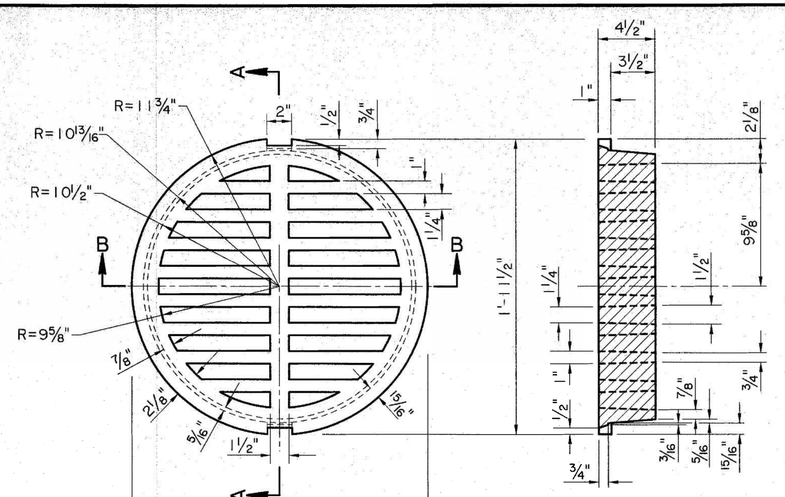


SECTION A-A

TYPE "K"

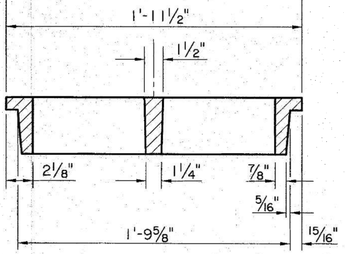
CAST IRON COVER & FRAME

PICKBAR DETAIL LEFT TO FABRICATOR



PLAN

SECTION A-A

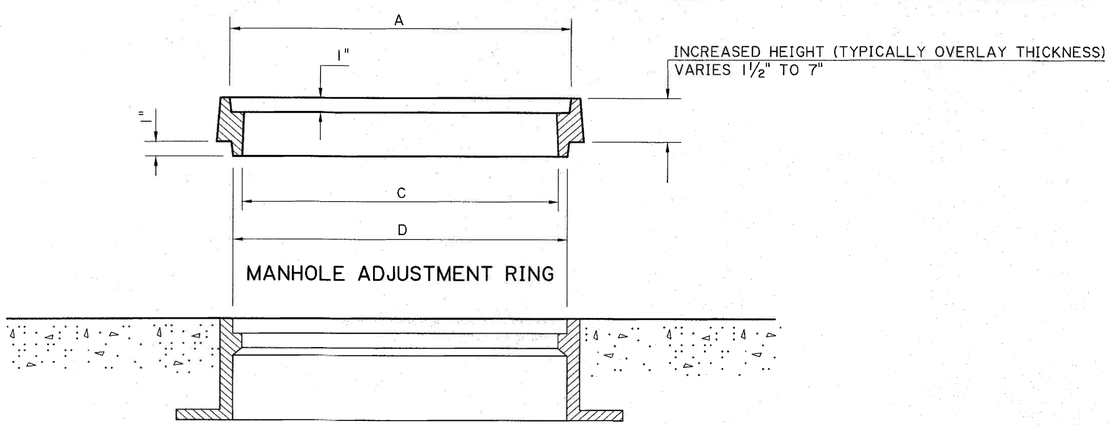


SECTION B-B

TYPE "K$_1$"

CAST IRON GRATE

NOTES: 1. APPROX. WEIGHT OF CAST IRON COVER = 250 LBS.
2. TO BE USED WITH TYPE "K" CAST IRON FRAME.



EXISTING GRATE SEAT

MANHOLE ADJUSTMENT RINGS		
A (IN.)	C (IN.)	D (IN.)
23 1/2	22 1/4	23 1/2
23 3/4	22 1/2	23 3/4

MANHOLE ADJUSTMENT RING

CAST IRON OR STEEL

STATE OF LOUISIANA
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STATE OF LOUISIANA
ALDEN M. ALLEN
REG. No. 20252
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
5-25-2018

SHEET NUMBER 221

PARISH | CONTROL SECTION | STATE PROJECT

DESIGNED AMA
CHECKED AMA
DETAILED TL
CHECKED AMA
SERIES NUMBER 9/01/17 5 OF 6

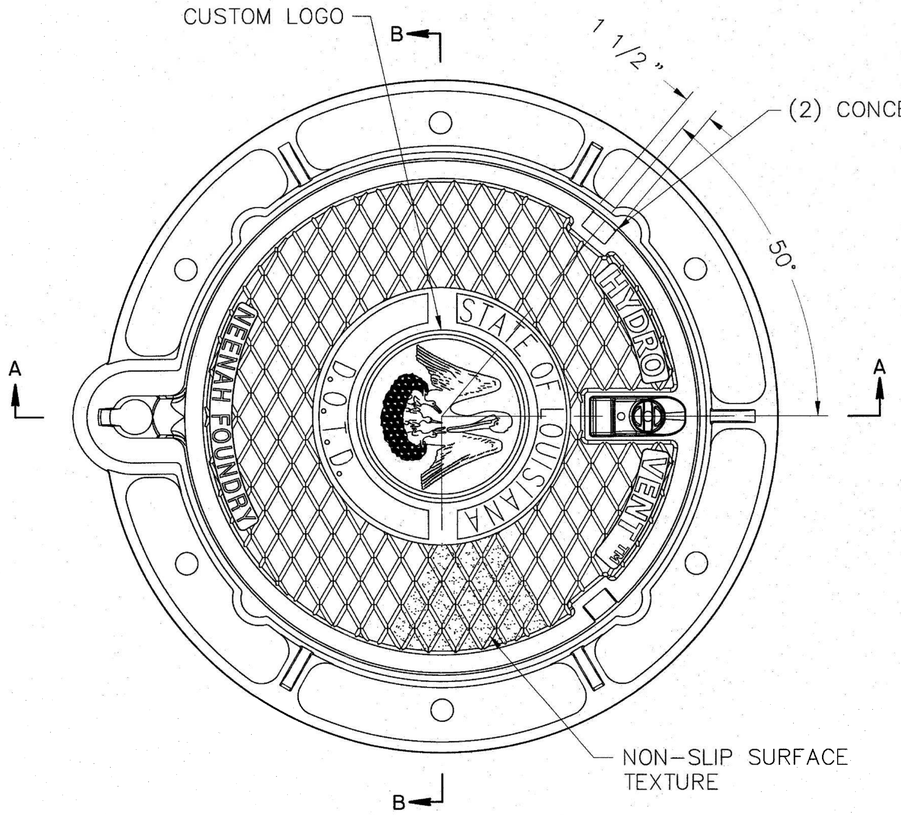
REVISION DESCRIPTION | BY | DATE: 5/25/18

APPROVED BY CHIEF ENGINEER:

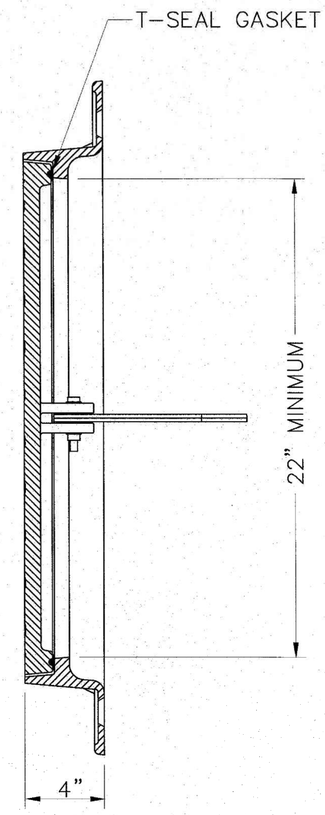
DETAILS OF GRATES, GRATE FRAMES AND COVERS FOR CATCH BASINS AND MANHOLES

STANDARD PLAN MC-01

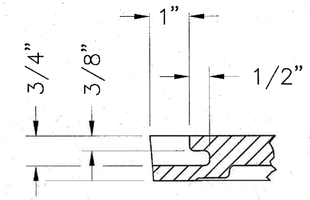
DOTD HYDRAULICS SECT.



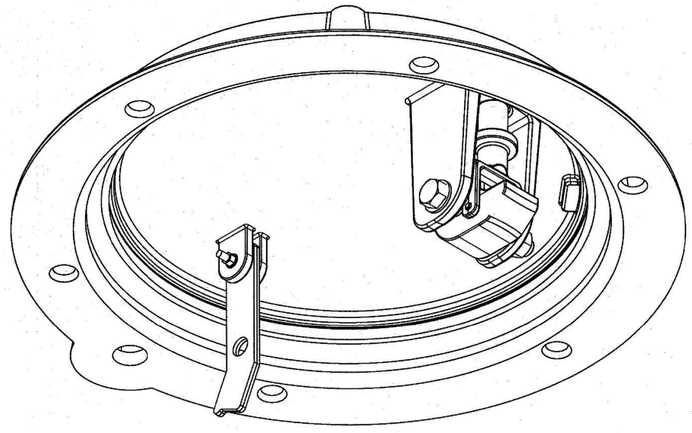
PLAN OF CAST IRON COVER



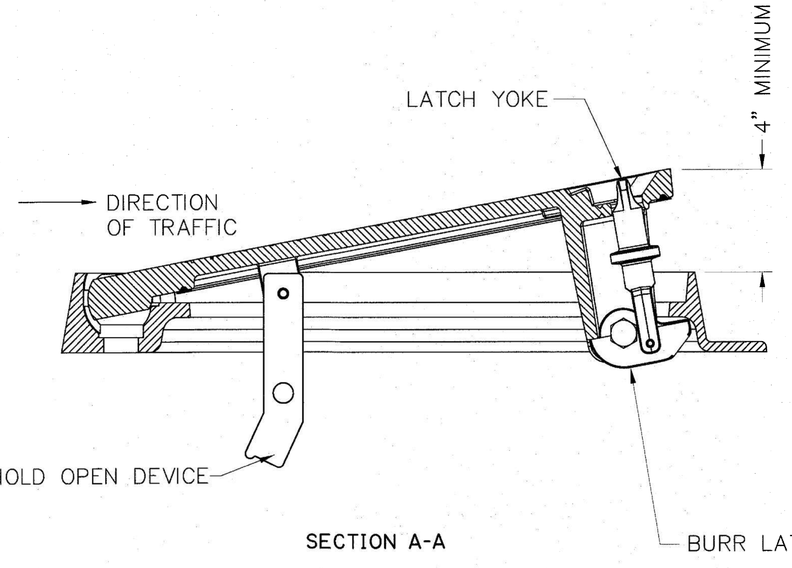
SECTION B-B



CONCEALED PICKHOLE DETAIL



ISOMETRIC BOTTOM VIEW



SECTION A-A

VENTING MANHOLE

CAST IRON COVER AND FRAME

NEENAH FOUNDRY 1650-HV SHOWN
EJ STORMSURGE 24 APPROVED BUT NOT SHOWN

TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
STATE OF LOUISIANA

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

ALDEN M. ALLEN
REG. No. 20252
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
STATE OF LOUISIANA
5-25-2018

SHEET NUMBER 222

PARISH | CONTROL SECTION | STATE PROJECT

DESIGNED AMA
CHECKED AMA
DETAILED TL
CHECKED AMA
SERIES NUMBER 12/01/17 6 OF 6

REVISION DESCRIPTION | BY | DATE: 5/25/18

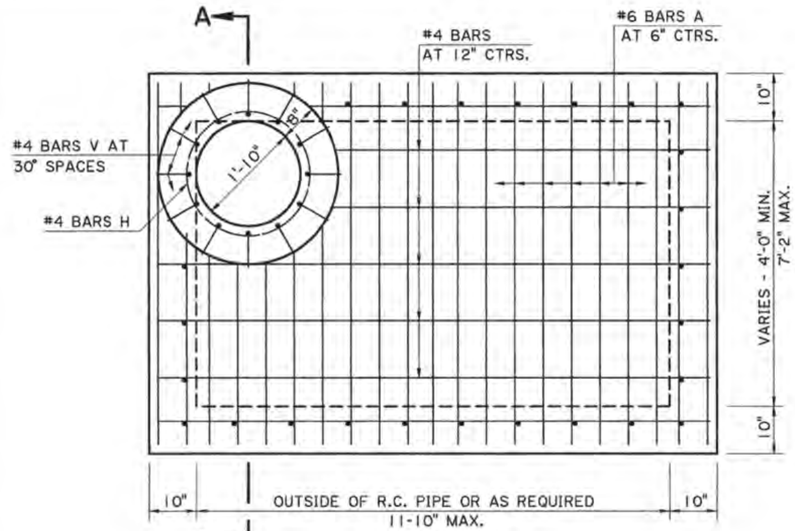
APPROVED BY CHIEF ENGINEER

DETAILS OF GRATES, GRATE FRAMES AND COVERS FOR CATCH BASINS AND MANHOLES

STANDARD CAM | MC-01

DOTD HYDRAULICS SECT.

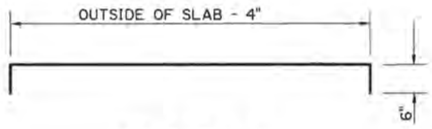
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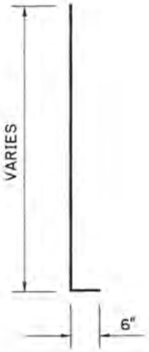
PLAN

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

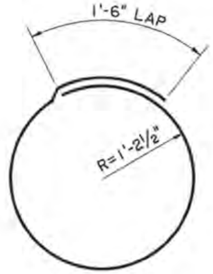
THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT



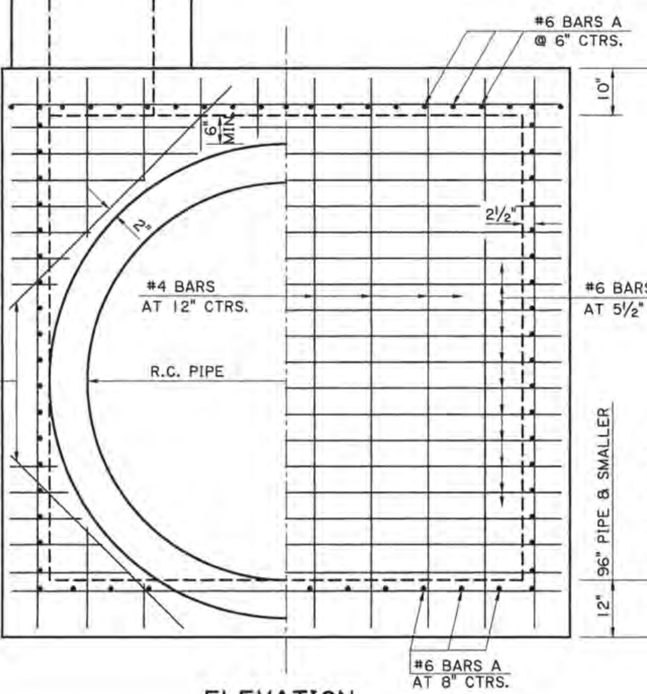
#6 BARS A



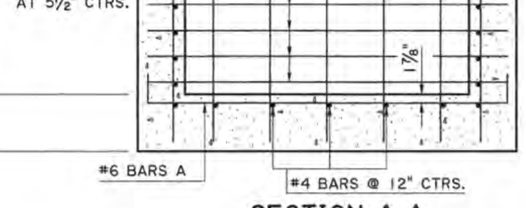
#4 BARS V



#4 BARS H



ELEVATION



SECTION A-A

DETAIL A

(MANHOLE IN PAVEMENT AREA)

GENERAL NOTES:

1. MANHOLE IS DESIGNED ACCORDING TO 4TH ED. 2007 AASHTO LRFD PROCEDURES. SECTION 702 OF THE DOTD STANDARD SPECIFICATIONS SHALL APPLY.
2. CONCRETE: ALL CONCRETE SHALL BE CLASS "M" MINOR STRUCTURE. ALL EXPOSED EDGES SHALL BE CHAMFERED ¾ IN. EXCEPT AS NOTED.
3. REINFORCING STEEL: REINFORCING STEEL SHALL BE GRADE 60. DIMENSIONS ARE TO BAR CENTERS. MINIMUM COVER FOR REINFORCING BARS SHALL BE 2 IN. CLEAR UNLESS SHOWN OTHERWISE.
4. SEE "DETAIL A" FOR DETAILS OF MANHOLE IN A PAVEMENT AREA.
5. THE CONTRACTOR WILL NOT POUR ABOVE THE BOTTOM OF THE SLAB UNTIL THE PAVING ADJACENT TO THE MANHOLE HAS BEEN COMPLETED.

SHEET NUMBER	223
PARISH	
FEDERAL PROJECT	
STATE PROJECT	
DESIGNED / CHECKED	CDJ / HJB
DETAILED / CHECKED	CDJ / HJB
DATE / SHEET	10-12-81 / 1 OF 1

REVISION DESCRIPTION	DATE	BY
CORRECTED DRAFTING ERROR OF BARS IN PLAN VIEW	5-18-11	WMR
REVISED TO 2007 AASHTO LRFD PROCEDURES	11-22-10	MH
REDRAFTED, REMOVED MANHOLE STEPS, NEW SHEET	10-22-08	JCM

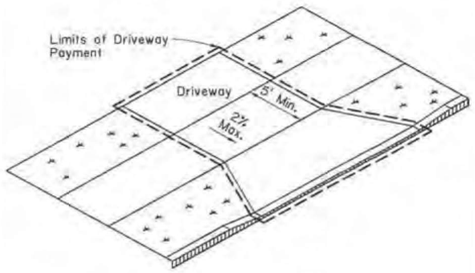
APPROVED BY (CHIEF ENGINEER): Richard Z. Savoie DATE: 5-18-11

R.C. MANHOLE
MAXIMUM DIMENSIONS: 11'-10" X 7'-2"
MAXIMUM DEPTH: 20'

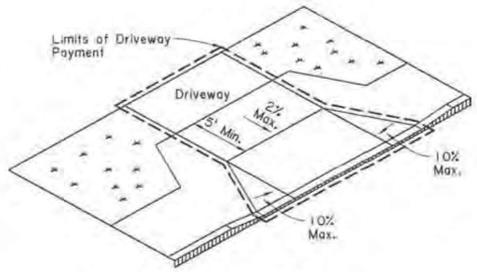
STANDARD PLAN MH-06

HYDRAULICS SECTION

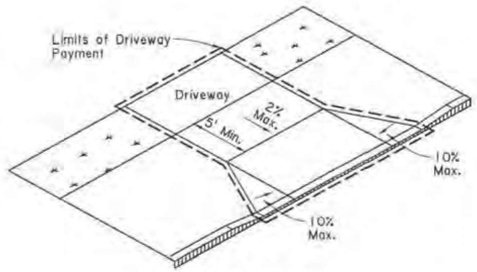
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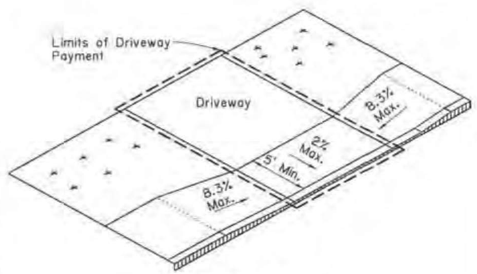
SETBACK SIDEWALK



APRON OFFSET SIDEWALK



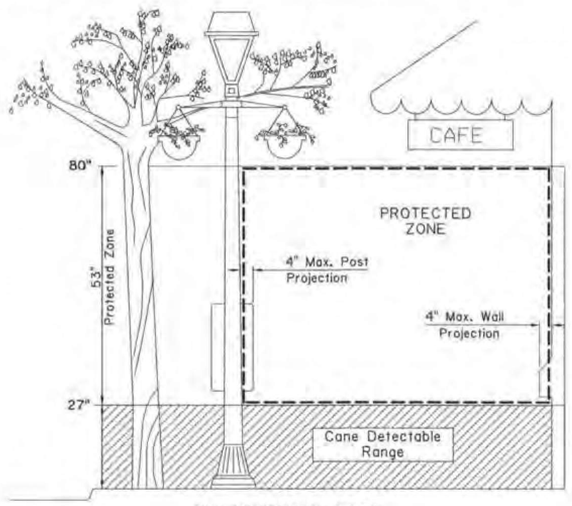
WIDE SIDEWALK



RAMP SIDEWALK

SIDEWALK TREATMENT AT DRIVEWAYS

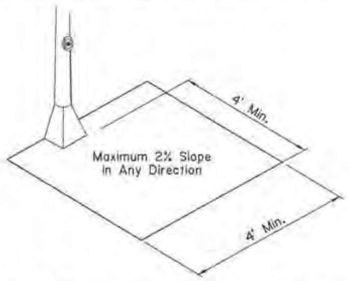
Refer to Driveway Standard Plans for further details.



PROTECTED ZONE

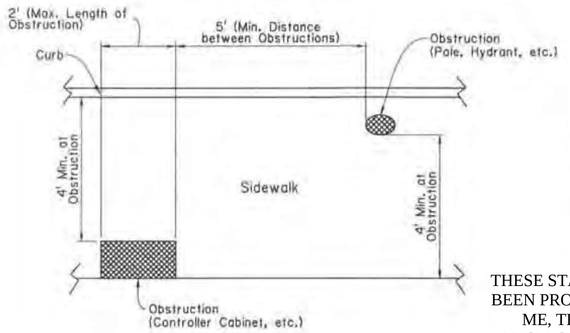
Notes:

1. In pedestrian circulation area, maximum 4" projection for post or wall mounted objects between 27" and 80" above the surface.
2. When an obstruction of a height greater than 27" from the surface would create a protrusion of more than 4" into the pedestrian circulation area, construct additional curb or foundation at the bottom to provide a maximum 4" overhang.
3. Protruding objects of a height less than 27" are detectable by cane and do not require additional treatment.



CLEAR GROUND SPACE ADJACENT TO PEDESTRIAN PUSH BUTTON

Minimum 4' x 4' clear space required at public use fixtures.



PLAN VIEW PLACEMENT OF OBSTRUCTIONS

Items not intended for public use.

PEDESTRIAN FACILITIES GENERAL NOTES

Curb Ramps

1. Maximum allowable cross slope of curb ramp surfaces is 2%; desired cross slope is 1.5%.
2. Theoretical pay areas for curb ramps are as shown on sheet 2, unless otherwise noted in the plans. These areas may be field adjusted as approved by the Project Engineer.
3. Grade breaks at the top and bottom of curb ramps runs shall be perpendicular to the direction of the ramp run.
4. Where curb ramps are located adjacent to a walking surface, a flare must be provided; otherwise a curb may be provided. For an example, refer to curb ramp Type 2 on sheet 2.
5. The landing dimensions are 5'x5' with a maximum 2% slope in any direction. The landing clear width shall be at least as wide as the widest ramp run leading to the landing.
6. Small raised channelization islands, which cannot provide a minimum of 5'x5' landing at the top of ramps, shall be cut through level with the surface of the street.
7. Raised medians should be 6' wide in the direction of pedestrian travel to serve as a pedestrian refuge area. Medians with pedestrian access routes through them shall be designed in accordance with Draft PROWAG.
8. Maneuvering space at the bottom of curb ramps shall be a minimum of 4'x4' completely contained within the crosswalk and completely outside the parallel vehicle travel lane.
9. It is desirable to provide a no-parking zone 50' from crosswalks on each intersection approach or provide a curb extension.
10. Drainage structures should be located on the upstream side of the ramp and located to prevent ponding near the curb ramp. Drainage structures should be placed outside the crosswalk.
11. Slopes of adjoining gutters and roadway surfaces immediately adjacent to the curb ramp shall not exceed 5%. Refer to the Transition from the Curb Ramp to Roadway Detail on sheet 1.
12. Curb ramps should be aligned with the direction of pedestrian travel on the crosswalk or theoretical crosswalk. Refer to sheet 3 for typical crossing layouts and refer to the pavement marking standards for crosswalk markings.
13. Crosswalk markings shall be placed a distance of 24" from the flare on each side of a diagonal curb ramp. Refer to sheet 3 for an example.
14. Curb ramps shall include detectable warning surfaces. Refer to sheet 4 for details of detectable warning surfaces.
15. Where a curb ramp is constructed within existing curb, curb and gutter and/or sidewalk, the existing curb or curb and gutter shall be removed to the nearest joint beyond the curb transition or the extent that no remaining section of curb or curb and gutter is less than 5' long or as directed by the Project Engineer. Existing sidewalks shall be removed to the nearest joint beyond the flare slope or to the extent that no remaining section of sidewalk is less than 5' long or as directed by the Project Engineer.

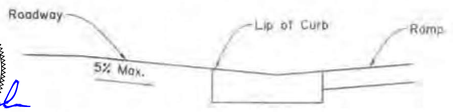
Sidewalks

1. Where a 5' sidewalk cannot be provided due to site constraints, 5'x5' passing areas at intervals not to exceed 200' are required.
2. Where sidewalks and crosswalks are contained within street or highway right-of-way, the grade of the sidewalk or crosswalk shall not exceed the grade of the adjacent street or highway. Where sidewalks are not contained within a street or highway right-of-way, the grade of the sidewalk shall be 5% maximum.
3. Maximum allowable cross slope of sidewalk surfaces is 2%; desired cross slope is 1.5%.
4. Vertical surface discontinuities along a sidewalk shall be 1/2" maximum. Discontinuities between 1/4" and 1/2" shall be beveled at a 1:2 maximum slope.
5. Where sidewalks intersect with streets, detectable warning surfaces are required. Refer to sheet 4 for details of detectable warning surfaces.
6. Traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items shall be placed so as not to obstruct the accessible route.
7. When a sidewalk crosses a driveway and exceeds the 2% maximum cross slope, the driveway or driveway portion shall be reconstructed to meet the 2% maximum cross slope requirement. Refer to driveway standard plans for driveway details.
8. Handrails are not required on sidewalks within highway right-of-way, unless site specific conditions, such as a vertical drop-off, dictate. Where handrails are provided, they must comply with ADAAG 505.
9. To prevent tracking of gravel onto the sidewalk, gravel driveways should be paved from the roadway edge to a point 10' behind the sidewalk or the right-of-way, whichever is less.

ADA - Americans with Disabilities Act
ADAAG - Americans with Disabilities Act Accessibility Guidelines
Draft PROWAG - Draft Public Rights-of-Way Accessibility Guidelines

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING



TRANSITION FROM CURB RAMP TO ROADWAY

SHEET NUMBER 224

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN MAL | DETAIL MAL | REVIEW | SERIES # 1 OF 5
CHECK BPW | CHECK BPW

STATE OF LOUISIANA
MELISSA LEBAS
License No. 39111
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
M.Lebas
7/19/2022

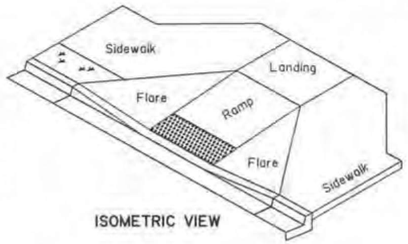
APPROVED BY CHIEF ENGINEER — DATE: 7/21/2022

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

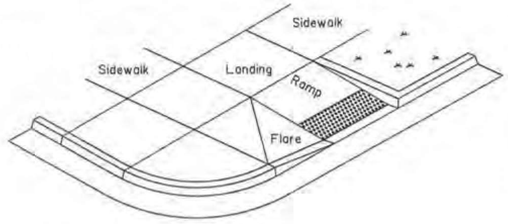
PEDESTRIAN FACILITIES
GENERAL NOTES AND MISC. DETAILS

PED-01

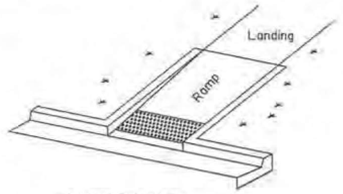
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
STANDARD PLAN



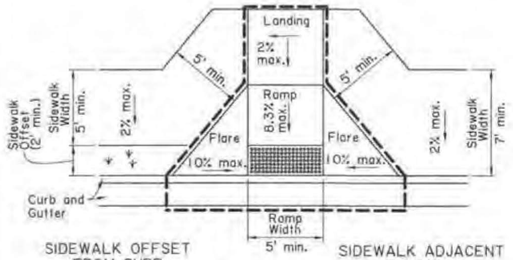
ISOMETRIC VIEW



ISOMETRIC VIEW



ISOMETRIC VIEW



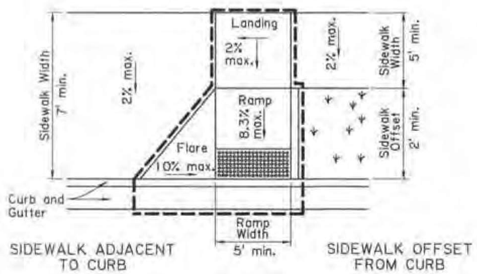
SIDEWALK OFFSET FROM CURB

SIDEWALK ADJACENT TO CURB

PLAN VIEW

TYPE 1

THEORETICAL PAY AREA = 12.8 SQ. YDS.



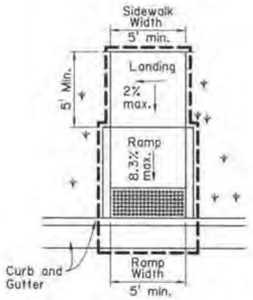
SIDEWALK ADJACENT TO CURB

SIDEWALK OFFSET FROM CURB

PLAN VIEW

TYPE 2

THEORETICAL PAY AREA = 10.4 SQ. YDS.



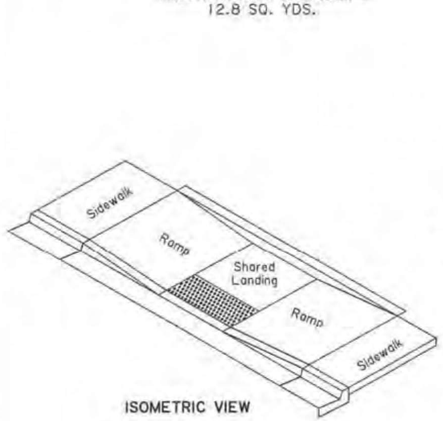
PLAN VIEW

TYPE 3

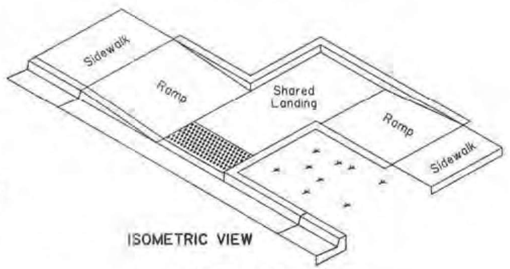
THEORETICAL PAY AREA = 8.1 SQ. YDS.

PERPENDICULAR CURB RAMPS

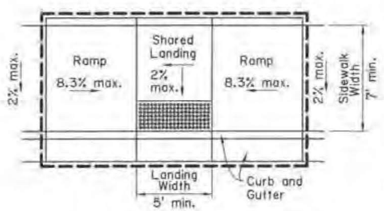
If a level landing of at least 3' cannot be provided, a perpendicular curb ramp should not be used.



ISOMETRIC VIEW



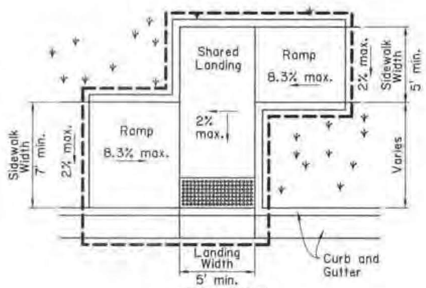
ISOMETRIC VIEW



PLAN VIEW

TYPE 4

THEORETICAL PAY AREA = 17.9 SQ. YDS.

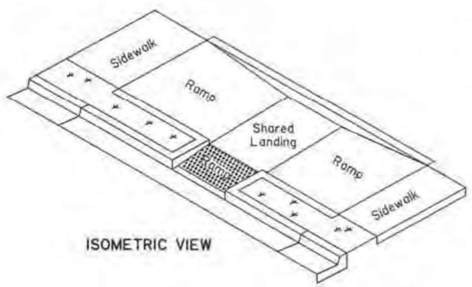


PLAN VIEW

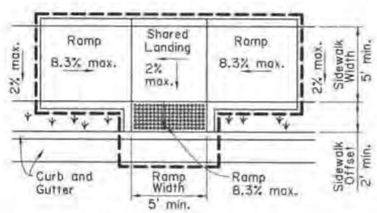
TYPE 5

THEORETICAL PAY AREA = 19.1 SQ. YDS.

PARALLEL CURB RAMPS



ISOMETRIC VIEW

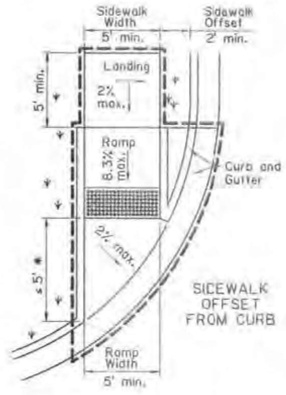


PLAN VIEW

TYPE 6

THEORETICAL PAY AREA = 13.7 SQ. YDS.

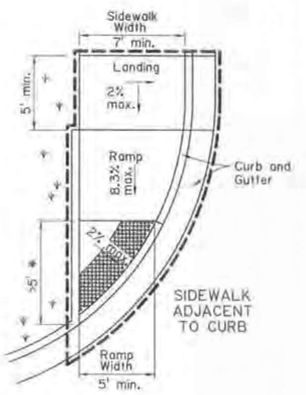
COMBINATION CURB RAMP



PLAN VIEW

TYPE 7

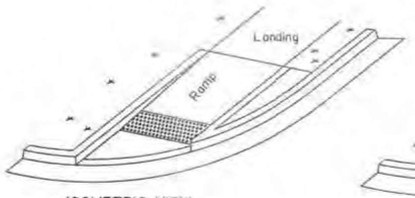
THEORETICAL PAY AREA = 13.3 SQ. YDS.



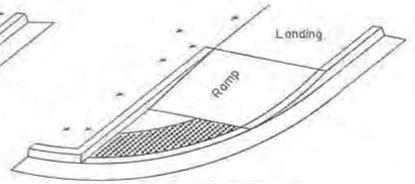
PLAN VIEW

TYPE 8

THEORETICAL PAY AREA = 15.5 SQ. YDS.



ISOMETRIC VIEW



ISOMETRIC VIEW

LEGEND OF PATTERNS

- Denotes Non-Walking Surface Not Part of Pedestrian Path
- Detectable Warning Surface
- Limits of Payment
- Slope

All slopes shown are maximum allowable. The least possible slope that will drain properly should be used.

Curb ramps shall be placed and designed where ponding does not occur at the bottom or on the curb ramp.

DIRECTIONAL CURB RAMPS

* Where the grade break is less than or equal to 5' from the back of curb, place detectable warning surface as shown in Type 7. Where grade break is greater than 5' from the back of the curb, place detectable warning surface as shown in Type 8.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING

SHEET NUMBER 225

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	MAL
CHECK	BPW
DETAIL	MAL
CHECK	BPW
REVIEW	
SERIES #	2 OF 5

STATE OF LOUISIANA
MELISSA LEBAS
License No. 29111
PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING
Melissa LeBas
7/19/2022

APPROVED BY CHIEF ENGINEER
7/21/2022
DATE

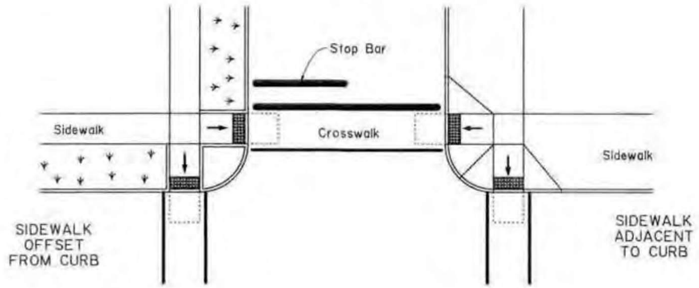
PEDESTRIAN FACILITIES

CURB RAMPS AND DETECTABLE WARNING LOCATION

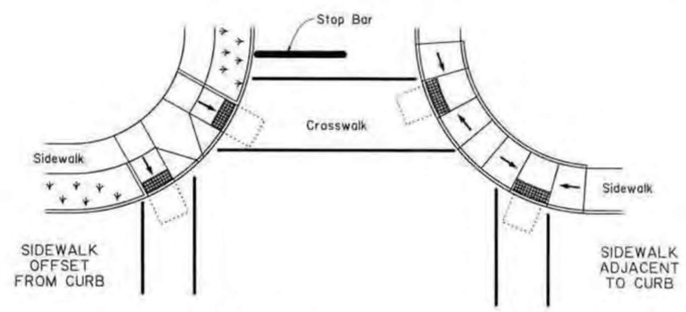
PED-01

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

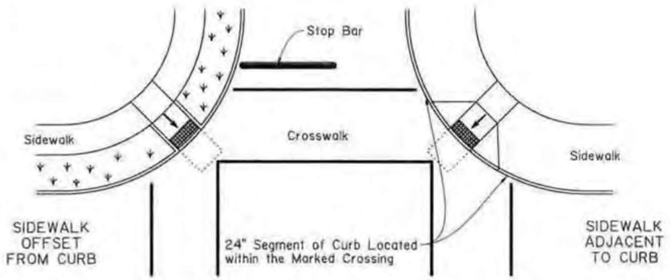
STANDARD PLAN



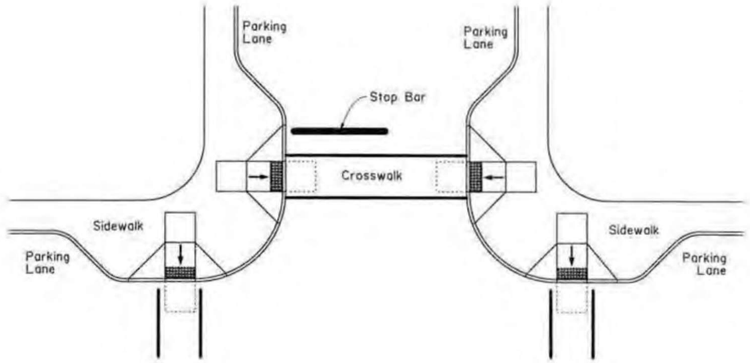
DETAIL A: CURB RAMPS PLACED OUTSIDE THE RADIUS OF A CURVE



DETAIL B: PAIRED CURB RAMPS PLACED WITHIN THE RADIUS OF A CURVE



DETAIL C: SINGLE CURB RAMP PLACED ON APEX OF A CURVE (DIAGONAL CURB RAMPS)



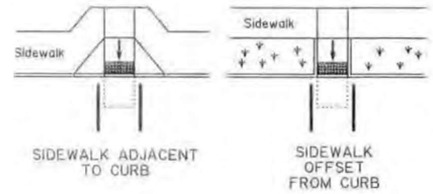
DETAIL D: CURB RAMPS PLACED ON CURB EXTENSION (BULB-OUTS)

GENERAL NOTES:

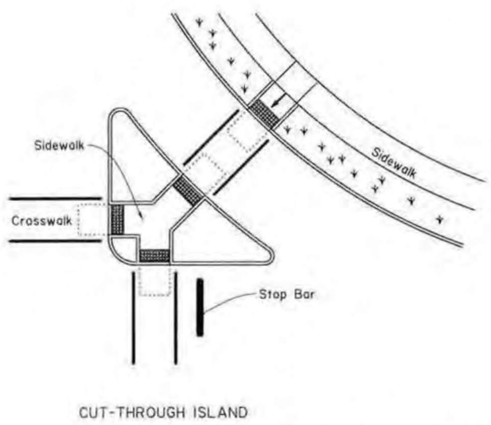
1. Curb ramps placed outside the radius of the curve are preferred. Paired curb ramps placed within the radius of a curve are acceptable. Single curb ramps placed on the apex of a curb should not be used unless site constraints, such as the location of drainage structures, require it.
2. Details and dimensions of curb ramps, sidewalks, and detectable warning surfaces are shown elsewhere.
3. Striping (crosswalks and stop bars) are shown for reference only. Refer to the pavement marking standard plans for striping details.

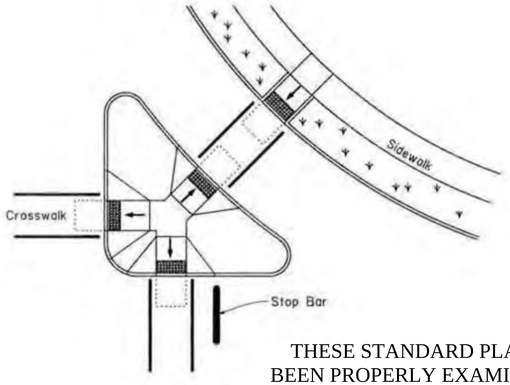
LEGEND

- Denotes non-walking surface not part of pedestrian path
- Detectable Warning Surface
- Maneuvering Space (4'x4' Min.)
- Ramp Surface



DETAIL E: CURB RAMPS PLACED AT MID-BLOCK CROSSING

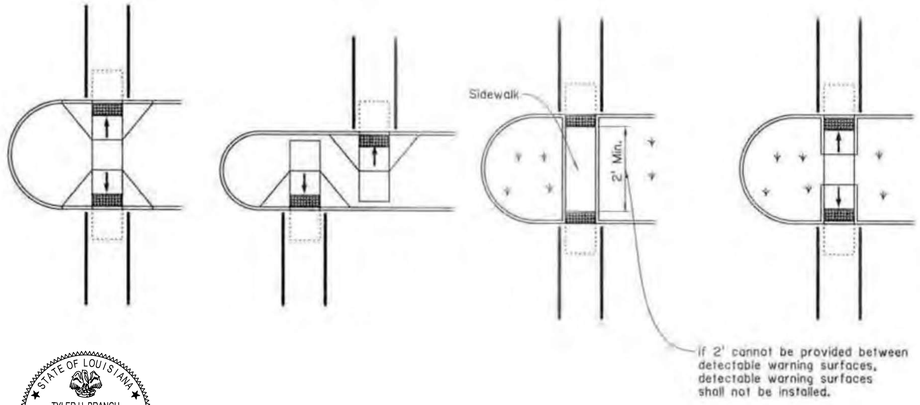




DETAIL F: SIDEWALKS AND CURB RAMPS AT ISLANDS

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING



DETAIL G: SIDEWALKS AND CURB RAMPS AT MEDIANS

SHEET NUMBER 226

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	CHECK	DETAIL	CHECK	REVIEW	SERIES * 3 OF 5
MAL	BPW	MAL	BPW		

STATE OF LOUISIANA
MELISSA LEBAS
License No. 38111
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
7/19/2022

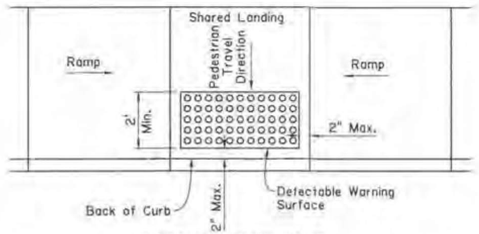
APPROVED BY CHIEF ENGINEER: DATE: 7/21/2022

PEDESTRIAN FACILITIES
TYPICAL CROSSING LAYOUTS
PED-01

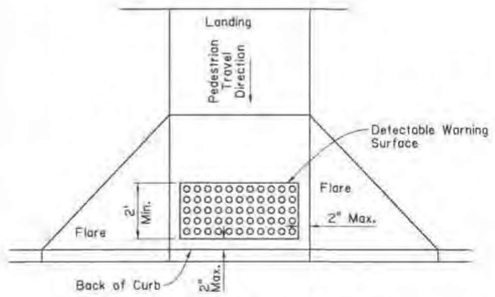
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

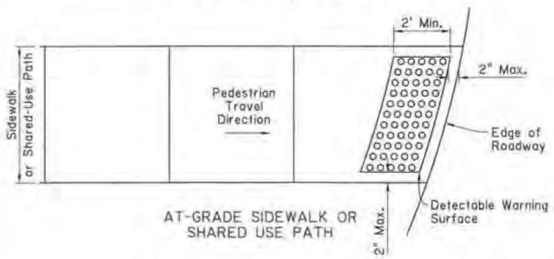
7/14/2022 12:04



PARALLEL CURB RAMP

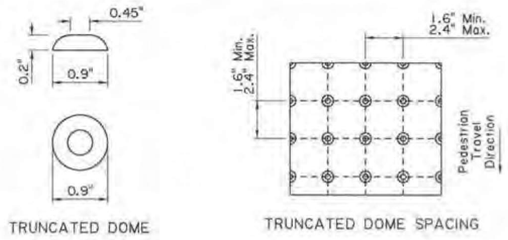


PERPENDICULAR CURB RAMP



AT-GRADE SIDEWALK OR SHARED USE PATH

TYPICAL PLACEMENT OF DETECTABLE WARNING SURFACE



TRUNCATED DOME

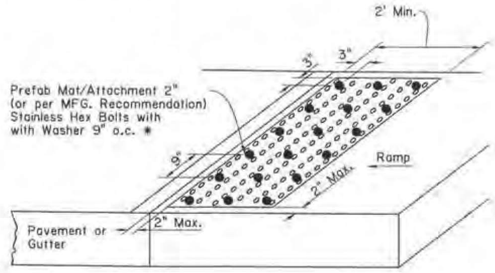
TRUNCATED DOME SPACING

Notes:

Domes shall be arranged in a square in-line pattern or radial pattern

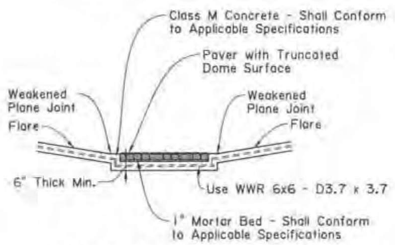
Color Fastness: Paver's composite coloring and ultra-violet stabilization must be homogeneous through the producted.

TRUNCATED DOME DETAILS

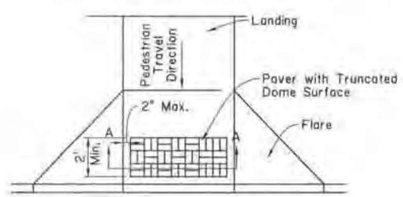


*Note: Retrofit application placed on top of existing ramp with drilled and epoxied bolts. Epoxy full surface area per manufacturer's recommendation.

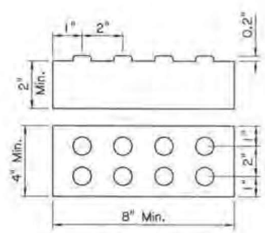
PREFABRICATED MAT OPTION (INLAID)



SECTION A-A



TRUNCATED DOME PATTERN CURB RAMP



PAVER WITH TRUNCATED DOME SURFACE

Notes: Paver units shall meet all requirements of the applicable ASTM Standards. Layout pattern shall be appropriate for size of paver used. 4"x8" pavers shall be laid out in a 2x2 basket weave pattern. 12"x12" pavers shall be laid out in a block pattern.

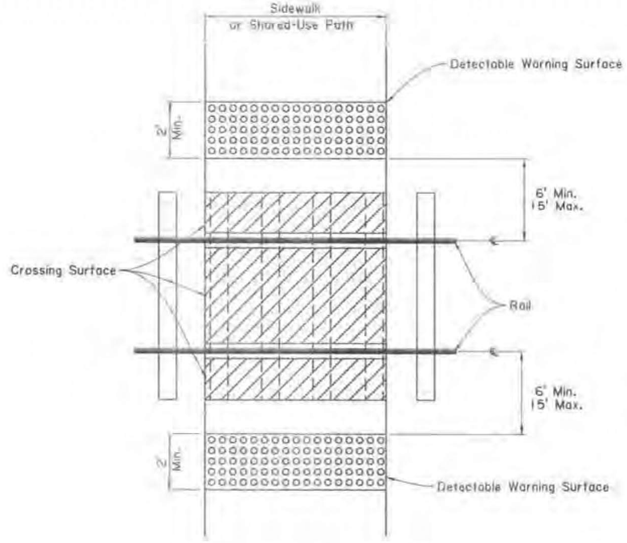
Paver units shall be saw cut only and any cut unit shall not be less than 25% of a full unit.

Installation should meet compliance with Draft PROWAG R302.7.2 (Vertical Surface Discontinuities). Vertical surface discontinuities shall be 1/2" maximum. Discontinuities between 1/4" and 1/2" shall be beveled at a 1:2 maximum slope.

DETECTABLE WARNING SURFACE PAVER OPTION

GENERAL NOTES:

1. For ADA compliance, detectable warning surfaces must be provided on all pedestrian curb ramps, medians and pedestrian refuge islands (width 6' or greater), railroad crossings and at-grade sidewalk and shared-use paths intersecting with roadways.
2. Curb ramps must contain a detectable warning surface that consists of raised truncated domes complying with ADA guidelines. The surface must contast visually with adjoining surfaces, including side flares, in accordance with Section 706 of the Standard Specifications. Color for detectable warning surface shall contrast visually with adjoining surfaces, either light-on-dark or dark-on-light.
3. Detectable warning surfaces must be slip resistant and not allow water to accumulate.
4. Truncated domes should be aligned perpendicular or radial to the grade break between the curb ramp or at-grade sidewalk and the street.
5. Detectable warning surfaces shall be a minimum of 24" in depth in direction of pedestrian travel and extend the full width of the ramp run or landing where the pedestrian access route enters the street. Some detectable warning products may require a concrete border. The concrete border should not exceed 2".
6. Detectable warning surfaces shall be placed at the back of curb or no greater than 5' from the back of curb. Detectable warning surfaces may be curved along the corner radius. Refer to sheet 2 for typical placement of detectable warning surfaces on curb ramp types.
7. Detectable warning surfaces may be stamped, constructed of brick pavers or inlaid prefabricated mats attached by epoxy adhesive and mechanical attachment. Other detectable warning installations may be installed with approval from the Project Engineer, provided that the detectable warning surface meets ADA guidelines. No painted surfaces will be allowed.
8. Any retrofit application of detectable warning surfaces must have beveled edges. The beveled edge shall not exceed a slope greater than 1:2.



