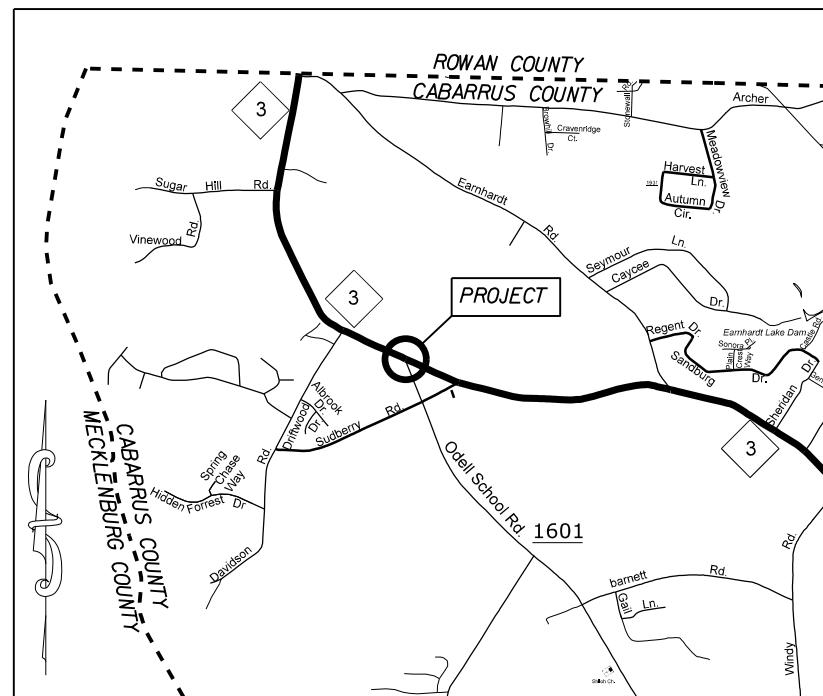


TIP:W-5601HQ

PROJECT: 47858