PLAN VIEW

LOCATION OF DETECTABLE WARNING SURFACES AT RAILROAD CROSSINGS

Note: Rows of truncated domes should be aligned parallel with the direction of wheelchair travel.

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

SHEET NUMBER 227

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN MAL CHECK BPW
DETAIL MAL CHECK BPW
REVIEW
SERIES # 4 OF 5

STATE OF LOUISIANA
MELISSA LEBAS
License No. 39111
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
7/19/2022

APPROVED BY DOTD ENGINEER: DATE: 7/21/2022

PEDESTRIAN FACILITIES
DETECTABLE WARNING SURFACES

PED-01

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

12:04

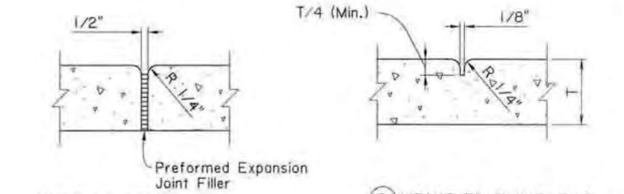
7/14/2022

GENERAL NOTES:

1. Weakened plane joints are required at all sidewalk ramps or driveways slope break lines.
2. Separate curb ramps and landing from adjacent sidewalk with preformed joint filler of 1/2".

JOINT LEGEND

- (A) 1/2" Expansion Joints (Preformed Joint Filler)
- (B) 1/8" Weakened Plane Joint
- (C) Construction Joint
- (D) Cold Joint with Bond Breaker



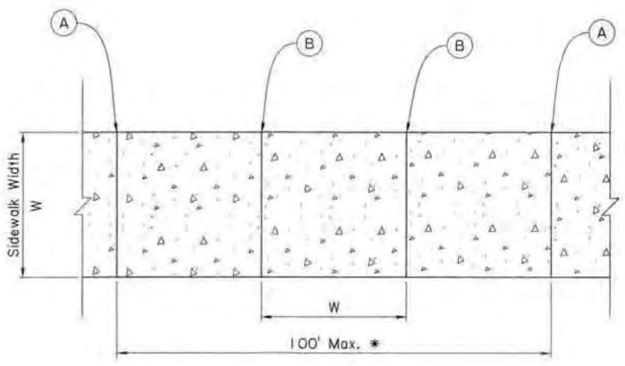
(A) EXPANSION JOINT

(B) WEAKENED PLANE JOINT

(C) CONSTRUCTION JOINT

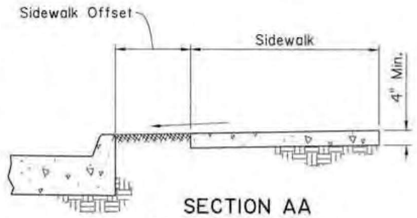
(D) COLD JOINT WITH BOND BREAKER

JOINT DETAILS

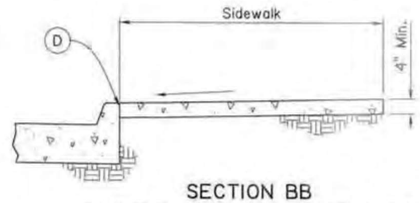


PLAN VIEW
SIDEWALK JOINT LAYOUT

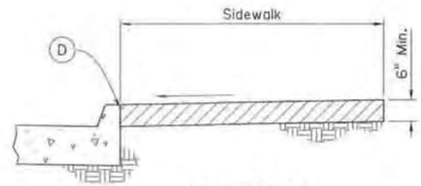
* Joint spacing to be approved by Project Engineer



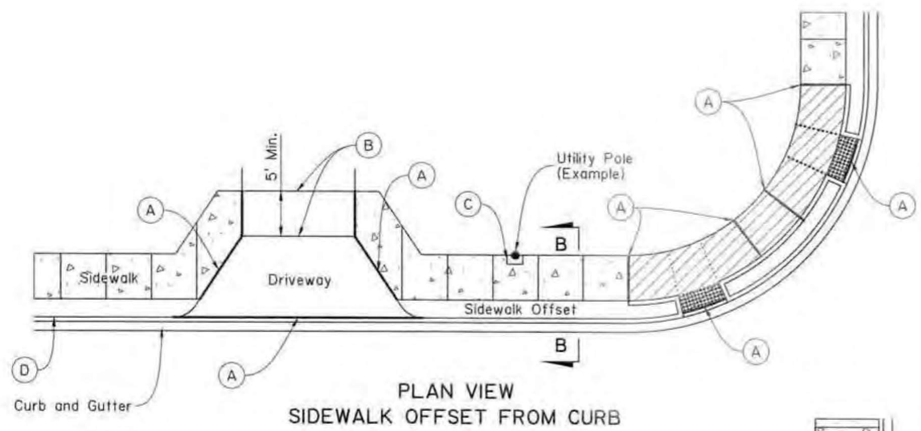
SECTION AA
OFFSET SIDEWALK



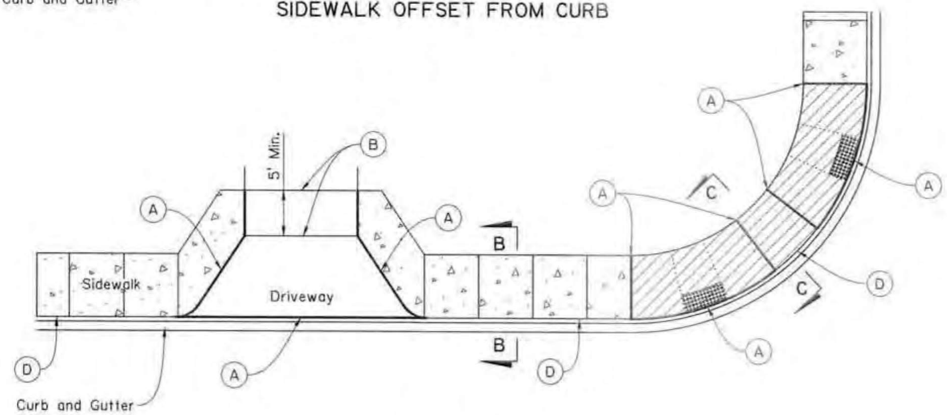
SECTION BB
SIDEWALK ADJACENT TO CURB



SECTION CC
SIDEWALK ADJACENT TO CURB
(WITHIN RADIUS OF TURNOUT)



PLAN VIEW
SIDEWALK OFFSET FROM CURB



PLAN VIEW
SIDEWALK ADJACENT TO CURB

4" Thick Concrete

6" Thick Concrete

Note: Driveways and curb ramps are shown for reference only. Refer to the driveway standard plans and curb ramp sheet for details.

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

SHEET NUMBER 228

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN MAL | CHECK BPW | DETAIL MAL | CHECK BPW | REVIEW | SERIES # 5 OF 5

STATE OF LOUISIANA
MELISSA LEBAS
License No. 39111
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
Melissa Lebas
7/14/2022

APPROVED BY CHIEF ENGINEER: DATE: 7/21/2022

PEDESTRIAN FACILITIES
JOINT DETAILS

PED-01

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

STANDARD PLAN

GENERAL NOTES:

1) THIS STRUCTURE MEETS ALL DOTD HYDRAULIC PERFORMANCE CRITERIA WHEN USED IN ACCORDANCE WITH THE DOTD HYDRAULICS MANUAL AND ALL DOTD HYDRAULIC DESIGN POLICIES.

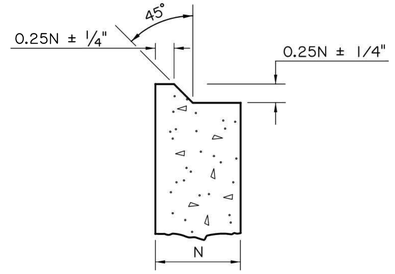
2) PROVIDE PRECAST UNITS AS THE LOWER PORTION OF A COMPOSITE STRUCTURE. PROVIDE CAST-IN-PLACE CONCRETE (SEE APPROPRIATE STANDARD PLAN FOR REQUIRED REINFORCING AND DIMENSIONS) FOR THE TOP 1'-6" OF THE STRUCTURE AS FOLLOWS:
   A) CB-01, CB-02, CB-04, CB-05, AND MANHOLES MAY BE FULLY PRECAST IF THE STRUCTURES ARE NOT EXPOSED TO TRAFFIC LOADS; ELEVATIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION.
   B) CB-06, CB-07, CB-08, AND CB-09 STRUCTURES MUST HAVE THE TOP 18" CAST-IN-PLACE; ELEVATIONS MUST BE FIELD VERIFIED PRIOR TO FABRICATION.

3) DESIGN IS TO BE IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EIGHTH EDITION, 2017, AND THE LATEST LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES.

4) FINISH CAST-IN-PLACE CONCRETE IN ACCORDANCE WITH OTHER STANDARD PLANS AND 805.

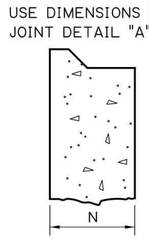
5) FORM PIPE OPENINGS ONLY AS REQUIRED FOR INTERSECTING PIPES. PROVIDE OPENING DIMENSIONS TO ACCOMMODATE PIPE DIAMETER AND SKEW ANGLE. PROVIDE OPENING DIMENSION THAT IS 4±1/2 INCH LARGER THAN OUTSIDE PIPE DIMENSION.

6) RESILIENT CONNECTORS OR CONCRETE COLLARS ARE REQUIRED FOR CONNECTIONS OF ALL PIPE SIZES (EXCEPT YARD DRAIN PIPE AND UNDERDRAINS) WITH COST TO BE INCLUDED IN THE COST OF THE PRECAST STRUCTURE.

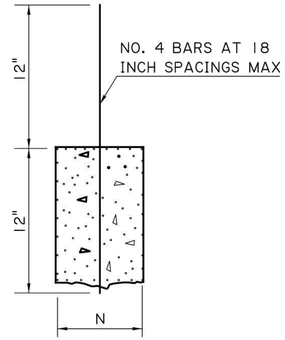


JOINT DETAIL A
PRECAST/PRECAST

1. SEAL AND WRAP JOINT IN ACCORDANCE WITH 702.3.020

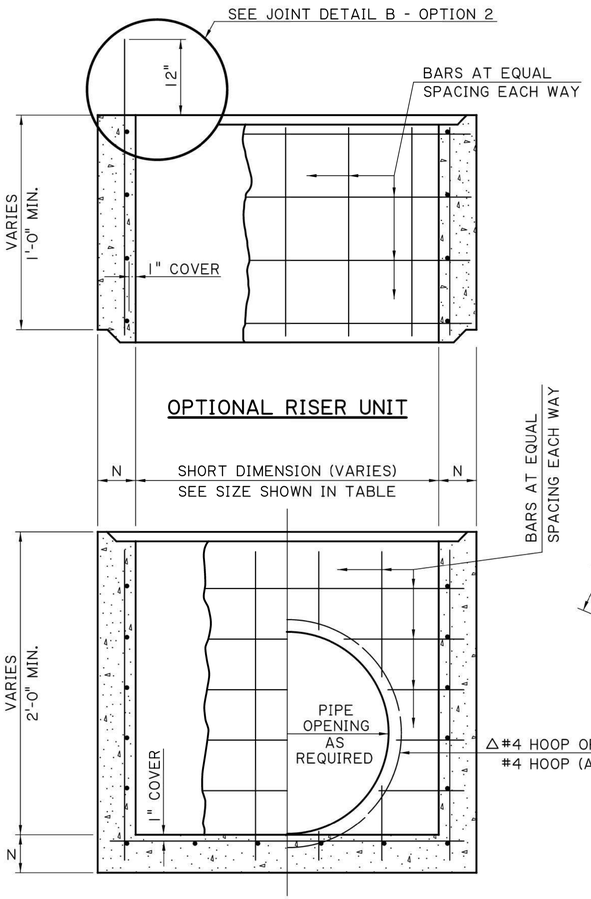


JOINT DETAIL B - OPTION 1
CAST-IN-PLACE/PRECAST



JOINT DETAIL B - OPTION 2
CAST-IN-PLACE/PRECAST

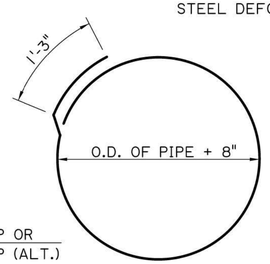
IN OPTIONS 1 AND 2, COAT PRECAST CONCRETE JOINT SURFACE AND A MAXIMUM OF 2 INCHES OF REINFORCING STEEL WITH TYPE V, GRADE 2 OR GRADE 3 EPOXY RESIN CONFORMING TO 1017. APPLY EPOXY RESIN AND PLACE CONCRETE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



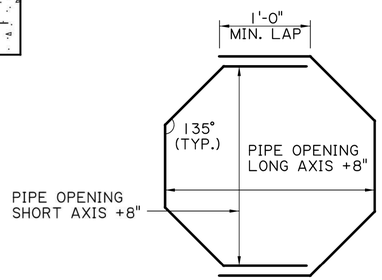
PRECAST UNITS FOR CATCH BASINS & MANHOLES

MAXIMUM HEIGHT	N	4' MAX. DIMENSION			6' MAX. DIMENSION			8' MAX. DIMENSION			10' MAX. DIMENSION		
		⊙TYPICAL SIZES 3'X3', 4'X4'			⊙TYPICAL SIZES 6'X4', 6'X6'			⊙TYPICAL SIZES 8'X4', 8'X6', 8'X8'			⊙TYPICAL SIZES 10'X4', 10'X6', 10'X8', 10'X10'		
FT.	IN.	BAR SIZE	SPAC.✱ IN.	As⊠ IN²/FT.	BAR SIZE	SPAC.✱ IN.	As⊠ IN²/FT.	BAR SIZE	SPAC.✱ IN.	As⊠ IN²/FT.	BAR SIZE	SPAC.✱ IN.	As⊠ IN²/FT.
8	4	4	6	0.40									
8	6	4	9	0.27	4	8	0.30	4	5.5	0.44	5	5.5	0.68
14	6	4	9	0.27	4	6	0.40	5	5	0.74	5	3.25	1.14
20	6	4	7	0.34	4	4.5	0.53						

⊙ OTHER SIZES ARE ACCEPTABLE AS LONG AS THE DIMENSIONS DO NOT EXCEED THE MAXIMUM DIMENSIONS.
✱ BAR SPACING APPLIES TO BOTH DIRECTIONS AND AT ALL LOCATIONS.
⊠ BAR SIZES AND SPACING MAY DIFFER FROM VALUES SHOWN, BUT THE AREA OF STEEL (A_s) SHALL BE EQUAL TO OR GREATER THAN VALUE SHOWN, AND BAR SPACING SHALL NOT EXCEED 1.5 TIMES THE WALL THICKNESS. THE AREA OF STEEL (A_s) MAY BE PROVIDED WITH STEEL DEFORMED WELDED WIRE FABRIC.

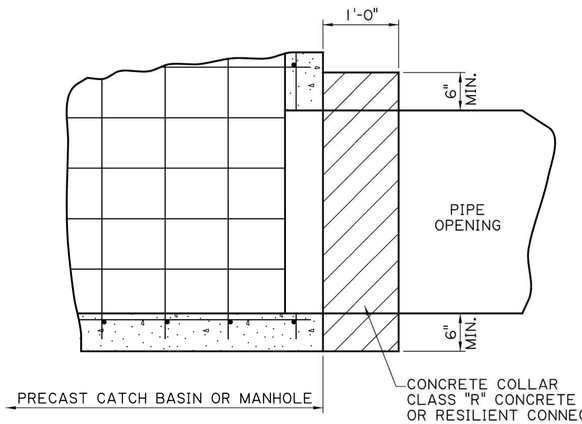


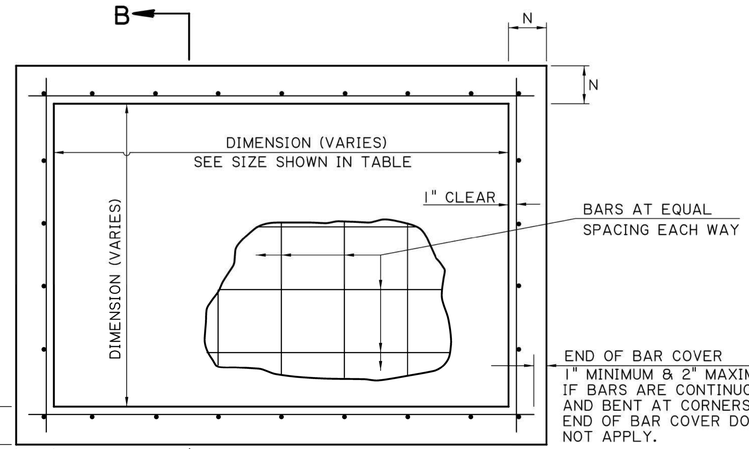
△#4 HOOP



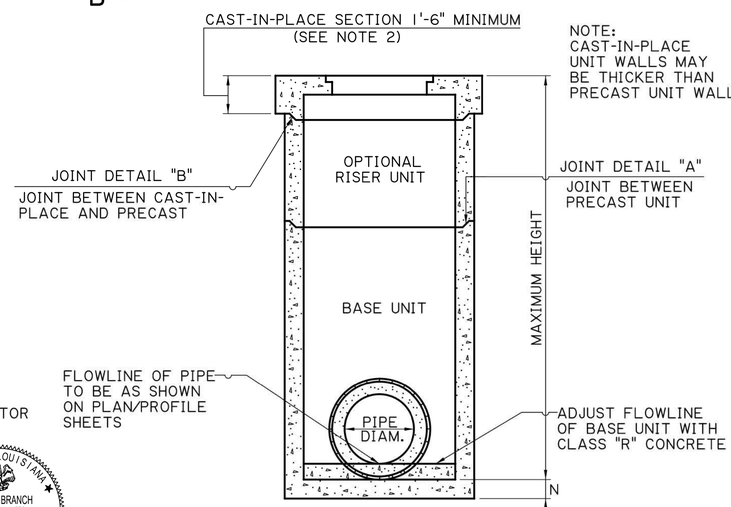
△#4 HOOP (ALT.)

△ #4 HOOP MAY BE USED WHEN PIPE IS CIRCULAR AND CONNECTS TO THE CATCH BASIN AT +/- 90 (DEGREE) ANGLE. #4 HOOP (ALT.) SHALL BE USED FOR NON-CIRCULAR (ELLIPTICAL) PIPES AND ALL PIPES THAT ENTER THE CATCH BASIN AT A SKEWED ANGLE.





PLAN



ELEVATION
TYPICAL COMPOSITE STRUCTURE

PIPE CONNECTION DETAIL

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 229

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN | CHECK | DETAIL | CHECK | REVIEW | SERIES # 1 OF 1

APPROVED BY CHIEF ENGINEER: DATE: 10/14/2025

NO. | DATE | REVISION OR CHANGE ORDER DESCRIPTION | BY

STATE OF LOUISIANA

PRECAST CATCH BASINS AND MANHOLES

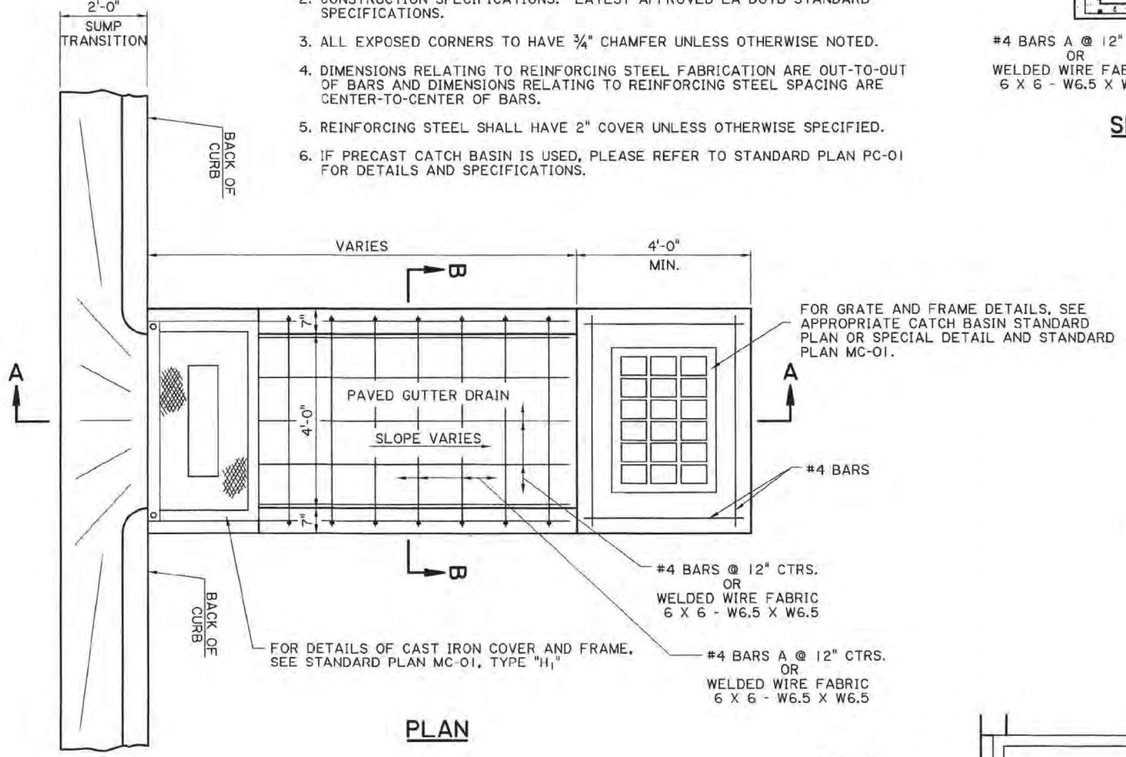
PC-01

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

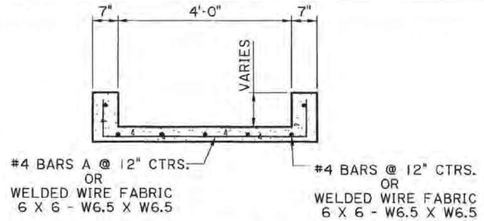
STANDARD PLAN

GENERAL NOTES:

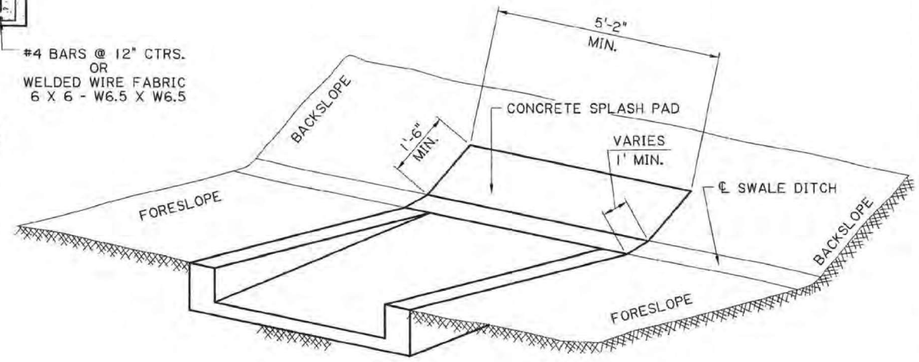
1. THIS STRUCTURE MEETS ALL DOTD HYDRAULIC PERFORMANCE CRITERIA WHEN USED IN ACCORDANCE WITH THE DOTD HYDRAULICS MANUAL AND ALL DOTD HYDRAULIC DESIGN POLICIES.
2. CONSTRUCTION SPECIFICATIONS: LATEST APPROVED LA DOTD STANDARD SPECIFICATIONS.
3. ALL EXPOSED CORNERS TO HAVE ¾" CHAMFER UNLESS OTHERWISE NOTED.
4. DIMENSIONS RELATING TO REINFORCING STEEL FABRICATION ARE OUT-TO-OUT OF BARS AND DIMENSIONS RELATING TO REINFORCING STEEL SPACING ARE CENTER-TO-CENTER OF BARS.
5. REINFORCING STEEL SHALL HAVE 2" COVER UNLESS OTHERWISE SPECIFIED.
6. IF PRECAST CATCH BASIN IS USED, PLEASE REFER TO STANDARD PLAN PC-01 FOR DETAILS AND SPECIFICATIONS.



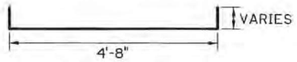
PLAN



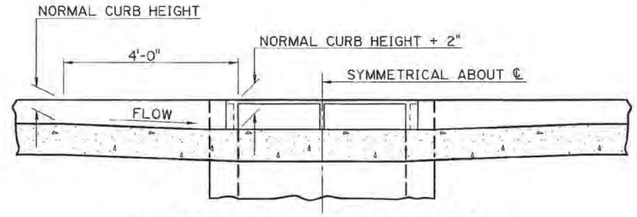
SECTION B-B



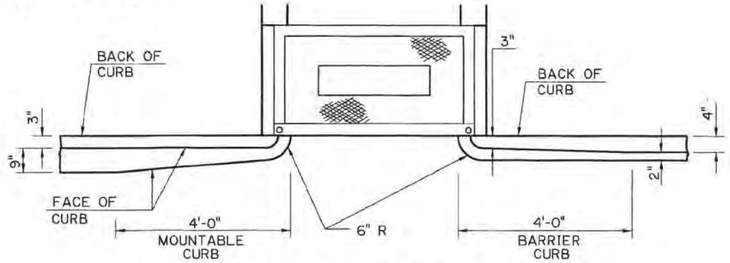
PARTIAL VIEW SHOWING
PAVED GUTTER DRAIN WITHOUT DROP INLET



#4 BARS A
2" ø PIN

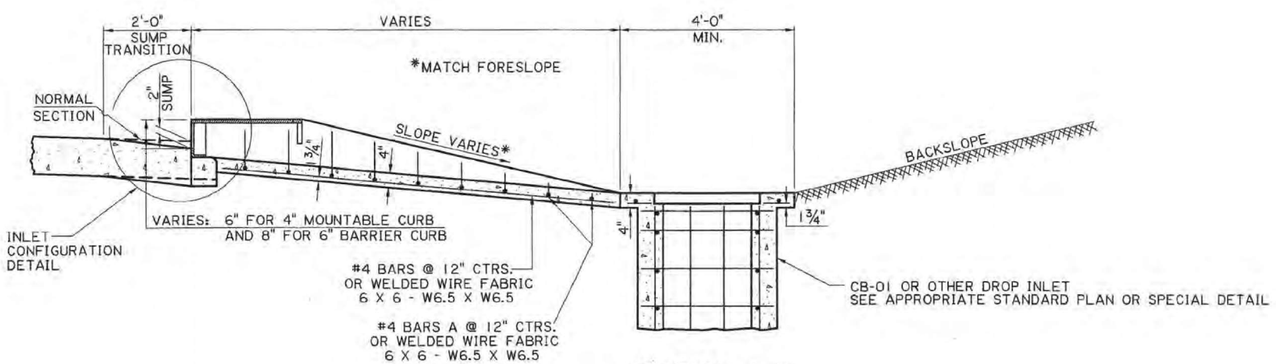


TRANSITION IN CURB HEIGHT
GUTTER DRAIN AT LOW POINT

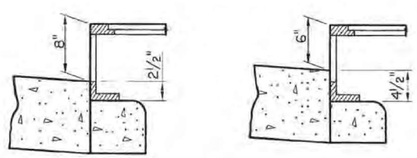


TRANSITION IN CURB WIDTH
(TYPICAL)

TRANSITION IN CURB HEIGHT
GUTTER DRAIN ON A GRADE



SECTION A-A



INLET CONFIGURATION

WHEN USED WITH 6" BARRIER CURB

WHEN USED WITH 4" MOUNTABLE CURB

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41578
REGISTERED PROFESSIONAL ENGINEER IN
CIVIL ENGINEERING
9/10/2020

SHEET NUMBER 230

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN | CHECK | DETAIL | CHECK | REVIEW | SERIES #

STATE OF LOUISIANA
MITRA HASHEMIEH
REG. No. 28546
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
9/11/2020
HYDRAULICS

STATE OF LOUISIANA
ADAM LANCASTER
REG. No. 35573
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
9/10/20
STRUCTURAL

APPROVED BY CHIEF ENGINEER: DATE: 9/22/2020

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SINGLE PAVED GUTTER DRAIN

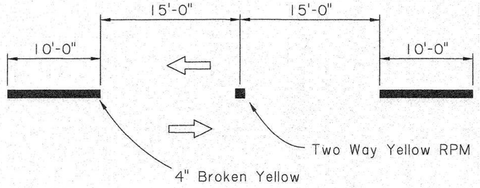
STANDARD PLAN PG-DRAIN (SINGLE)

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

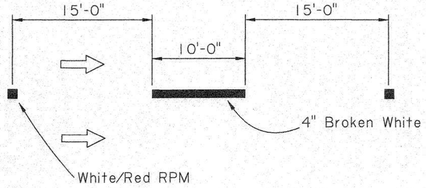
HYDRAULICS SECTION

9/21/2020 09:51

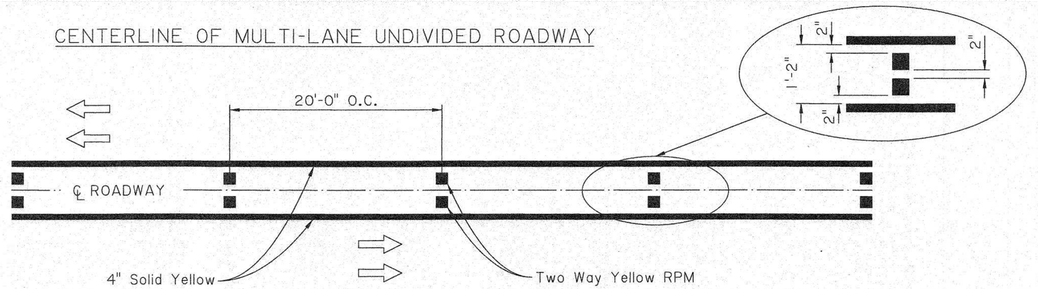
Ⓐ CENTERLINE OF TWO-LANE ROADWAY WITH TWO-WAY TRAFFIC



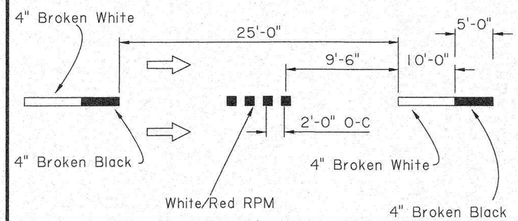
Ⓑ LANE LINE BETWEEN LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION



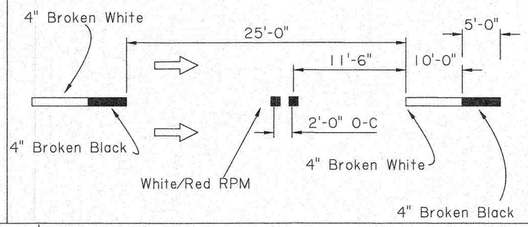
Ⓒ CENTERLINE OF MULTI-LANE UNDIVIDED ROADWAY



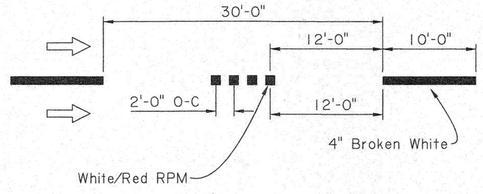
Ⓓ CONTRAST LANE LINE BETWEEN LANES ON PORTLAND CEMENT CONCRETE ADT ≥ 80,000



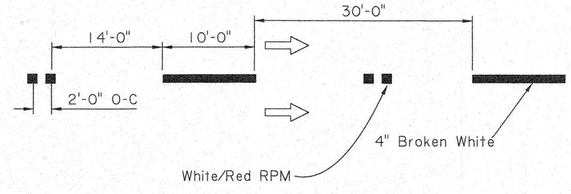
Ⓔ CONTRAST LANE LINE BETWEEN LANES ON PORTLAND CEMENT CONCRETE ADT < 80,000



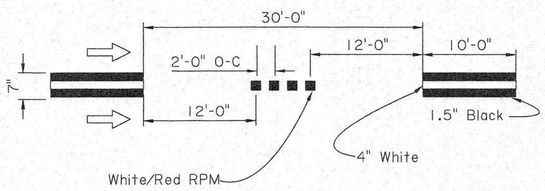
Ⓕ LANE LINE BETWEEN LANES ON ASPHALT CONCRETE WITH ADT ≥ 80,000



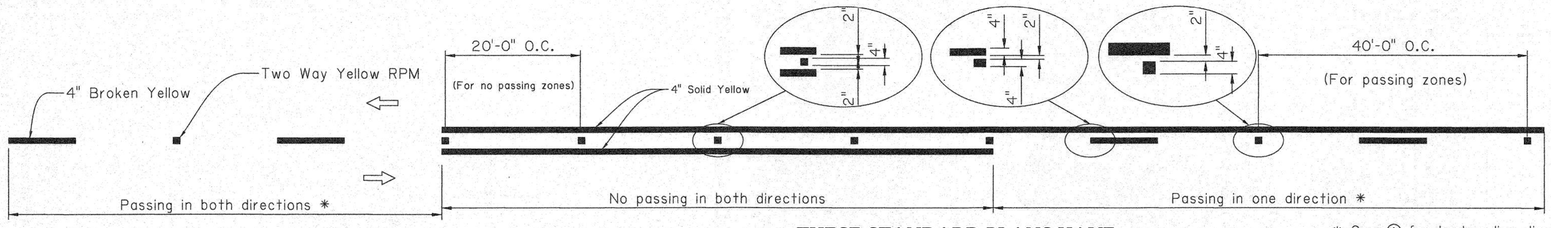
Ⓖ LANE LINE BETWEEN LANES ON ASPHALT CONCRETE WITH ADT < 80,000



Ⓗ CONTRAST LANE LINE BETWEEN LANES ON PORTLAND CONCRETE ADT ≥ 80,000

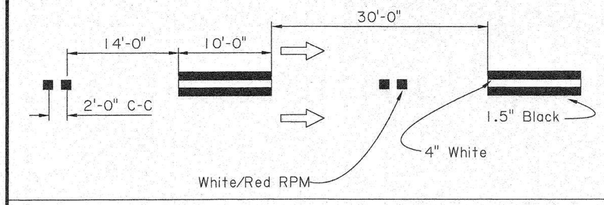


Ⓘ CENTERLINE OF TWO-LANE ROADWAY WITH TWO-WAY TRAFFIC WITH PASSING RESTRICTIONS



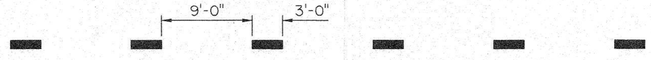
* See Ⓐ for broken line dimensions.

Ⓙ CONTRAST LANE LINE BETWEEN LANES ON PORTLAND CONCRETE ADT < 80,000



Ⓚ TYPE A DOTTED

Used for entrance, exit and auxiliary lanes, lane drop markings and shared use bicycle paths.



Note: Width and color shall match line extending unless otherwise noted.

Ⓛ TYPE B DOTTED

Used for lane line extensions through intersections, turn lane taper markings, edge line extensions and bulb outs.



Note: Width and color shall match line extending unless otherwise noted.

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STATE OF LOUISIANA — TYLER H. BRANCH — License No. 41578 — REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

STATE OF LOUISIANA — GARY N. LeBLANC — REG. No. 28220 — REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

2-27-19

GENERAL NOTES:

1. 4" Edge lines shall be placed on all roadways.
2. Place edge lines, centerlines and lane lines to avoid longitudinal joints as directed by the project engineer.
3. Edge lines in a curb and gutter section should be kept out of the gutter and clear from debris.
4. If rumble strips are used, striping details remain unchanged.
5. Centerlines shall be placed on roadways with a traveled way width of 16 feet or greater.
6. 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.
7. ⇨ indicates the direction of travel (not a pavement marker).
8. For non-interstate striping, use one Raised Reflectorized Pavement Marker.
9. White Reflectorized Pavement Marker faces same direction traffic and red faces opposing traffic.

SHEET NUMBER 231

PARISH	CONTROL SECTION	STATE PROJECT

DESIGNED G. LEBLANC
CHECKED J. COLVIN
DETAILED K. WILLIAMS
CHECKED G. LEBLANC
DATE SHEET

DATE 2/28/19

APPROVED BY CHIEF ENGINEER:

PM-01
Centerline and Edgeline Markings

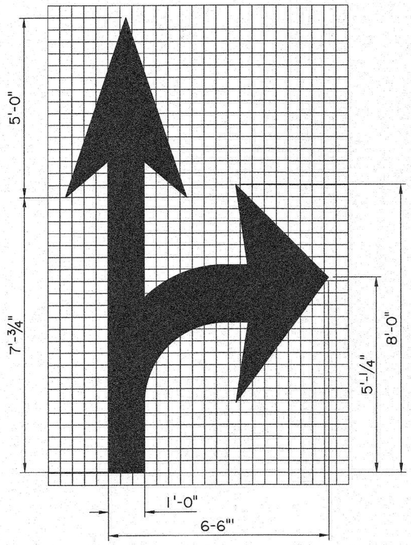
PAVEMENT MARKING DETAILS

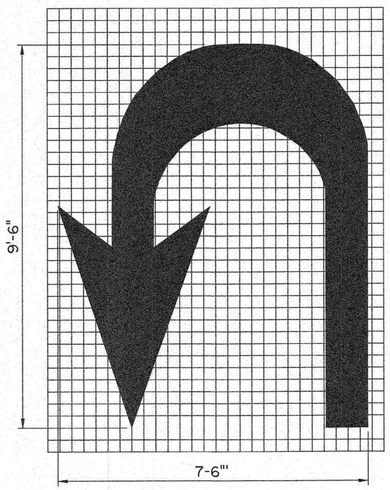
DOTD TRAFFIC ENGINEERING

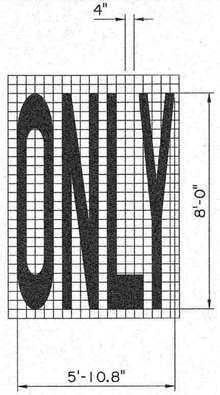
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9/21/2020 09:51

Ⓐ TURN ARROW AND ONLY WORD MARKING

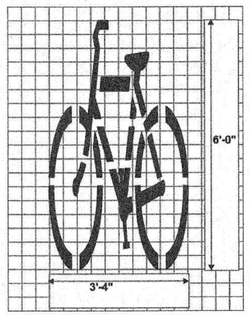




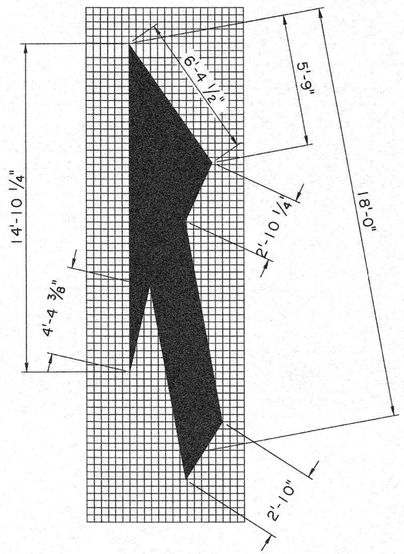


*For left turn arrow, use mirror image.

Ⓑ BIKE SYMBOL

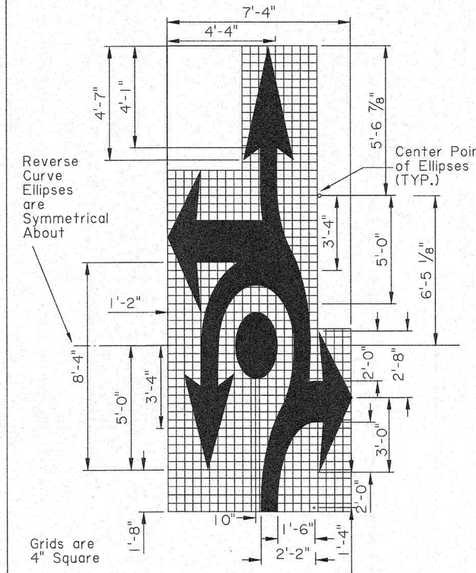


Ⓒ LANE REDUCTION ARROW



*For left lane reduction, use mirror image.

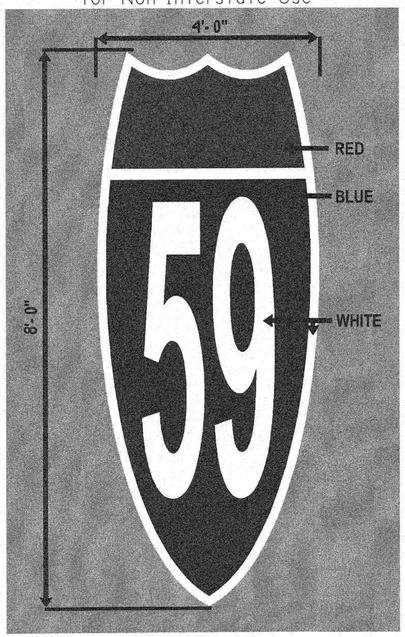
Ⓓ DIRECTIONAL ARROWS FOR ROUNDABOUTS (FISHHOOK)



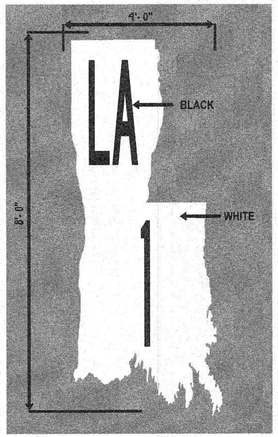
Assume Points Not Dimensioned to be Coincident with Grid Lines

Only Fishhook Combinations That Have Pay Items May Be Used.

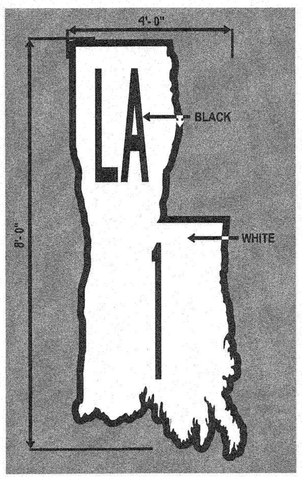
Ⓔ INTERSTATE SHIELD for Non-Interstate Use



Ⓕ STATE HIGHWAY SHIELDS for Non-Interstate Use

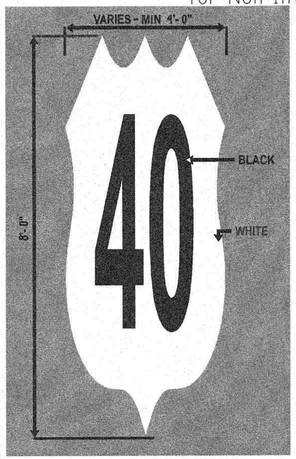


FOR USE ON DARK PAVEMENT.

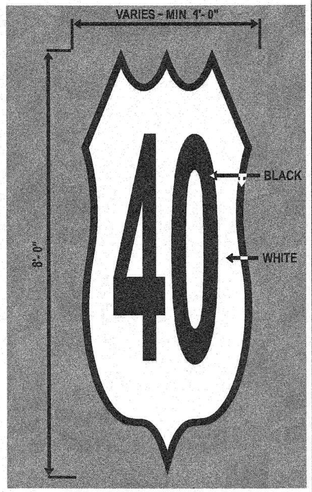


FOR USE ON LIGHT PAVEMENT.

Ⓖ STATE HIGHWAY SHIELDS for Non-Interstate Use



FOR USE ON DARK PAVEMENT.



FOR USE ON LIGHT PAVEMENT.

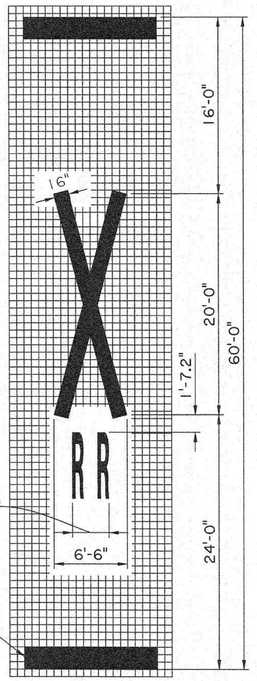
Ⓗ RAILROAD CROSSING PAVEMENT MARKINGS

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

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STATE OF LOUISIANA
GARY N. LeBLANC
REG. No. 28220
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

2-27-19



SHEET NUMBER	232
PARISH	CONTROL SECTION	STATE PROJECT
DESIGNED G. LEBLANC CHECKED J. COLVIN	DETAILED K. WILLIAMS CHECKED G. LEBLANC	DATE SHEET

DATE 2/28/19

APPROVED BY CHIEF ENGINEER:

PM-02
Pavement Word and Symbol Markings for Non-Interstate Use

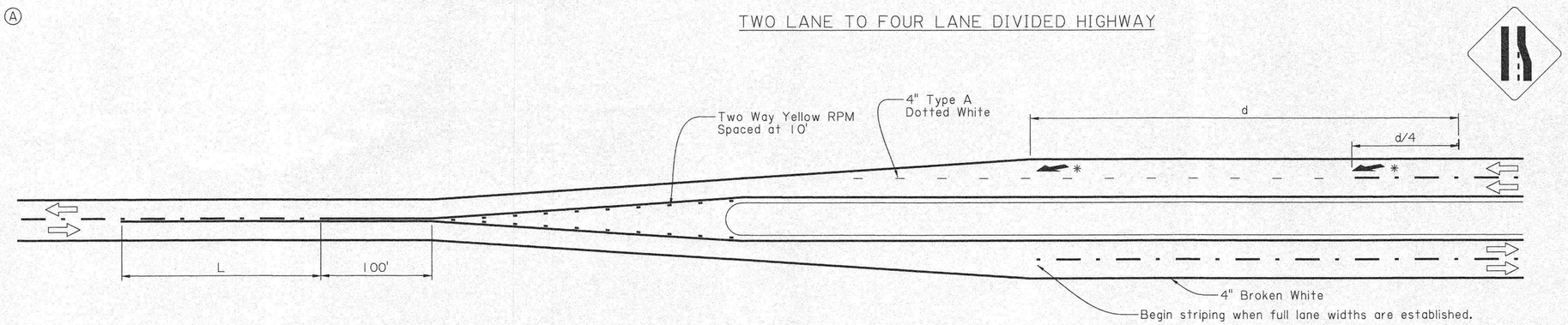
PAVEMENT MARKING DETAILS

TRAFFIC ENGINEERING

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Ⓐ

TWO LANE TO FOUR LANE DIVIDED HIGHWAY

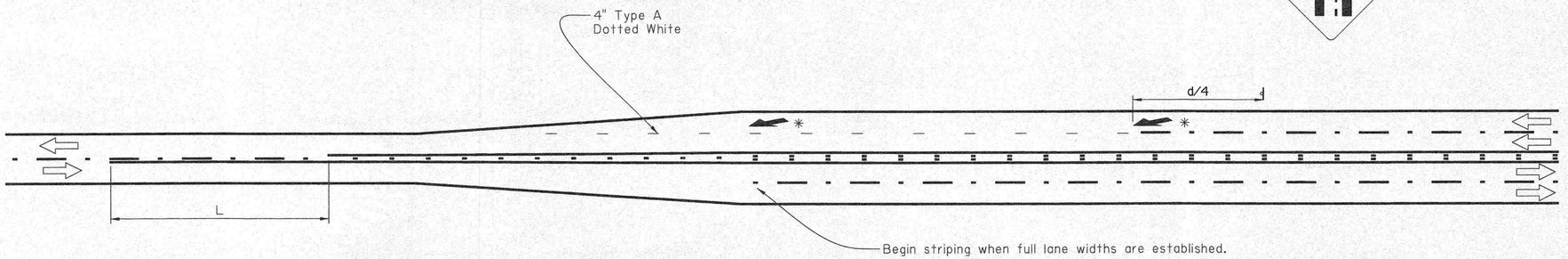


* No more than two reduction arrows shall be used per lane reduction.

85th Percentile or Speed Limit (mph)	Length of No Passing Minimum (L in feet)
25	100
30	100
35	100
40	125
45	175
50	250
55	325
60	400
65	475
70	550

Ⓑ

TWO LANE TO FOUR LANE UNDIVIDED HIGHWAY

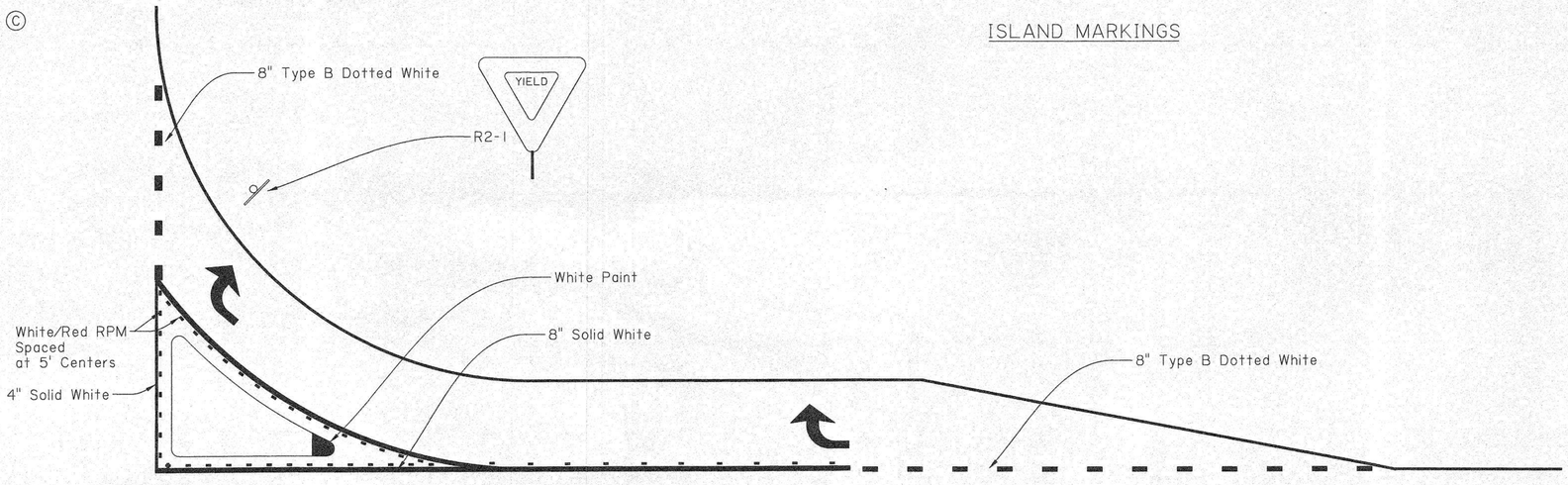


* No more than two reduction arrows shall be used per lane reduction.

85th Percentile or Speed Limit (mph)	Distance, d (ft)
20	225
25	325
30	460
35	565
40	670
45	775
50	885
55	990
60	1100
65	1200
70	1250

Ⓒ

ISLAND MARKINGS



General Notes:

1. ⇨ indicates direction of travel (not a pavement marker).
2. See PM-01 for centerline and lane line details.
3. All dotted lines are optional with DTOE Approval.
4. White paint for island marking shall be a minimum of 2' width or as directed by DTOE.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

STATE OF LOUISIANA
GARY N. LeBLANC
REG. No. 28220
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

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2-27-19

SHEET NUMBER 233

PARISH	CONTROL SECTION	STATE PROJECT

DESIGNED	CHECKED	DETAILED	CHECKED	DATE	SHEET
G. LEBLANC	J. COLVIN	K. WILLIAMS	G. LEBLANC		

DATE 2/28/19

APPROVED BY CHIEF ENGINEER:

PM-06

Lane Reduction and Island Layouts

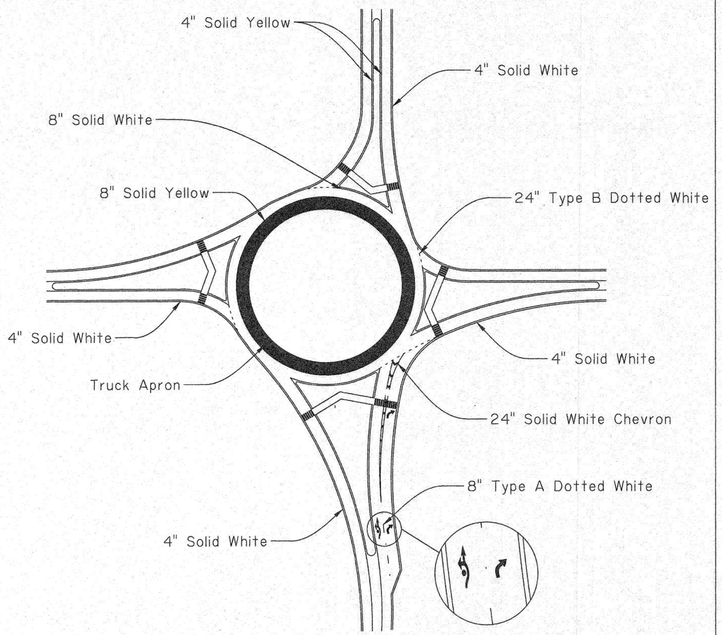
PAVEMENT MARKING DETAILS

DOTD TRAFFIC ENGINEERING

IP PWP:dms12298\PM-06.dgn

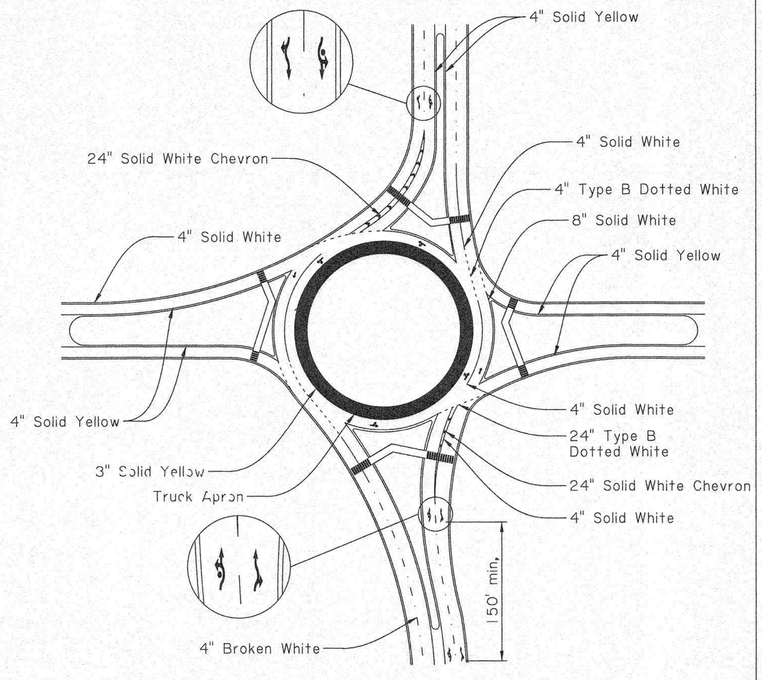
09:53
9/21/2020

Ⓐ ONE-LANE ROUNDABOUT

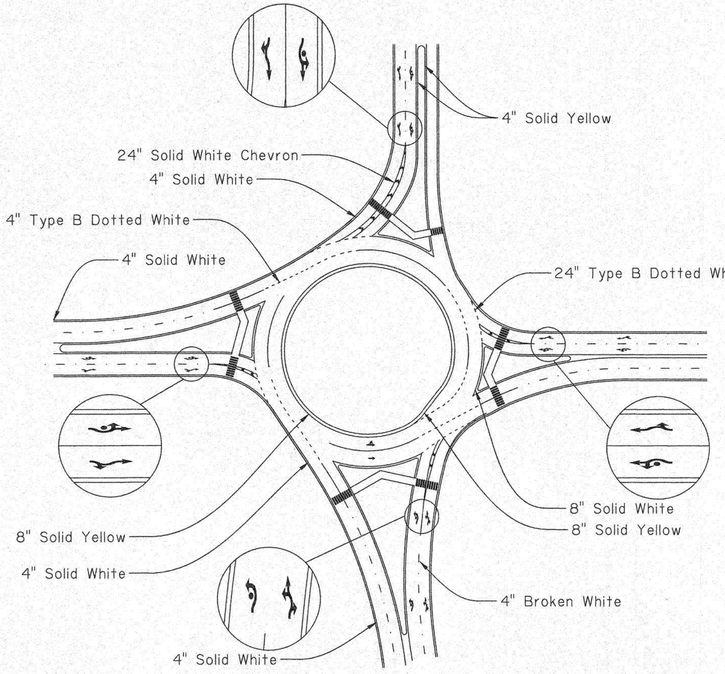


Note: No arrow pavement markings are to be used on single lane approaches.

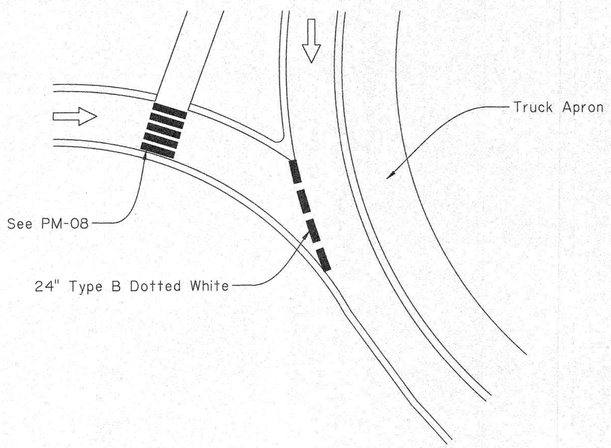
Ⓑ TWO-LANE ROUNDABOUT WITH ONE AND TWO LANE APPROACHES



Ⓒ TWO-LANE ROUNDABOUT

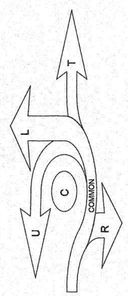


Ⓓ APPROACH DETAILS



Note: ⇨ indicates direction of travel (not a pavement marker).

Ⓔ COMPONENT KEY



The labeled areas above correspond to the portions needed for each type of roundabout traffic arrow.

"C" should only be used in the inside lane.

GENERAL NOTES:

1. Each roundabout approach shall have two sets of arrows. The first set shall be located at the guide sign. The second set shall be located at the theoretical gore of the splitter island.
2. Crosswalks shall be placed a minimum of 20 feet from the edge line of the circulatory roadway. See PM-08 for crosswalk details.
3. See PM-02 for fishhook details.
4. See PM-06 for island details.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
GARY N. LeBLANC
REG. No. 28220
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

2-27-19

SHEET NUMBER 234

PARISH	CONTROL SECTION	STATE PROJECT

DESIGNED / CHECKED	DETAILED / CHECKED	DATE / SHEET
G. LEBLANC / J. COLVIN	K. WILLIAMS / G. LEBLANC	

DATE 2/28/19

APPROVED BY CHIEF ENGINEER:

PM-09
Roundabout Striping Layout

PAVEMENT MARKING DETAILS

DOTD
TRAFFIC ENGINEERING

GENERAL NOTES - ROADSIDE TRAFFIC SIGNS

CONSTRUCTION SPECIFICATIONS: CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES. LATEST EDITION EXCEPT AS SUPPLEMENTED OR AMENDED BY THE PLANS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS, 1994 AND INTERM SPECIFICATIONS.

STEEL: STEEL SHALL CONFORM TO A.S.T.M. A-709, GRADE 36. STEEL TUBING SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF A.S.T.M. DESIGNATION A-36 OR HOT-FORMED TUBING (A-501) OR PIPE (A-53) TYPE "E" OR "S", GRADE "B" OR COLD-FORMED TUBING (A-500) GRADE "B" OR "C", UNLESS OTHERWISE NOTED.

ALUMINUM: ALL ALUMINUM EXCEPT SIGN PANELS SHALL CONFORM TO ASTM B-221, B-308, OR B-429 ALLOY 6061-T6 UNLESS OTHERWISE NOTED. SIGN PANELS SHALL BE .080" THICK ALUMINUM CONFORMING TO ASTM B-209 ALLOY 5052-H38 OR 6061-T6.

CONCRETE AND REINFORCING STEEL: CONCRETE SHALL BE CLASS "M", UNLESS OTHERWISE NOTED. DIMENSIONS RELATING TO REINFORCING STEEL FABRICATION ARE OUT TO OUT OF BAR UNLESS OTHERWISE NOTED. DIMENSIONS RELATING TO REINFORCING STEEL SPACING ARE CENTER TO CENTER OF BAR OR FACE OF CONCRETE TO CENTERLINE OF BAR. REINFORCING STEEL SHALL HAVE A MINIMUM COVERING OF 2" EXCEPT WHEN CONCRETE IS CAST AGAINST THE EARTH THEN THE COVERING WILL BE 3". ALL REINFORCING STEEL SHALL BE GRADE 60. THE FIRST DIGIT OF REINFORCING BAR NUMBER INDICATES THE BAR SIZE. THE TOP EDGES OF THE FOOTING SHALL BE CHAMFERED ¾".

CONCRETE FINISH: ALL PORTIONS OF THE FOOTINGS FOR CANTILEVERS AND TRUSSES ABOVE GROUNDLINE SHALL HAVE A FINISH IN ACCORDANCE WITH LOUISIANA SPECIFICATION. 805.08.3.

WELDING: ALL WELDING SHALL CONFORM TO THE LA. STANDARD SPECIFICATIONS, SECTION 809 AND SUPPLEMENTAL SPECIFICATIONS.

GALVANIZING: ALL STRUCTURAL STEEL AND MISCELLANEOUS STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. DESIGNATION A-123. DAMAGE TO GALVANIZED SURFACES THAT ARE NOT TO BE ENCASED IN CONCRETE SHALL BE REPAIRED IN ACCORDANCE WITH LA. STANDARD SPECIFICATIONS, SECTION 811.08. ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH A.S.T.M. DESIGNATION A-153 . ALL FIELD HOLES IN GALVANIZED MATERIAL SHALL BE TREATED WITH A COLD GALVANIZING COMPOUND FROM THE A.M.L.

BOLTS: UNLESS NOTED, ALL THREADED CONNECTIONS SHALL INCORPORATE A LOCKING DEVICE AND HAVE A MINIMUM OF 3 THREADS BEYOND THE NUTS. ALL BOLTS SHALL BE HIGH STRENGTH BOLTS, A.S.T.M. A-325, UNLESS OTHERWISE NOTED. ANCHOR BOLTS SHALL CONFORM TO AASHTO M314, GRADE 55 (OR APPROVED EQUAL) AND BE HOT DIP GALVANIZED TO A.S.T.M. A-153. STAINLESS STEEL FOR BOLTS SHALL CONFORM TO A.S.T.M. DESIGNATION A-320 B8, CLASS 2 TYPE 304, OR A-193 B8, CLASS 2 TYPE 304, UNLESS OTHERWISE NOTED. STAINLESS STEEL NUTS SHALL CONFORM TO A.S.T.M. DESIGNATION A-194, GRADE 8, TYPE 304. ALUMINUM BOLTS SHALL CONFORM TO A.S.T.M. F-468 ALLOY 2024-T4 AND NUTS ARE A.S.T.M. F-467 ALLOY 6061-T6 OR 6262-T9. WHERE BOLTS ARE USED ON BEVELED SURFACES, BEVELED WASHERS SHALL BE PROVIDED TO GIVE FULL BEARING TO THE HEAD AND/OR THE NUT.

RIVETS: ALL RIVETS SHALL BE ¼" DIAMETER BLIND RIVETS WITH POSITIVE MANDREL RETENTION. THE RIVET BODY AND MANDREL SHALL BE ALUMINUM WITH A ½" MAXIMUM DIAMETER DOME HEAD. THE RIVETS SHALL HAVE A MINIMUM ULTIMATE TENSILE STRENGTH = 875 LBS., AND CONFORM TO ASTM B-316 5056-H32.

BREAK-AWAY BASE: BASES FOR SIGNS LOCATED ADJACENT TO MORE THAN ONE ROADWAY (RAMP TERMINALS, INTERSECTIONS, ETC.) SHALL BE ORIENTED IN THE DIRECTION OF THE HIGHEST SPEED TRAFFIC. ALL MULTI-POST SIGNS WITH A DISTANCE BETWEEN POSTS OF 7'-0" CENTERS OR LESS SHALL HAVE BEVELED BASE CONNECTION. BASE CONNECTIONS SHALL BE WRAPPED PRIOR TO POURING THE FOOTING, WITH MATERIAL SUFFICIENT TO PREVENT CONCRETE SPLATTER ON THE BREAK-AWAY BASE ASSEMBLY.

ANCHOR BOLTS: ANCHOR BOLT NUTS TO BE TIGHTENED A MINIMUM ROTATION OF 240° (⅔ TURNS) FROM THE SNUG TIGHT CONDITION.

SIGN SHEETING: UNLESS OTHERWISE NOTED, ALL SIGN MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 1015 IN THE STANDARD SPECIFICATIONS. IN ORDER TO OBTAIN AN ACCEPTABLE COLOR MATCH BETWEEN MULTIPLE PANELS ON A GUIDE SIGN, ALL OF THE BACKGROUND SHEETING FOR ANY GUIDE SIGN SHALL BE THE MINIMUM WIDTH OF THE LARGEST PANEL AND SHALL COME FROM THE SAME LOT OR RUN NUMBER FROM THE SHEETING MANUFACTURER UNLESS OTHERWISE APPROVED IN WRITING. RETRO-REFLECTIVE SHEETING SHALL BE APPLIED TO ALL PANELS IN SUCH A MANNER THAT THERE ARE NO HORIZONTAL SPLICES.

OVERLAY PANELS FULL SIGN OVERLAY PANELS SHALL BE IN ACCORDANCE WITH SECTION 729.05.3. PARTIAL SIGN OVERLAYS AND ALL SHIELDS SHALL HAVE SHIMS AT ALL RIVETS. SHIMS SHALL BE AT LEAST .080" THICK AND SIZED SO THEY WILL NOT EXTEND BEYOND EDGE OF OVERLAY. RIVETS SHALL BE AS SPECIFIED ON THIS STANDARD DETAIL SHEET.

SIGN LOCATIONS: FOR GROUND MOUNTED SIGN INSTALLATIONS, THE ENGINEER MAY ADJUST THE TYPE D AND E SIGN LOCATIONS INDICATED ON THE PLANS. THIS WILL BE ALLOWED TO AVOID PLACEMENT IN DEEP DITCHES, STEEP BACKSLOPES, TREE LINES, AND ANY OTHER UNACCOUNTED FOR FIELD CONDITIONS AND TO PROVIDE BETTER MESSAGE PRESENTATION. ANY ADJUSTMENTS MUST BE WITH THE CONCURRENCE OF THE GEOMETRIC DESIGN ENGINEER.

SIGN TYPES: TYPE A = SMALL SIGN WITH ONE POST; TYPE B = CLUSTER ASSEMBLY OF TYPE A SIGNS; TYPE D = LARGE RECTANGULAR SIGN ADJACENT TO TRAFFIC MOUNTED WITH MULTIPLE POSTS; TYPE E = SECONDARY SIGN (SUCH AS AN EXIT NUMBER PANEL) ATTACHED TO A LARGE RECTANGULAR PRIMARY SIGN; DELINEATOR, MILEPOST AND OBJECT MARKER SIGNS ARE NOT COVERED UNDER TRAFFIC SIGNS. SEE STANDARD PLAN HS-03.

MISCELLANEOUS: THE CONTRACTOR SHALL MARK THE DATE OF FABRICATION, SHEETING MANUFACTURER CODE, AND SIZE OF SIGN ON THE BACK OF EACH SIGN. FOR EXTRUDED PANEL SIGNS THE LETTER HEIGHT SHALL BE 2". FOR ALL OTHER FLAT SHEETING SIGNS, THE LETTER HEIGHT SHALL BE ¾". THE SIGN ID NUMBERS SHALL FOLLOW THE ABOVE REQUIREMENTS BUT SHALL HAVE A BLUE BACKGROUND WITH WHITE NUMBERS. ALL MARKINGS SHALL HAVE A CLEAR UV PROTECTIVE FILM INSTALLED OVER THEM. SEE DETAIL "A" SHEET 5 OF 17.

POST HINGE SPLICE ON MULTI-POST SIGNS WITH ALL POSTS CONNECTED BY A SECONDARY SIGN SHALL BE LOCATED BELOW THE SECONDARY SIGN. STUB POST SHALL BE ASSEMBLED TO SIGN POST WITH REQUIRED BOLTS AND ONE FLAT WASHER ON EACH BOLT BETWEEN PLATES PRIOR TO SHIPMENT. POST SPLICE SLIP PLATE SHALL BE ASSEMBLED TO MINIMUM BOLT TENSION IN SHOP PRIOR TO SHIPMENT. SIGN POST SHALL BE SHIPPED TO JOB SITE ASSEMBLED WITH ALL HARDWARE REQUIRED IN PLACE AND SECURED. EXPOSED ENDS OF ALL PIPE SHALL BE CAPPED. USE OF SECTIONS PROVIDING EQUAL OR GREATER STRENGTH FOR ANY MEMBER DESIGNATED ON THE PLANS SHALL BE SUBMITTED TO THE BRIDGE ENGINEER FOR APPROVAL.

ALL DIMENSIONS REQUIRED FOR SATISFACTORY INSTALLATION SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE FABRICATION. ADJUSTMENTS SHALL BE MADE AS DIRECTED BY THE ENGINEER.

ALL ALUMINUM SURFACES PLACED IN CONTACT WITH, OR FASTENED TO UNGALVANIZED STEEL MEMBERS SHALL BE THOROUGHLY COATED WITH AN APPROVED ALUMINUM IMPREGNATED CAULKING COMPOUND. PAINT ALUMINUM SECTIONS IN CONTACT WITH CONCRETE WITH A HEAVY COAT OF AN ALKALI RESISTANT BITUMINOUS PAINT OR A COAT OF ZINC CHROMATE PAINT AND ALLOW TO DRY BEFORE PLACING. ALUMINUM ALLOYS SHALL NOT BE PLACED IN CONTACT WITH COPPER, COPPER BASED ALLOYS, LEAD, OR NICKEL.

SHOP DRAWINGS: NOT REQUIRED FOR SIGN BACKING AND SMALL GROUND MOUNTED SIGN SUPPORTS, UNLESS FABRICATOR INTENDS TO DEVIATE FROM THE DETAILS HEREIN. SHOP DRAWING ARE REQUIRED FOR ALL STRUCTURE MOUNTED SIGNS.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
6/24/22

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT



WIND LOAD MAP

WIND LOAD MAP LEGEND			
SYMBOL	ROADSIDE MOUNTED		
	ZONE	WIND VELOCITY (MPH)⊗	WIND LOAD (PSF) △
	1	70	20
	2	80	27

⊗ 25 YEAR MEAN RECURRENCE INTERVAL

△ INCLUDES C_d = 1.2

SHEET	BRIDGE STANDARD INDEX NO.	DESCRIPTION
1 OF 17	BD.2.7.2.0.1	WIND LOAD MAP & GENERAL NOTES
2 OF 17	BD.2.7.2.0.2	PANEL DETAILS (TYPE A & B SIGNS)
3 OF 17	BD.2.7.2.0.3	MOUNTING DETAILS (TYPE A & B SIGNS)
4 OF 17	BD.2.7.2.0.4	SPACING OF POSTS FOR GROUND MOUNTED SIGNS
5 OF 17	BD.2.7.2.0.5	EXTRUDED ALUMINUM SIGNS (TYPE D & E SIGNS)
6 OF 17	BD.2.7.2.0.6	EXTRUDED ALUMINUM PANELS (TYPE D & E SIGNS)
7 OF 17	BD.2.7.2.0.7	ROADSIDE MOUNTED SIGNS (TYPE A, B, & D SIGNS)
8 OF 17	BD.2.7.2.0.8	ROADSIDE MOUNTED SIGN DETAILS (TYPE A & B SIGNS)
9 OF 17	BD.2.7.2.0.9	ROADSIDE MOUNTED SIGN DETAILS (TYPE D SIGNS)
10 OF 17	BD.2.7.2.0.10	SQUARE TUBE SIGN DETAILS
11 OF 17	BD.2.7.2.0.11	Z - BRACKET SIGN SUPPORT (F - SHAPE BARRIER)
12 OF 17	BD.2.7.2.0.12	Z - BRACKET SIGN SUPPORT (F - SHAPE BARRIER)
13 OF 17	BD.2.7.2.0.13	Z - BRACKET SIGN SUPPORT (POST AND RAIL BARRIER)
14 OF 17	BD.2.7.2.0.14	Z - BRACKET SIGN SUPPORT (POST AND RAIL BARRIER)
15 OF 17	BD.2.7.2.0.15	CONTRAFLOW SIGNS (GROUND MOUNTED)
16 OF 17	BD.2.7.2.0.16	CONTRAFLOW SIGNS (F - SHAPE BARRIER)
17 OF 17	BD.2.7.2.0.17	CONTRAFLOW SIGNS (POST AND RAIL BARRIER)

SHEET NUMBER 235

PARISH	CONTROL SECTION	STATE PROJECT#

DESIGN K. BRAUNER
CHECK C. GUIDRY
DETAIL K. BRAUNER
CHECK C. GUIDRY
REVIEW C. BOURGEOIS
SERIES # 1 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
6/24/22

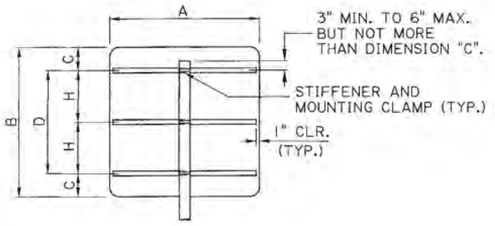
APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

WIND LOAD MAP & GENERAL NOTES

ROADSIDE SIGNING STANDARDS

STANDARD No. RS.A.01

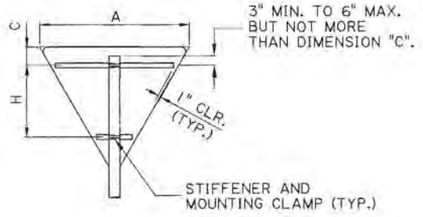
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN



SQUARE, RECTANGLE, CIRCLE, OCTAGON AND ROUTE MARKERS

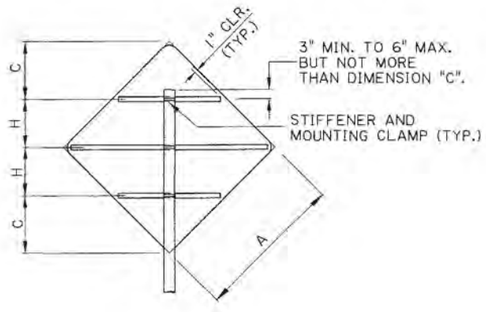
SQUARE, RECTANGLE, CIRCLE, OCTAGON AND ROUTE MARKERS					
A (IN.)	B (IN.)	C (IN.)	D (IN.)	H (IN.)	STIFFENER NUMBER REQUIRED
VARIABLE 12" TO 48"	6	3			1
	12	6			1
	15	7.5			1
	18	9			1
	24	6	12		2
	30	7.5	15		2
	36	7.5	21		2
	48	10	28		2
	60	9	42	21	3
	72	11	6 △	25	3
	84	10.5	6 △	21	4
48	96	12	6 △	24	4

△ LOCATION OF BORDER ANGLE FROM EDGE



EQUILATERAL TRIANGLE

EQUILATERAL TRIANGLE			
A (IN.)	C (IN.)	H (IN.)	STIFFENER NUMBER REQUIRED
24	8		1
30	6	10	2
36	6	12.5	2
48	6	23	2
60	6	33.5	2



DIAMOND

DIAMOND			
A (IN.)	C (IN.)	H (IN.)	STIFFENER NUMBER REQUIRED
24	10	6.97	1
30	12	9.21	2
36	14	11.46	2
48	18.5	15.44	3
60	22.5	19.93	3

NOTES:

NO BOLTS SHALL BE PLACED THROUGH FACE OF SIGN.

ALL TRACK HEAD BOLTS SHALL HAVE HEADS DESIGNED TO FIT AND TRANSMIT LOAD TO BOLT SLOTS IN THE STIFFENER.

STIFFENERS SHALL BE ALUMINUM EXTRUSIONS AS DETAILED ON THIS SHEET UNLESS OTHERWISE NOTED.

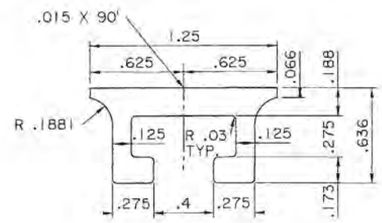
MOUNTING CLAMPS REQUIRED AT EACH HORIZONTAL STIFFENER.

SIGN PANELS AND POSTS SHALL BE THE SIZE REQUIRED ON THE PLANS AND SUMMARY SHEET.

SEE OTHER SHEETS FOR MOUNTING DETAILS.

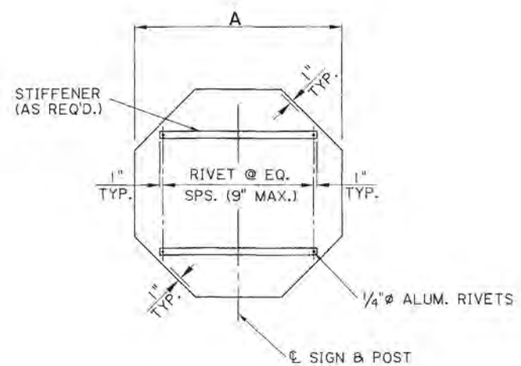
ALL SIGNS THAT REQUIRE BACKING SHALL BE INSTALLED WITH RIVETS.

THIS SHEET TO BE USED WITH WIND LOAD MAP AND GENERAL NOTES SHEET.

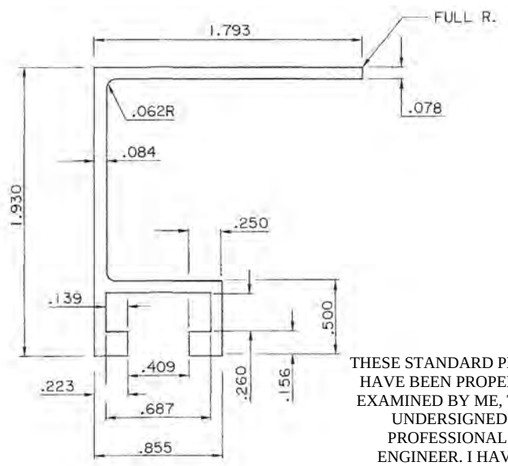


EXTRUDED CHANNEL DETAIL

TYPE A SIGNS



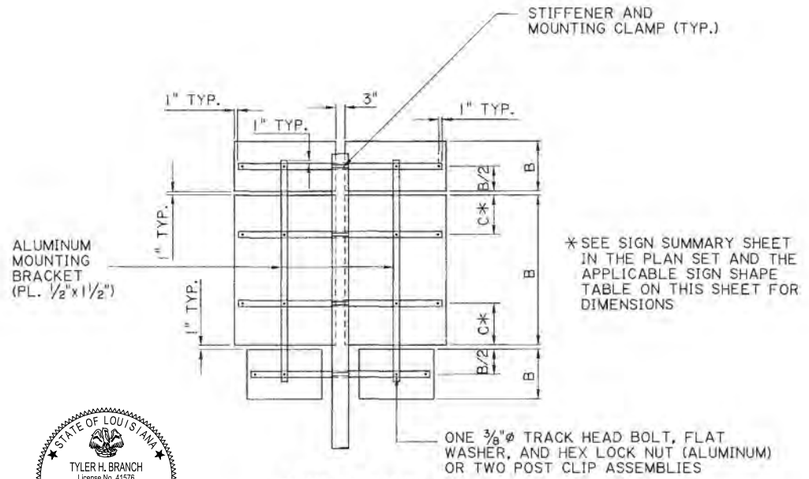
TYPICAL SIGN BACKING DETAIL



EXTRUSION STIFFENER
THIS STIFFENER REQUIRES THE USE OF RIVETS

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING



TYPE B SIGN
CLUSTER ASSEMBLY

DESIGN K. BRAUNER
CHECK C. GUIDRY
DETAIL K. BRAUNER
CHECK C. GUIDRY
REVIEW C. BOURGEOIS
SERIES • 2 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30057
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

PANEL DETAILS
(TYPE A & B SIGNS)

ROADSIDE SIGNING STANDARDS

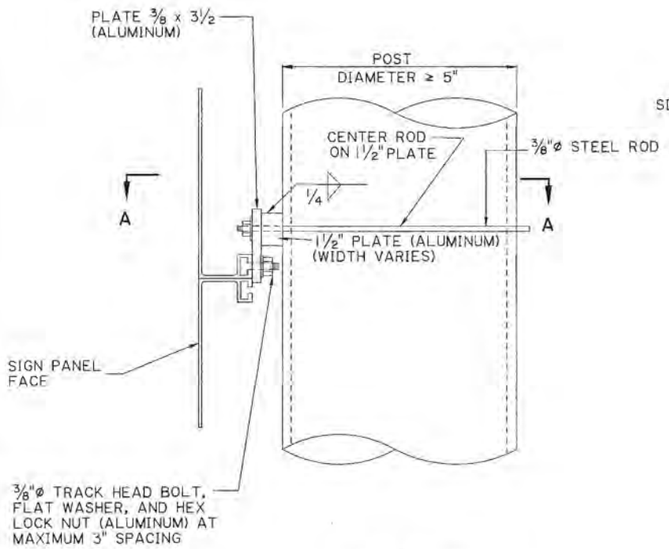
STANDARD PLAN

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

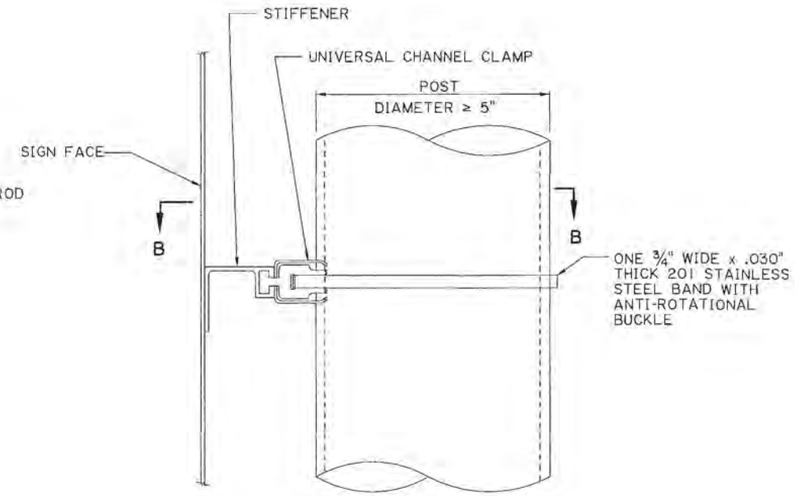
BRIDGE AND STRUCTURAL DESIGN

6/24/2022 09:14

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ELEVATION
(TYPICAL AT EACH STIFFENER)

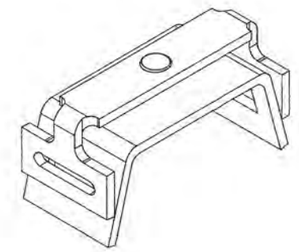


ELEVATION
TYPICAL AT EACH STIFFENER

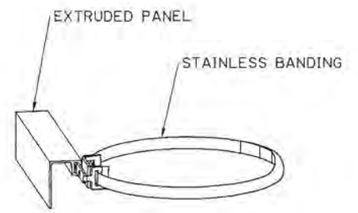
NOTES:
NO BOLTS SHALL BE PLACED THROUGH FACE OF SIGN.

ALL TRACK HEAD BOLTS SHALL HAVE HEADS DESIGNED TO FIT AND TRANSMIT LOAD TO BOLT SLOTS IN THE STIFFENER.

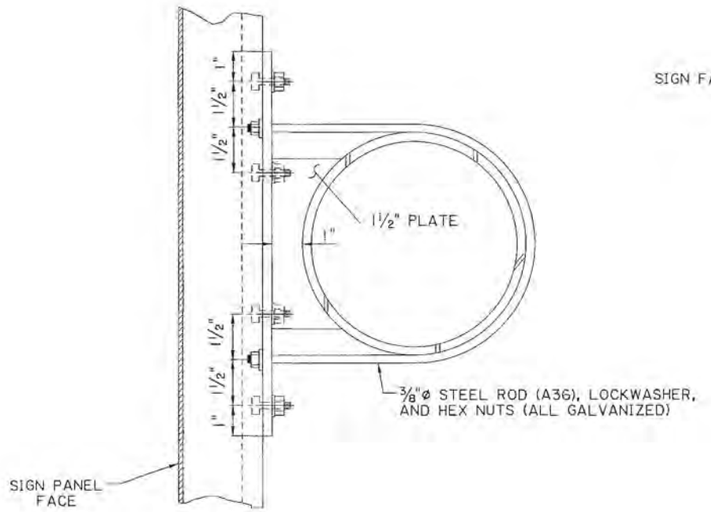
MOUNTING CLAMP REQUIRED AT EACH HORIZONTAL STIFFENER.



STAINLESS STEEL BANDING

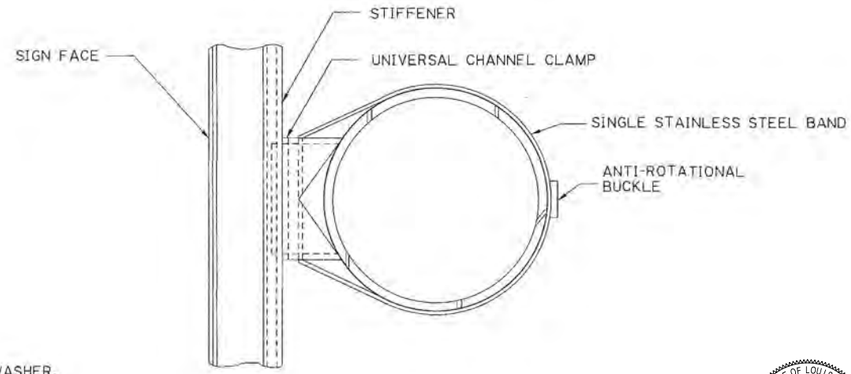


EXTRUDED PANEL BANDING CLIP



SECTION A-A

MOUNTING DETAIL (TYPE I)
FOR NON-TAPERED ROUND METAL POST SIZES ≥ 5" DIAMETER AND SIGNS > 20 SQ. FT.

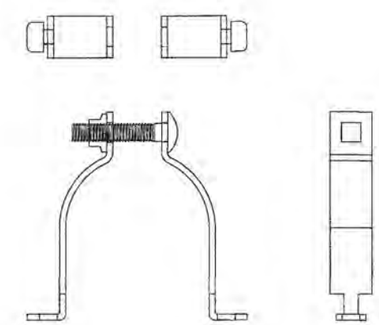


SECTION B-B

MOUNTING DETAIL (BAND TYPE)
FOR ALL POSTS ≥ 5" AND WITH SIGN AREAS ≤ 20 SQ. FT. OR LESS THAN 4 FEET WIDE

STATE OF LOUISIANA
TYLER H. BRANCH
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REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT



ROUND POST CLAMPS

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	K. BRAUNER
CHECK	C. GUIDRY
DETAIL	K. BRAUNER
CHECK	C. GUIDRY
REVIEW	C. BOURGEOIS
SERIES	3 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 36567
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
6/21/22

APPROVED BY CHIEF ENGINEER:
DATE: 7/1/2022

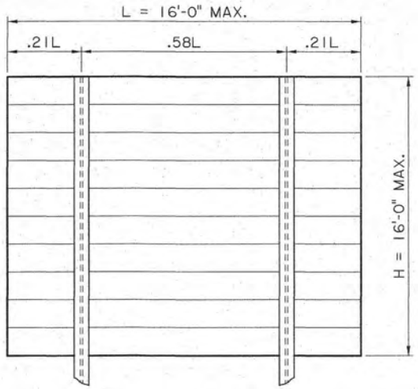
STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

MOUNTING DETAILS
(TYPE A & B SIGNS)

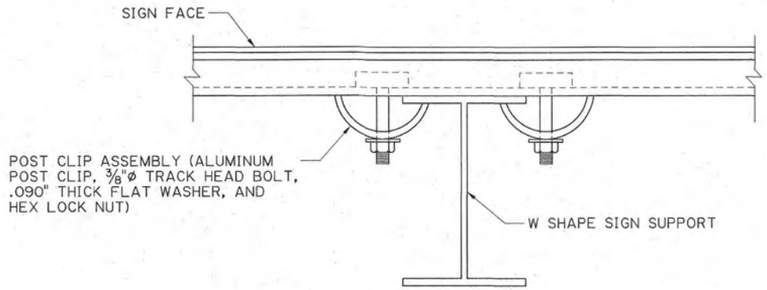
ROADSIDE SIGNING STANDARDS
STANDARD PLAN

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN

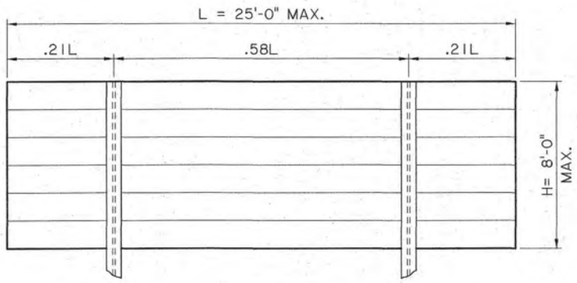
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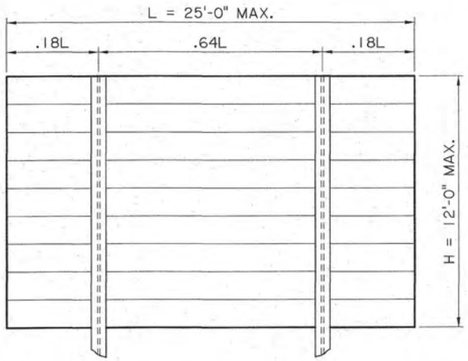
2 POSTS



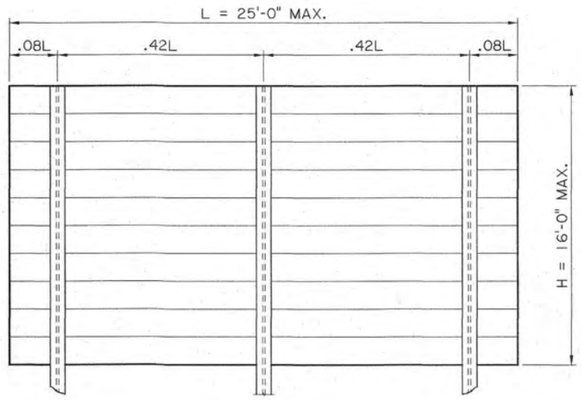
MOUNTING DETAIL (TYPE II)



2 POSTS



2 POSTS



3 POSTS

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING

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PARISH | CONTROL SECTION | STATE PROJECT

DESIGN K. BRAUNER | DETAIL K. BRAUNER | REVIEW C. BOURGEOIS
CHECK C. GUIDRY | CHECK C. GUIDRY | SERIES # 4 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

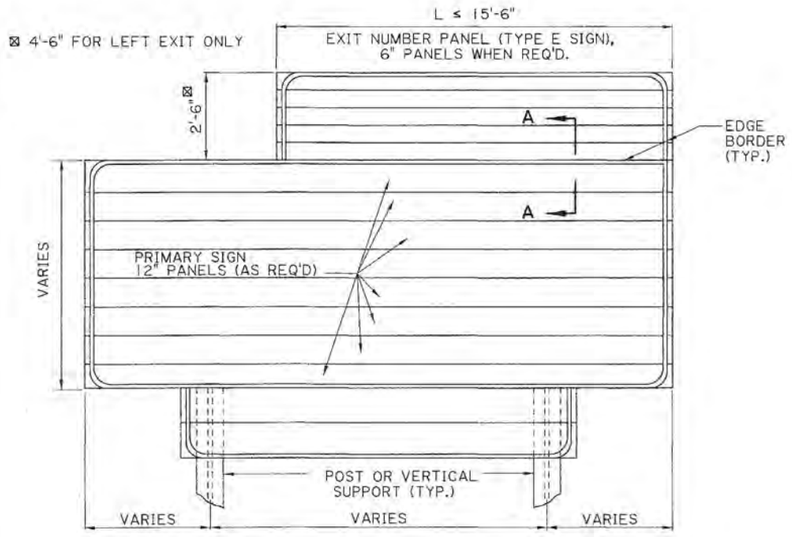
STATE OF LOUISIANA DEPARTMENT OF HEALTH AND HUMAN RESOURCES

SPACING OF POSTS FOR GROUND MOUNTED SIGNS

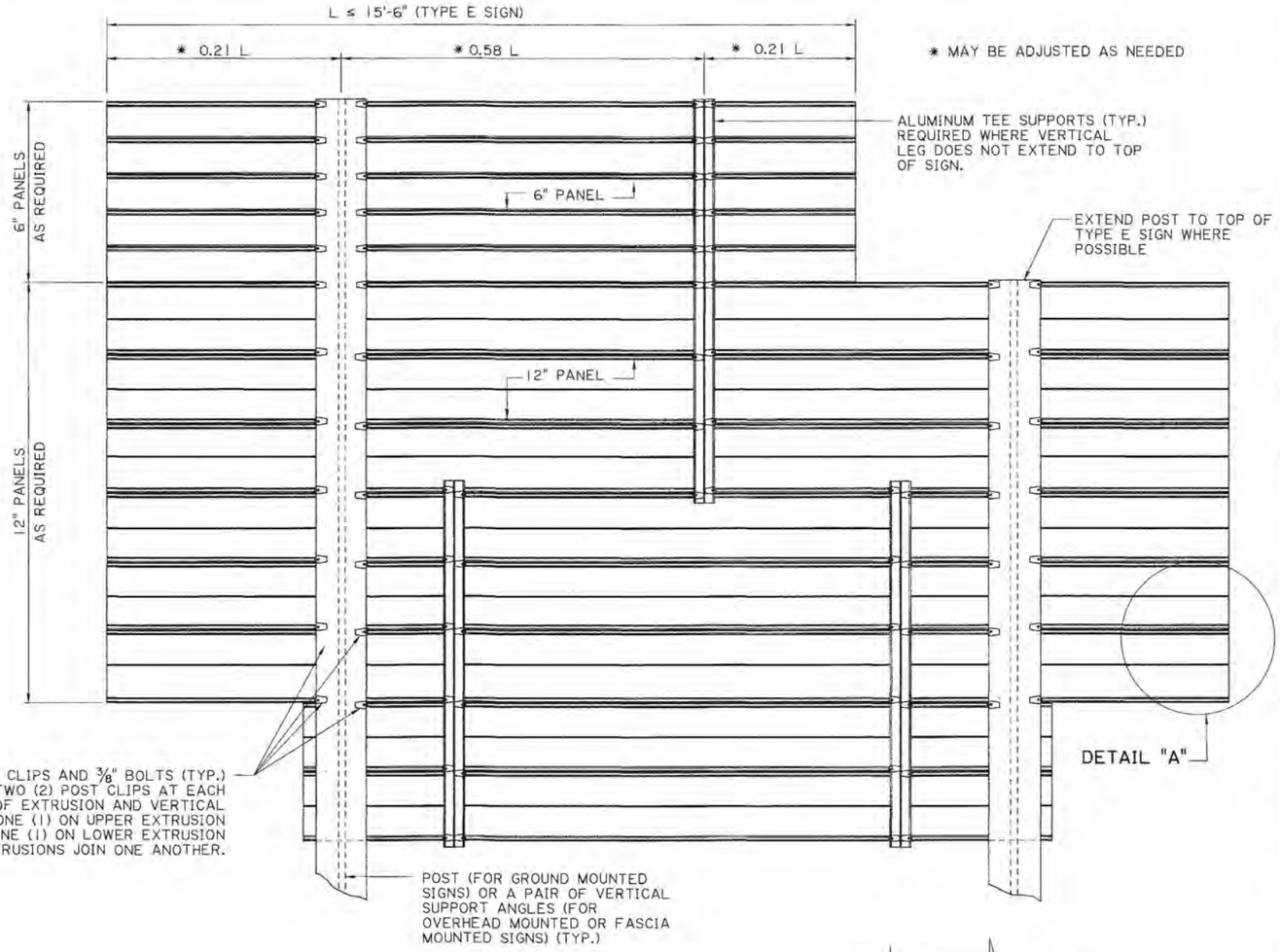
STANDARD PLAN | ROADSIDE SIGNING STANDARDS

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN

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FRONT ELEVATION



BACK ELEVATION

NOTES:

EXTRUDED ALUMINUM PANELS WILL BE ALLOWED AS AN ALTERNATE TO SIGN PANEL DETAILS FOR TYPE "D" AND "E" GROUND MOUNTED SIGNS ONLY. NUMBER AND SPACING OF POST SHALL MATCH THOSE SHOWN FOR PANEL DETAILS.

ALL 12" EXTRUDED ALUMINUM PANELS SHALL BE ALUMINUM ALLOY 6063-T6.
ALL POST CLIPS SHALL BE ALUMINUM ALLOY 356-T6.
ALL EXTRUDED PANEL BOLTS AND POST CLIP BOLTS SHALL BE ALUMINUM.
ALL HEX LOCK NUTS SHALL BE ALUMINUM ALLOY 2017-T4.
ALL POST CLIP BOLTS SHALL BE TORQUED TO A MINIMUM OF 175 IN-LBS.
ALL POST CLIP BOLTS SHALL HAVE HEADS DESIGNED TO FIT THE BOLT SLOTS IN THE PANELS.

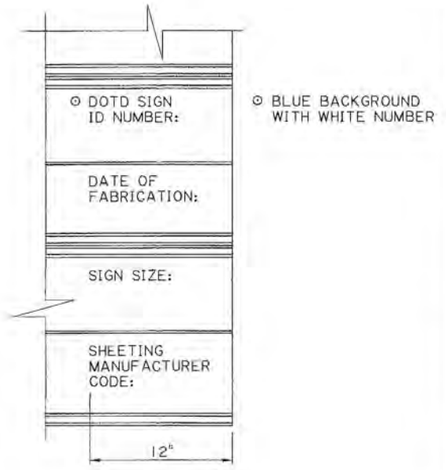
TYPE E SIGNS SHALL BE ATTACHED TO PRIMARY SIGNS WITH ALUMINUM TEE SUPPORTS, (5'-1" LENGTH), POST CLIPS, POST CLIP BOLTS, AND HEX LOCK NUTS.

FOR NEW OVERHEAD SIGNS (INCLUDING FASCIA MOUNTED) INCORPORATING EXISTING MOUNTS, THE CONTRACTOR WILL PLACE VERTICAL SUPPORT ANGLES WITHOUT SPLICES THAT EXTEND THE FULL HEIGHT OF THE EXTRUDED PRIMARY SIGN PANEL.

FOR NEW TYPE D SIGNS INCORPORATING EXISTING MOUNTS, THE EXISTING POST MAY BE REUSED IF THE NEW SIGN PANEL DOES NOT EXTEND OVER 2'-0" ABOVE THE EXISTING POST. SUCH NEW SIGNS WILL BE MOUNTED TO ALUMINUM TEE SUPPORTS BEGINNING AT THE TOP OF THE SIGN AND EXTENDING DOWNWARD FROM THE TOP OF THE POST THE DISTANCE THE NEW SIGN IS ABOVE THE EXISTING POST PLUS 1'-0". ONE TEE IS REQUIRED ADJACENT TO EACH EXISTING POST AND ATTACHED WITH POST CLIPS AS SHOWN FOR NEW TYPE E SIGNS. IF THE NEW SIGN EXTENDS OVER 2'-0" ABOVE THE EXISTING POST, THE CONTRACTOR IS TO REPLACE THE EXISTING POST AND MEET DETAILS FOR NEW CONSTRUCTION.

REFLECTIVE SHEETING FOR EXTRUDED PANELS: ONLY SPLICES THAT OCCUR AS PART OF THE MANUFACTURING PROCESS SHALL BE PERMITTED. A MAXIMUM OF TWO VERTICAL SPLICES ON ANY ONE SIGN FABRICATED USING EXTRUDED PANELS, WITH ONE SPLICE PER EXTRUDED PANELS SHALL BE ALLOWED. ALL "EXIT ONLY" PANELS THAT ARE DETAILED WITH THE TOP AND/OR BOTTOM EDGE NOT AT AN EXTRUDED PANEL EDGE SHALL BE FABRICATED FROM .080" ALUMINUM AND ATTACHED AS AN OVERLAY. ALL OTHER "EXIT ONLY" PANELS SHALL BE FABRICATED BY APPLYING THE YELLOW REFLECTIVE SHEETING ON THE EXTRUDED PANELS. THE REFLECTIVE SHEETING APPLIED TO EXTRUDED PANELS SHALL EXTEND APPROXIMATELY 1/4" OVER EACH SIDE AND SHALL BE ADHERED TO THE SIDE OF THE PANEL.

THIS SHEET TO BE USED WITH WIND LOAD MAP AND GENERAL NOTE SHEET.



DETAIL "A"

2" LETTERING IN LAST 12" OF SIGN, SEE MISCELLANEOUS NOTE ON GENERAL NOTE SHEET OF TRAFFIC SIGN DETAILS.

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN K. BRAUNER | DETAIL K. BRAUNER | REVIEW C. BOURGEOIS
CHECK C. GUIDRY | CHECK C. GUIDRY | SERIES # 5 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

EXTRUDED ALUMINUM SIGNS (TYPE D & E SIGNS)

STANDARD PLAN | ROADSIDE SIGNING STANDARDS

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

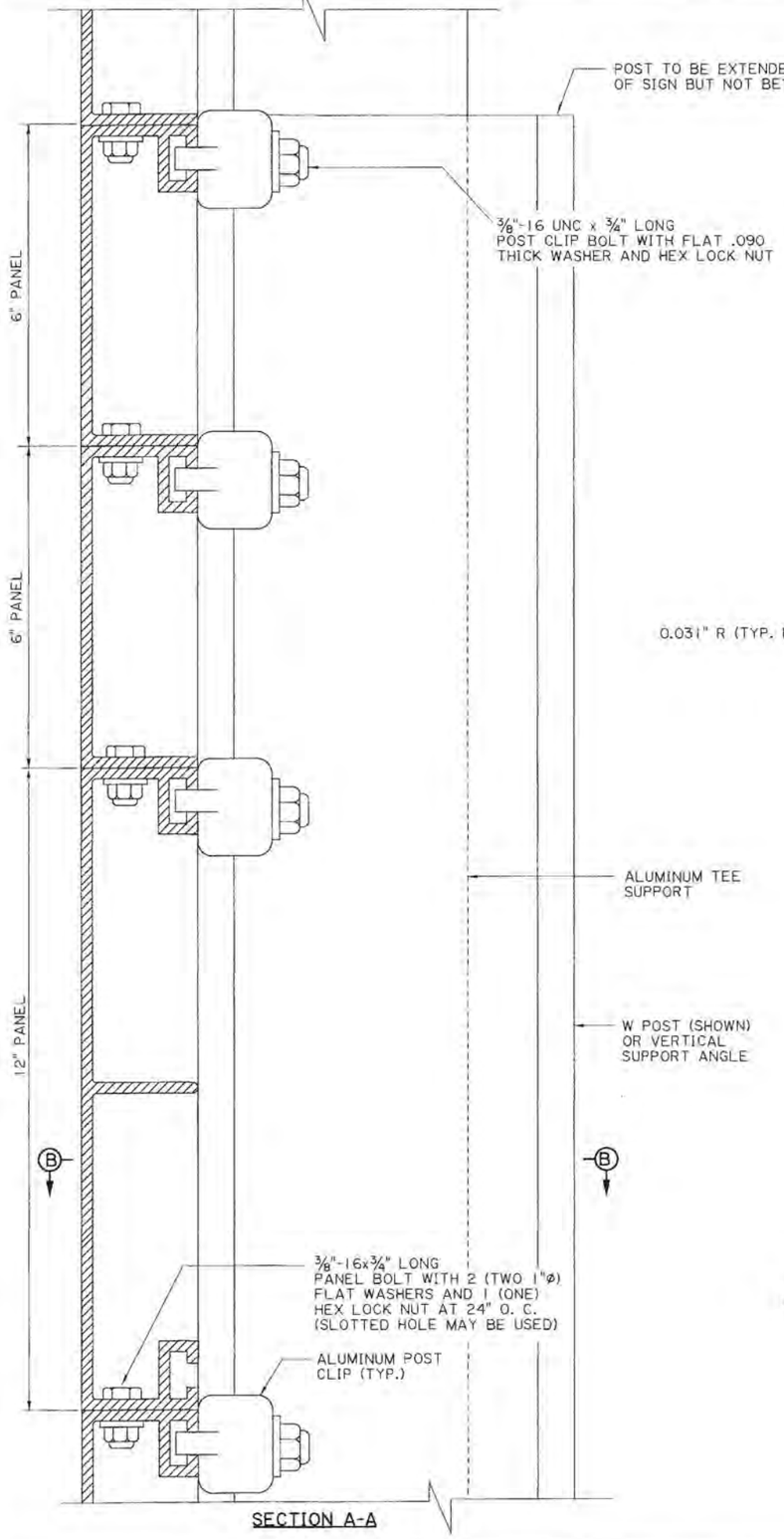
BRIDGE AND STRUCTURAL DESIGN

6/24/2022 09:19

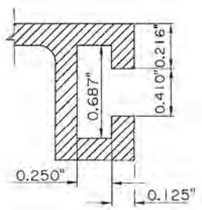
I:_PWP:d0964073\Roadside Traffic Signs 05.dgn

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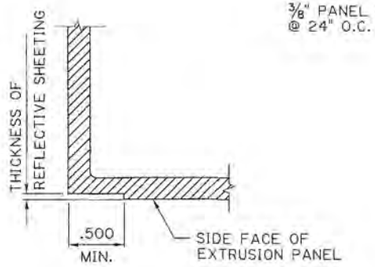
STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING



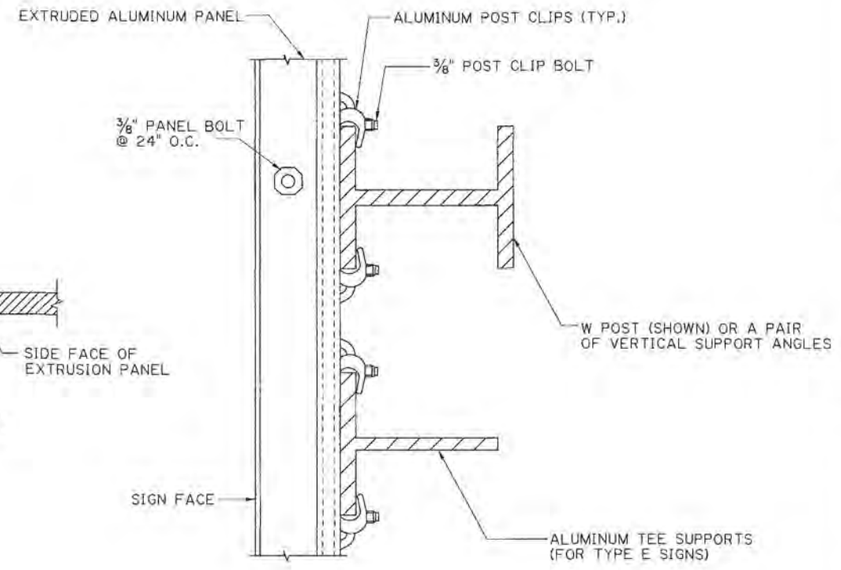
SECTION A-A



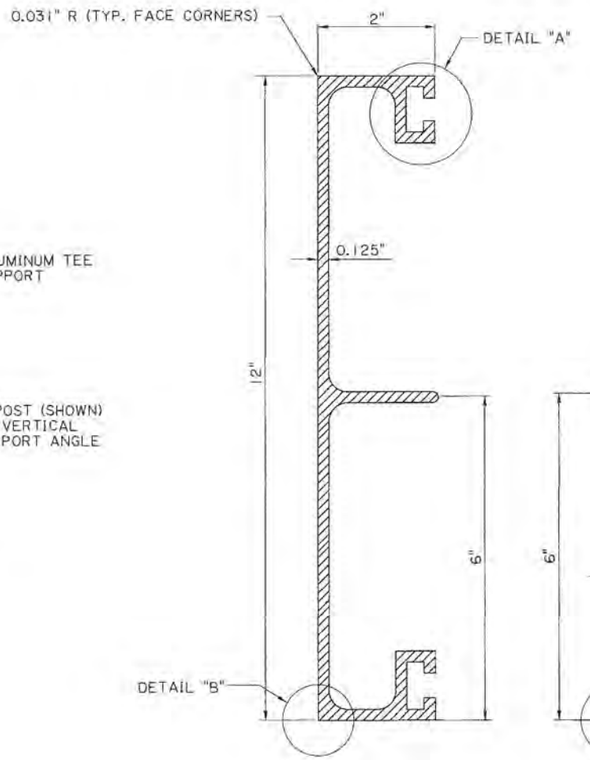
DETAIL "A"



DETAIL "B"

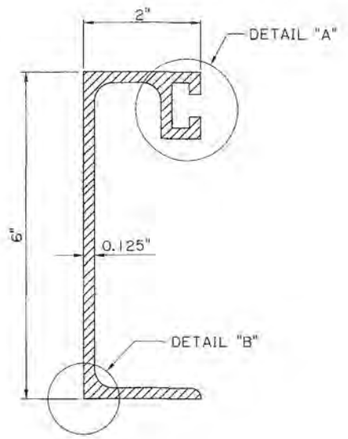


SECTION B-B



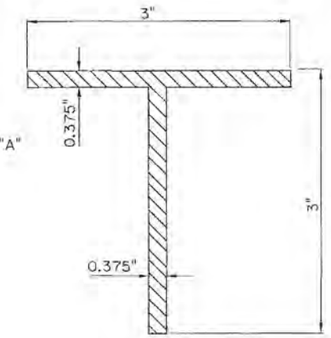
12" PANEL

MINIMUM WALL THICKNESS IS 0.080" UNLESS OTHERWISE SPECIFIED

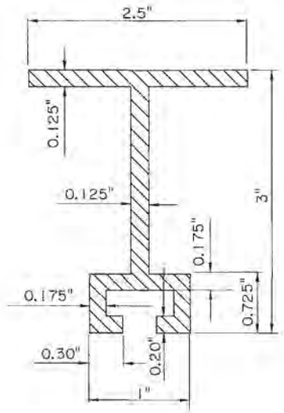


6" PANEL

MINIMUM WALL THICKNESS IS 0.080" UNLESS OTHERWISE SPECIFIED



3"x3"x3/8"



3"x2.5"

ALUMINUM TEE SUPPORTS
FOR TYPE E SIGNS

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN K. BRAUNER | DETAIL K. BRAUNER | REVIEW C. BOURGEOIS
CHECK C. GUIDRY | CHECK C. GUIDRY | SERIES # 6 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30647
PROFESSIONAL ENGINEER
IN CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER: 7/1/2022 DATE:

EXTRUDED ALUMINUM PANELS (TYPE D & E SIGNS)

STANDARD PLAN | ROADSIDE SIGNING STANDARDS

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN

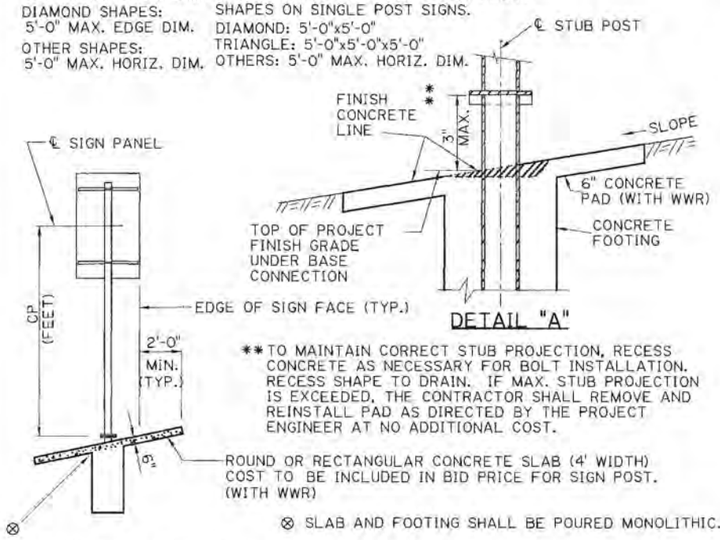
09:20
6/24/2022
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TYPE A SIGN

RECTANGULAR SHAPES:
4'-0" MAX. HORIZ. DIM.
DIAMOND SHAPES:
5'-0" MAX. EDGE DIM.
OTHER SHAPES:
5'-0" MAX. HORIZ. DIM.

TYPE B SIGN

CLUSTER ASSEMBLY
MAX. DIM. FOR DIFFERENT SIGN BLANK SHAPES ON SINGLE POST SIGNS.
DIAMOND: 5'-0"x5'-0"
TRIANGLE: 5'-0"x5'-0"x5'-0"
OTHERS: 5'-0" MAX. HORIZ. DIM.



DETAIL "A"

**TO MAINTAIN CORRECT STUB PROJECTION, RECESS CONCRETE AS NECESSARY FOR BOLT INSTALLATION. RECESS SHAPE TO DRAIN. IF MAX. STUB PROJECTION IS EXCEEDED, THE CONTRACTOR SHALL REMOVE AND REINSTALL PAD AS DIRECTED BY THE PROJECT ENGINEER AT NO ADDITIONAL COST.

ROUND OR RECTANGULAR CONCRETE SLAB (4' WIDTH) COST TO BE INCLUDED IN BID PRICE FOR SIGN POST. (WITH WWR)

⊗ SLAB AND FOOTING SHALL BE POURED MONOLITHIC.

SINGLE POST MOUNTS																
CP	TOTAL SQ. FT. SIGN AREA															
	STEEL ALTERNATE															
	ZONE I							ZONE II								
	5	10	15	20	25	30	35	5	10	15	20	25	30	35		
7	1	1	1	2	2	2	3	1	1	2	2	3	3	3		
8			2			2			1							
9						3			2							
10					2						2					
11					3						3					
12	1	2						1								
13	2			2				2						3		
14				3							2			4		
15				3							3			4		
16	2	2	2	3	3	3	3	2	2	3	3	3	3	4		

SINGLE POST PIPE & TUBE SECTIONS	
NO.	STEEL
1	2½" ø SCH. 40
2	3½" ø SCH. 40
3	5" ø SCH. 40
4	6" ø SCH. 40

NOTES:

W POST SECTIONS AND TABLE:
COLUMNS HEADED BY THE NUMBERS 27 AND 20 REPRESENT THE DESIGN WIND PRESSURE IN POUNDS PER SQUARE FOOT.
SEE ACCOMPANYING LOUISIANA WIND MAP TO DETERMINE THE DESIGN WIND PRESURE.
L - LENGTH OF SIGN PANEL DESIGNED.
H - HEIGHT OF SIGN PANEL DESIGNED.
ALL DIMENSIONS ARE IN INCREMENTS OF EVEN FEET.

THIS SHEET TO BE USED WITH WIND LOAD MAP AND GENERAL NOTE SHEET.

CONCRETE SLAB TO BE REINFORCED WITH A.S.T.M. A1064 WWR 4x4-W4.0 x W4.0 AND FINISHED IN ACCORDANCE WITH LA. STD. SPECS. 805.08.5.

✡ 30' MAX. (15' MIN.) FOR FREEWAYS AND EXPRESSWAYS. 15' FOR FRONTAGE ROADS, "BRIDGE ICES BEFORE ROAD" SIGNS, AND TYPE D RAMP SIGNS. SEE SIGN SUMMARY SHEETS. PROJECT ENGINEER MAY ADJUST ON A CASE-BY-CASE BASIS.

⊠ 7' MINIMUM FOR ROUTE MARKERS, WARNING AND REGULATORY SIGNS. 8' MINIMUM FOR GUIDE SIGNS WHEN SECONDARY SIGN MOUNTED BELOW.

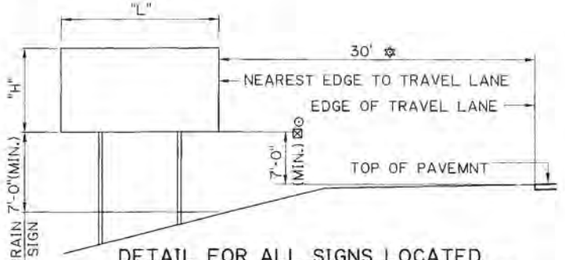
⊙ MOUNTING HEIGHT SHALL BE 7'-0" MIN. UNLESS OTHERWISE NOTED ON THE SIGN SUMMARY SHEET. CHEVRON SIGNS (W1-8) MAY BE INSTALLED AT 4'-0" OR HIGHER.

W POST SECTIONS FOR DOUBLE & TRIPLE POST MOUNTINGS																			
PL		STEEL		PL		STEEL		PL		STEEL		PL		STEEL		PL		STEEL	
L	H	27	20	L	H	27	20	L	H	27	20	L	H	27	20	L	H	27	20
5	1	1	1	12	5	2	1	16	5	4	4	21	8	3	3				
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5	3	1	1	12	7	2	2	17	4	2	2	21	10	4	3				
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12	3	1	1	16	13	4	3	21	6	3	2	25	15	4	4				
12	4	1	1	16	14	4	3	21	7	3	3	25	16	5	4				

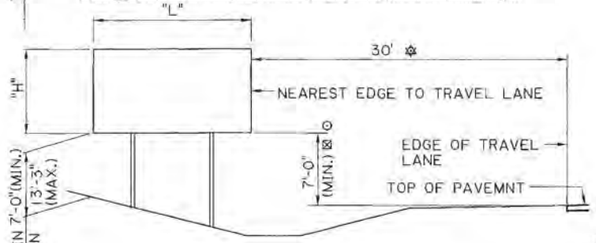
THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41578
REGISTERED PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

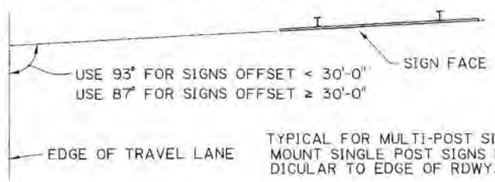
REAR ELEVATION OF SINGLE POST MOUNTING



DETAIL FOR ALL SIGNS LOCATED ON FORE SLOPE (TWO SUPPORTS SHOWN)



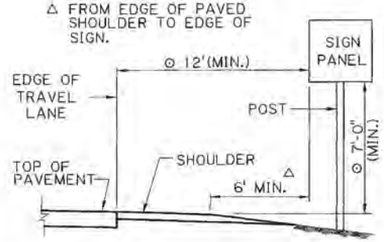
DETAIL FOR ALL SIGNS LOCATED ON BACK SLOPE (TWO SUPPORTS SHOWN)



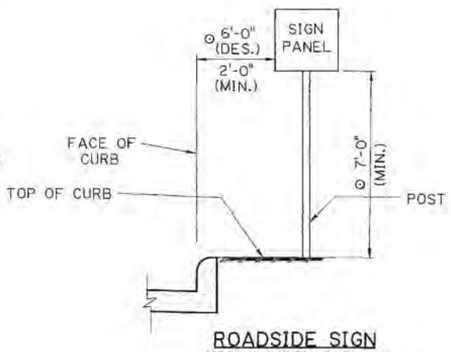
TYPICAL FOR MULTI-POST SIGNS. MOUNT SINGLE POST SIGNS PERPENDICULAR TO EDGE OF RDWY.

LOCATION OF ALL GROUND MOUNTED SIGN STRUCTURES (TWO SUPPORTS SHOWN)

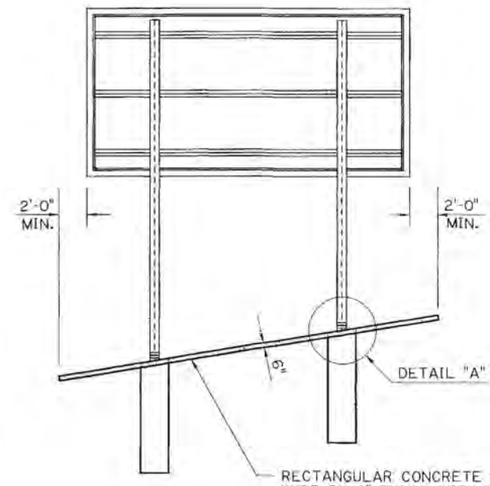
△ FROM EDGE OF PAVED SHOULDER TO EDGE OF SIGN.



ROADSIDE SIGN
RURAL INTERSECTIONS



ROADSIDE SIGN
URBAN INTERSECTIONS



REAR ELEVATION OF MULTI - POST MOUNTING

W SECTIONS	
NO.	STEEL
1	W6x12
2	W8x18
3	W8x24
4	W10x33
5	W12x40
6	W12x45

SHEET NUMBER 241

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN K. BRAUNER
CHECK C. GUIDRY
DETAIL K. BRAUNER
CHECK C. GUIDRY
REVIEW C. BOURGEOIS
SERIES * 7 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
6/24/22

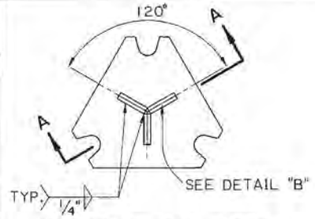
APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

ROADSIDE MOUNTED SIGNS (TYPE A, B, & D SIGNS)

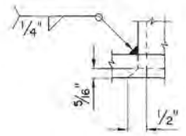
ROADSIDE SIGNING STANDARDS

STANDARD PLAN

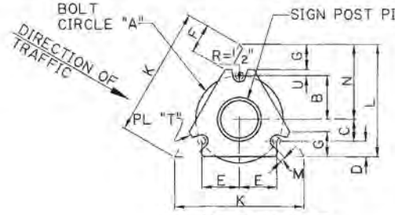
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN



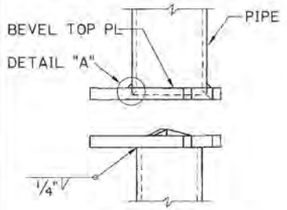
TOP VIEW STUB POST



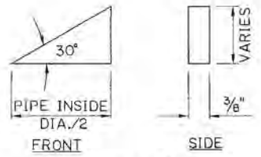
DETAIL "A"



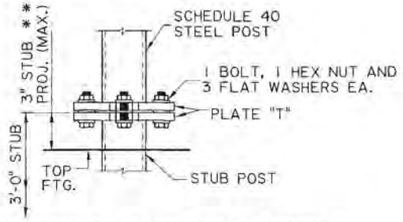
PLAN OF BASE



SECTION A-A



DETAIL "B"
3 REQ'D.



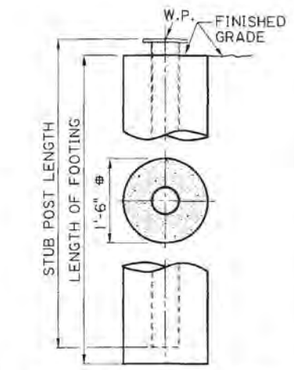
ELEVATION OF BASE CONNECTION
STEEL

MULTI-DIRECTIONAL BASE
SINGLE STEEL POST ONLY

** IF MAX. STUB PROJECTION IS EXCEEDED, CONTRACTOR SHALL REMOVE AND REINSTALL PAD AS DIRECTED BY THE PROJECT ENGINEER AT NO COST TO THE DEPARTMENT.

STEEL MULTI-DIRECTIONAL BASE CONNECTION DATA																	
NOMINAL PIPE SIZE	BOLT SIZE ⊙ & TORQUE	WELD SIZE	T	Y	A	B	C	D	E	F	G	K	L	M	N	U
2½" OR 3½" DIA.	5/8" T=226	3/8"	5/8"	7"	7"	3½"	1¾"	1¼"	3"	2 5/16"	2"	10 3/8"	9"	½"	6"	½"

FOR STUB POST LENGTH & FOOTING DIMENSION SEE TABLE BELOW AND FOOTING DETAIL.
⊙ TORQUE IN INCH-LBS., BOLTS ARE HIGH STRENGTH



⊕ FOR 2½"ø (STEEL) POST SECTIONS, FOOTING DIAMETER SHALL BE 1'-0"

FOOTING DETAIL
PIPE SECTIONS

FOOTING DATA			
POST DIA.	STUB L	FOOTING L	CU.YD. CONC.
2½"	36"	36"	0.09
3½"	36"	36"	0.20
5"	48"	48"	0.26

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:

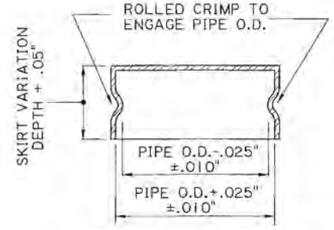
SPECIAL CARE SHALL BE TAKEN TO SET THE BASE PLUM TO AVOID EXCESSIVE SHIMMING AT THE BREAK-AWAY FEATURE AFTER FINAL INSTALLATION. EXCESSIVE SHIMMING COULD IMPAIR THE BREAK-AWAY FEATURE FOR WHICH THIS INSTALLATION WAS DESIGNED.

1. BASE SHALL BE ALIGNED AND SET PLUM BEFORE OR IMMEDIATELY AFTER POURING CONCRETE FOOTING.
2. H.S. BOLTS IN BASE PLATE SHALL BE TIGHTENED TO THE PRESCRIBED TORQUE. CARE SHALL BE TAKEN TO AVOID OVERTIGHTING.

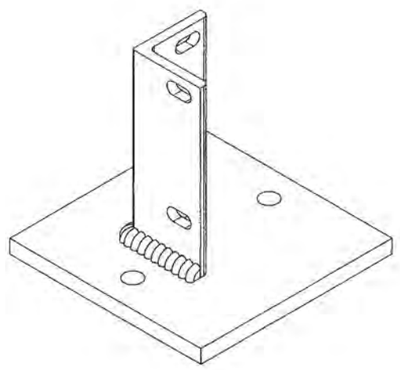
FRICTION CAPS:

CAPS MAY BE MANUFACTURED FROM EITHER HOT ROLLED OR COLD ROLLED STEEL SHEETS. FOR PIPE SIZES 3½" AND SMALLER THE MINIMUM SHEET METAL THICKNESS SHALL BE 24 GAUGE. THE RIM EDGES SHALL BE REASONABLY STRAIGHT AND SMOOTH. CAPS SHALL BE SIZED AND FORMED IN SUCH A MANNER AS TO PRODUCE A DRIVE-ON FRICTION FIT AND HAVE NO TENDENCY TO ROCK WHEN SEATED ON THE PIPE. THE DEPTH SHALL BE SUFFICIENT TO GIVE POSITIVE PROTECTION AGAINST ENTRANCE OF RAINWATER. THEY SHALL BE FREE OF SHARP CREASES OR INDENTATIONS AND SHOW NO EVIDENCE OF METAL FRACTURE. CAPS SHALL HAVE A ELECTRODEPOSITED COATING OF ZINC IN ACCORDANCE WITH THE REQUIREMENTS OF A.S.T.M. SPECIFICATION B633 SC4, TYPE I.

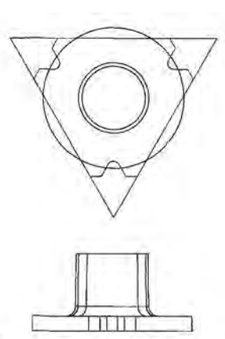
THIS SHEET TO BE USED WITH WIND LOAD MAP AND GENERAL NOTE SHEET.



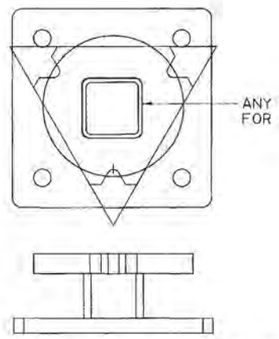
FRICTION CAP DETAIL
USED AT TOP OF ALL POSTS



SURFACE MOUNT FOR MILE MARKERS
(SQUARE TUBE ONLY)



TYPICAL TOP ASSEMBLY



TYPICAL BOTTOM ASSEMBLY

CONCRETE SURFACE MOUNT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

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SHEET NUMBER 242

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN K. BRAUNER | DETAIL K. BRAUNER | REVIEW C. BOURGEOIS
CHECK C. GUIDRY | CHECK C. GUIDRY | SERIES 8 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

ROADSIDE MOUNTED SIGN DETAILS (TYPE A & B SIGNS)

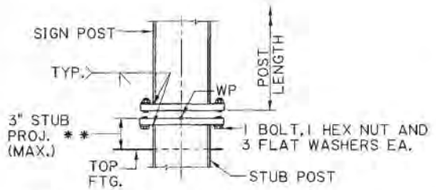
STANDARD PLAN | ROADSIDE SIGNING STANDARDS

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

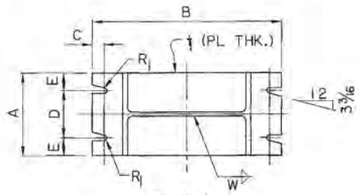
BRIDGE AND STRUCTURAL DESIGN

6/24/2022 09:24

IP PWP:d0964073\Roadside Traffic Signs 08.dgn

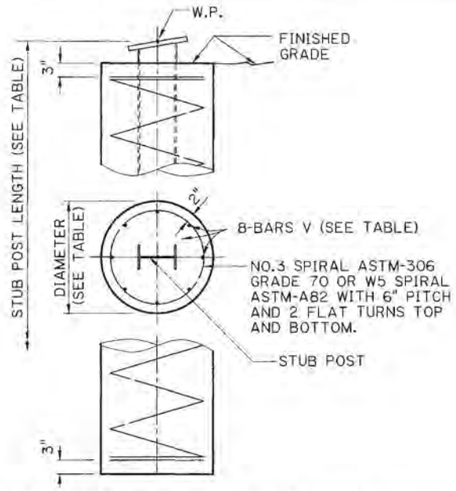


ELEVATION OF HORIZONTAL CONNECTION W SECTION



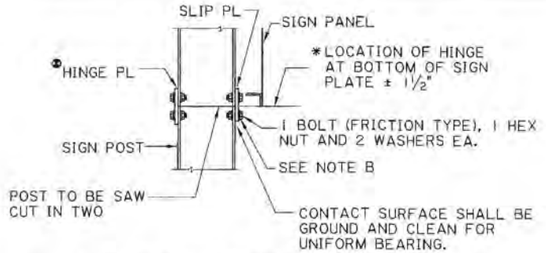
PLAN
BASE PLATE AND POST

ADD ½" FOR BEVELED BASE PLATES



CONCRETE FOOTING DETAIL W SECTION

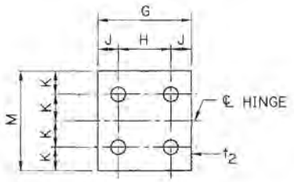
NOTE:
NO REINFORCING STEEL IS REQUIRED FOR 'S' SECTION.



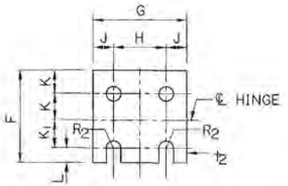
SLIP PLATE CONNECTION DETAIL

⊕ WHEN SIGN IS LOCATED ON SIDE OF ROADWAY WITH TWO WAY TRAFFIC, A SLIP PLATE WILL BE USED ON BOTH SIDES OF THE POST IN LIEU OF THE HINGE PLATE SHOWN

* FOR EXTRUSION SIGN PANEL ALTERNATE, LOCATION OF ℄ HINGE SHALL BE 3½" FROM BOTTOM OF SIGN PANEL.



HINGE PLATE DETAIL



SLIP PLATE DETAIL

BOLT HOLE DIAMETERS TO BE EQUAL TO BOLT DIA. + 1/16" IN POST FLANGE AND SLIP PLATE.

SLIP PLATE CONNECTION NOTES:

1. POST SHALL BE SAW CUT OR TORCH CUT PRIOR TO GALVANIZING.
2. SLIP PLATE SHALL BE INSTALLED WITH H.S. BOLTS AT MINIMUM BOLT TENSION.
3. TIGHTING SHALL BE OBTAINED BY
   (a) TURN OF NUT METHOD; OR
   (b) DIRECT TENSION INDICATOR METHOD USING LOAD INDICATOR WASHER. SEE NOTE A.
4. TIGHTING SHALL BE TO SUCH A DEGREE AS TO OBTAIN MINIMUM BOLT TENSION AS SPECIFIED IN STANDARD SPECIFICATIONS SUBSECTION 807.05, CURRENT AT TIME OF FABRICATION.
5. TIGHTEN BOLTS IN A SYSTEMATIC ORDER TO THE PRESCRIBED MINIMUM BOLT TENSION.

NOTE A:

WHEN HIGH STRENGTH BOLT IS TIGHTENED BY USE OF A DIRECT TENSION INDICATOR, THE INSTALLATION AND INSPECTION SHALL BE IN ACCORDANCE WITH SPECIFICATION FOR STRUCTURAL JOINTS, SECTION 5 AND 6 FOR ASTM A-325 BOLTS APPROVED BY THE RESEARCH COUNCIL ON RIVETED AND BOLTED STRUCTURAL JOINTS. FOR DETAILED INSTALLATION AND INSPECTION PROCEDURES FOLLOWED MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL BE REQUIRED TO SUBMIT BROCHURES TO THE BRIDGE DESIGN ENGINEER FOR APPROVAL.

NOTE B:

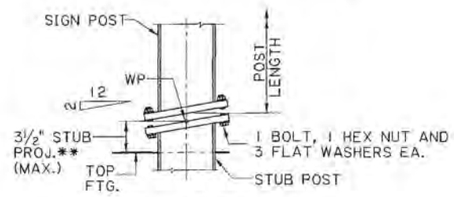
WHEN HIGH STRENGTH BOLT IS TIGHTENED BY USE OF A DIRECT TENSION INDICATOR METHOD, THE WASHER UNDER THE BOLT HEAD SHALL BE A LOAD INDICATOR WASHER.

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:

SPECIAL CARE SHALL BE TAKEN TO SET THE BASE PLUMB TO AVOID EXCESSIVE SHIMMING AT THE BREAK-AWAY FEATURE AFTER FINAL INSTALLATION. EXCESSIVE SHIMMING COULD IMPAIR THE BREAK-AWAY FEATURE FOR WHICH THIS INSTALLATION WAS DESIGNED. SHIM PACKS SHOWN ON THIS DRAWING SHOULD BE SUFFICIENT TO ALLOW FOR NORMAL MISALIGNMENT.

1. BASE SHALL BE ALIGNED AND SET PLUMB BEFORE OR IMMEDIATELY AFTER POURING CONCRETE FOOTING.
2. H.S. BOLTS IN BASE PLATE SHALL BE TIGHTENED TO THE PRESCRIBED TORQUE. CARE SHALL BE TAKEN TO AVOID OVERTIGHTING.

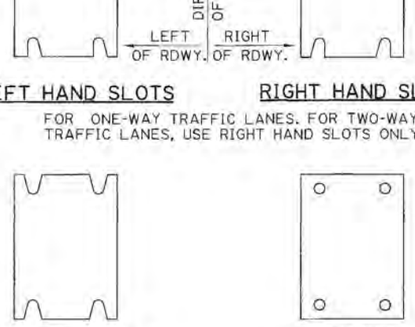
DIRECTION OF HIGHEST SPEED TRAFFIC



ELEVATION OF BEVELED CONNECTION W SECTION

TO BE USED ON ALL MULTI-POST SIGNS WITH DISTANCE BETWEEN POSTS 7'-0" ℄ TO ℄ OR LESS.

** IF MAX. STUB PROJECTION IS EXCEEDED, CONTRACTOR SHALL REMOVE AND REINSTALL PAD AS DIRECTED BY THE PROJECT ENGINEER AT NO COST TO THE DEPARTMENT.



LEFT HAND SLOTS RIGHT HAND SLOTS

FOR ONE-WAY TRAFFIC LANES. FOR TWO-WAY TRAFFIC LANES, USE RIGHT HAND SLOTS ONLY.

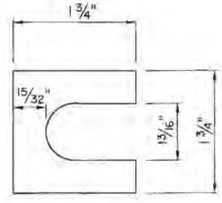
TWO-WAY SLOTS

FOR GORE INSTALLATIONS

HOLES

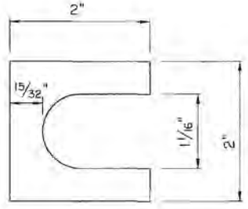
FOR BRIDGE MOUNTED SIGNS & SIGNS BEHIND GUARDRAIL

ORIENTATION AND USE OF SLOTS AND HOLES



* SHIM DETAIL

BOLTS UP TO ¾" ø BOLTS



* SHIM DETAIL

BOLTS UP TO 1" ø BOLTS

* FURNISH 2 SHIMS 0.012"± THICK AND 2 SHIMS 0.032"± THICK PER POST. SHIMS SHALL BE BRASS CONFORMING TO A.S.T.M. SPEC. B-36 AND BE USED AS DIRECTED BY THE PROJECT ENGINEER.

DIMENSION (INCH) / SECTION	BASE CONNECTION DATA										SLIP PLATE & HINGE PLATE DATA										FOOTING DATA				
	BOLT SIZE & * TORQUE LIMITS	A	B	C	D	E	t_1	R	W	W (ALT.) SEE NOTE	F	G	H	J	K	K_1	L	M	t_2	R_2	H.S. BOLT DIA.	STUB LTH.	FTG. DIA.	LTH. OF FTG.	BARS V SIZE	CU. YD. CONC.
W6x12	⅝"ø T= 226-345	4	10	¾	2	1	1½	11/32	5/16	5/16	3⅝	4	2¼	⅞	1	1¼	⅝	4¼	⅜	9/32	½	24	24	48	#5	0.46
W8x18		5¼	12	¾	3	1⅛	1½	11/32	5/16	5/16	4⅛	5¼	2¾	1¼	1⅛	1⅜	¾	4¾	½	11/32	⅝	24	24	60	#6	0.58
W8x24	¾"ø T= 369-554	6½	12½	⅞	3¼	1⅜	1¾	13/32	⅜	7/16	4⅛	6½	3½	1½	1⅛	1⅜	¾	4¾	½	11/32	⅝	30	24	72	#7	0.70
W10x33	1"ø T= 460-735	8	15½	1¼	4½	1¾	2	17/32	⅜	7/16	4⅝	8	5½	1¼	1¼	1½	⅞	5¼	⅝	13/32	¾	30	24	96	#9	0.93
W12x40		8	17½	1¼	4½	1¾	2	17/32	⅜	7/16	4⅝	8	5½	1¼	1¼	1½	⅞	5¼	⅝	13/32	¾	36	24	120	#10	1.16
W12x45		10	17½	1¼	6	2	2	17/32	⅜	7/16	5½	10	5½	2¼	1½	1¾	1	6¼	¾	1⅛	⅞	36	36	96	#9	2.09

*BASE PLATE TO POST WELD ALTERNATE (AS AN ALTERNATE TO WELDS SHOWN IN DETAILS, THE POST MEMBERS TABULATED MAY BE WELDED ALL AROUND WITH A FILLET WELD W(ALT.).) ALL BOLTS SHALL HAVE A MINIMUM OF 3 THREADS BEYOND THE NUT. BOLT TORQUE LIMITS ARE IN INCH POUNDS. (THE HIGH STRENGTH BOLTS AT THE BASE CONNECTION SHOULD BE TORQUED WITHIN THE LIMITS SPECIFIED. HOWEVER, THE LOWER LIMIT IS DESIRABLE). FOR NON-BREAKAWAY USE TORQUE LIMITS GIVEN IN THE STANDARD SPECIFICATIONS

STATE OF LOUISIANA
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PARISH | CONTROL SECTION | STATE PROJECT

DESIGN K. BRAUNER | DETAIL K. BRAUNER | REVIEW C. BOURGEOIS
CHECK C. GUIDRY | CHECK C. GUIDRY | SERIES 9 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER: Christopher P. Knotts
DATE: 7/1/2022

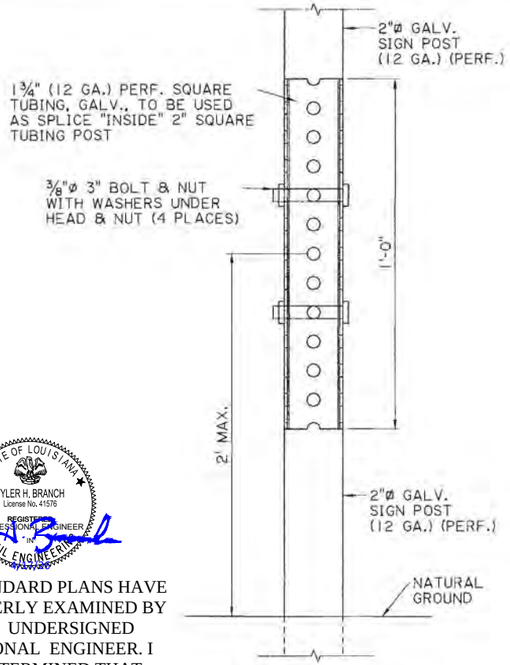
STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

ROADSIDE MOUNTED SIGN DETAILS (TYPE D SIGNS)

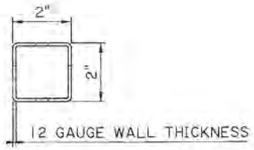
ROADSIDE SIGNING STANDARDS

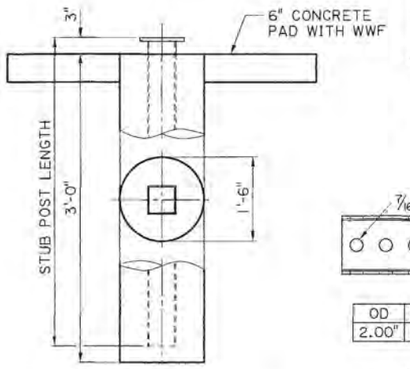
STANDARD PLAN

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN

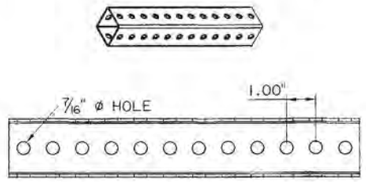


SPLICE JOINT
FOR SIGN 2" POST



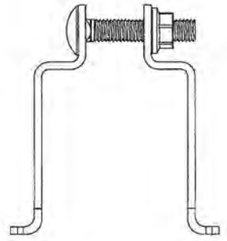


FOOTING DETAIL
SQ. TUBE SECTIONS



OD	GAUGE	WALL	WEIGHT PER FOOT
2.00"	12GA	0.105"	2.459#

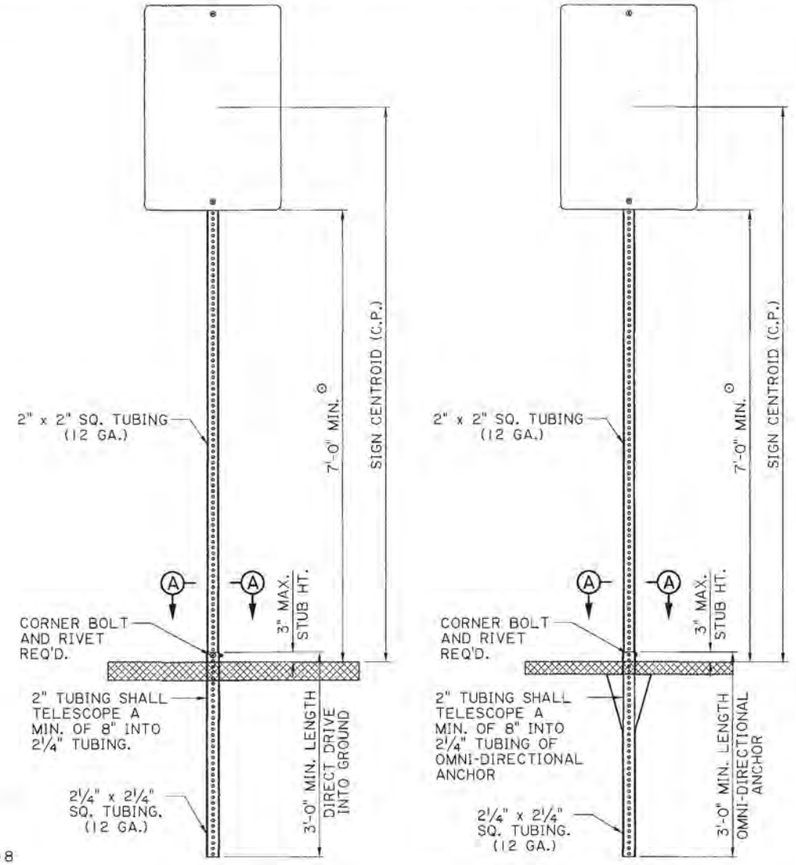
2" SQUARE TUBING



SIGN CLAMP FOR SQUARE POSTS

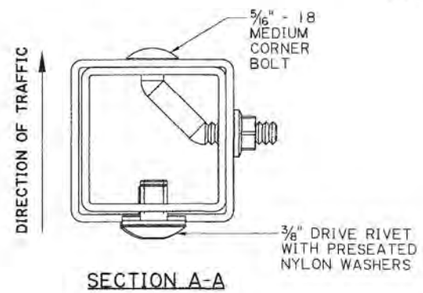
⅞" WIDE X 11GA. TYPE 304, #2B FINISHED STAINLESS STEEL INCLUDES ⅜" - 16 X 2" CARRIAGE BOLT AND CASE HARDENED FLANGE NUT.

SIGN CENTROID (CP)	ALLOWABLE SIGN AREA (FT²)			
	70 MPH + 30% GUST		80 MPH + 30% GUST	
	SINGLE POST (2" x 12GA PERF.)	DOUBLE POST (2" x 12GA PERF.)	SINGLE POST (2" x 12GA PERF.)	DOUBLE POST (2" x 12GA PERF.)
14'	3.99	7.98	2.99	5.97
13.5'	4.14	8.28	3.10	6.19
13'	4.30	8.59	3.21	6.43
12.5'	4.47	8.93	3.34	6.68
12'	4.65	9.30	3.48	6.96
11.5'	4.85	9.70	3.63	7.26
11'	5.07	10.14	3.79	7.59
10.5'	5.31	10.62	3.97	7.95
10'	5.57	11.15	4.17	8.34
9.5'	5.86	11.73	4.39	8.77
9'	6.19	12.37	4.63	9.26
8.5'	6.55	13.09	4.90	9.79
8'	6.95	13.90	5.20	10.40
7.5'	7.41	14.81	5.54	11.08
7'	7.93	15.86	5.93	11.86

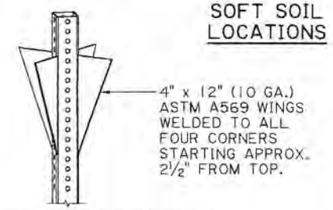


HARD SOIL LOCATIONS

SOFT SOIL LOCATIONS



SECTION A-A



OMNI-DIRECTIONAL ANCHOR

NOTES:

SEE SECTION 1015.02 IN THE STANDARD SPECIFICATIONS FOR INFORMATION RELATED TO THE ALLOWABLE MATERIALS.

SIGNS MOUNTED TO SINGLE SQUARE TUBE POSTS DO NOT REQUIRE STIFFENERS UNLESS THE SIGN HAS AT LEAST ONE SIDE GREATER THAN 36" LONG.

FOR DUAL POSTS, LOCATE POSTS AT 58% SPACING FROM CENTER OF SIGN, OR 21% FROM EACH EDGE OF SIGN. USE STIFFENERS ON BACK OF SIGNS MOUNTED ON DUAL POSTS.

SIGNS MAY BE MOUNTED BACK TO BACK ON THE POST.

⊙ MOUNTING HEIGHT SHALL BE 7'-0" MIN. UNLESS OTHERWISE NOTED ON THE SIGN SUMMARY SHEET. CHEVRON SIGNS (W1-8) MAY BE INSTALLED AT 4'-0" OR HIGHER.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

SHEET NUMBER 244

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN K. BRAUNER | CHECK C. GUIDRY | DETAIL K. BRAUNER | CHECK C. GUIDRY | REVIEW C. BOURGEOIS | SERIES • 10 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER | DATE: 7/1/2022

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SQUARE TUBE SIGN DETAILS

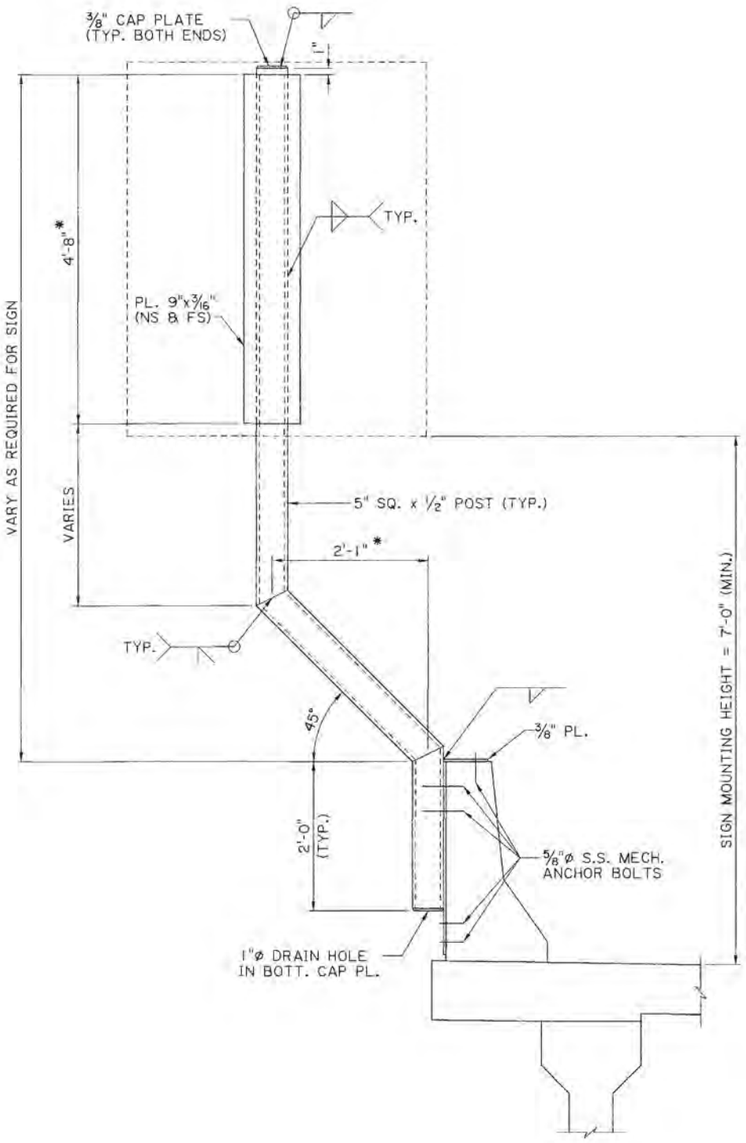
ROADSIDE SIGNING STANDARDS

STANDARD PLAN

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

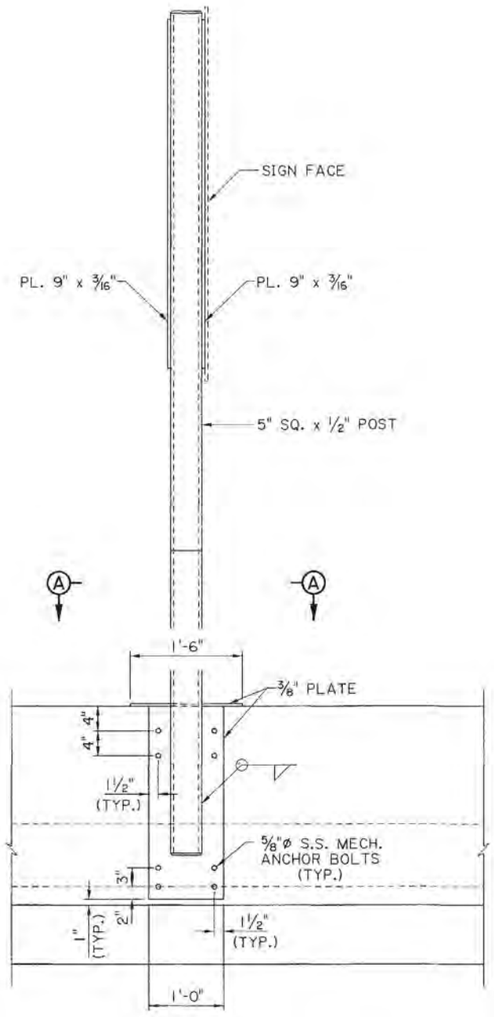
BRIDGE AND STRUCTURAL DESIGN

6/24/2022 09:33
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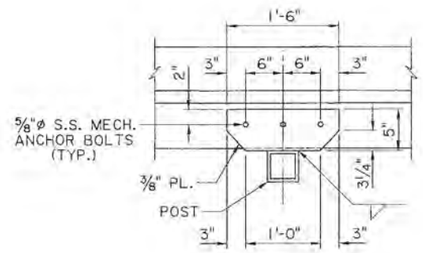


OFFSET SIGN SUPPORT

* DIMENSIONS ARE BASED ON A 5 FT. x 4 FT. SIGN. ADJUST AS NEEDED FOR DIFFERENT SIGN SIZES.



OUTSIDE ELEVATION SHOWING BARRIER
(TYPICAL INSTALLATION)



SECTION A-A

NOTES:

STRUCTURAL MEMBERS SHALL BE AASHTO M270 GRADE 50 STEEL AND SHALL BE HOT DIPPED GALVANIZED PER ASTM A-123.

MECHANICAL ANCHOR BOLTS SHALL BE 5/8"ø STAINLESS STEEL (MIN. FY = 55 ksi) AND SHALL BE SELECTED FROM THE A.M.L. AND INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS. EACH ANCHOR SHALL HAVE AN ALLOWABLE CAPACITY OF 3 KIPS PULLOUT AND 3 KIPS SHEAR AFTER APPLICATION OF ANY REDUCTION FACTORS FOR ANCHOR SPACING AND EDGE DISTANCE.

WELDING SHALL BE IN ACCORDANCE WITH THE BRIDGE WELDING CODE OF THE AMERICAN WELDING SOCIETY (AWS D1.5-10), AND SECTION 809 OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2016 EDITION.

NO PART OF ANY SIGN SHALL PROTRUDE INTO THE SHOULDER AREA. DIMENSIONS OF SUPPORT POST AND BRACKET SHALL BE ADJUSTED AS NEEDED PRIOR TO FABRICATION.

ANY PORTIONS OF THE EXISTING BARRIER THAT ARE DAMAGED SHALL BE REPAIRED TO THE SATISFACTION OF THE PROJECT ENGINEER.

DIMENSIONS RELATED TO THE BARRIER CONNECTION ARE BASED ON AS-BUILT DRAWINGS AND PREVIOUS STANDARDS. DIMENSIONS SHALL BE ADJUSTED AS NEEDED BASED ON FIELD MEASUREMENTS.

A 1/8" NEOPRENE PAD SHALL BE USED BETWEEN ALL STEEL AND CONCRETE CONTACT SURFACES.

MAX SIGN AREA = 20 SQFT.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

SHEET NUMBER 245

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	K. BRAUNER	DETAIL	K. BRAUNER	REVIEW	C. GUIDRY
CHECK	V. TOURRES	CHECK	V. TOURRES	SERIES	11 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER: 7/1/2022 DATE:

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

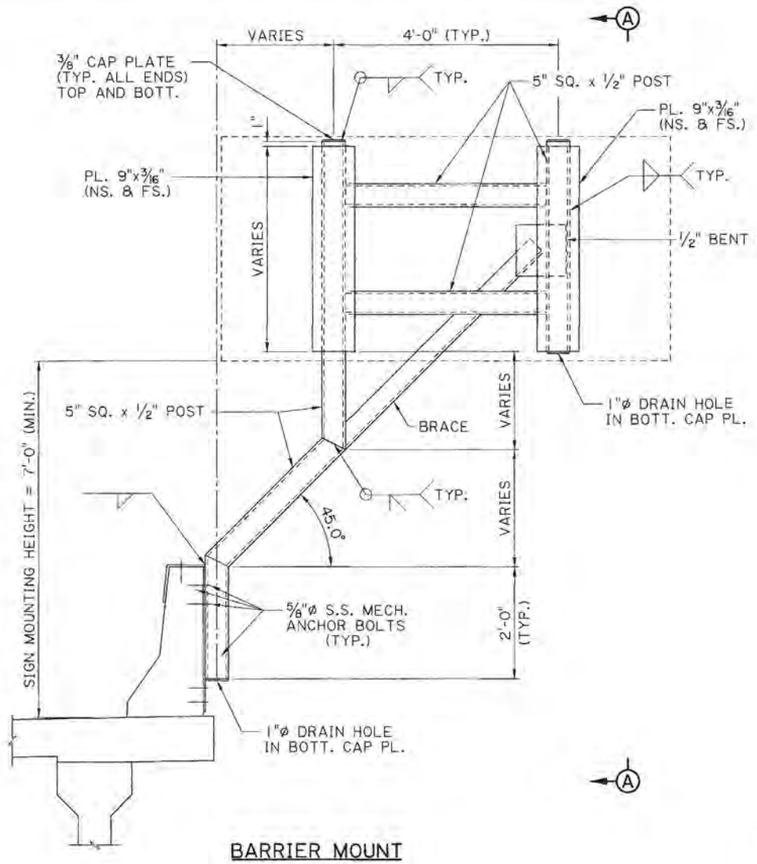
Z - BRACKET SIGN SUPPORT (F - SHAPE BARRIER)

ROADSIDE SIGNING STANDARDS

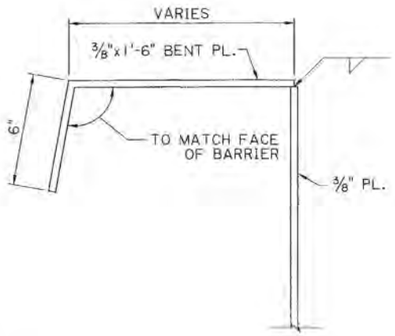
STANDARD PLAN

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

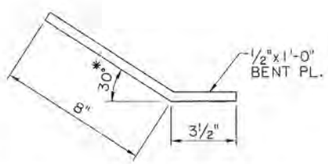
BRIDGE AND STRUCTURAL DESIGN



BARRIER MOUNT

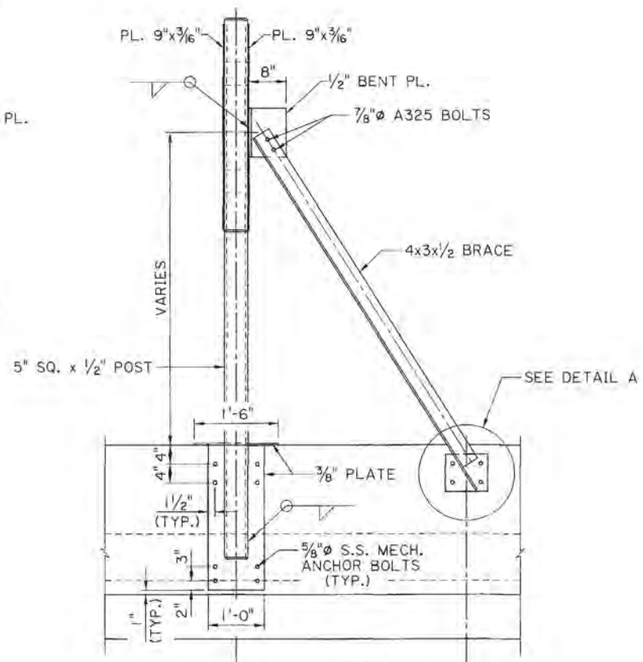


BARRIER CONNECTION DETAIL



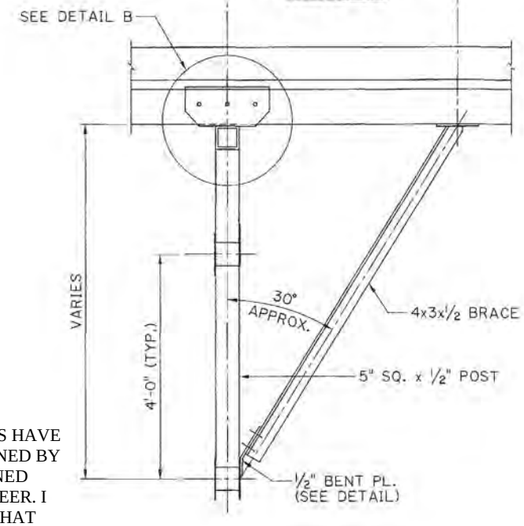
1/2" BENT PLATE DETAIL

* ANGLE IS APPROXIMATE. VARY AS NEEDED.

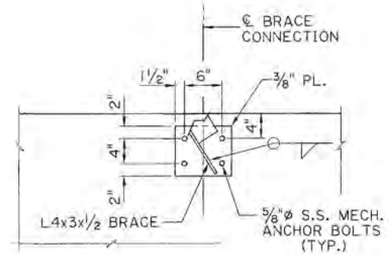


℄ POST CONNECTION — ℄ BRACE CONNECTION

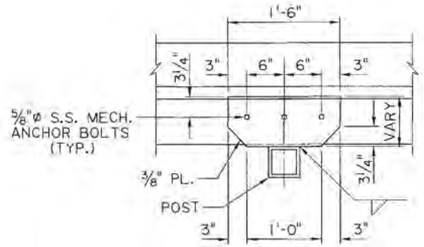
VIEW A-A



TOP VIEW



DETAIL A



DETAIL B

NOTES:

STRUCTURAL MEMBERS SHALL BE AASHTO M270 GRADE 50 STEEL AND SHALL BE HOT DIPPED GALVANIZED PER ASTM A-123. A325 BOLTS TO BE GALVANIZED PER ASTM A-153.

MECHANICAL ANCHOR BOLTS SHALL BE 5/8"ø STAINLESS STEEL (MIN. FY = 55 ksi) AND SHALL BE SELECTED FROM THE A.M.L. AND INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS. EACH ANCHOR SHALL HAVE AN ALLOWABLE CAPACITY OF 3 KIPS PULLOUT AND 3 KIPS SHEAR AFTER APPLICATION OF ANY REDUCTION FACTORS FOR ANCHOR SPACING AND EDGE DISTANCE.

WELDING SHALL BE IN ACCORDANCE WITH THE BRIDGE WELDING CODE OF THE AMERICAN WELDING SOCIETY (AWS D1.5-10), AND SECTION 809 OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2016 EDITION.

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A 1/8" NEOPRENE PAD SHALL BE USED BETWEEN ALL STEEL AND CONCRETE CONTACT SURFACES.

MAX SIGN AREA = 40 SQFT.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

SHEET NUMBER 246

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN K. BRAUNER | CHECK V. TOURRES | DETAIL K. BRAUNER | CHECK V. TOURRES | REVIEW C. GUIDRY | SERIES # 12 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

Z - BRACKET SIGN SUPPORTS (F - SHAPE BARRIER)

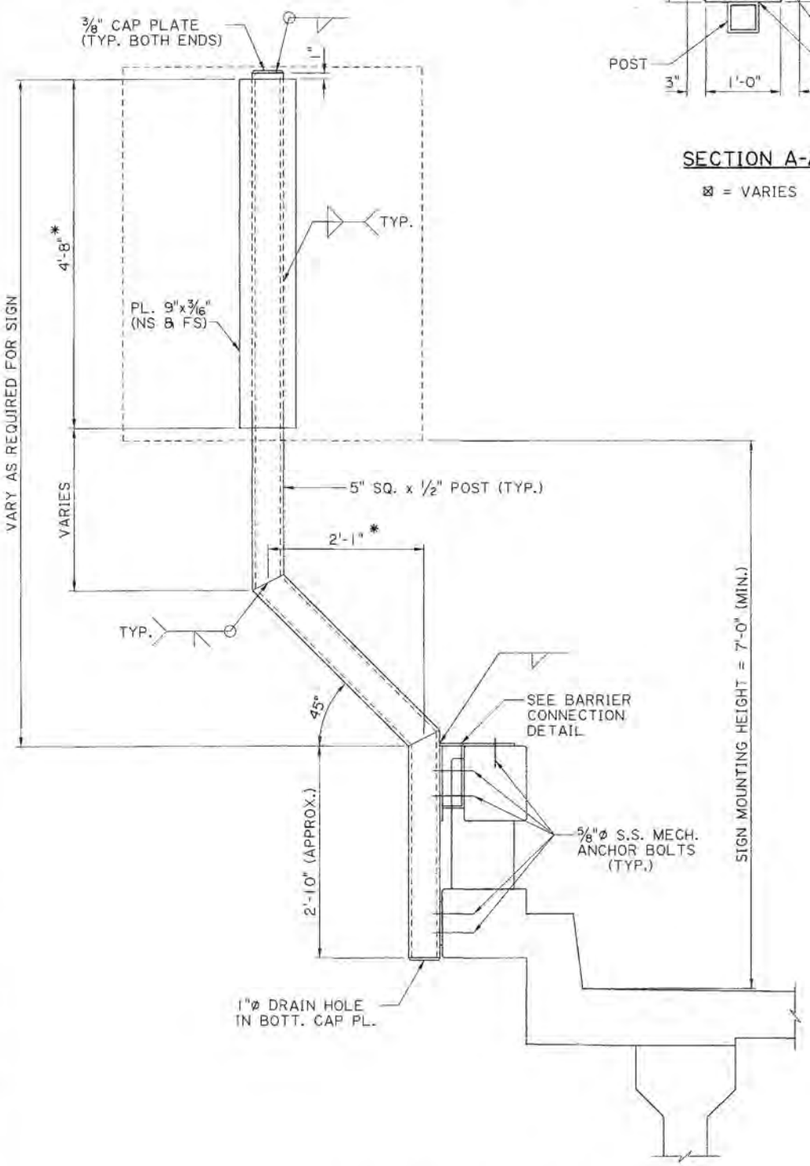
ROADSIDE SIGNING STANDARDS

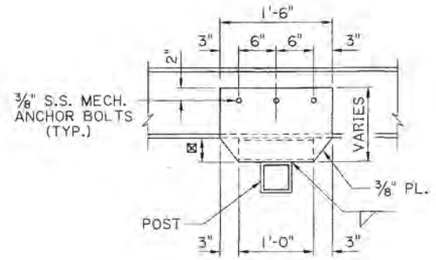
STANDARD PLAN

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT



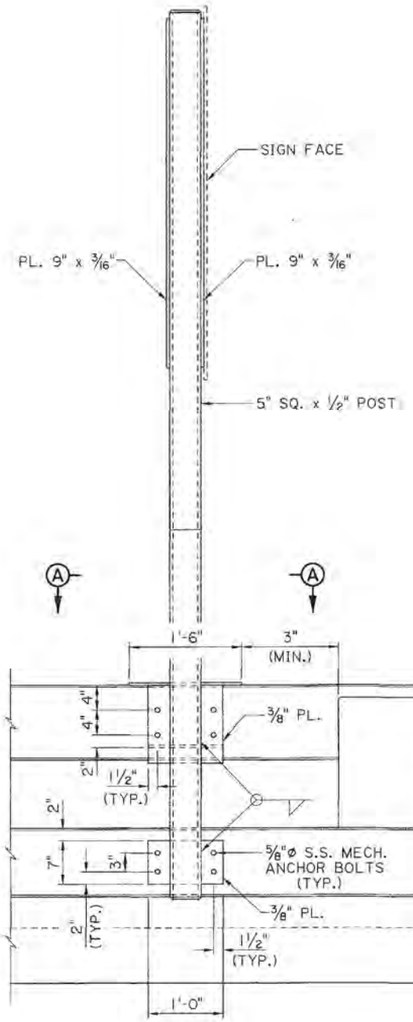


SECTION A-A

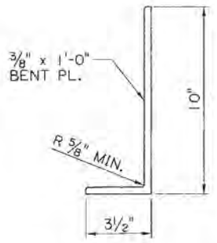
⊠ = VARIES

OFFSET SIGN SUPPORT

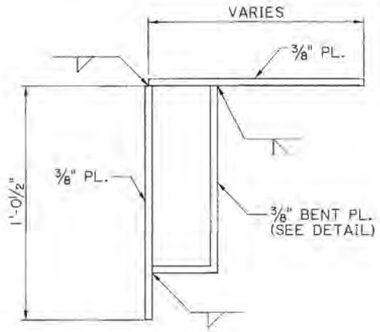
* DIMENSIONS ARE BASED ON A 5 FT. x 4 FT. SIGN. ADJUST AS NEEDED FOR DIFFERENT SIGN SIZES.



OUTSIDE ELEVATION SHOWING BARRIER



3/8" BENT PL. DETAIL



BARRIER CONNECTION DETAIL

NOTES:

STRUCTURAL MEMBERS SHALL BE AASHTO M270 GRADE 50 STEEL AND SHALL BE HOT DIPPED GALVANIZED PER ASTM A-123.

MECHANICAL ANCHOR BOLTS SHALL BE 5/8"ø STAINLESS STEEL (MIN. FY = 55 ksi) AND SHALL BE SELECTED FROM THE A.M.L. AND INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS. EACH ANCHOR SHALL HAVE AN ALLOWABLE CAPACITY OF 3 KIPS PULLOUT AND 3 KIPS SHEAR AFTER APPLICATION OF ANY REDUCTION FACTORS FOR ANCHOR SPACING AND EDGE DISTANCE.

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A 1/8" NEOPRENE PAD SHALL BE USED BETWEEN ALL STEEL AND CONCRETE CONTACT SURFACES.

MAX SIGN AREA = 20 SQFT.

	PARISH	CONTROL SECTION	STATE PROJECT
DESIGN K. BRAUNER / CHECK V. TOURRES	DETAIL K. BRAUNER / CHECK V. TOURRES	REVIEW C. GUIDRY	SERIES • 13 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
4/24/22

APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

Z - BRACKET SIGN SUPPORT
(POST AND RAIL BARRIER)

STANDARD PLAN

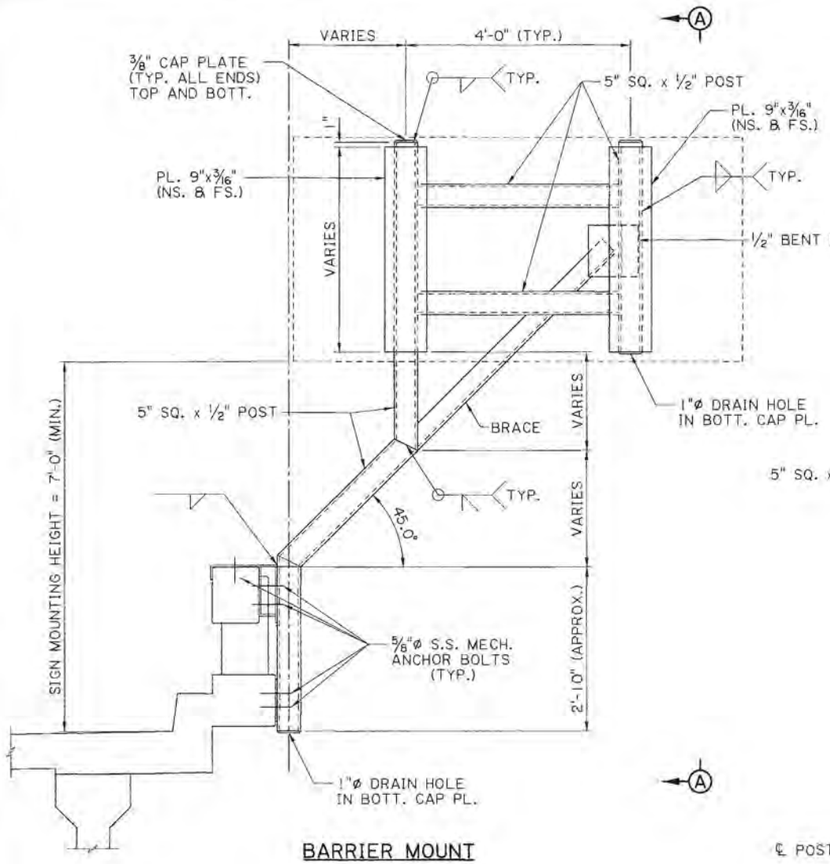
ROADSIDE SIGNING STANDARDS

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

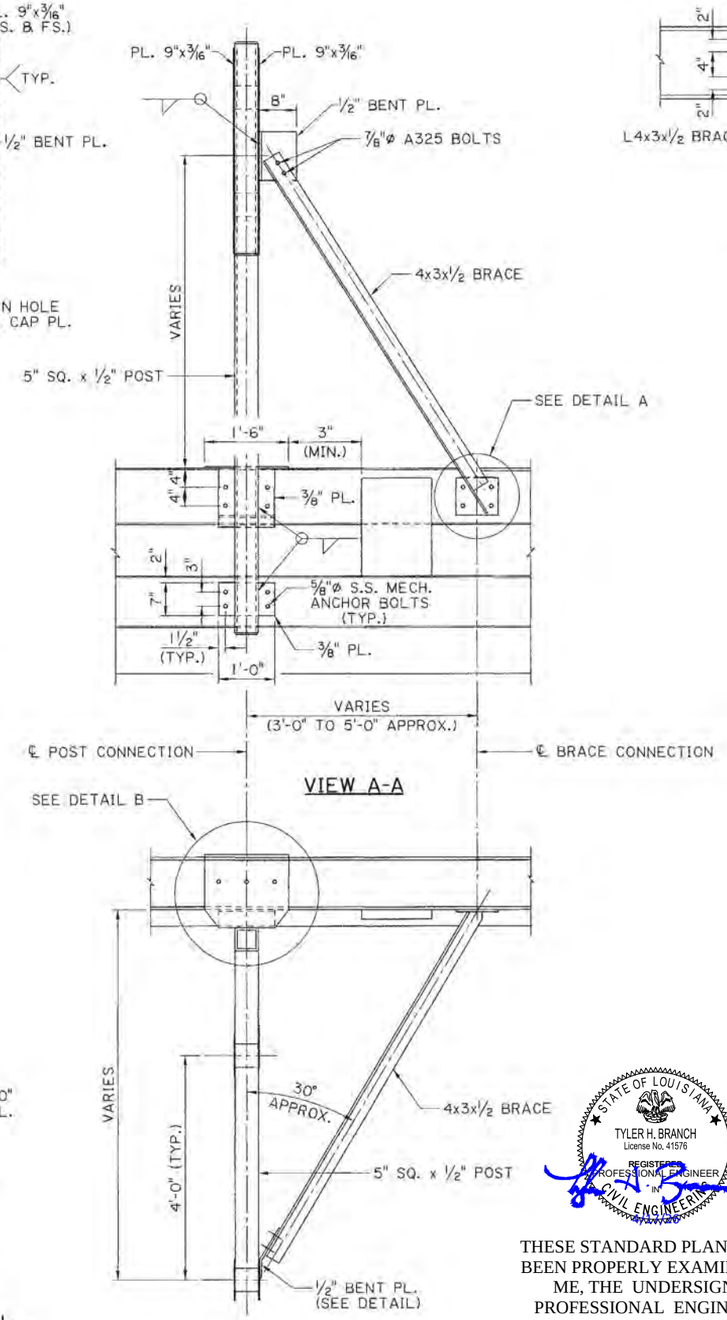
BRIDGE AND STRUCTURAL DESIGN

6/24/2022 09:35

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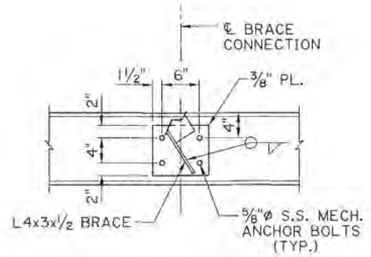


BARRIER MOUNT

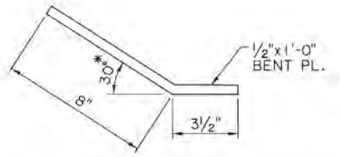


VIEW A-A

TOP VIEW

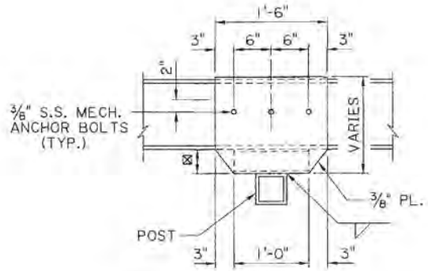


DETAIL A



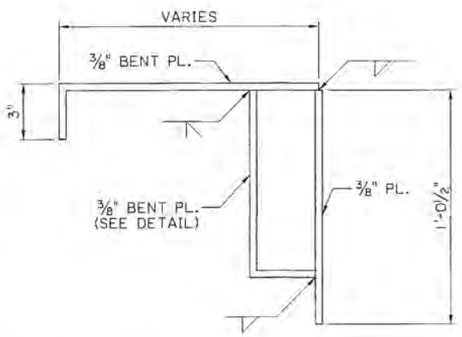
1/2" BENT PLATE DETAIL

* ANGLE IS APPROXIMATE. VARY AS NEEDED.

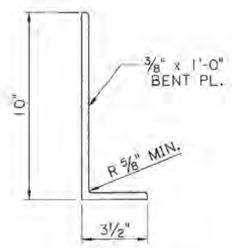


DETAIL B

⊠ = VARIES



BARRIER CONNECTION DETAIL



3/8" BENT PL. DETAIL

NOTES:

STRUCTURAL MEMBERS SHALL BE AASHTO M270 GRADE 50 STEEL AND SHALL BE HOT DIPPED GALVANIZED PER ASTM A-123. A325 BOLTS TO BE GALVANIZED PER ASTM A-153.

MECHANICAL ANCHOR BOLTS SHALL BE 5/8"ø STAINLESS STEEL (MIN. FY = 55 ksi) AND SHALL BE SELECTED FROM THE A.M.L. AND INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS. EACH ANCHOR SHALL HAVE AN ALLOWABLE CAPACITY OF 3 KIPS PULLOUT AND 3 KIPS SHEAR AFTER APPLICATION OF ANY REDUCTION FACTORS FOR ANCHOR SPACING AND EDGE DISTANCE.

WELDING SHALL BE IN ACCORDANCE WITH THE BRIDGE WELDING CODE OF THE AMERICAN WELDING SOCIETY (AWS D1.5-10), AND SECTION 809 OF THE LOUISIANA STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, 2016 EDITION.

NO PART OF ANY SIGN SHALL PROTRUDE INTO THE SHOULDER AREA. DIMENSIONS OF SUPPORT POST AND BRACKET SHALL BE ADJUSTED AS NEEDED PRIOR TO FABRICATION.

ANY PORTIONS OF THE EXISTING BARRIER THAT ARE DAMAGED SHALL BE REPAIRED TO THE SATISFACTION OF THE PROJECT ENGINEER.

DIMENSIONS RELATED TO THE BARRIER CONNECTION ARE BASED ON AS-BUILT DRAWINGS AND PREVIOUS STANDARDS. DIMENSIONS SHALL BE ADJUSTED AS NEEDED BASED ON FIELD MEASUREMENTS.

A 1/8" NEOPRENE PAD SHALL BE USED BETWEEN ALL STEEL AND CONCRETE CONTACT SURFACES.

MAX SIGN AREA = 40 SQFT.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	K. BRAUNER	DETAIL	K. BRAUNER	REVIEW	C. GUIDRY
CHECK	V. TOURRES	CHECK	V. TOURRES	SERIES #	14 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30567
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
6/24/22.

APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

Z - BRACKET SIGN SUPPORT (POST AND RAIL BARRIER)

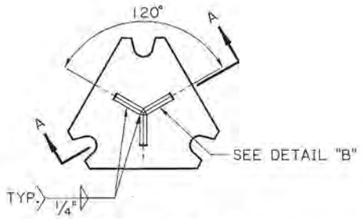
ROADSIDE SIGNING STANDARDS

STANDARD PLAN

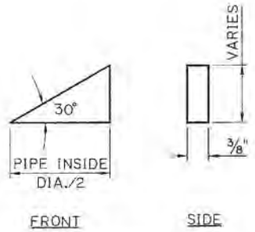
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN

6/24/2022 09:37

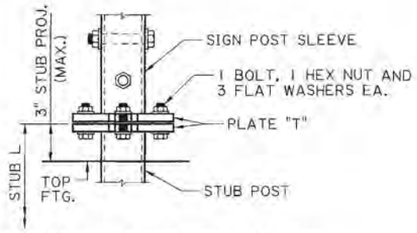
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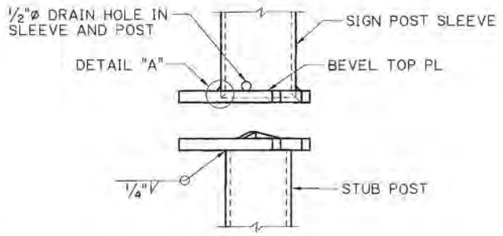
TOP VIEW STUB POST



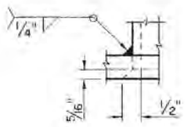
DETAIL "B"
3 REQ'D.



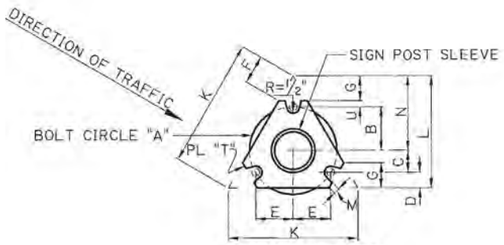
ELEVATION OF BASE CONNECTION
STEEL



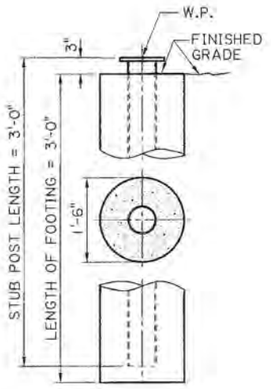
SECTION A-A



DETAIL "A"



PLAN OF BASE

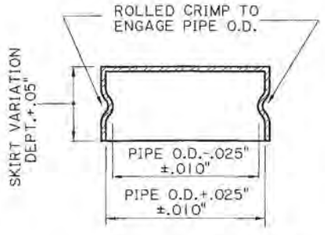


FOOTING DETAIL
PIPE SECTIONS

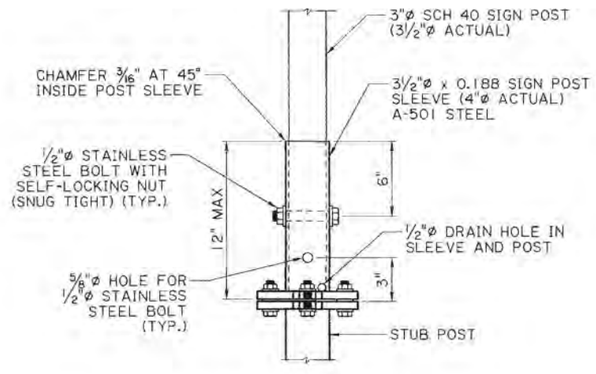
STEEL MULTI-DIRECTIONAL BASE CONNECTION DATA																
NOMINAL PIPE SIZE FOR POST SLEEVE	BOLT SIZE ⊙ & TORQUE	WELD SIZE	T	A	B	C	D	E	F	G	K	L	M	N	U
3½"ø SCH 40	5/8"ø T=226	3/8"	5/8"	7"	3½"	1¾"	1¼"	3"	2 5/16"	2"	10 3/8"	9"	½"	6"	½"

FOR STUB POST LENGTH & FOOTING DIMENSION SEE FOOTING DETAIL.

⊙ TORQUE IN INCH-LBS., BOLTS ARE HIGH STRENGTH



FRICTION CAP DETAIL
(USED AT TOP OF ALL POSTS)



POST SLEEVE DETAIL

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION:

SPECIAL CARE SHALL BE TAKEN TO SET THE BASE PLUMB TO AVOID EXCESSIVE SHIMMING AT THE BREAK-AWAY FEATURE AFTER FINAL INSTALLATION. EXCESSIVE SHIMMING COULD IMPAIR THE BREAK-AWAY FEATURE FOR WHICH THIS INSTALLATION WAS DESIGNED. SHIM PACKS SHOWN ON THIS DRAWING SHOULD BE SUFFICIENT TO ALLOW FOR NORMAL MISALIGNMENT.

1. BASE SHALL BE ALIGNED AND SET PLUMB BEFORE OR IMMEDIATELY AFTER POURING CONCRETE FOOTING.
2. H.S. BOLTS IN BASE PLATE SHALL BE TIGHTENED TO THE PRESCRIBED TORQUE. CARE SHALL BE TAKEN TO AVOID OVERTIGHTING.

FRICTION CAPS:

CAPS MAY BE MANUFACTURED FROM EITHER HOT ROLLED OR COLD ROLLED STEEL SHEETS. THE MINIMUM SHEET METAL THICKNESS SHALL BE 24 GAUGE. THE RIM EDGES SHALL BE REASONABLY STRAIGHT AND SMOOTH. CAPS SHALL BE SIZED AND FORMED IN SUCH A MANNER AS TO PRODUCE A DRIVE-ON FRICTION FIT AND HAVE NO TENDENCY TO ROCK WHEN SEATED ON THE PIPE. THE DEPTH SHALL BE SUFFICIENT TO GIVE POSITIVE PROTECTION AGAINST ENTRANCE OF RAINWATER. THEY SHALL BE FREE OF SHARP CREASES OR INDENTATIONS AND SHOW NO EVIDENCE OF METAL FRACTURE. CAPS SHALL HAVE A ELECTRODEPOSITED COATING OF ZINC IN ACCORDANCE WITH THE REQUIREMENTS OF A.S.T.M. SPECIFICATION B633 SC4, TYPE I.

GALVANIZING:

ALL STEEL POST, PLATE, AND SLEEVE MEMBERS SHALL BE GALVANIZED PER ASTM A-123.

ALL MISC. HARDWARE (EXCEPT FOR STAINLESS STEEL BOLTS) SHALL BE GALVANIZED PER ASTM A-153.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

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APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

SHEET NUMBER 249

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN	K. BRAUNER	DETAIL	K. BRAUNER	REVIEW	G. BOURGEOIS
CHECK	C. GUIDRY	CHECK	C. GUIDRY	SERIES #	15 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30947
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
6/24/22

CONTRAFLOW SIGNS (GROUND MOUNTED)

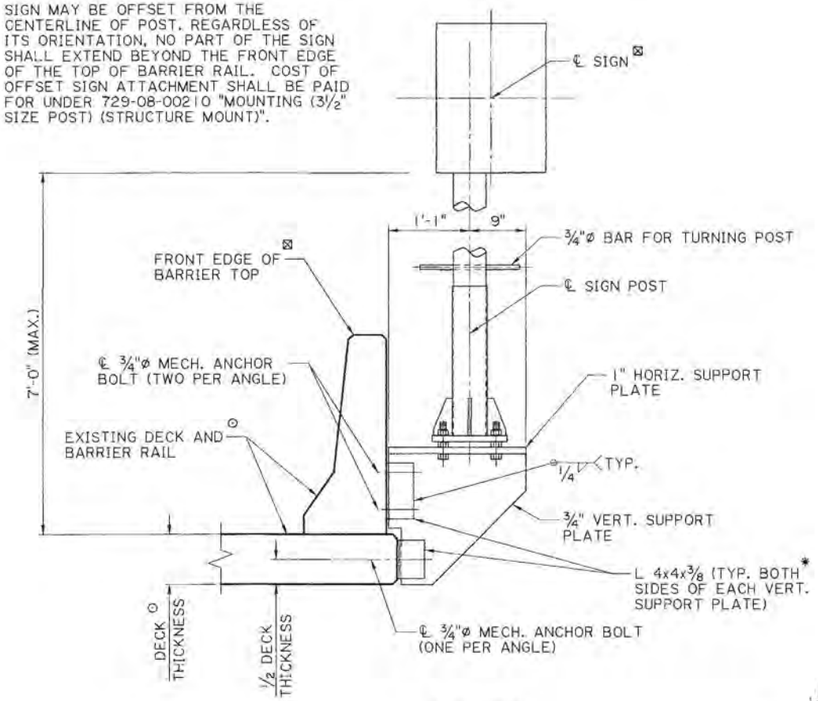
ROADSIDE SIGNING STANDARDS

STANDARD PLAN

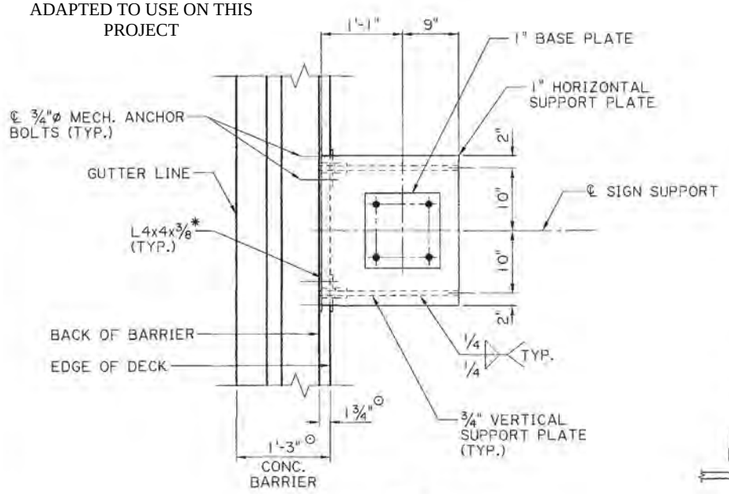
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN

09:38
6/24/2022
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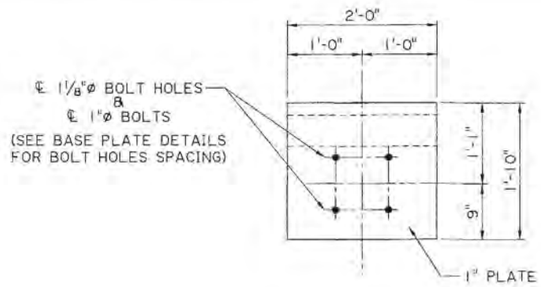
⊠ SIGN MAY BE OFFSET FROM THE CENTERLINE OF POST. REGARDLESS OF ITS ORIENTATION, NO PART OF THE SIGN SHALL EXTEND BEYOND THE FRONT EDGE OF THE TOP OF BARRIER RAIL. COST OF OFFSET SIGN ATTACHMENT SHALL BE PAID FOR UNDER 729-08-00210 "MOUNTING (3½" SIZE POST) (STRUCTURE MOUNT)".



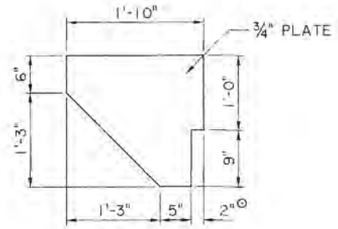
ELEVATION



PLAN

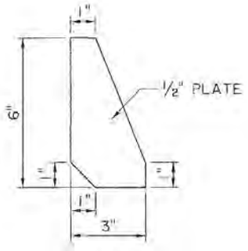


1" HORIZ. SUPPORT PLATE

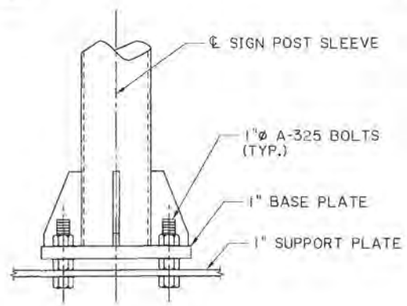


¾" VERT. SUPPORT PLATE

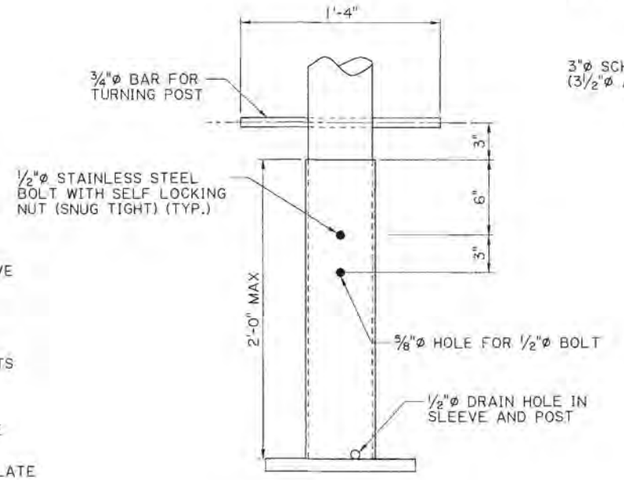
SIGN SUPPORT BRACKET DETAILS



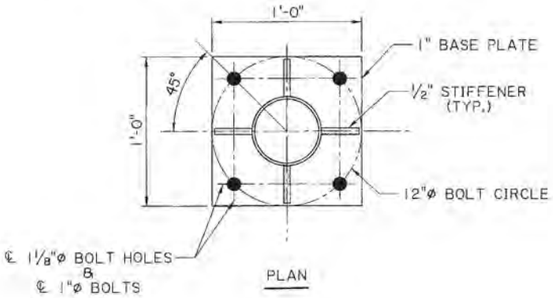
½" STIFFENER



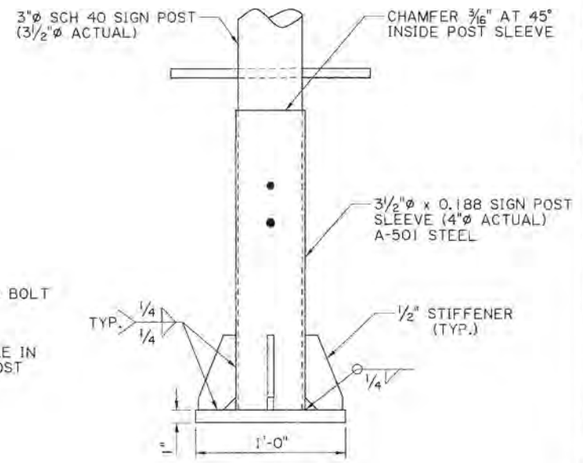
1"ø BOLT DETAIL



⅝"ø BOLT DETAIL
(STIFFENERS NOT SHOWN FOR CLARITY)



PLAN



ELEVATION

1" BASE PLATE & SIGN POST SLEEVE DETAILS

NOTES:

STRUCTURAL MEMBERS SHALL BE AASHTO M270 GRADE 50 STEEL AND SHALL BE HOT DIPPED GALVANIZED PER ASTM A-123. ALL MISC. HARDWARE (EXCEPT STAINLESS STEEL BOLTS) SHALL BE GALVANIZED AS PER ASTM A-153.

⊙ ALL EXISTING DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO FABRICATION. ANY ADJUSTMENTS TO SUPPORT BRACKET DIMENSIONS SHALL BE APPROVED BY THE ENGINEER.

* EQUIVALENT BENT PLATES MAY BE USED. ADJUST ANGLE OF BEND AS NEEDED TO ATTACH TO BARRIER RAIL.

PAYMENT FOR THE TYPE "A" SIGN POST AND SUPPORT BRACKET SHALL BE UNDER ITEM NO. 729-08-00210, "MOUNTING (3½" SIZE POST) (STRUCTURE MOUNT)".

MECHANICAL ANCHOR BOLTS SHALL BE ¾"ø STAINLESS STEEL (MIN. FY = 55 ksi) AND SHALL BE SELECTED FROM THE A.M.L. AND INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS. EACH ANCHOR SHALL HAVE AN ALLOWABLE CAPACITY OF 3 KIPS PULLOUT AND 3 KIPS SHEAR AFTER APPLICATION OF ANY REDUCTION FACTORS FOR ANCHOR SPACING AND EDGE DISTANCE.

A ⅛" NEOPRENE PAD SHALL BE USED BETWEEN ALL STEEL AND CONCRETE CONTACT SURFACES.

ANY PORTIONS OF THE EXISTING BARRIER THAT ARE DAMAGED SHALL BE REPAIRED TO THE SATISFACTION OF THE PROJECT ENGINEER.

REGARDLESS OF ITS ORIENTATION, NO PART OF ANY SIGN SHALL EXTEND BEYOND THE FRONT EDGE OF THE TOP OF BARRIER RAIL. DIMENSIONS OF SUPPORT POST AND BRACKET SHALL BE ADJUSTED AS NEEDED PRIOR TO FABRICATION.

MAXIMUM ALLOWABLE SIGN AREA = 20 SQ. FT.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

SHEET NUMBER 250

PARISH | CONFORM SECTION | STATE PROJECT

DESIGN K. BRAUNER | DETAIL K. BRAUNER | DEVIEW C. BOURGEOIS
CHECK C. GUIDRY | CHECK C. GUIDRY | SERIES * 16 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 30967
PROFESSIONAL ENGINEER IN CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER: DATE: 7/1/2022

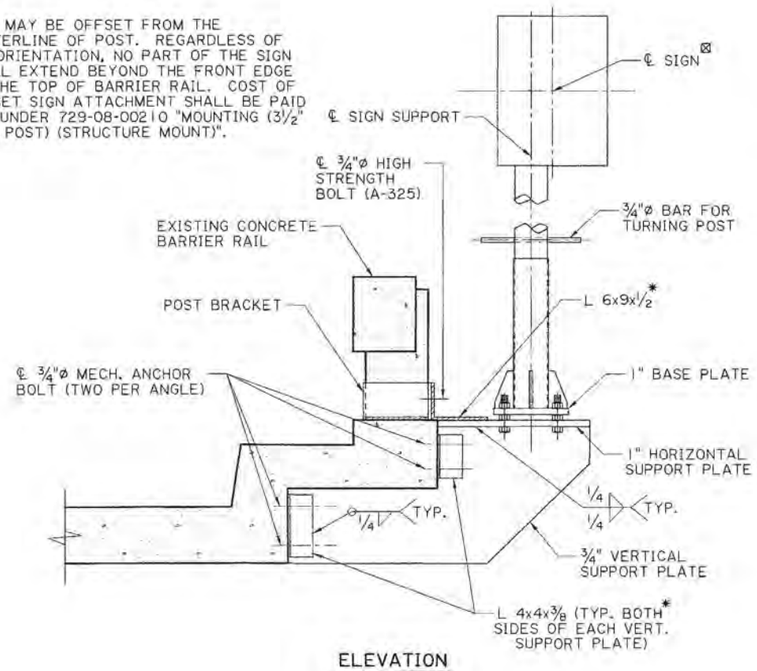
CONTRAFLOW SIGNS
(F - SHAPE BARRIER)

ROADSIDE SIGNING STANDARDS
STANDARD PLAN

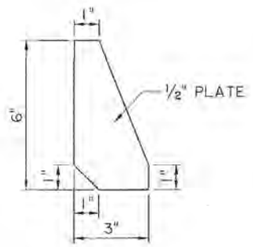
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
BRIDGE AND STRUCTURAL DESIGN

6/24/2022 09:39
IP_PWP:d0964073\Roadside Traffic Signs 16.dgn

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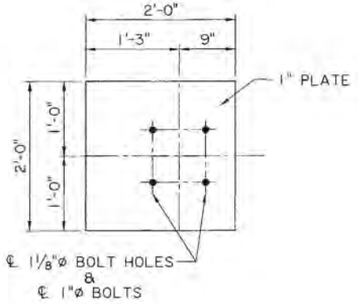
ELEVATION



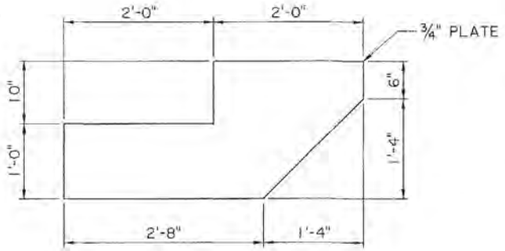
½" STIFFENER

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STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING



1" HORIZONAL SUPPORT PLATE
(SEE BASE PLATE DETAILS FOR BOLT HOLES SPACING)



¾" VERT. SUPPORT PLATE ⊙

NOTES:

STRUCTURAL MEMBERS SHALL BE AASHTO M270 GRADE 50 STEEL AND SHALL BE HOT DIPPED GALVANIZED PER ASTM A-123. ALL MISC. HARDWARE (EXCEPT STAINLESS STEEL BOLTS) SHALL BE GALVANIZED AS PER ASTM A-153.

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* EQUIVALENT BENT PLATES MAY BE USED. ADJUST ANGLE OF BEND AS NEEDED TO ATTACH TO BARRIER RAIL.

PAYMENT FOR THE TYPE "A" SIGN POST AND SUPPORT BRACKET SHALL BE UNDER ITEM NO. 729-08-00210, "MOUNTING (3½" SIZE POST) (STRUCTURE MOUNT)".

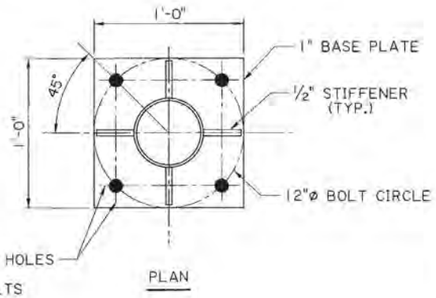
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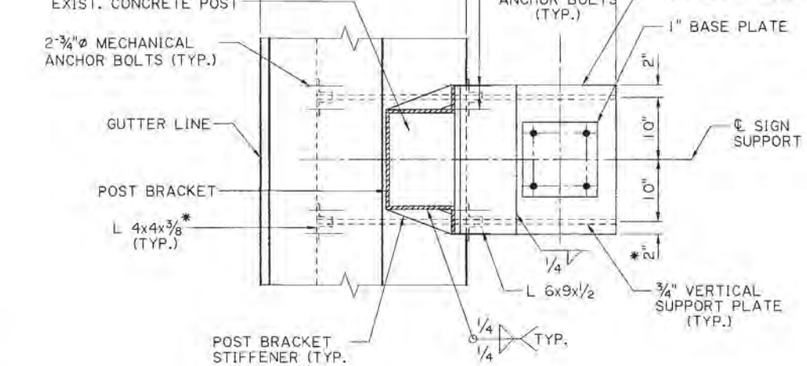
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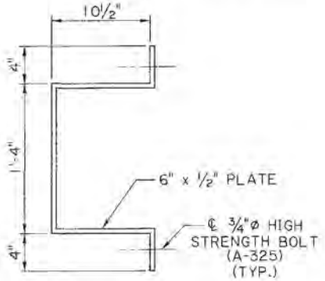
MAXIMUM ALLOWABLE SIGN AREA = 20 SQ. FT.



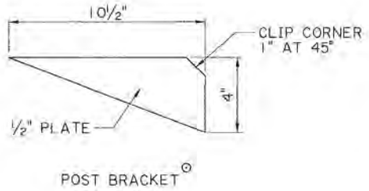
PLAN



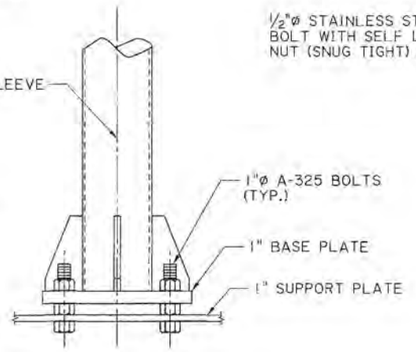
PLAN



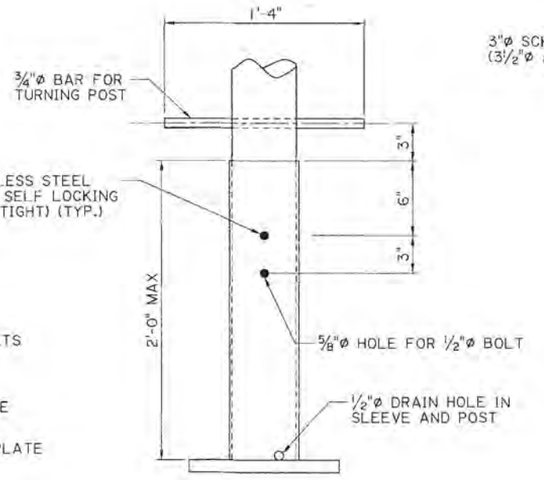
POST BRACKET ⊙



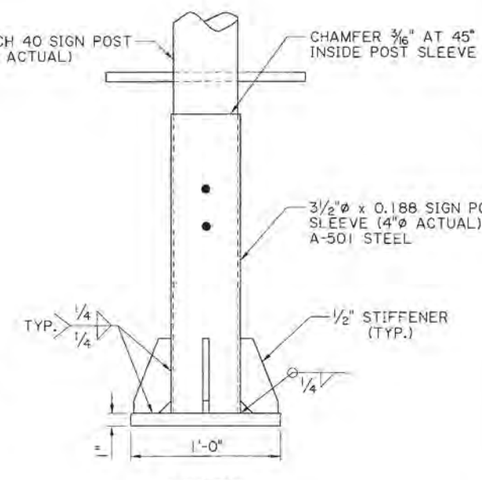
POST BRACKET STIFFENER ⊙



1"ø BOLT DETAIL



⅝"ø BOLT DETAIL
(STIFFENERS NOT SHOWN FOR CLARITY)



ELEVATION

1" BASE PLATE & SIGN POST SLEEVE DETAILS

DESIGN K. BRAUNER
CHECK C. GUIDRY
DETAIL K. BRAUNER
CHECK C. GUIDRY
REVIEW C. BOURGEOIS
PARISH
DIST./SECTION
STATE PROJECT
SERIES 17 OF 17

STATE OF LOUISIANA
KURT M. BRAUNER
License No. 35557
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING
6/24/22

APPROVED BY CHIEF ENGINEER
DATE: 7/1/2022

CONTRAFLOW SIGNS
(POST AND RAIL BARRIER)

STANDARD PLAN

ROADSIDE SIGNING STANDARDS

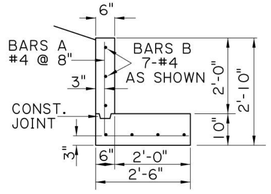
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

BRIDGE AND STRUCTURAL DESIGN

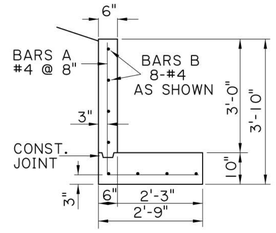
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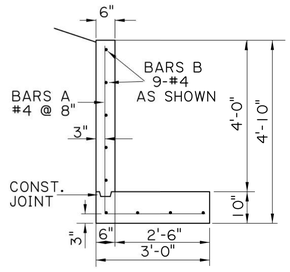
NOTE: MINIMUM CONCRETE COVER SHALL BE 3" FOR THE RETAINING SIDE OF THE WALL AND FOR THE FOOTING, AND 2" FOR THE OPEN SIDE OF THE WALL.



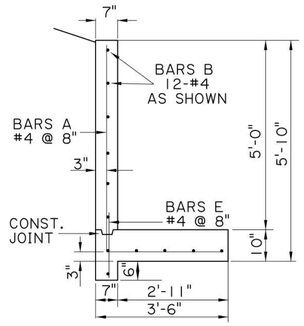
TYPE L2



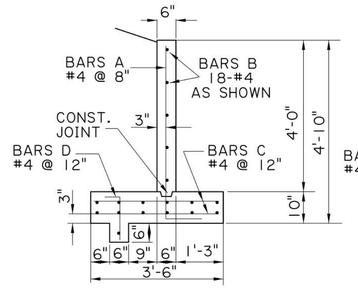
TYPE L3



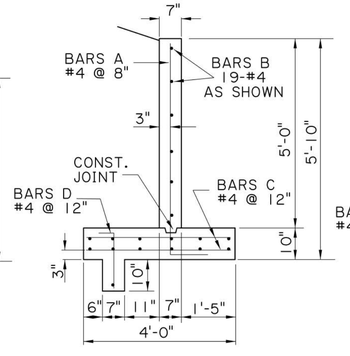
TYPE L4



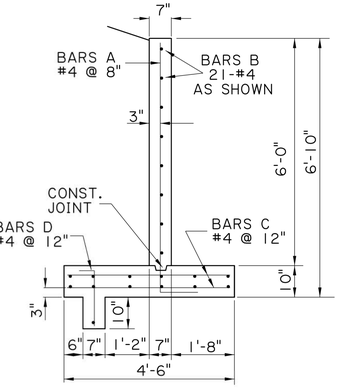
TYPE L5



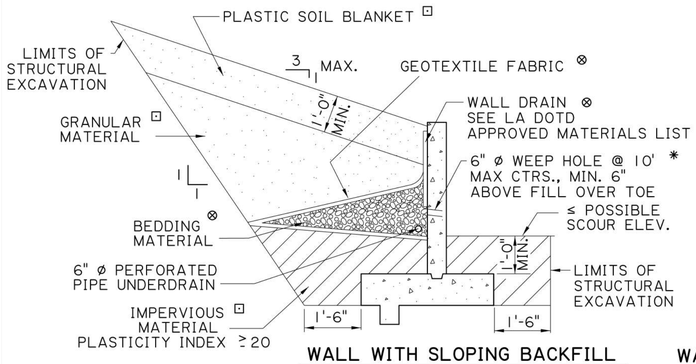
TYPE T4



TYPE T5

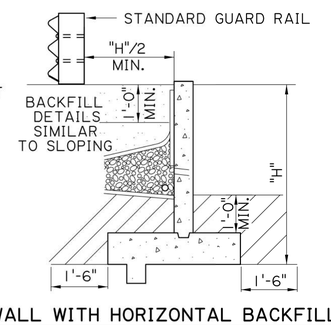


TYPE T6



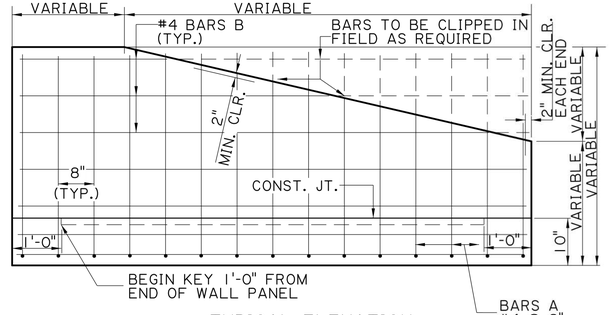
WALL WITH SLOPING BACKFILL

T-WALL SHOWN. L-WALL SIMILAR.



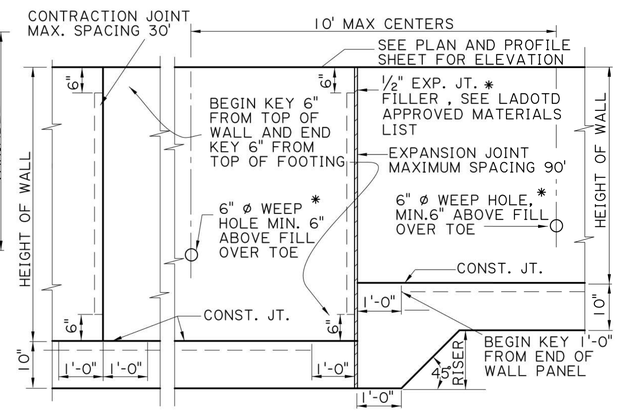
WALL WITH HORIZONTAL BACKFILL

T-WALL SHOWN. L-WALL SIMILAR.



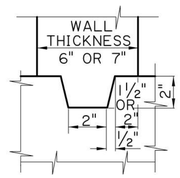
TYPICAL ELEVATION

SHOWING REINFORCEMENT DETAILS
SHEAR KEY NOT SHOWN FOR CLARITY

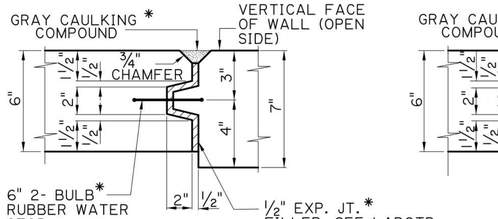


PART ELEVATION OF RETAINING WALL

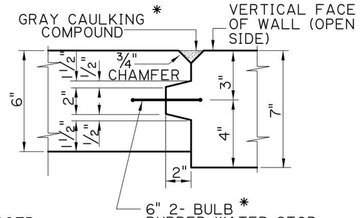
SHOWING RISER UNDER FOOTING



WALL TO FOOTING KEY DETAIL



EXPANSION JOINT DETAIL



CONTRACTION JOINT DETAIL

REBAR DIMENSIONS

WALL TYPE	BAR A SIZE	a	b	LENGTH	BAR C LENGTH	BAR D LENGTH	BAR E LENGTH
L2	#4	2'-5"	2'-1"	4'-6"	—	—	—
L3	#4	3'-5"	2'-4"	5'-9"	—	—	—
L4	#4	4'-5"	2'-7"	7'-0"	—	—	—
L5	#4	5'-5"	3'-1"	8'-6"	—	—	1'-6"
T4	#4	4'-5"	0'-10"	5'-3"	3'-2"	1'-3"	—
T5	#4	5'-5"	1'-1"	6'-6"	3'-8"	1'-7"	—
T6	#4	6'-5"	1'-4"	7'-9"	4'-2"	1'-7"	—

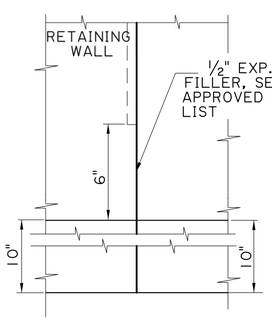
NOTES:
ALL BARS ARE #4
BARS B,C,& E ARE STRAIGHT
BAR B LENGTH = WALL LENGTH BETWEEN JOINTS MINUS 4"

MATERIAL QUANTITIES

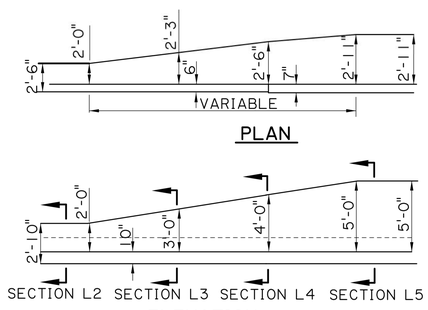
PER LINEAR FOOT OF WALL

WALL TYPE	L2	L3	L4	L5	T4	T5	T6
CLASS A1 CONCRETE CUYD	0.077	0.140	0.167	0.211	0.191	0.249	0.287
DEFORMED REINFORCING STEEL LB	9.2	11.0	13.0	18.0	22.4	25.2	28.4

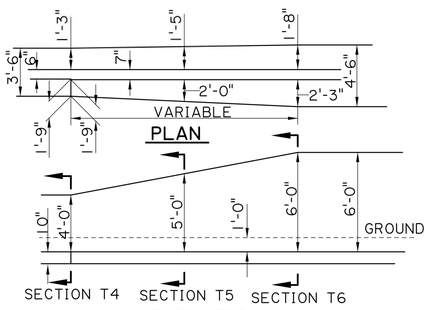
6" ø PERFORATED PIPE UNDERDRAIN WILL BE PAID PER LIN. FT.



FOOTING EXPANSION JOINT DETAIL



"L" TYPE WALL TRANSITION FROM L2 TO L5



"T" TYPE WALL TRANSITION FROM T4 TO T6

SLOPING RETAINING WALL



BAR A



BAR D

NOTES:

1. STRUCTURAL CONCRETE CAPACITY HAS BEEN DESIGNED IN ACCORDANCE WITH AASHTO LRFD FOURTH EDITION 2007 WITH 2008 AND 2009 INTERIM SPECIFICATIONS.
2. USE CLASS A1 CONCRETE. CHAMFER ALL EXPOSED CORNERS ¾".
3. DEFORMED REINFORCING BARS SHALL BE GRADE 60. DIMENSIONS RELATING TO REINFORCING STEEL SPACING ARE TO BAR CENTERS.
4. MAXIMUM SPACING OF EXPANSION JOINT IS 90 FT.
5. MAXIMUM SPACING OF CONTRACTION JOINT IS 30 FT.
6. INSTALL WALL DRAIN AND PERFORATED PIPE UNDERDRAIN CONFORMING TO THE SPECIFICATIONS.

* TO BE INCLUDED WITH COST OF CLASS A1 CONCRETE.
⊗ TO BE INCLUDED WITH COST OF PERFORATED PIPE UNDERDRAIN.
⊡ BACKFILL MATERIAL TO BE INCIDENTAL TO STRUCTURAL EXCAVATION IN CUT SECTION AND WILL BE PAID FOR AS EMBANKMENT IN FILL SECTION.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

SHEET NUMBER 252

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN T. LE | DETAIL G. GRASS | REVIEW | SERIES # 1 OF 1
CHECK J. PELTIER | CHECK A.LANCASTER

APPROVED BY CHIEF ENGINEER: DATE: 11/24/2025

NO. | DATE | REVISION OR CHANGE ORDER DESCRIPTION | BY

MISC. RETAINING WALL DETAILS T & L TYPES
2'-0" THROUGH 6'-0" HEIGHTS

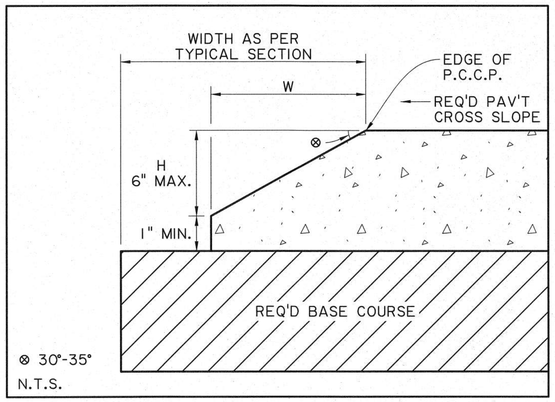
RW-01

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

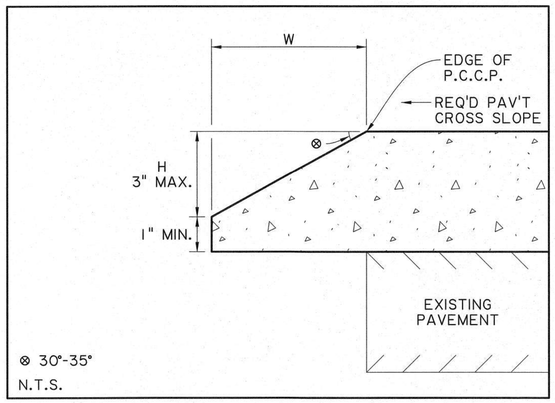
STANDARD PLAN

11:0
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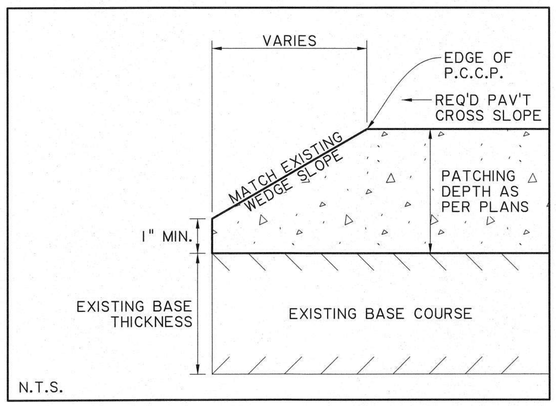
P.C.C.P. SHOULDER WEDGE



P.C.C. SHOULDER WEDGE FOR NEW CONSTRUCTION



P.C.C. SHOULDER WEDGE FOR WHITETOPPING



P.C.C. SHOULDER WEDGE FOR PAVEMENT PATCHING WITH EXISTING WEDGE

NOTES:

1. SHOULDER WEDGES SHALL BE REQUIRED AT THE OUTSIDE EDGES OF THE PAVED ROADWAY (EDGE OF TRAVEL LANE OR EDGE OF PAVED SHOULDER), UNLESS THE TOTAL REQUIRED ASPHALT CONCRETE THICKNESS IS LESS THAN 2" AND FOR PAVEMENT PATCHING PROJECTS WHERE THE EXISTING PAVEMENT DOES NOT HAVE SHOULDER WEDGES.
2. FOR ASPHALT CONCRETE PAVEMENTS, SHOULDER WEDGES SHALL BE UTILIZED ON SINGLE LIFTS IF THE LAYER THICKNESS IS GREATER THAN OR EQUAL TO 2" AND, AT A MINIMUM, ON EACH OF THE TOP 2 LIFTS OF A MULTI-LIFT PAVEMENT.
3. EQUIP THE PAVER WITH A MECHANICAL DEVICE THAT WILL PRODUCE A WEDGE WITH A UNIFORM TEXTURE, SHAPE, AND DENSITY, WHILE AUTOMATICALLY ADJUSTING TO VARYING HEIGHTS ENCOUNTERED ALONG THE PAVEMENT EDGE.
4. THE CONTRACTOR SHALL BLADE AND SHAPE EXISTING GROUND OR SHOULDER MATERIAL TO FORM A UNIFORM SURFACE UNDER THE ASPHALT SHOULDER WEDGE PRIOR TO PLACEMENT OF PAVEMENT.
5. FOR ASPHALT CONCRETE PAVEMENTS, THE MAXIMUM SHOULDER WEDGE HEIGHT ("H") SHALL EQUAL 6". IF THE TOTAL ASPHALT THICKNESS IS GREATER THAN 6", THE CONTRACTOR SHALL STAGE CONSTRUCTION BY PULLING UP THE SHOULDERS OR FORE SLOPE MATERIAL IN THE LOWER LIFTS, THEN UTILIZING THE WEDGE IN EACH OF THE FINAL 2 LIFTS.
6. REQUIRED BASE WIDTHS ARE AS SHOWN ON TYPICAL SECTIONS. IT IS NOT REQUIRED FOR THE BASE COURSE WIDTH TO INCLUDE THE WIDTH OF THE ASPHALT WEDGE. THE ASPHALT WEDGE MAY BE SUPPORTED BY THE EXISTING GROUND, EMBANKMENT, OR SHOULDER MATERIAL. HOWEVER, THE DESIGNER SHOULD MAKE EVERY EFFORT TO SUPPORT THE SHOULDER WEDGE WITH NEW BASE COURSE MATERIAL UNLESS PREVENTED BY PROJECT SCOPE, PHYSICAL RESTRAINTS, OR DEEMED IMPRACTICAL. FOR CONCRETE SHOULDER WEDGES, THE REQUIRED BASE WIDTH SHOULD INCLUDE THE WIDTH OF THE SHOULDER WEDGE AND THE DESIRED ADDITIONAL WIDTH BEYOND THE SURFACING, EXCEPT FOR WHITETOPPING.
7. SEE TYPICAL SECTION SHEETS FOR PAVEMENT DETAILS.
8. THE ANGLE SHOWN FOR AN ASPHALT CONCRETE SHOULDER WEDGE IS MEASURED AFTER COMPACTION.
9. THE SHOULDER WEDGE SHALL NOT BE CONSIDERED PART OF THE REQUIRED PAVEMENT WIDTH.
10. ANGLE OF SHOULDER WEDGE IS MEASURED FROM THE FACE OF THE WEDGE TO A LINE REPRESENTING THE THEORETICAL PROJECTION OF THE PAVEMENT CROSS SLOPE.
11. SHOULDER WEDGES SHALL NOT BE CONSTRUCTED AT INTERSECTIONS, PAVED DRIVEWAYS, OR BEHIND GUARDRAILS UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE PROJECT ENGINEER. IF SHOULDER WEDGES ARE CONSTRUCTED AT THESE LOCATIONS DURING PAVING OPERATIONS, THEY SHALL BE REMOVED BY SAWCUTTING AT NO DIRECT PAY. NO QUANTITY DEDUCTIONS WILL BE MADE IN THE PLANS FOR SUCH GAPS.
12. SHOULDER WEDGES SHALL BE REQUIRED AT THE OUTSIDE EDGES OF WHITETOPPING UNLESS THE REQUIRED THICKNESS IS 2" OR AN ASPHALT SHOULDER IS PROPOSED IN ADDITION TO WHITETOPPING. THE PROPOSED ASPHALT SHOULDER IS REQUIRED TO HAVE WEDGES UNLESS THE TOTAL REQUIRED ASPHALT CONCRETE THICKNESS IS LESS THAN 2".

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

P.C.C.P. SHOULDER WEDGE QUANTITIES

HEIGHT "H" INCHES	30° WEDGES		35° WEDGES	
	WIDTH "W" INCHES	SQYD PER MILE	WIDTH "W" INCHES	SQYD PER MILE
4.0	6.9	674.7	5.7	557.3
5.0	8.7	850.7	7.1	694.2
6.0	10.4	1016.9	8.6	840.9

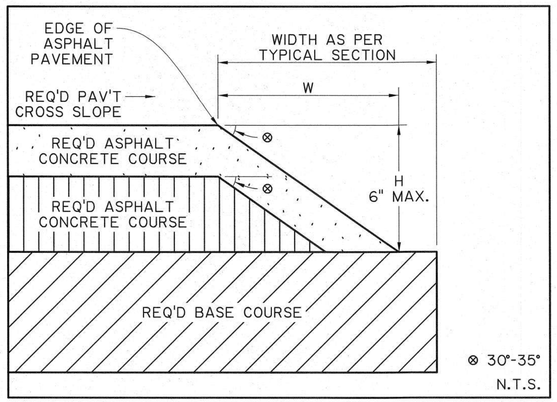
QUANTITIES SHOWN IN PLANS ARE BASED ON A 35° WEDGE
QUANTITIES SHOWN ARE FOR 2 WEDGES (ONE AT EACH SIDE OF ROADWAY)

WHITETOPPING WEDGE QUANTITIES

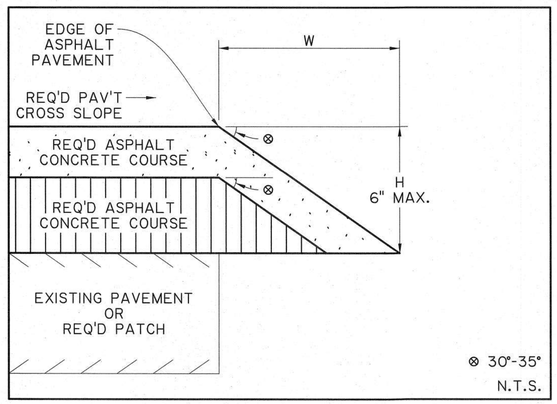
HEIGHT "H" INCHES	30° WEDGES		35° WEDGES	
	WIDTH "W" INCHES	SQYD PER MILE	WIDTH "W" INCHES	SQYD PER MILE
2.0	3.5	342.2	2.9	283.6
3.0	5.2	508.4	4.3	420.4

QUANTITIES SHOWN IN PLANS ARE BASED ON A 35° WEDGE
QUANTITIES SHOWN ARE FOR 2 WEDGES (ONE AT EACH SIDE OF ROADWAY)

ASPHALT CONCRETE SHOULDER WEDGE



ASPHALT CONCRETE SHOULDER WEDGE
FOR NEW CONSTRUCTION OR BASE REHABILITATION



ASPHALT CONCRETE SHOULDER WEDGE FOR OVERLAY OR PATCHING

ASPHALT CONCRETE SHOULDER WEDGE QUANTITIES

HEIGHT "H" INCHES	30° WEDGES		35° WEDGES	
	WIDTH "W" INCHES	TONS PER MILE	WIDTH "W" INCHES	TONS PER MILE
2.0	3.5	18.8	2.9	15.6
2.5	4.3	28.9	3.6	24.2
3.0	5.2	41.9	4.3	34.7
3.5	6.1	57.4	5.0	47.1
4.0	6.9	74.2	5.7	61.3
4.5	7.8	94.4	6.4	77.4
5.0	8.7	117.0	7.1	95.5
5.5	9.5	140.5	7.9	116.8
6.0	10.4	167.8	8.6	138.7

QUANTITIES SHOWN IN PLANS ARE BASED ON A 35° WEDGE
QUANTITIES SHOWN IN TABLE ARE BASED ON 110 $\frac{LB}{IN\ SQYD}$
QUANTITIES SHOWN ARE FOR 2 WEDGES (ONE AT EACH SIDE OF ROADWAY)

SHEET NUMBER 253

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN RAN | CHECK JML | DETAIL RAN | CHECK JML | REVIEW | SERIES # 1 OF 1

10/24/2022
STATE OF LOUISIANA
RYAN A. NOLAN
License No. 40078
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

APPROVED BY CHIEF ENGINEER:
DATE: 10/25/2022

SHOULDER WEDGE
STANDARD PLAN SW-01

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
ROAD DESIGN

GENERAL PROVISIONS

- All temporary traffic control (TTC) devices used shall be in accordance with the Louisiana Standard Specifications for Roads and Bridges, the MUTCD, and shall meet the NCHRP Report 350 or MASH requirements for Test Level 3 devices where applicable.
- Materials used for TTC shall be in accordance with the Louisiana Standard Specifications for Roads and Bridges and, when applicable, the LADOTD AML.
- Placement of TTC devices shall not commence without the approval of the Engineer and until work is about to begin, unless they are covered.
- No lane closures, lane shifts, diversions or detours shall occur without the approval of the Engineer.
- Responsibility is hereby placed upon the contractor for the installation, maintenance and operation of all TTC devices called for in these plans or required by the Engineer for the protection of the traveling public as well as all LADOTD and construction personnel.
- The contractor shall also be responsible for the maintenance of all permanent signs, pavement markings, and traffic signals left in place as essential to the safe movement and guidance of traffic within the project limits unless noted in the plans.
- The DTOE shall serve as a technical advisor to the Engineer for all traffic control matters.
- The Chief Construction Engineer or his appointed designee shall approve all signs and situations not addressed in the plans based on the recommendations of the Project Engineer and the DTOE. All changes shall be noted in all project traffic control diaries.
- The Chief Construction Engineer or his appointed designee shall approve all design speeds of diversions or shifts, if it differs from design plans, based on the recommendations of the Project Engineer and the DTOE.
- All temporary traffic control plans shall comply with the Transportation Management Plan.
- Any additional signs shown in the MUTCD and required by the Engineer shall be installed under Item 713-01-00100.
- Neither work activity nor storage of equipment, vehicles, TMAs, or materials shall occur within the buffer space.
- When a work area has been established on one side of the roadway only, there shall be no conflicting operations or parking on the opposite shoulder within 500 feet of the work area.
- A lighting plan shall be submitted to the Engineer 30 days prior to night work for approval. (See section 713.10 of the Louisiana Standard Specifications for Roads and Bridges.)
- Parking of vehicles or unattended equipment or storage of materials, within the work zone clear zone shall not be permitted unless protected by guardrail or barriers. If the work zone clear zone is not defined on the plan sheets, the Engineer shall verify.
- Immediately upon removal of existing guardrail, the contractor shall install and maintain an NCHRP Report 350 or MASH approved device to protect the blunt end of the bridge or column until new guardrail is installed. After removal of the existing guardrail, new guardrail should be installed within seven (7) days. On non-NHS routes with shoulders less than 8 feet wide: If an NCHRP 350 Report Test Level 3 or MASH device is required but the field conditions of the roadway cannot support a Test Level 3 device, then a Test Level 2 device can be substituted in its place upon approval by the Engineer. If utilized, a TMA is allowed for a maximum of 72 hours.
- All costs associated with temporary crash devices are to be included under the appropriate NS-700 pay item.
- Sight distance should be considered when placing traffic control devices.
- On all mainline Interstates, a minimum of 1.5 feet of paved shoulder on the left and right side shall be maintained at all times.
- On Interstates, a minimum of 11 foot lanes shall be maintained. On all other roadways, a 10 foot minimum travel lane should be maintained where practical.
- TTC Standards are not drawn to scale.
- The contractor shall develop an internal traffic control plan approved by the Engineer prior to each phase.
- Truck restrictions such as (but not limited to) restricting lanes, oversize loads or times of travel, may be required for narrow lanes or other field conditions.
- Temporary concrete barrier shall be placed on a paved surface. This paved surface should follow current design criteria used for paved embankment widening for guardrails.
- Flare rates for temporary concrete barriers should follow the most current guidance in the AASHTO Roadside Design Guide.

PAVEMENT MARKINGS (see AML)

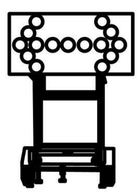
- All pavement markings within the limits of the project or adjacent to the project limits that are in conflict with the project signing or the required traffic movements shall be removed from the pavement by blast cleaning or grinding. (Existing striping shall not be painted over with black paint or covered with tape.)
- If special pavement markings are needed, they shall be reflectorized, removable and accompanied by the proper signage.
- Temporary Raised Pavement Markers may be added to supplement temporary striping in areas of transition, in tapers, in diversions and in other areas of need as shown in the plans or as directed by the Engineer.
- Temporary markings installed in the permanent configuration shall comply with LADOTD pavement marking standard plans, MUTCD and/or the permanent striping plans.

PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)

- PCMS shall be used on all Interstate Highways. PCMS shall be used on all other roadways (where space is available) with an ADT greater than 20,000.
- When used in advance of a lane closure or a lane shift, the PCMS should be placed on the right hand side of the road a minimum distance of 2 miles in advance of the taper for interstates and to be determined by the Engineer on other highways.
- For interstates and multi-lane highways, if vehicles are queuing beyond the 2 mile PCMS, an additional PCMS should be placed on the right hand side of the road approximately 5 miles in advance of the taper or at the end of the queue, whichever is greater.
- PCMS messages shall be approved by the Engineer. Messages shall be no more than 3 lines and 2 screens.
- Messages shall display only traffic operational, regulatory, warning, and guidance information. PCMS messages shall not display advertising or safety messages. Messages should only convey information concerning the problem/situation, location, and recommended driver action.
- PCMS should be placed as far from the traveled lane as possible. They shall be shielded by guardrail or barriers. If this is not possible they shall be delineated with a min. 3 drum taper spaced at 20ft with a 4th drum alongside the PCMS.
- If the PCMS encroaches on the improved shoulder then the contractor shall install a shoulder closure.
- When the PCMS is not displaying a work zone appropriate message pertaining to the ongoing construction project it shall be shielded by guard rail or barriers, or removed from the work zone clear zone.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING





THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

SPEED LIMITS

- The Engineer may approve a 10 mph drop in the speed limit for posted speeds of 45 mph or greater and for any construction, maintenance or utility operation that requires one or more of the following:
  - (A) The condition of the traveled way is degraded due to milled surfaces or uneven travel lane lines greater than 1.5 inches.
  - (B) Work is in progress in the immediate vicinity of the travel way requiring lane closures or lane width reductions less than 11 feet.
  - (C) Workers present on the shoulder within 2 feet of the edge of the traveled way without barrier protection.
- The reduced speed zone shall only apply to those portions of the project limits affected. The Engineer may allow SPEED LIMIT WHEN FLASHING signs to supplement reduced speed zones.
- If the speed limit is reduced, speed limit signs shall be placed:
  - (A) beyond major intersections;
  - (B) at one mile intervals in rural areas;
  - (C) at half mile intervals in urban areas.
- At the end of the reduced speed zone, a speed limit sign displaying the original speed limit prior to construction shall be installed.
- For all other speed limit reductions not listed above, the Project Engineer and the DTOE shall recommend the speed reduction to the Chief Construction Engineer or his appointed designee for approval.
- If the speed limit is reduced more than 10 mph, placement of the signs shall be re-evaluated according to the MUTCD.

FLASHING ARROW BOARDS

- All Flashing Arrow Boards shall be 4 feet by 8 feet and Type C.
- Flashing Arrow Boards should be placed on the shoulder. When there is no shoulder or median area, the arrow board shall be placed within the closed lane behind the channelizing devices and as close to the beginning of the taper as practical.
- Flashing arrow boards shall be delineated with retroreflective TTC devices.
- At no time shall the arrow board encroach in the traveled way. When Flashing Arrow Board signs are not being used, they shall be shielded by guard rail or barriers, or removed.
- Arrow boards shall only be used for lane reduction tapers and shall not be used for lane shifts.

ABBREVIATIONS

AASHTO	American Association of State Highway and Transportation Officials
ADT	Average Daily Traffic
AGC	Associated General Contractors of America
AML	Approved Materials List
ANSI	American National Standards Institute
ATSSA	American Traffic Safety Services Association
B.O.P.	Beginning of Project
DTOE	District Traffic Operations Engineer
E.O.P.	End of Project
LADOTD	Louisiana Department of Transportation and Development
MASH	AASHTO Manual for Assessing Safety Hardware
MUTCD	Manual on Uniform Traffic Control Devices
NCHRP	National Cooperative Highway Research Program
NHS	National Highway System
PCMS	Portable Changeable Message Sign
TMA	Truck Mounted Attenuator
TMC	Traffic Management Center
TTC	Temporary Traffic Control
TTC Standards	Temporary Traffic Control Standard Plans

SHEET NUMBER 254

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. BOUCHER | DETAIL | REVIEW | SERIES *
CHECK M. RILOVICH | CHECK

APPROVED BY CHIEF ENGINEER: Feb. 7, 2025 DATE:

NO.	DATE	BY
0	4-3-24	BRB

BARRIER INFORMATION AND MINOR CORRECTIONS
REVISION OR CHANGE ORDER DESCRIPTION

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

TEMPORARY TRAFFIC CONTROL
GENERAL NOTES SHEET

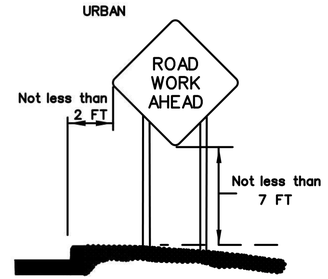
TTC-00 (A)

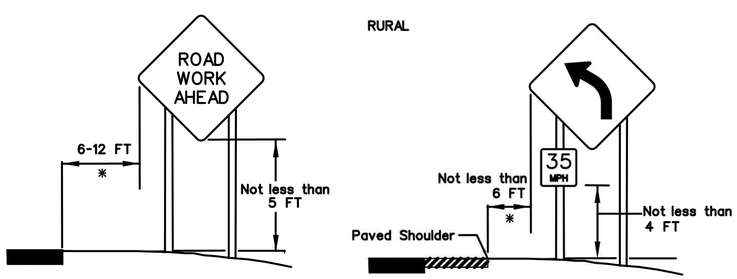
DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

TRAFFIC ENGINEERING

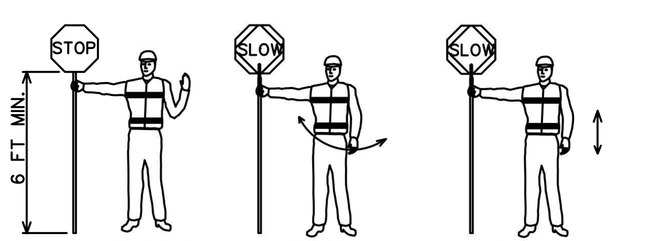
SIGNS

- All signs used for temporary traffic control shall follow the plans, the LADOTD TTC Standards and the MUTCD.
- Signs shown in the TTC illustrations are typical and may vary with each specific condition.
- One Type B High Intensity light shall be used to supplement the first sign (or pair of signs) that gives warning about a lane closure during nighttime operations (See AML).
- Mesh rollup signs shall not be allowed on any project.
- Contractor shall use caution not to damage existing signs which remain in place. Any LADOTD signs damaged by work operations shall be replaced by the contractor under item 713-01-00100.
- All signs (permanent and temporary) shall be removed or completely covered with a strong, lightweight, opaque material when no longer applicable. (Burlap is not an acceptable material to cover signs).
- At no time shall signs warning against a particular operation be left in place once the operation has been completed or where the condition has been removed.
- Warning signs used for temporary traffic controls shall meet the following guidelines unless otherwise noted in the plans:
  - (A) size shall be 48 inches by 48 inches.
  - (B) see the Louisiana Standard Specifications for Roads and Bridges and the AML for sheeting information.
  - (C) lateral distance of signs shall be a minimum of 6 feet from the edge of shoulder or edge of pavement if no shoulder exists and 2 feet from the back of curb in urban areas (see diagram).
- When portable sign frames are not in use, they shall be moved to an area inaccessible to traffic and not visible to the driver.
- Left side mounted signs will not be required for roadways with a center left turn lane and for undivided roadways.
- Q Vinyl roll up signs and 1 foot portable sign stands may be used if work zone is in place for 3 days or less. Signs or stands may not be used if there are more than 2 lanes in each direction and if signs do not meet all size, color, retroreflectivity and NCHRP 350 Report or MASH requirements.
- All signs shall be visible to the drivers (i.e. no obstructions such as on street parking or other traffic control devices shall block the sign).
- On divided highways, signs shall be placed on the right and the left as shown on the TTC standards.
- Sign posts:
  - -Signs measuring 10 square feet or less shall be mounted on 1 rigid post
  - -Signs over 10 square feet shall be mounted on 2 rigid posts
  - -Signs over 20 square feet shall be mounted on at least 3 rigid posts
- Rigid sign supports shall be driven to a minimum depth of 3 feet. (If splicing is required, see Allowable Lap Splice U-channel Post.)
- For sign height, see the Rural and Urban diagrams:





* If lateral distance is not practical, the sign may be placed no less than 2 feet.



To STOP Traffic

Traffic Proceed

To Alert & SLOW Traffic

Use of Hand Sign

Use of Hand Sign

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
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CIVIL ENGINEERING

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LANE CLOSURES

- All proposed lane, road or shoulder closures shall be reviewed by the DTOE and approved by the Engineer.
- Two lane, two-way highways shall have a maximum work area of two miles; all other roadways shall have a four mile maximum work area.
- A queue analysis shall be performed prior to approval of lane closures on all Interstates according to Section 6A.1 of the Traffic Engineering Manual.
- Closure plans and times shall be turned in to the Engineer for review according to the following:
  - (A) 5 working days minimum if traffic control plan has been approved or is contained in the plans.
  - (B) 10 working days minimum and a traffic control plan must be submitted for lane closures not addressed in the plans.
- Weekly updates to the DTOE, Project Engineer, the LADOTD TMC operator and the regional TMC operator (if applicable) will be required for all ongoing lane closures to update the closure status.
- Daily updates to the DTOE, Project Engineer and TMC operator (if applicable) will be required for all projects where active closures are in place.

FLAGGERS

- All flaggers shall be qualified.
- The contractor shall be responsible for training or assuring that all flaggers are qualified to perform flagging duties.
- A Qualified Flagger is one that has completed courses such as those offered by ATSSA or other courses approved by the LADOTD Work Zone Task Force. The contractor shall be responsible for getting the flagger course approved.
- When utilized, a flagger shall use a minimum 18 inch octagonal shape sign on a minimum 6 foot stop/slow paddle and wear ANSI Class 2 Lime Green vest during day time operations and ANSI Class 3 Lime Green ensemble during night operations.
- In all flagging operations, the flagger must be visible from the flagger advance warning sign.
- Flaggers shall not be used on the Interstate.

PEDESTRIAN CONSIDERATIONS

- If the TTC zone affects the movement of pedestrians, adequate pedestrian access and walkways shall be provided either through the TTC zone or a designated alternate route.
- Pedestrians should be provided with a convenient and accessible path that replicates as nearly as practical the most desirable characteristics of the existing sidewalk(s) or footpath(s).
- Advance notification of sidewalk closures shall be provided by the maintaining agency.
- Q No storage of construction materials, equipment, and/or vehicles will be permitted on permanent or temporary bicycle, pedestrian, or transit facilities for any duration of time.

REFERENCES

- The contractor shall be responsible for understanding all rules and requirements in the current edition of the following documents:

Q 1) Louisiana Standard Specifications for Roads and Bridges. http://www.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications

2) Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD). http://mutcd.fhwa.dot.gov/

3) LADOTD Approved Materials List (AML) Manual. http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Menu_QPL.aspx

4) LADOTD Traffic Engineering Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc%20Documents/Traffic%20Engineering%20Manual.pdf

5) National Cooperative Highway Research Program (NCHRP) Report 350: "Guidelines for Work Zones Traffic Control Devices". http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_350-a.pdf

6) NCHRP Report 475: "A Procedure for Assessing and Planning Nighttime Highway Construction and Maintenance". http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_475.pdf

7) NCHRP Report 476: "Guidelines for Design and Operation of Nighttime Traffic Control for Highway Maintenance". http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_476.pdf

8) NCHRP Report 498: "Illumination Guidelines for Nighttime Highway Work". http://onlinepubs.trb.org/Onlinepubs/nchrp/nchrp_rpt_498.pdf

9) American Association of State Highway and Transportation Officials (AASHTO) Roadside Design Guide.

10) American Traffic Safety Services Association (ATSSA) Quality Guidelines for Work Zone Traffic Control Devices and Features.

11) U.S. Department of Transportation Federal Highway Administration Traffic Control Handbook for Mobile Operations at Night. http://www.dot.state.il.us/blr/1023.pdf

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CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

SHEET NUMBER 255

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. BOUCHER | DETAIL | REVIEW | SERIES #
CHECK M. RILOVICH | CHECK

APPROVED BY CHIEF ENGINEER: Feb. 7, 2025 DATE:

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY
1	4-3-24	STORAGE NEAR SIDEWALKS AND MINOR CORRECTIONS	BRB

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION

TEMPORARY TRAFFIC CONTROL
GENERAL NOTES SHEET

TTC-00 (B)

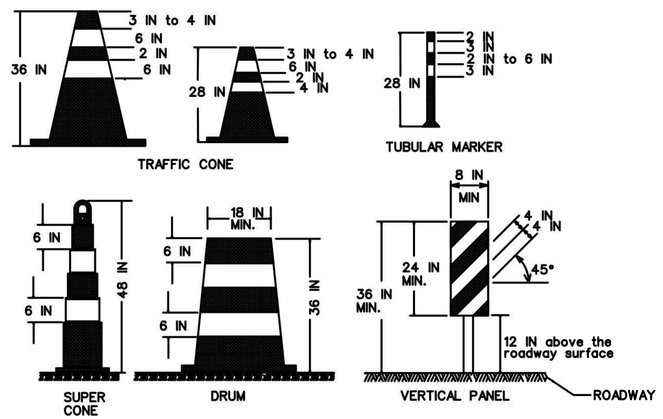
DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
TRAFFIC ENGINEERING

CHANNELIZING DEVICES

- The following devices may be used as channelizing devices: Tubular Markers, Vertical Panels, Cones, Drums and Super Cones.
- 28 inch traffic cones are not allowed on:
  1) Interstates
  2) Highways with speeds greater than 40 mph.
- During nighttime operations, 28 inch and 36 inch cones are not allowed.
- Retroreflective material pattern used on super cones shall match that used on drums.

- Tangent Areas:
  - A) Standard Spacing: See Standard Device Spacing and Buffer Space table.
  - B) Daylight Operations: Drums and super cones are spaced at standard spacing. All other devices are at ½ standard spacing.
  - C) Nighttime Operations: Drums and supercones at standard spacing are the only devices allowed.

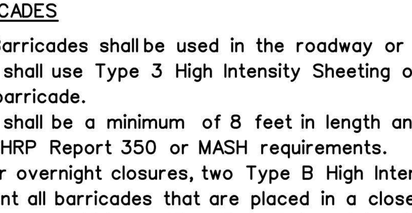
- Taper Areas:
  - A) Standard Spacing: See Standard Device Spacing and Buffer Space table.
  - B) Daylight Operations: Drums are spaced at standard spacing. All other devices are ½ standard spacing.
  - C) Nighttime Operations: Drums (at standard spacing) are the only devices allowed.
  - Q D) Downstream Locations & Flaggers: Drums or supercones at 20' max spacing. The length of taper shall be between 50' - 100' with a minimum of 6 devices.
- Type C steady burn lights shall be used on all channelizing devices in the taper as well as the first two devices in the tangent at night, (see the AML).
- Typical channelizing device lateral placement (do not include when it is used as a divider for opposing directions of traffic) shall be 2 feet off the lane line in the closed lane or shoulder.
- Devices may be adjusted laterally to accomodate ongoing work in the immediate vicinity but must be returned to the closed lane after the work activity has moved.
- Channelizing devices on the lane line shall be of the same type.
- Channelizing devices in each taper shall be of the same type.



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TYPE III BARRICADES

- Q Only Type III Barricades shall be used in the roadway or shoulder. All barricades shall use Type 3 High Intensity Sheeting on both sides of the barricade.
- All barricades shall be a minimum of 8 feet in length and must meet NCHRP Report 350 or MASH requirements.
- When used for overnight closures, two Type B High Intensity Lights shall supplement all barricades that are placed in a closed lane or that extend across a highway. Two Type A Low Intensity Lights may be used in urban areas if approved by the Engineer (See AML).
- When signs and lights are to be mounted to a barricade, they must meet NCHRP Report 350 or MASH requirements.
- A truck with a TMA may be substituted for a barricade when workers are present.
- Barricades shall be placed:
  - (A) at the beginning of a closed lane or shoulder and at 1,000 foot intervals where no active work is ongoing and the lane must remain closed. A minimum of 2 barricades shall be placed if the lane or shoulder closure is less than 2,000 feet. (One barricade shall be placed at the beginning of the lane closure after the buffer space and one shall be placed in the middle of the lane closure.)
  - (B) before each or group of unfilled holes or holes filled with temporary material.
  - (C) before uncured concrete.
  - (D) in the closed lane on each side of every intersection and crossover. (Do not block sight distance.)
  - (E) in front of piles of material (dirt, aggregate, broken concrete), culverts and equipment which is near the work zone.



TTC for DROP-OFFS

NON-INTERSTATE

Average Drop-off	Current Posted Speed (Prior to Construction)	
	> 45 MPH	≤ 45 MPH
≤ 3 IN	Low Shoulder Sign (Optional)	Low Shoulder Sign (Optional)
> 3 IN ≤ 6 IN	Shoulder Drop Off Sign & Edge Lines or Shoulder Drop Off Sign & Channelizing Device	Shoulder Drop Off Sign
> 6 IN ≤ 10 IN	No Shoulder Sign, Edge Lines & Vertical Panel	No Shoulder Sign & Channelizing Device
> 10 IN	Concrete Barrier (if drop off is < 12 FT from edge of travel lane) & Edge Lines	No Shoulder Sign & Vertical Panel

INTERSTATE

Average Drop-off	
≤ 2 IN	Low Shoulder Sign (Optional)
> 2 IN ≤ 6 IN	Shoulder Drop Off Sign & Edge Lines or Shoulder Drop Off Sign & Channelizing Device
> 6 IN	Concrete Barrier (if drop off is < 12 FT from edge of travel lane), Shoulder Drop Off Sign, & Edge Lines

- If a portable concrete barrier will be required then the deflection shall be considered in the design.
- For Interstate ramps, refer to non-Interstate drop offs.

STANDARD DEVICE SPACING AND BUFFER SPACE

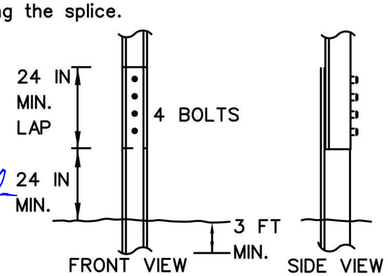
SPEED LIMIT (prior to construction)	MERGING TAPER LENGTH (L) Lane Width (FT)				STANDARD DEVICE SPACING IN FEET		BUFFER SPACE
MPH	9	10	11	12	Along Taper	Along Tangent	FT
25	94	105	115	125	20	40	155
30	135	150	165	180	30	60	200
35	184	205	225	245	35	70	250
40	240	267	294	320	40	80	305
45	405	450	495	540	40	80	360
50	450	500	550	600	40	80	425
55	495	550	605	660	40	80	495
60	540	600	660	720	40	80	570
65	585	650	715	780	40	80	645
70	630	700	770	840	40	80	730
75	675	750	825	900	40	80	820

SPEED LIMIT (prior to construction)	SHIFTING TAPER LENGTH (1/2)(L) Lane Shift (FT)						STANDARD DEVICE SPACING IN FEET		BUFFER SPACE
MPH	2	4	6	8	10	12	Along Taper	Along Tangent	FT
25	11	21	32	42	52	63	20	40	155
30	15	30	45	60	75	90	30	60	200
35	21	41	62	82	102	123	35	70	250
40	27	54	80	107	134	160	40	80	305
45	45	90	135	180	225	270	40	80	360
50	50	100	150	200	250	300	40	80	425
55	55	110	165	220	275	330	40	80	495
60	60	120	180	240	300	360	40	80	570
65	65	130	195	260	325	390	40	80	645
70	70	140	210	280	350	420	40	80	730
75	75	150	225	300	375	450	40	80	820

SPEED LIMIT (prior to construction)	SHOULDER TAPER LENGTH (1/3)(L) Shoulder Width (FT)						STANDARD DEVICE SPACING IN FEET		BUFFER SPACE
MPH	2	4	6	8	10	12	Along Taper	Along Tangent	FT
25	7	14	21	28	35	42	20	40	155
30	10	20	30	40	50	60	30	60	200
35	14	28	41	55	68	82	35	70	250
40	18	36	54	72	89	107	40	80	305
45	30	60	90	120	150	180	40	80	360
50	34	67	100	134	167	200	40	80	425
55	37	74	110	147	184	220	40	80	495
60	40	80	120	160	200	240	40	80	570
65	44	87	130	174	217	260	40	80	645
70	47	94	140	187	234	280	40	80	730
75	50	100	150	200	250	300	40	80	820

- See MUTCD for taper formulas.
- ALLOWABLE LAP SPLICE FOR U-CHANNEL POST

  U-Channel posts may be spliced where long lengths are required. The upper section shall overlap the lower section by at least 24 inches. The bottom edge of the upper section of the splice shall be a minimum of 24 inches above the ground. The spliced sections shall be secured with at least four 5/16 inch diameter hex bolts spaced equally along the splice.



THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 256

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN B. BOUCHER | CHECK M. RILOVICH | DETAIL | CHECK | REVIEW | SERIES #

APPROVED BY CHIEF ENGINEER: DATE: Feb. 7, 2025

NO.	DATE	BY	REVISION OR CHANGE ORDER DESCRIPTION
1	4-3-24	BRB	DOWNSTREAM TAPERS AND MINOR CORRECTIONS

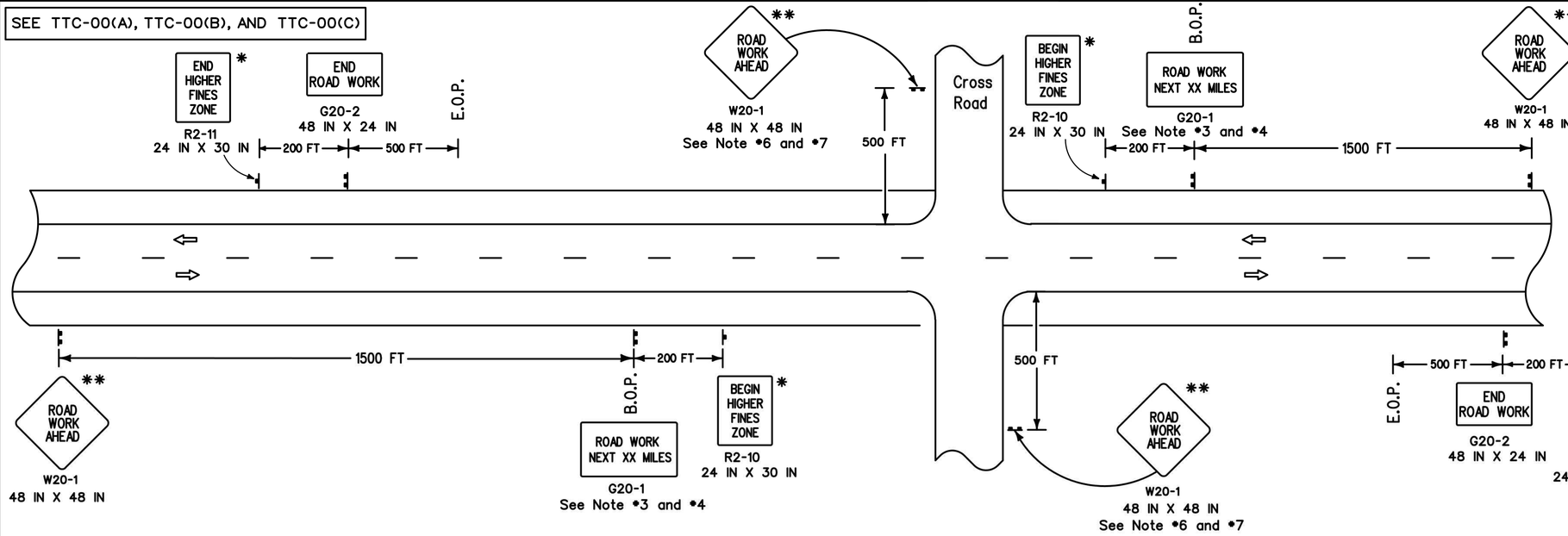
TEMPORARY TRAFFIC CONTROL
GENERAL NOTES SHEET

TTC-00 (C)

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

TRAFFIC ENGINEERING

SEE TTC-00(A), TTC-00(B), AND TTC-00(C)



* For divided roadways with speeds ≥ 50 mph use larger sign, 36 IN X 48 IN.

** Any sign of the W20-1 series may be used.

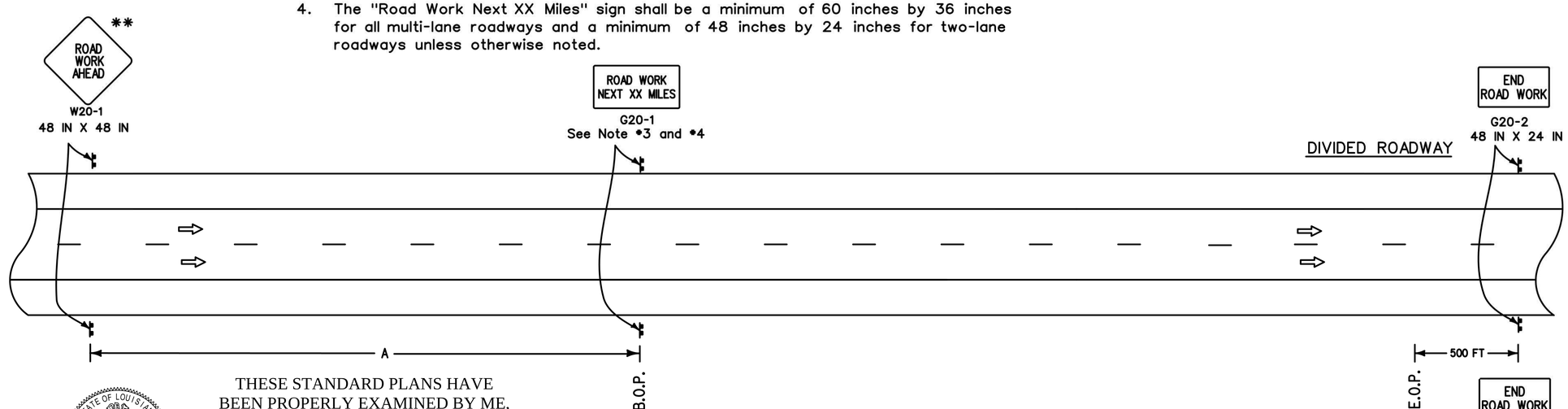
NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B), TTC-00(C), and other Temporary Traffic Control Sheets as appropriate.

1. This layout represents the minimum traffic controls required for placement of "Road Work Next XX Miles" and "End Road Work" signs.
2. This layout does not replace other TTC Standard Sheets, but is intended as a supplement to the required signing.
3. The distance on the "Road Work Next XX Miles" sign shall be rounded up to the nearest whole mile. This sign shall be placed at the Beginning of Project (B.O.P.) limits. This sign may be omitted if work zone is less than 0.5 miles.
4. The "Road Work Next XX Miles" sign shall be a minimum of 60 inches by 36 inches for all multi-lane roadways and a minimum of 48 inches by 24 inches for two-lane roadways unless otherwise noted.
5. The "End Road Work" sign shall be placed 500 feet past the End of Project (E.O.P.) limits.
6. If "Road Work Ahead" sign is used on a cross road to warn of road work on another route, then "End Road Work" sign is not required.
7. When projects are separated by less than 1 mile, they shall be signed as one project; this may require coordination.

LEGEND

- Traffic Sign
- ⇨ Direction of Travel



SPEED LIMIT (prior to construction)	SPACING 'A'
≤ 40 mph	1500 FT
45 mph	2640 FT
> 45 mph	5280 FT

- Sign spacing to be adjusted for Horizontal and Vertical curves.
- For work outside of the traveled way, see TTC-01 and TTC-02.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
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SHEET NUMBER 257

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. BOUCHER | DETAIL | REVIEW | SERIES *
CHECK M. RILOVICH | CHECK

APPROVED BY CHIEF ENGINEER: Feb. 7, 2025 DATE:

BY BRB

REVISION OR CHANGE ORDER DESCRIPTION: MINOR CORRECTIONS
DATE 4-3-24
NO. 1

STATE OF LOUISIANA

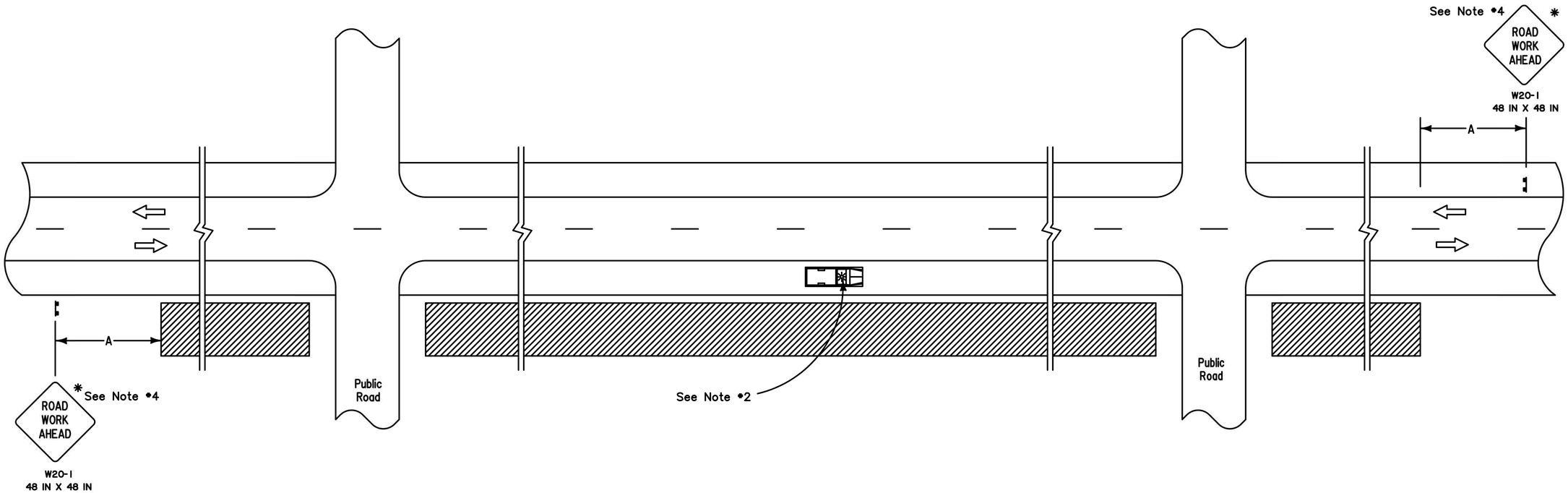
TEMPORARY TRAFFIC CONTROL
LAYOUT FOR PLACEMENT OF ROAD WORK NEXT XX MILES AND END ROAD WORK SIGNS

TTC-00 (D)

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

TRAFFIC ENGINEERING

SEE TTC-00(A), TTC-00(B) AND TTC-00(C)



LEGEND

- Traffic Sign
- Work Area
- Direction of Travel
- Truck with Green/Amber Light

SPEED LIMIT (prior to construction)	SPACING
	'A'
≤ 40 mph	500 FT
45-50 mph	1000 FT
≥ 55 mph	1500 FT

NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B) and TTC-00(C).

1. This layout represents the minimum traffic controls required for workers and equipment operating more than 15 feet from the travel way.
2. If the operation results in equipment or other vehicles being parked closer than 15 feet to the travel way, but not within the roadway, each vehicle shall have an green/amber light.
3. When a work area has been established on one side of the roadway only, there shall be no parking on the opposite shoulder within 500 feet of the work area.
4. Other signs may be used in place of the "Road Work Ahead" sign, such as W21-8 (Mowing), W21-7 (Utility), or W21-6 (Survey) when applicable.

* Any sign of the W20-1 series may be used.

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN
CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

SHEET NUMBER 258

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. BOUCHER | DETAIL | REVIEW | SERIES *
CHECK M. RILOVICH | CHECK

APPROVED BY CHIEF ENGINEER: DATE: Feb. 7, 2025

BY BRB

NO. DATE REVISION OR CHANGE ORDER DESCRIPTION
1 4-3-24 MINOR CORRECTIONS

STATE OF LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

TEMPORARY TRAFFIC CONTROL FOR WORK GREATER THAN 15 FEET FROM THE TRAVELED WAY

TTC-01

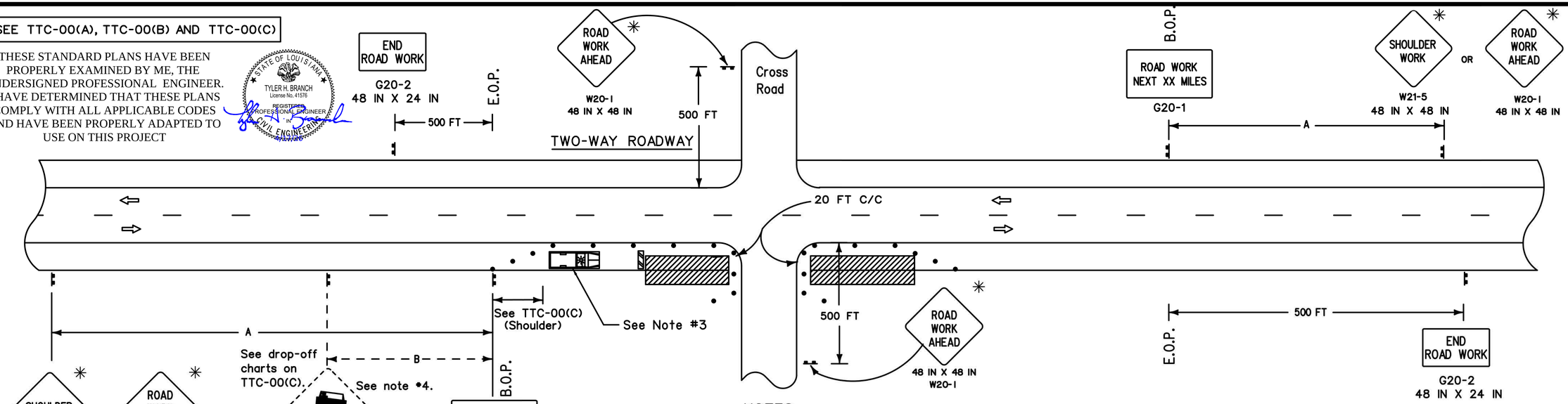
DOTD

TRAFFIC ENGINEERING

SEE TTC-00(A), TTC-00(B) AND TTC-00(C)

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

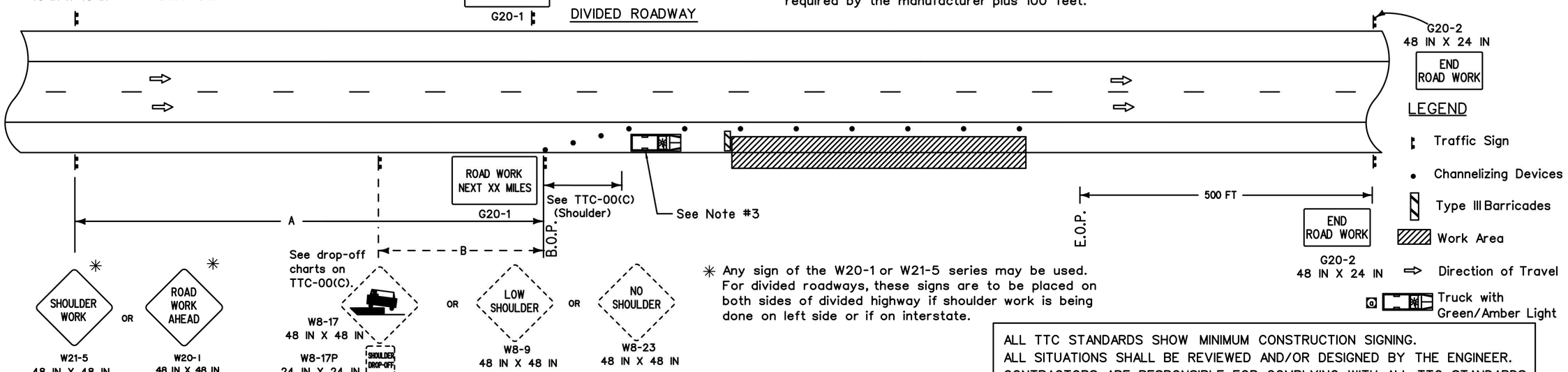
STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING



SPEED LIMIT (prior to construction)	SPACING 'A'	SPACING 'B'
≤ 40 mph	500 FT	250 FT
45-50 mph	1000 FT	350 FT
≥ 55 mph	1500 FT	500 FT
Expressway/Interstate	2500 FT	1000 FT

- See TTC-00(C) for minimum taper length and maximum device spacing for shoulder closure tapers.
- If horizontal curve radius is less than 300 feet, device spacing shall be 25 feet.

DIVIDED ROADWAY



NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B), TTC-00(C)

1. This layout represents the minimum traffic controls required for workers and equipment operating less than 15 feet from the traveled way for more than one hour. Less than one hour, see figure TA-4 of the MUTCD.
2. No signs or barricades are required for equipment operating or work in progress greater than 15 feet from the traveled way. (See TTC-01).
3. Work or equipment confined to a spot location (less than 200 feet) shall be marked by channelizing devices spaced at 25 feet or by a vehicle with a green/amber light visible to traffic. Work extending more than 200 feet of roadway length shall be marked with appropriate devices spaced as noted on TTC-00(C).
4. Applicable drop-off sign options are defined on TTC-00(C).
5. The distance on the "Road Work Next XX Miles" sign shall be rounded up to the nearest whole mile. This sign shall be placed at the Beginning of Project (B.O.P.) limits. This sign may be omitted if work zone is less than 0.5 miles.
6. A vehicle with a flashing green/amber light and a truck mounted attenuator shall be used on all shoulders of all interstates, as well as all roadways with an ADT greater than 20,000 and a pre-construction speed greater than or equal to 40 mph. This vehicle shall move with work operations not to exceed the roll-ahead distance required by the manufacturer plus 100 feet.

✳ Any sign of the W20-1 or W21-5 series may be used. For divided roadways, these signs are to be placed on both sides of divided highway if shoulder work is being done on left side or if on interstate.

LEGEND

- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Work Area
- Direction of Travel
- Truck with Green/Amber Light

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

SHEET NUMBER 259

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. BOUCHER | CHECK M. RILOVICH | DETAIL | CHECK | REVIEW | SERIES #

APPROVED BY CHIEF ENGINEER: DATE: Feb. 7, 2025

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY
1	4-3-24	MINOR CORRECTIONS	BRB

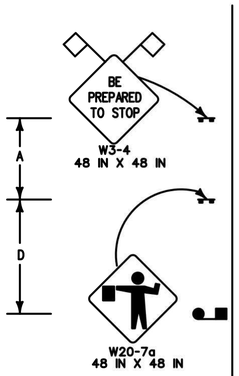
TEMPORARY TRAFFIC CONTROL
LAYOUT FOR WORK LESS THAN 15 FEET FROM THE TRAVELED WAY

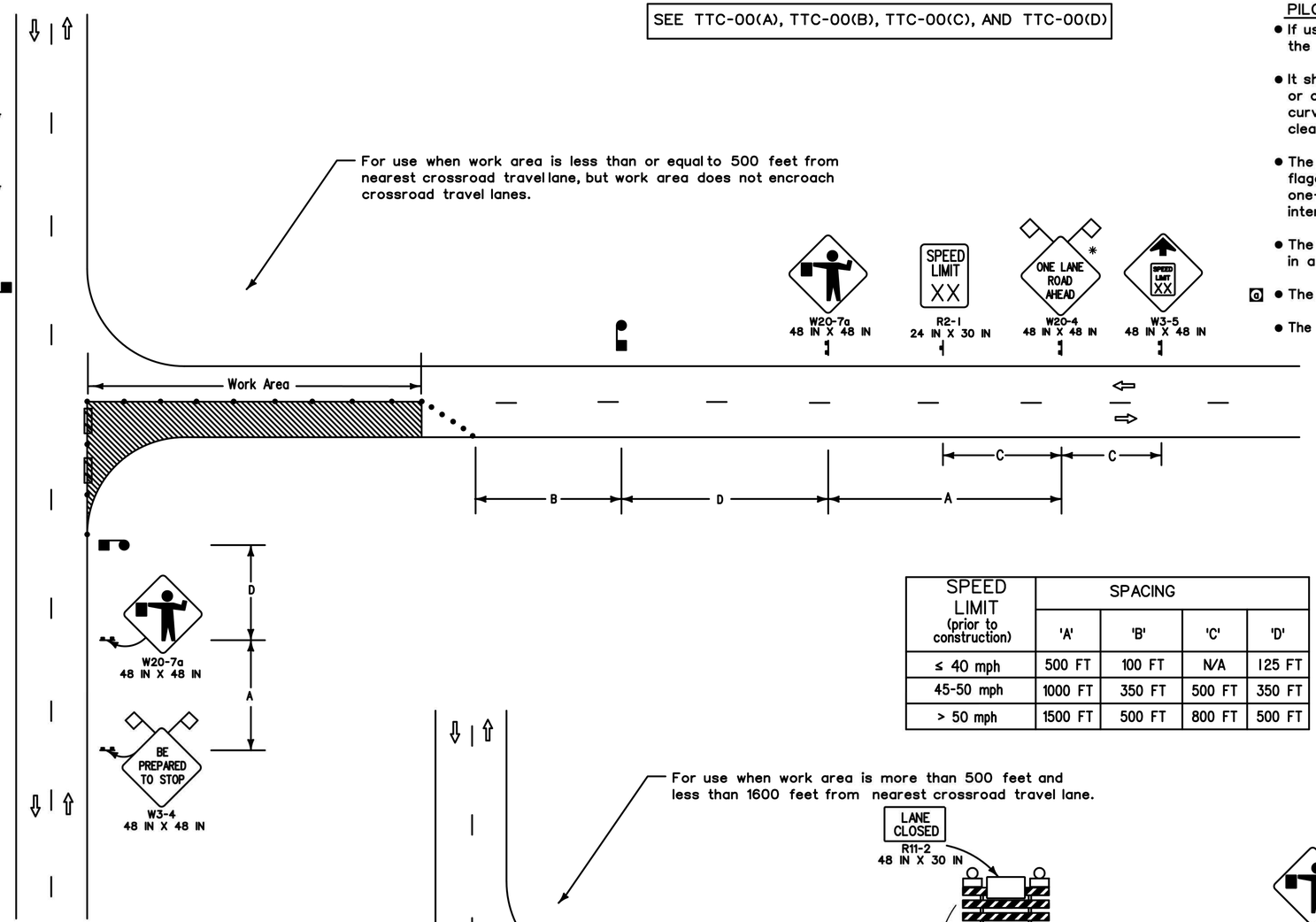
TTC-02

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

TRAFFIC ENGINEERING

SEE TTC-00(A), TTC-00(B), TTC-00(C), AND TTC-00(D)

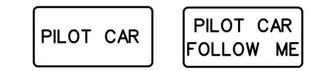




SPEED LIMIT (prior to construction)	SPACING			
	'A'	'B'	'C'	'D'
≤ 40 mph	500 FT	100 FT	N/A	125 FT
45-50 mph	1000 FT	350 FT	500 FT	350 FT
> 50 mph	1500 FT	500 FT	800 FT	500 FT

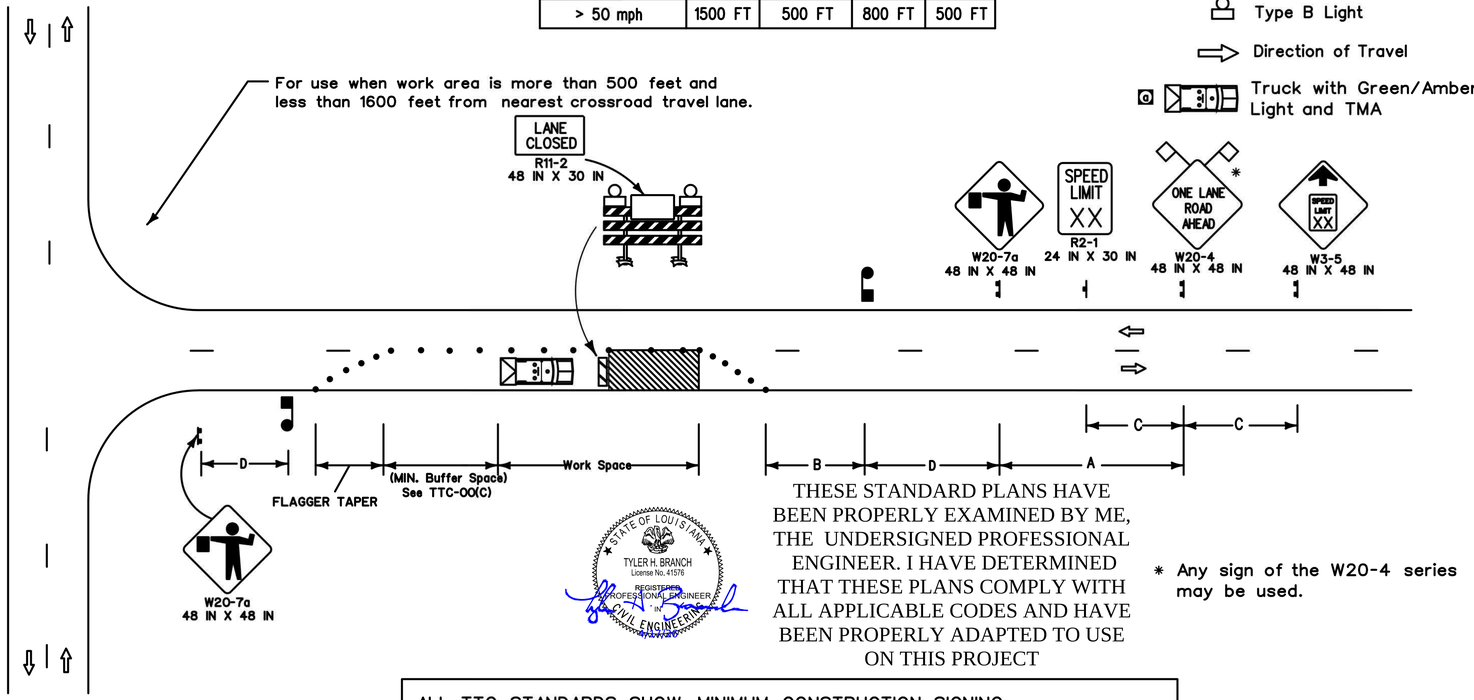
PILOT CAR

- If used, a pilot car shall guide a queue of vehicles through the work zone or diversion.
- It shall be used in restricted visibility operations such as lime or cement stabilization, chip seals, or operations in hilly or curvy terrains, where flaggers cannot see each other (no clear line-of-sight).
- The operation of the pilot vehicle shall be coordinated with flagging operations or other controls at each end of the one-lane section and all major driveways and street intersections.
- The pilot car sign should be mounted 7 feet above roadway in a position visible to oncoming and following traffic.
- [o] The pilot car shall have a green/amber beacon light.
- The sign mounted on the vehicle shall be two-sided.



LEGEND

- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Work Area
- Flagger
- Type B Light
- Direction of Travel
- [o] Truck with Green/Amber Light and TMA



NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B), TTC-00(C), and TTC-00(D).

1. This layout represents the minimum traffic controls required for lane closures on two-lane roads with two-way traffic less than 1600 feet from an intersection. For advance signing see TTC-00(D).
2. Visual or radio contact shall be required between flaggers at all times. The flagger shall be visible from flagger sign.
3. Only law officers shall direct traffic against a traffic signal indication.
4. If work area is greater than 1600 feet see TTC-04.
5. If a pilot car is required then the contractor is not required to have channelizing devices in the tangent section.
6. [o] A vehicle with a flashing green/amber light and a truck mounted attenuator shall be used on all roadways with an ADT greater than 20,000 and a pre-construction speed greater than or equal to 40 mph. This vehicle shall move with work operations not to exceed the roll-ahead distance required by the manufacturer plus 100 feet.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

* Any sign of the W20-4 series may be used.

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

SHEET NUMBER 260

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. BOUCHER | DETAIL | REVIEW | SERIES *
CHECK M. RILOVICH | CHECK

APPROVED BY CHIEF ENGINEER: DATE: Feb 7, 2025

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY
1	4-3-24	MINOR CORRECTIONS	BRB

STATE OF LOUISIANA

TEMPORARY TRAFFIC CONTROL
LAYOUT FOR LANE CLOSURES ON TWO LANE ROADS WITH TWO-WAY TRAFFIC NEAR INTERSECTIONS (FLAGGING OPERATIONS)

TTC-03

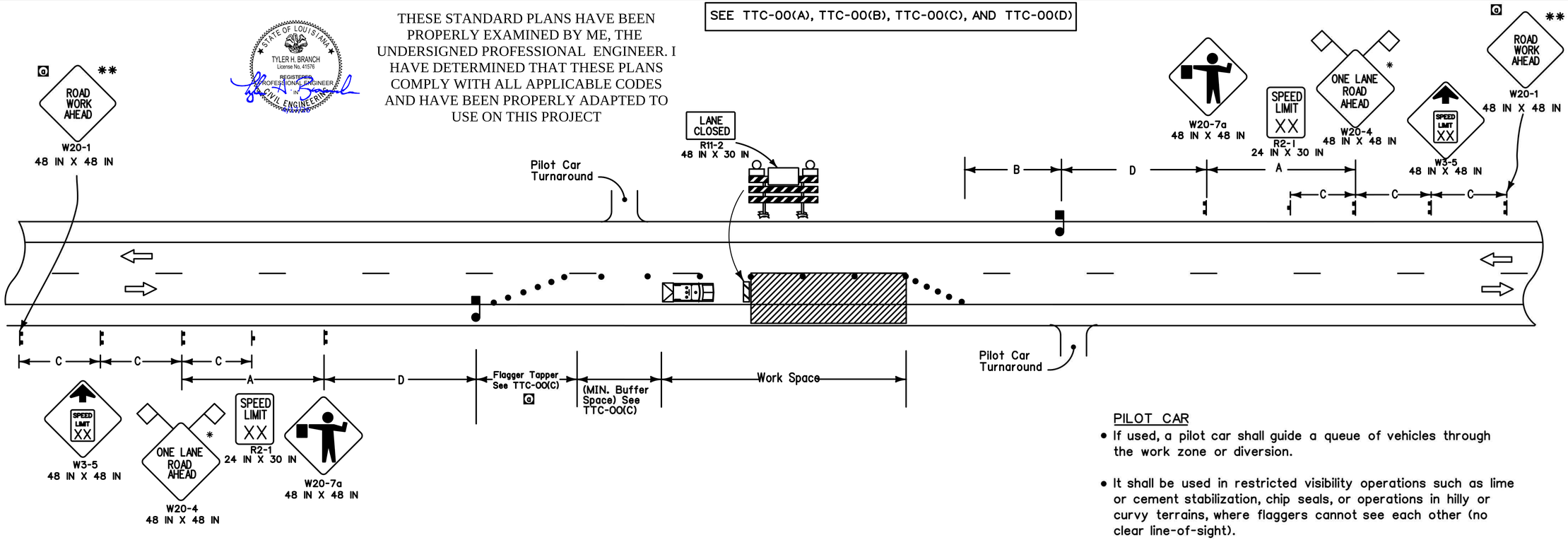
DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

TRAFFIC ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SEE TTC-00(A), TTC-00(B), TTC-00(C), AND TTC-00(D)



NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B), TTC-00(C) and TTC-00(D).

1. This layout represents the minimum traffic controls required for lane closures on two-lane roads with two-way traffic greater than 1600 feet from an intersection. For this type of closure either a flagger or a pilot car will be required. For advance signing see TTC-00(D).
2. To prevent vehicles from entering the work area against the flow of traffic, an additional flagger shall be stationed at each intersection, major driveway, railroad crossing, or crossing within the work area.
3. For projects in rural areas the distance between flaggers shall not exceed:
   (A) 2.5 miles for ADT<2,500
   (B) 2.0 miles for 2,500<ADT<5,000
   (C) 1.5 miles for ADT>5,000
4. The flagger station shall be near the beginning of the taper and shall have adequate sight distance to be visible to oncoming traffic. If sight distance cannot be achieved, the distance between flaggers may be extended for a short duration.
5. Visual or radio contact shall be required between flaggers at all times. The flagger shall be visible from the flagger sign.
6. A vehicle with a flashing green/amber light and a truck mounted attenuator shall be used on all roadways with an ADT greater than 20,000 and a pre-construction speed greater than or equal to 40 mph. This vehicle shall move with work operations not to exceed the roll-ahead distance required by the manufacturer plus 100 feet.
7. If a pilot car is required then the contractor is not required to have channelizing devices in the tangent section.
8. If work zone is less than 1600 feet from an intersection see TTC-03.

SPEED LIMIT (prior to construction)	SPACING			
	'A'	'B'	'C'	'D'
≤ 40 mph	500 FT	100 FT	N/A	125 FT
45-50 mph	1000 FT	350 FT	500 FT	350 FT
≥ 55 mph	1500 FT	500 FT	800 FT	500 FT

* Any sign of the W20-4 series may be used.

** For extended length projects, if the distance between the current working area and beginning of the project exceeds 2500', an additional W20-1 should be added before the W3-5 sign to remind traffic of the work area.

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

PILOT CAR

- If used, a pilot car shall guide a queue of vehicles through the work zone or diversion.
- It shall be used in restricted visibility operations such as lime or cement stabilization, chip seals, or operations in hilly or curvy terrains, where flaggers cannot see each other (no clear line-of-sight).
- The operation of the pilot vehicle shall be coordinated with flagging operations or other controls at each end of the one-lane section and all major driveways and street intersections.
- The pilot car sign should be mounted 7 feet above roadway in a position visible to oncoming and following traffic.
- The pilot car shall have an green/amber beacon light.
- The sign mounted on the vehicle shall be two-sided.

PILOT CAR — G20-4, 36 IN X 18 IN (FRONT OF SIGN)

PILOT CAR FOLLOW ME — G20-4, 36 IN X 18 IN (BACK OF SIGN)

LEGEND

- Traffic Sign
- Flagger
- Channelizing Devices
- Type III Barricades
- Work Area
- Type B Light
- Direction of Travel
- Truck with Green/Amber Light and TMA

SHEET NUMBER 261

PARISH	CONTROL SECTION	STATE PROJECT

DESIGN B. BOUCHER | CHECK M. RILOVICH | DETAIL | CHECK | REVIEW | SERIES *

APPROVED BY CHIEF ENGINEER: DATE: Feb. 7, 2025

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY
	4-3-24	ADD W20-1 SIGN, PROJECT LENGTH, MINOR CORRECTIONS	BRB

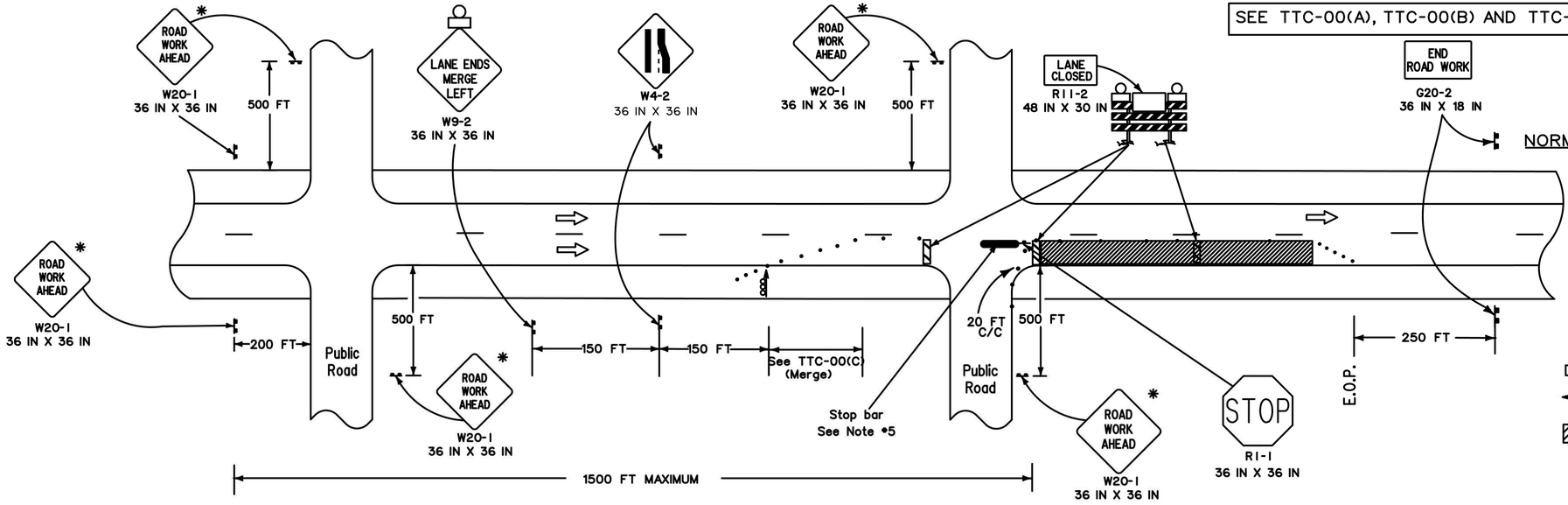
TEMPORARY TRAFFIC CONTROL
LAYOUT FOR LANE CLOSURES ON TWO LANE ROADS WITH TWO-WAY TRAFFIC (FLAGGING OPERATIONS)

TTC-04

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
TRAFFIC ENGINEERING

SEE TTC-00(A), TTC-00(B) AND TTC-00(C)

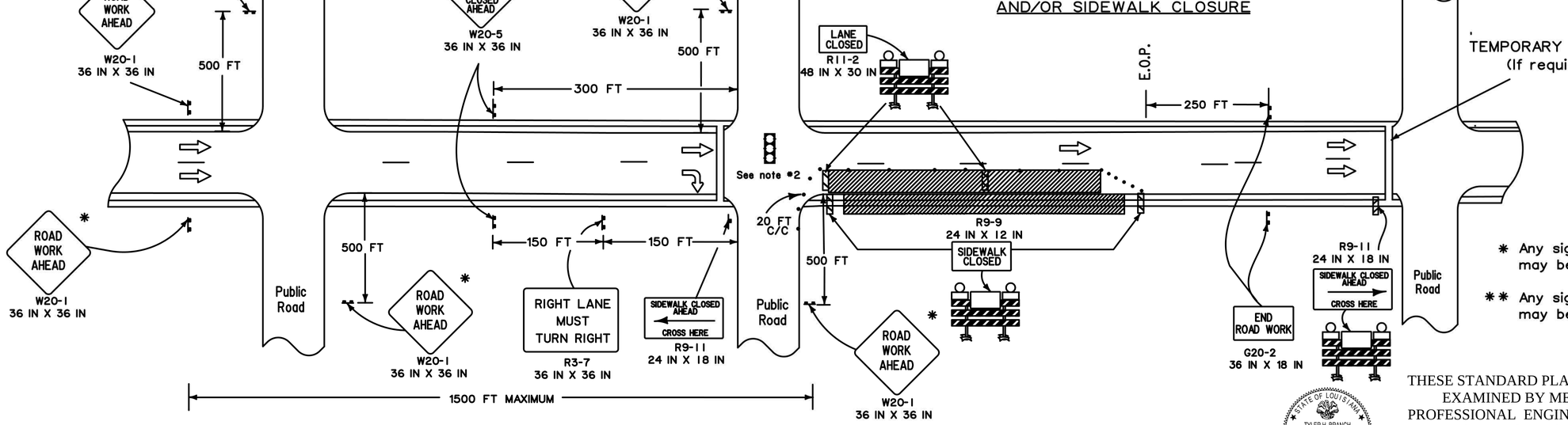
NORMAL LANE CLOSURE



LEGEND

- Traffic Sign
- Channelizing Devices
- Type III Barricades
- Flashing Arrow Board (Type 'C')
- Work Area
- Type B Light
- Direction of Travel

LANE CLOSURE WITH HIGH VOLUME RIGHT TURNS AND/OR SIDEWALK CLOSURE



* Any sign of the W20-1 series may be used.

** Any sign of the W20-5 series may be used.

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

STATE OF LOUISIANA — TYLER H. BRANCH — License No. 41576 — REGISTERED PROFESSIONAL ENGINEER — CIVIL ENGINEER

NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B) and TTC-00(C).

1. This layout represents the minimum traffic controls required for lane closures in areas with a grid layout and with speed limits of 40 mph and below. This layout illustrates roadwork near a signal or a major intersection with or without sidewalks.
2. If a signal is involved in the construction zone, a specific temporary traffic signal timing and phasing plan for each phase of construction shall be developed.
3. Bicyclists and pedestrians, including those with disabilities, should be provided with access and reasonably safe passage through the TTC zone.
4. The sign height shall be at least 7 feet in business, commercial, and residential areas and also near parking, pedestrians, bicyclists, or other obstructions.
5. Place stop bars if work duration is greater than 3 days.
6. Place "Road Work Ahead" sign prior to an intersecting alternate route, no more than 1500 feet from the work area.
7. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features in the existing pedestrian facility as defined in the MUTCD.

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

SHEET NUMBER 262

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. BOUCHER | CHECK M. RILOVICH | DETAIL | CHECK | REVIEW | SERIES #

APPROVED BY CHIEF ENGINEER: DATE: Feb. 7, 2025

NO. | DATE | REVISION OR CHANGE ORDER DESCRIPTION | BY

TEMPORARY TRAFFIC CONTROL
FOR LANE AND SIDEWALK CLOSURES
IN URBAN AREAS WITH SPEED LIMIT
LESS THAN OR EQUAL TO 40 MPH

TTC-10

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

TRAFFIC ENGINEERING

SEE TTC-00(A), TTC-00(B), AND TTC-00(C)

NOTES

This sheet shall be used with the Temporary Traffic Control General Notes Sheets TTC-00(A), TTC-00(B), and TTC-00(C).

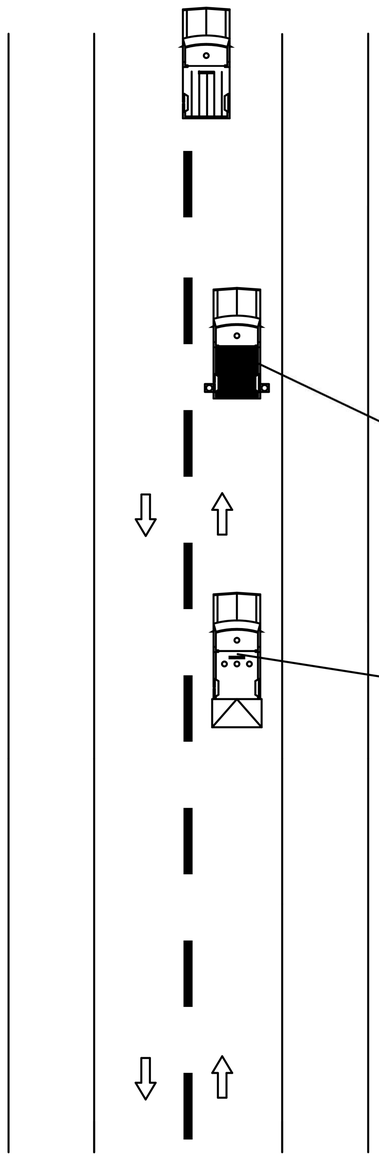
1. This layout represents the minimum traffic controls required for moving operations on two-lane roads with two-way traffic, such as striping, street sweeping, and placement of raised pavement markers.

2. Distances between vehicles may vary and should be adjusted due to drying time and sight obstructions such as overpasses and hills. Vehicles with attenuators shall move with work operations. Buffer space shall not exceed rollahead distance required by the manufacturer plus 100 feet.

3. If a queue greater than 5 minutes (about 1000 feet) exists, the contractor shall cease operations and pull over to the shoulder until the queue dissipates.

4. Flaggers may be used with this layout, if needed. See TTC-00(B).

5. All construction vehicles with flashing lights shall use green/amber colors. ◘



(Optional) Lead Vehicle straddling centerline with flashing lights may be used.

Work Vehicle with flashing light mounted on top and on outriggers and with Type C 96" X 48" arrow board in caution mode

CAUTION
WET PAINT
18 IN X 48 IN

Place this sign on back of work vehicle during striping operations.

First Protection Vehicle with flashing lights and Truck Mounted Attenuator.

ROAD WORK AHEAD *
W20-1
48 IN X 48 IN

OR

CAUTION
STRIPING MACHINE AHEAD
KEEP OFF WET PAINTED LINES
36 IN X 48 IN

Place this sign on back of protection vehicle during striping operations.

ALL TTC STANDARDS SHOW MINIMUM CONSTRUCTION SIGNING.
ALL SITUATIONS SHALL BE REVIEWED AND/OR DESIGNED BY THE ENGINEER.
CONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL TTC STANDARDS.

* Any sign of the W20-1 series may be used.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER IN CIVIL ENGINEERING

THESE STANDARD PLANS HAVE BEEN PROPERLY EXAMINED BY ME, THE UNDERSIGNED PROFESSIONAL ENGINEER. I HAVE DETERMINED THAT THESE PLANS COMPLY WITH ALL APPLICABLE CODES AND HAVE BEEN PROPERLY ADAPTED TO USE ON THIS PROJECT

LEGEND

- ⇨ Direction of Travel
- Work Vehicle
- Lead Vehicle
- Protection Vehicle

SHEET NUMBER 263

PARISH | CONTROL SECTION | STATE PROJECT

DESIGN B. BOUCHER | DETAIL | REVIEW | SERIES *
CHECK M. RILOVICH | CHECK

APPROVED BY CHIEF ENGINEER: DATE: Feb. 7, 2025

NO.	DATE	REVISION OR CHANGE ORDER DESCRIPTION	BY
◘	4-3-24	MINOR CORRECTIONS	BRB

TEMPORARY TRAFFIC CONTROL FOR MOVING OPERATIONS ON TWO-WAY TWO-LANE ROADWAYS

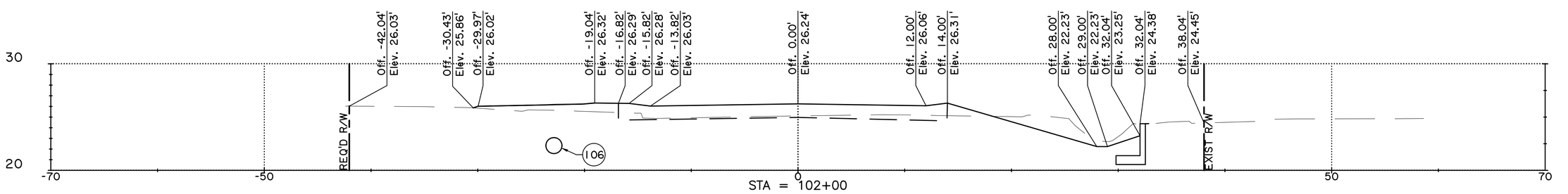
TTC-18

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

TRAFFIC ENGINEERING

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS01
6/18/2026 10:12 AM

LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 102+00

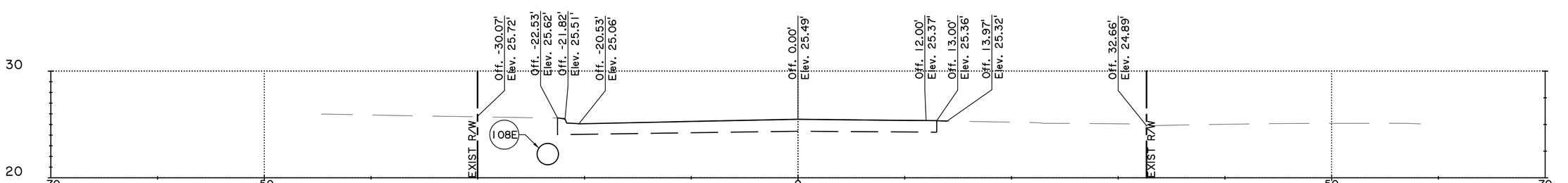
Volume Cut: 56 CU. YD.
Volume Fill: 9 CU. YD.

ORIGINAL EL = 25.11
DESIGN EL = 26.24

STA = 101+50

Volume Cut: 66 CU. YD.
Volume Fill: 0 CU. YD.

ORIGINAL EL = 25.34
DESIGN EL = 25.61



STA = 101+04

Volume Cut: 0 CU. YD.
Volume Fill: 0 CU. YD.

ORIGINAL EL = 25.49
DESIGN EL = 25.49

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 401

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
CROSS SECTIONS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

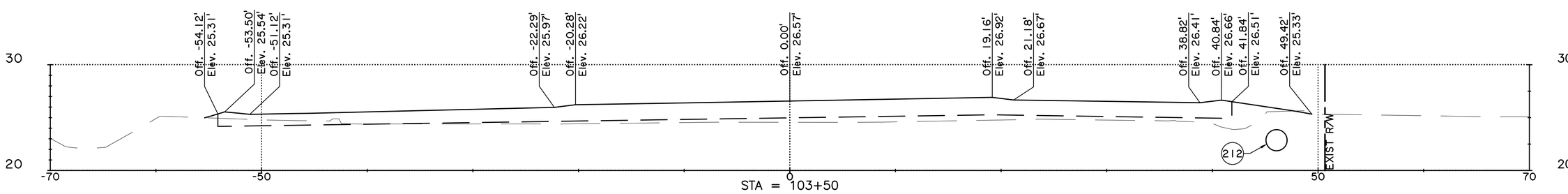
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS02
6/18/2026 10:13 AM

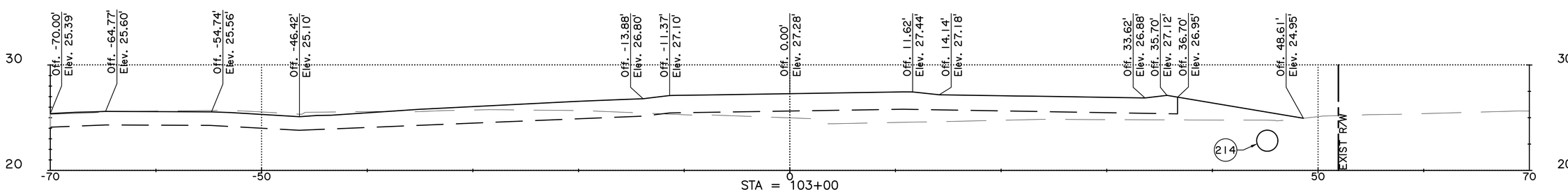
LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 103+50

Volume Cut: 71 CU. YD.
Volume Fill: 80 CU. YD.

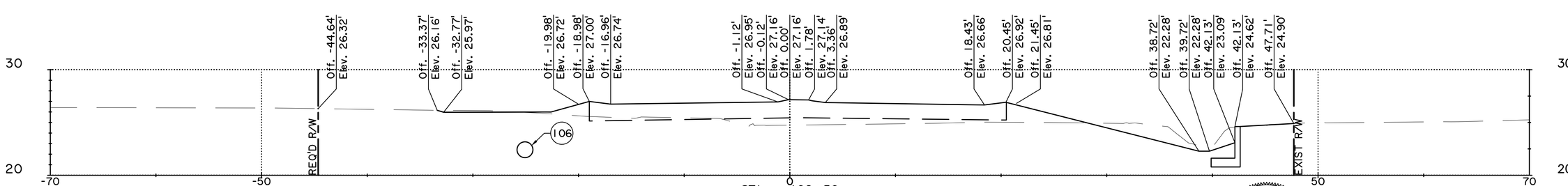
ORIGINAL EL = 24.56
DESIGN EL = 26.57



STA = 103+00

Volume Cut: 80 CU. YD.
Volume Fill: 69 CU. YD.

ORIGINAL EL = 24.99
DESIGN EL =



STA = 102+50

Volume Cut: 35 CU. YD.
Volume Fill: 31 CU. YD.

ORIGINAL EL = 24.75
DESIGN EL = 27.16

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 402

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

CROSS SECTIONS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

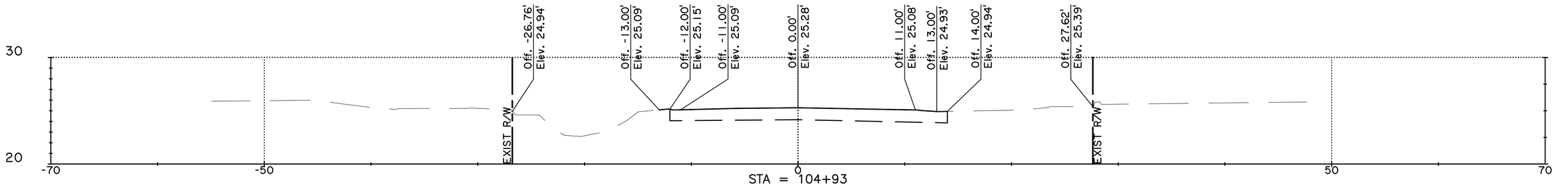
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT 1 INCH, ADJUST SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
6/18/2026 10:13 AM
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS03

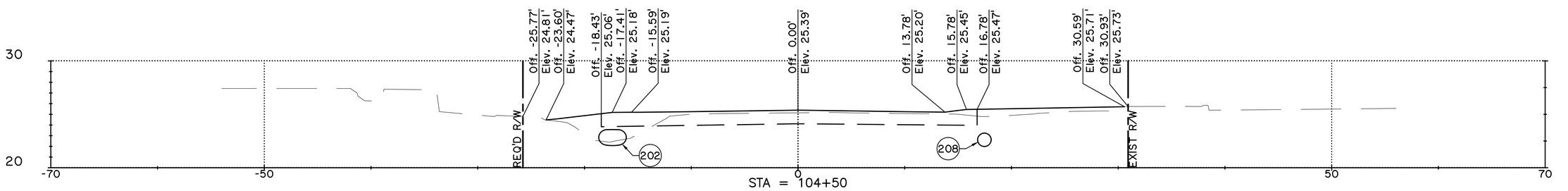
LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 104+93

Volume Cut: 47 CU. YD.
Volume Fill: 13 CU. YD.

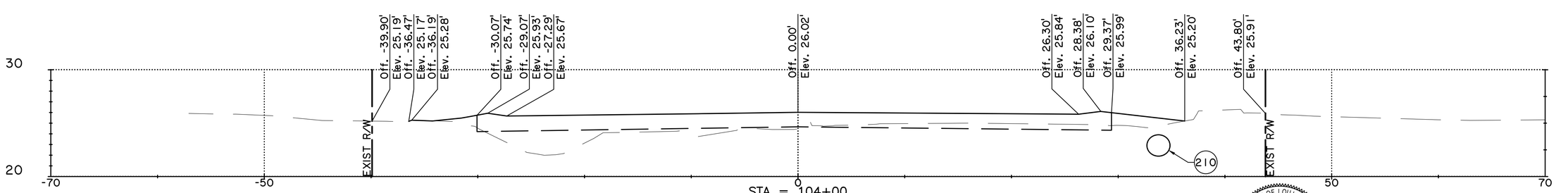
ORIGINAL EL = 25.28
DESIGN EL = 25.28



STA = 104+50

Volume Cut: 40 CU. YD.
Volume Fill: 42 CU. YD.

ORIGINAL EL = 25.14
DESIGN EL = 25.39



STA = 104+00

Volume Cut: 17 CU. YD.
Volume Fill: 59 CU. YD.

ORIGINAL EL = 24.47
DESIGN EL = 26.02

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 403

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

CROSS SECTIONS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

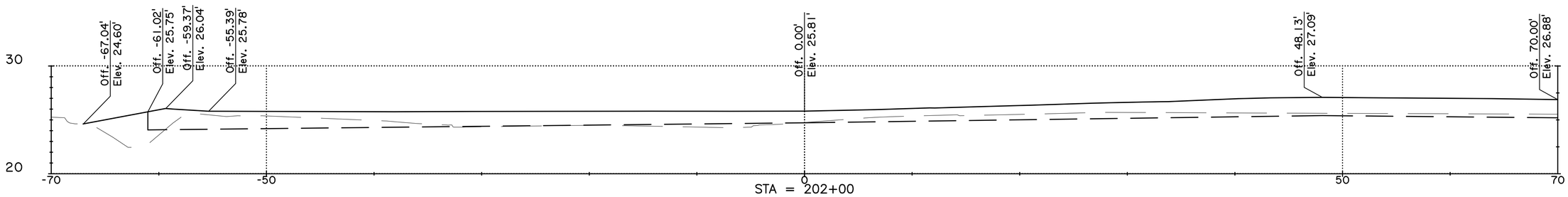
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT 1 INCH, ADJUST SCALE ACCORDINGLY. THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
6/18/2026 10:13 AM
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS04

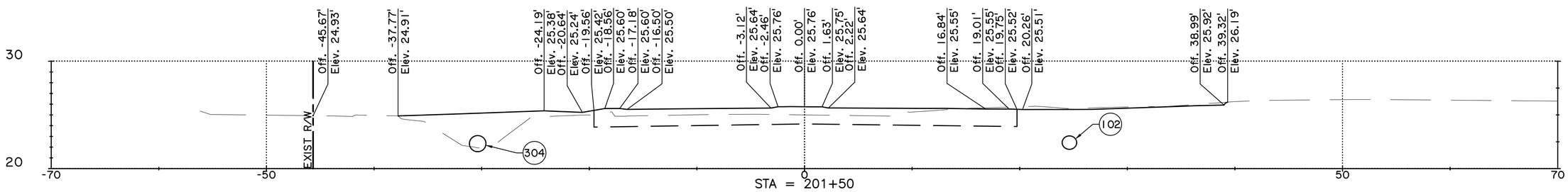
LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 202+00

Volume Cut: 88 CU. YD.
Volume Fill: 38 CU. YD.

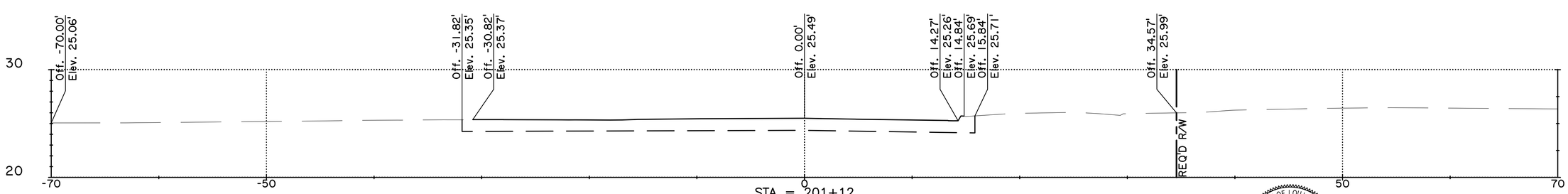
ORIGINAL EL = 24.76
DESIGN EL = 25.81



STA = 201+50

Volume Cut: 69 CU. YD.
Volume Fill: 18 CU. YD.

ORIGINAL EL = 25.00
DESIGN EL = 25.76



STA = 201+12

Volume Cut: 0 CU. YD.
Volume Fill: 0 CU. YD.

ORIGINAL EL = 25.49
DESIGN EL = 25.49

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
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CIVIL ENGINEERING

SHEET NUMBER 404

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

CROSS SECTIONS

DESIGNED	MDB	DETAILED	MDB
CHECKED	NAB	CHECKED	THB
		DATE	4/17/26
		SCALE	N.T.S.

FORTE & TABLADA

ATTENTION:
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THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL

R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS05

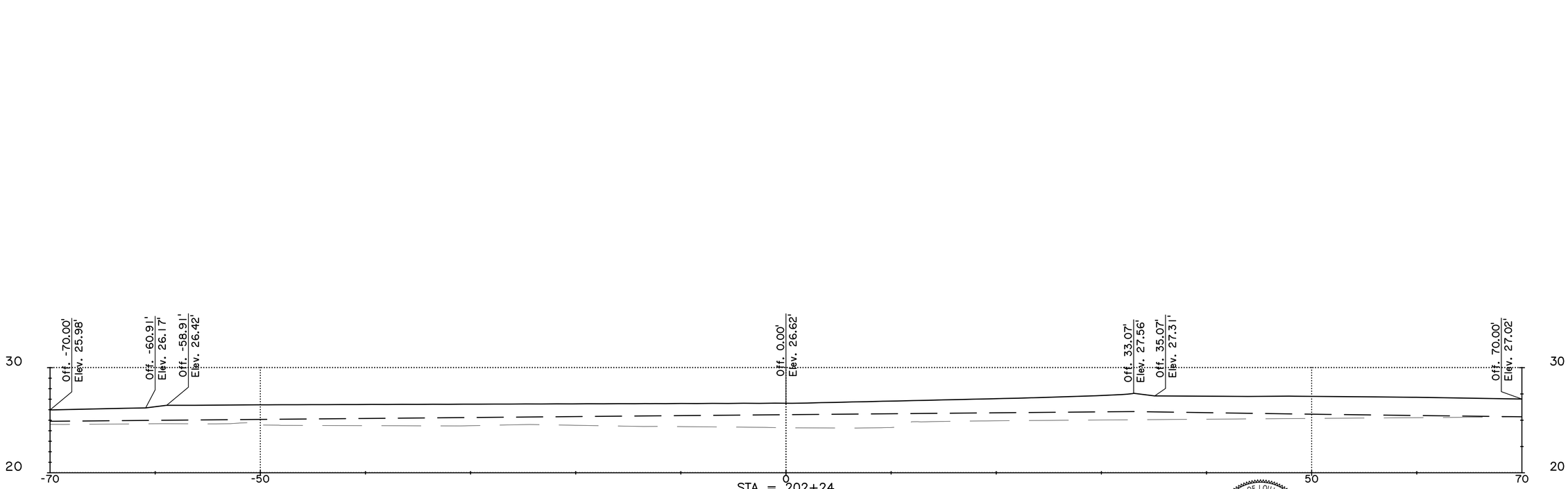
6/18/2026 10:13 AM

LEGEND

EXISTING GROUND LINE ——— ———

DESIGN GROUND LINE ———————

DESIGN SUBGRADE — — —



ORIGINAL EL = 24.28
DESIGN EL = 26.62

STATE OF LOUISIANA
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License No. 41576
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IN
CIVIL ENGINEERING

Volume Cut: 64 CU. YD.
Volume Fill: 7 CU. YD.

SHEET NUMBER 405

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
CROSS SECTIONS

DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	N.T.S.

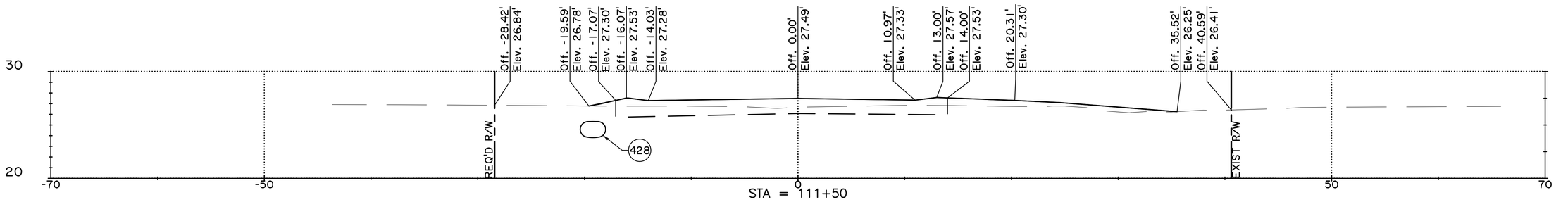
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
IF NOT, ADJUST SCALE.
THIS BAR = 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS06
6/18/2026 10:14 AM

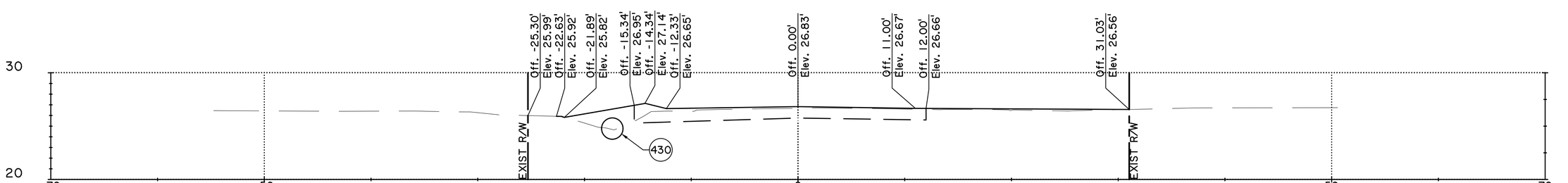
LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 111+50

Volume Cut: 47 CU. YD.
Volume Fill: 18 CU. YD.

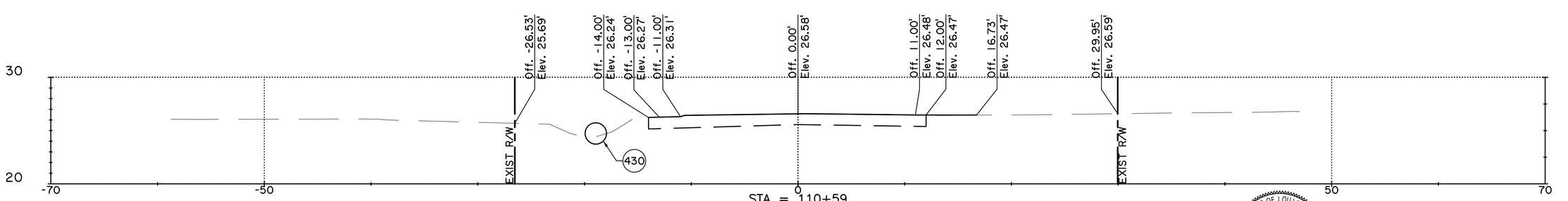
ORIGINAL EL = 26.67
DESIGN EL = 27.49



STA = 111+00

Volume Cut: 41 CU. YD.
Volume Fill: 8 CU. YD.

ORIGINAL EL = 26.68
DESIGN EL = 26.83



STA = 110+59

Volume Cut: 0 CU. YD.
Volume Fill: 0 CU. YD.

ORIGINAL EL = 26.58
DESIGN EL = 26.58

STATE OF LOUISIANA
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SHEET NUMBER 406

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

CROSS SECTIONS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

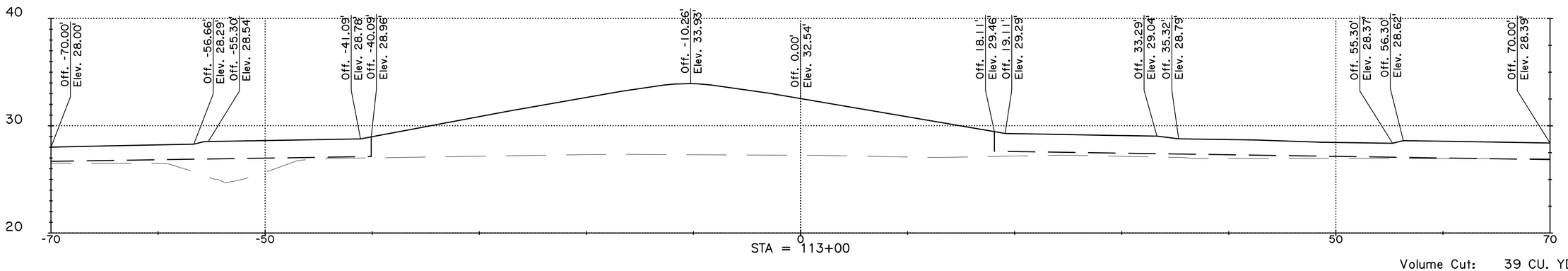
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS07
6/18/2026 10:14 AM

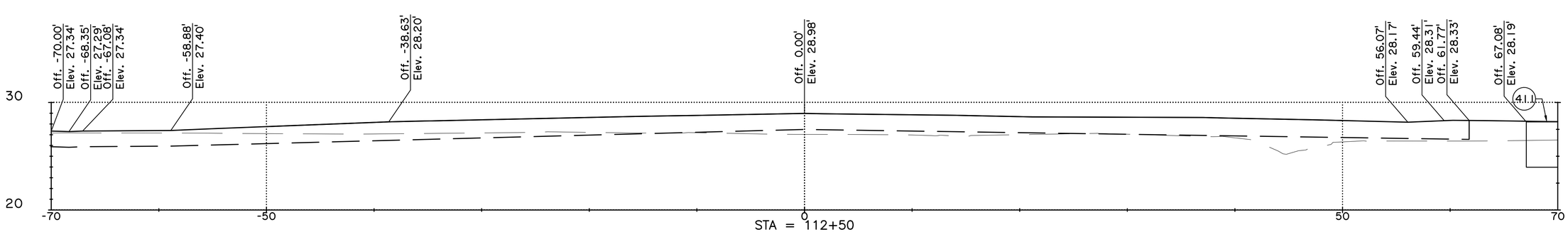
LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 113+00

Volume Cut: 39 CU. YD.
Volume Fill: 310 CU. YD.

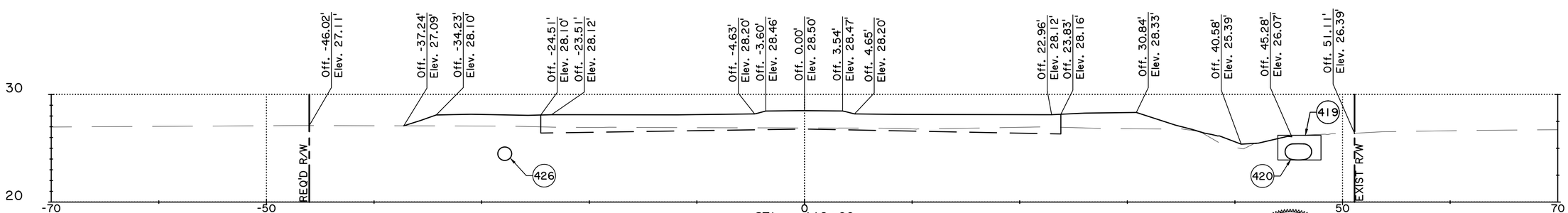
ORIGINAL EL = 27.26
DESIGN EL = 32.54



STA = 112+50

Volume Cut: 55 CU. YD.
Volume Fill: 59 CU. YD.

ORIGINAL EL = 27.03
DESIGN EL = 28.98



STA = 112+00

Volume Cut: 39 CU. YD.
Volume Fill: 33 CU. YD.

ORIGINAL EL = 26.89
DESIGN EL = 28.50

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
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CIVIL ENGINEERING

SHEET NUMBER 407

CO234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
CROSS SECTIONS

DESIGNED	MDB	DATE	4/17/26
CHECKED	NAB	SCALE	N.T.S.
DETAILED	MDB		
CHECKED	THB		

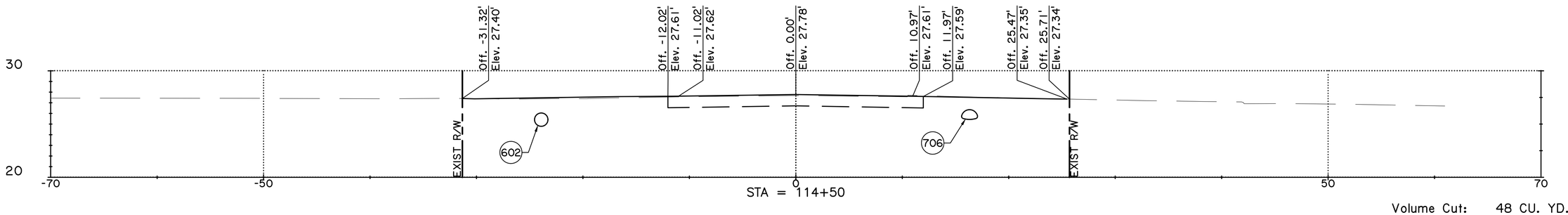
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS08
6/18/2026 10:14 AM

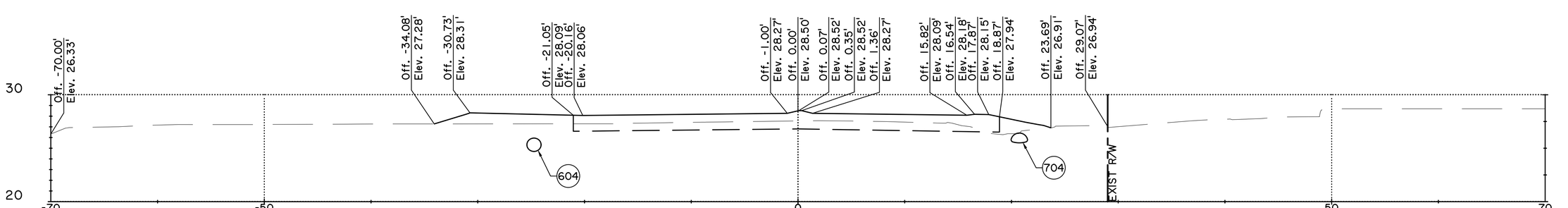
LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 114+50

Volume Cut: 48 CU. YD.
Volume Fill: 15 CU. YD.

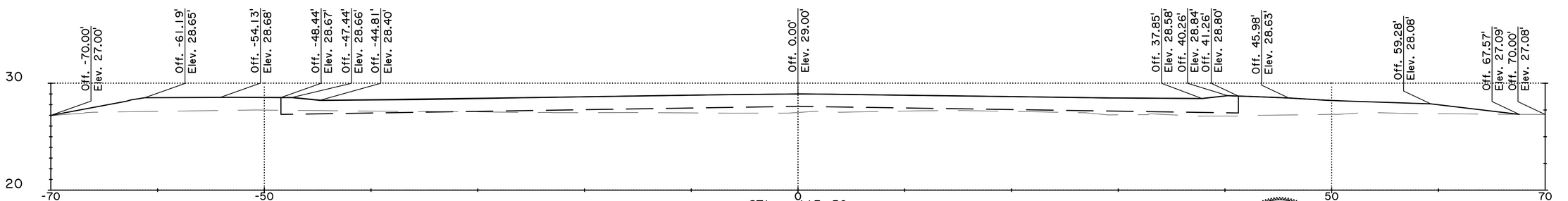
ORIGINAL EL = 27.67
DESIGN EL = 27.77



STA = 114+00

Volume Cut: 29 CU. YD.
Volume Fill: 79 CU. YD.

ORIGINAL EL = 27.55
DESIGN EL = 28.50



STA = 113+50

Volume Cut: 3 CU. YD.
Volume Fill: 340 CU. YD.

ORIGINAL EL = 27.27
DESIGN EL = 29.00

STATE OF LOUISIANA
TYLER H. BRANCH
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CIVIL ENGINEERING

SHEET NUMBER 408

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
CROSS SECTIONS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING.
IF NOT, SCALE AS REQ'D.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL

R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS09

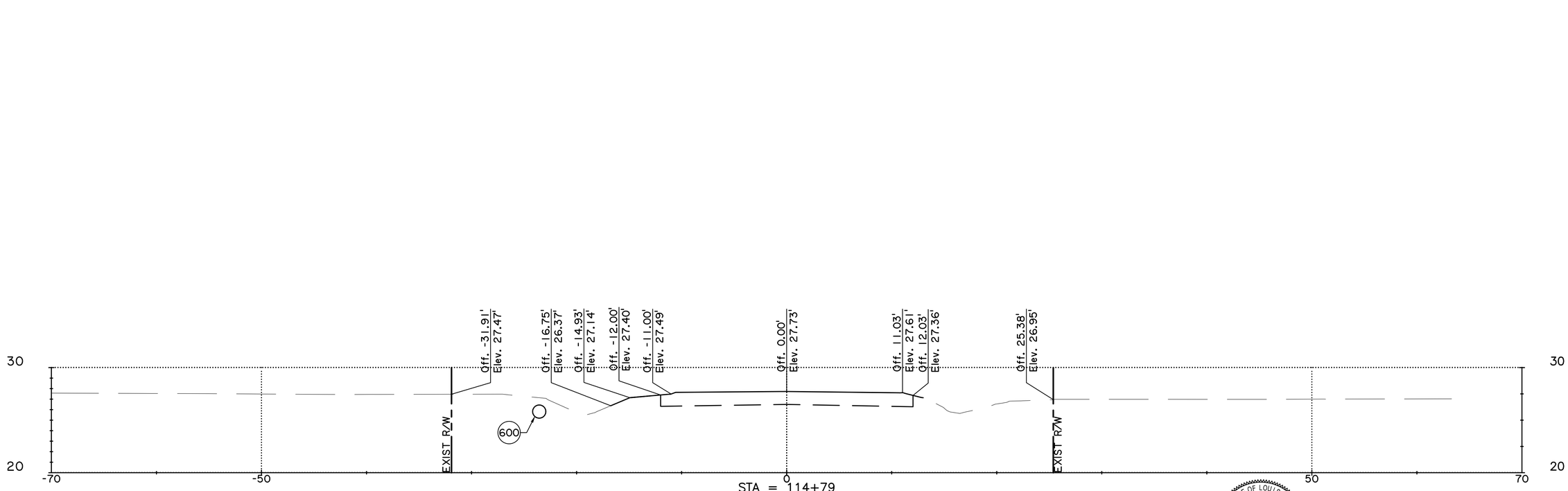
6/18/2026 10:14 AM

LEGEND

EXISTING GROUND LINE

DESIGN GROUND LINE

DESIGN SUBGRADE



ORIGINAL EL = 27.73
DESIGN EL = 27.73

Volume Cut: 29 CU. YD.
Volume Fill: 1 CU. YD.

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
PROFESSIONAL ENGINEER
IN
CIVIL ENGINEERING

SHEET NUMBER 409

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
CROSS SECTIONS

DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	N.T.S.

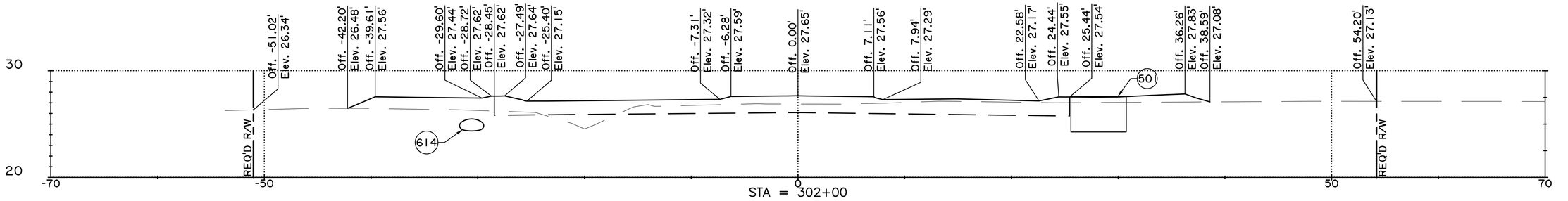
FORTE & TABLADA

ATTENTION:
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IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
6/18/2026 10:15 AM
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS10

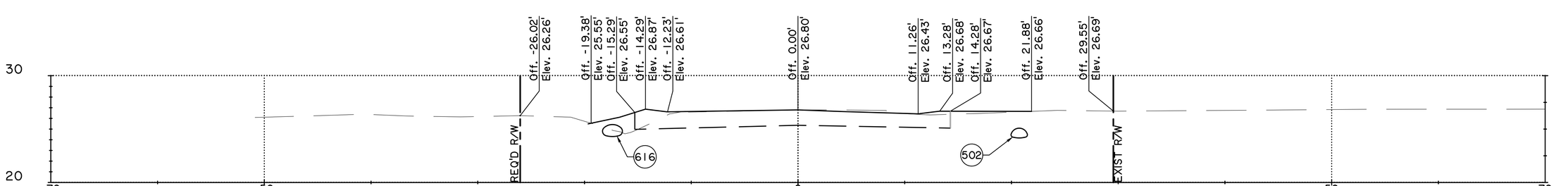
LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 302+00

Volume Cut: 75 CU. YD.
Volume Fill: 29 CU. YD.

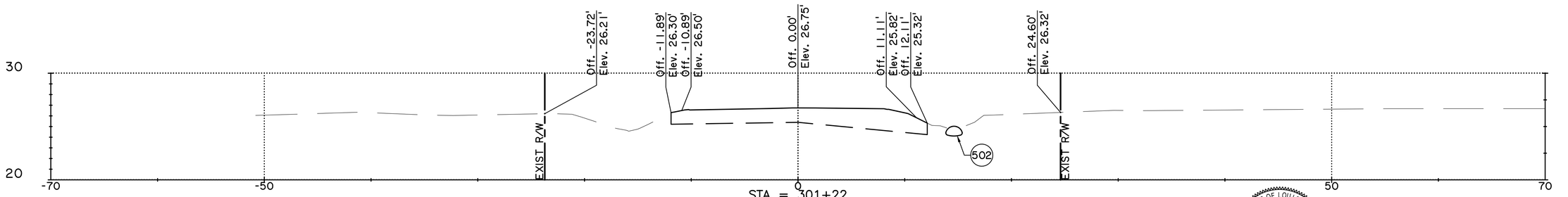
ORIGINAL EL = 26.88
DESIGN EL = 27.65



STA = 301+50

Volume Cut: 39 CU. YD.
Volume Fill: 3 CU. YD.

ORIGINAL EL = 26.80
DESIGN EL = 26.80



STA = 301+22

Volume Cut: 0 CU. YD.
Volume Fill: 0 CU. YD.

ORIGINAL EL = 26.75
DESIGN EL = 26.75

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
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CIVIL ENGINEERING

SHEET NUMBER 410

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
CROSS SECTIONS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

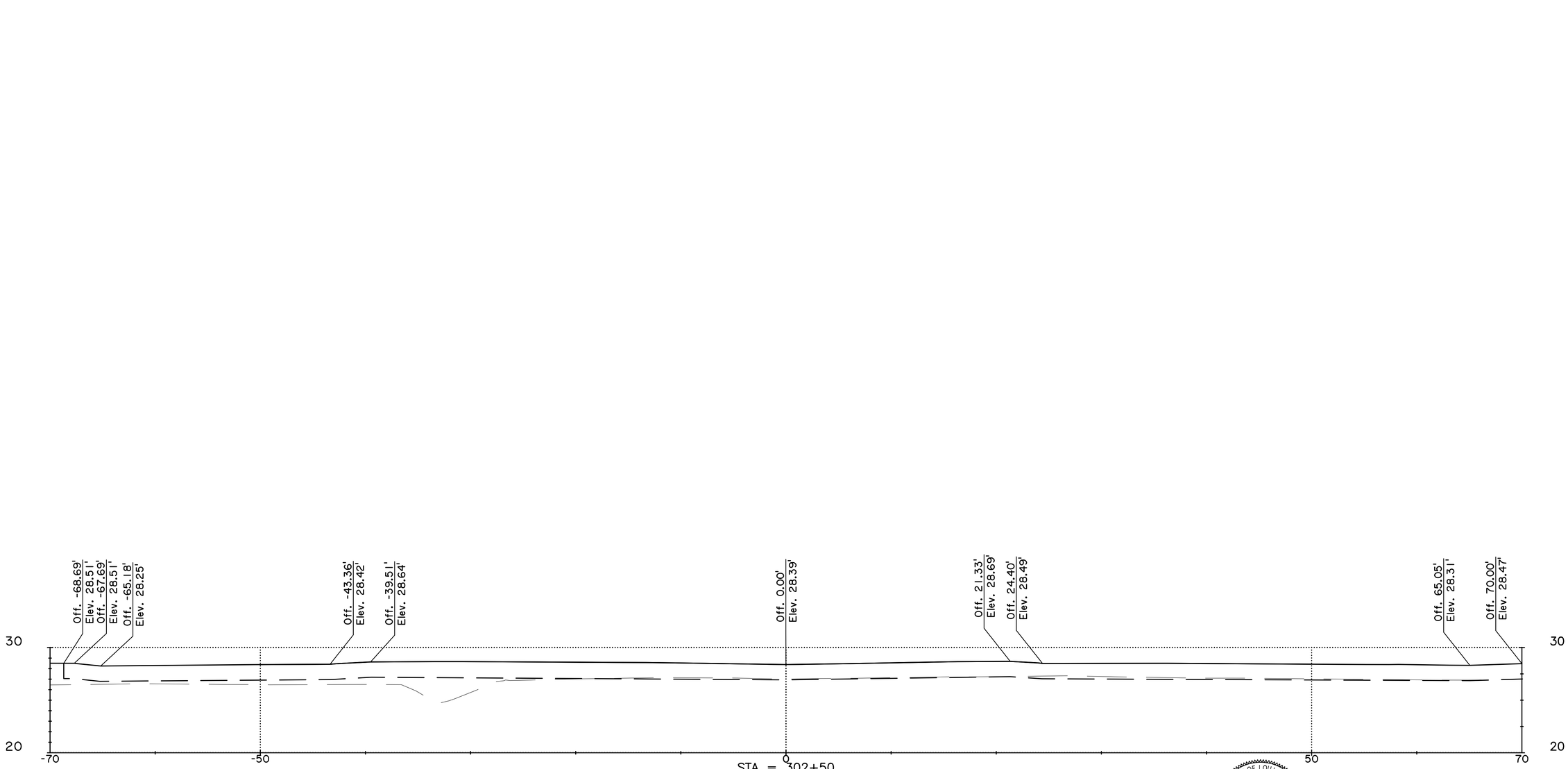
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS11
6/18/2026 10:15 AM

LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 302+50

ORIGINAL EL = 27.01
DESIGN EL = 28.39

STATE OF LOUISIANA
TYLER H. BRANCH
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REGISTERED
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CIVIL ENGINEERING

Volume Cut: 47 CU. YD.
Volume Fill: 53 CU. YD.

SHEET NUMBER 411

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
CROSS SECTIONS

DESIGNED	MDB
CHECKED	NAB
DETAILED	MDB
CHECKED	THB
DATE	4/17/26
SCALE	N.T.S.

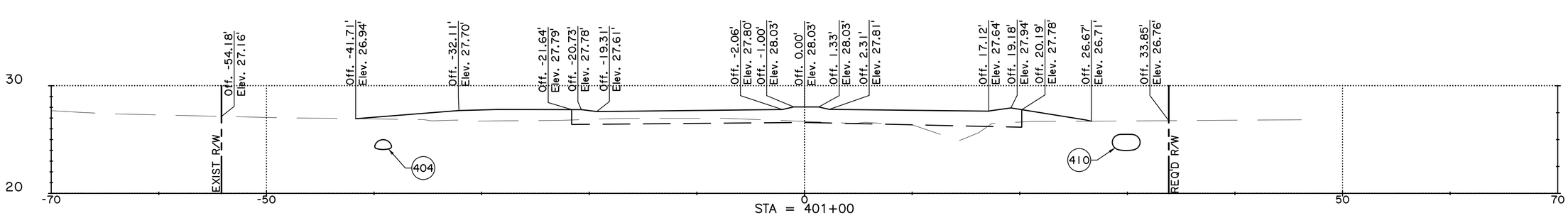
FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, ADJUST SCALE ACCORDINGLY.
THIS BAR = 1 INCH.
1"

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS12
6/18/2026 10:15 AM

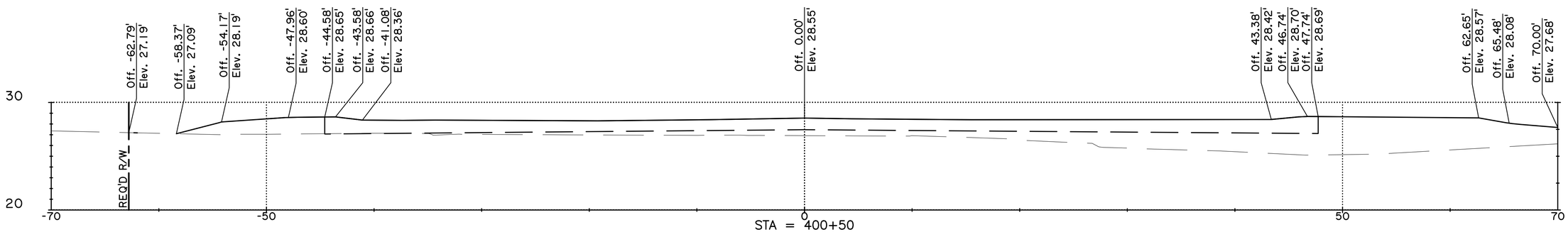
LEGEND
EXISTING GROUND LINE
DESIGN GROUND LINE
DESIGN SUBGRADE



STA = 401+00

Volume Cut: 48 CU. YD.
Volume Fill: 157 CU. YD.

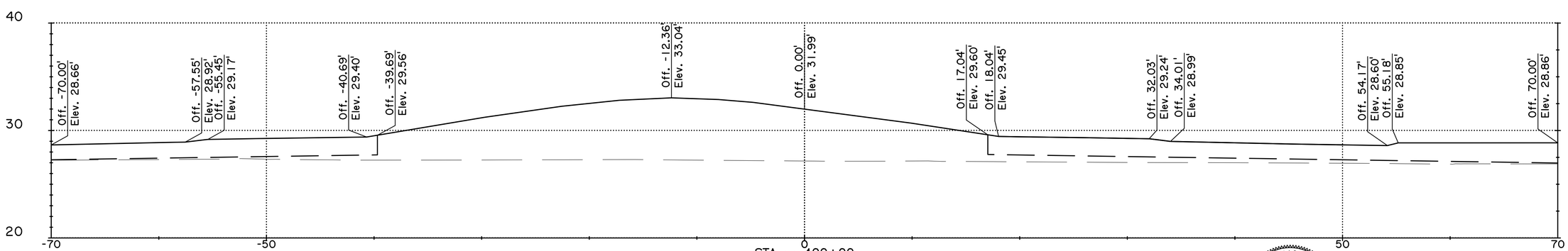
ORIGINAL EL = 26.68
DESIGN EL = 28.03



STA = 400+50

Volume Cut: 76 CU. YD.
Volume Fill: 391 CU. YD.

ORIGINAL EL = 26.91
DESIGN EL = 28.55



STA = 400+00

Volume Cut: 0 CU. YD.
Volume Fill: 0 CU. YD.

ORIGINAL EL = 27.16
DESIGN EL = 31.99

STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED PROFESSIONAL ENGINEER
CIVIL ENGINEERING

SHEET NUMBER 412

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON
CROSS SECTIONS

DESIGNED	MDB	DATE	4/17/26
CHECKED	NAB	SCALE	N.T.S.
DETAILED	MDB		
CHECKED	THB		

FORTE & TABLADA

ATTENTION:
THIS BAR = 1 INCH ON ORIGINAL DRAWING. IF NOT, SCALE ACCORDINGLY.
THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY

100% FINAL PLANS SUBMITTAL

6/18/2026 10:15 AM

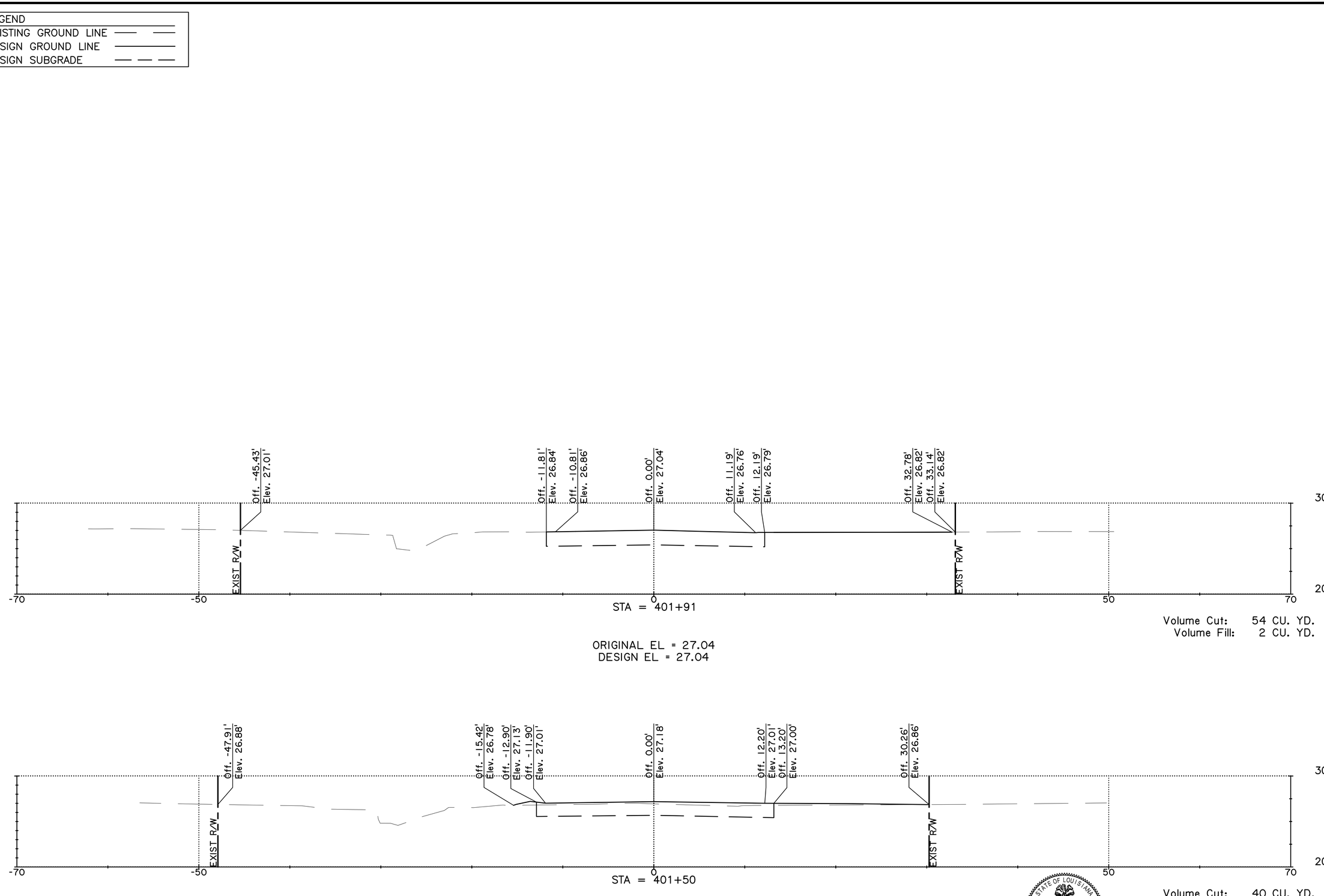
R:\2023\231312 - JEFFERSON_COLUMBIA_30TH ROUNDABOUT\7.0 CAD\PRODUCTION PLAN\231312C-XS13

LEGEND

EXISTING GROUND LINE

DESIGN GROUND LINE

DESIGN SUBGRADE



STATE OF LOUISIANA
TYLER H. BRANCH
License No. 41576
REGISTERED
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CIVIL ENGINEERING

SHEET NUMBER 413

C0234: COLUMBIA ROUNDABOUTS
ST. TAMMANY PARISH
CITY OF COVINGTON

CROSS SECTIONS

DESIGNED MDB
CHECKED NAB
DETAILED MDB
CHECKED THB
DATE 4/17/26
SCALE N.T.S.

FORTE & TABLADA

ATTENTION:
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THIS BAR = 1 INCH.

NO.	DATE	REVISION DESCRIPTION	BY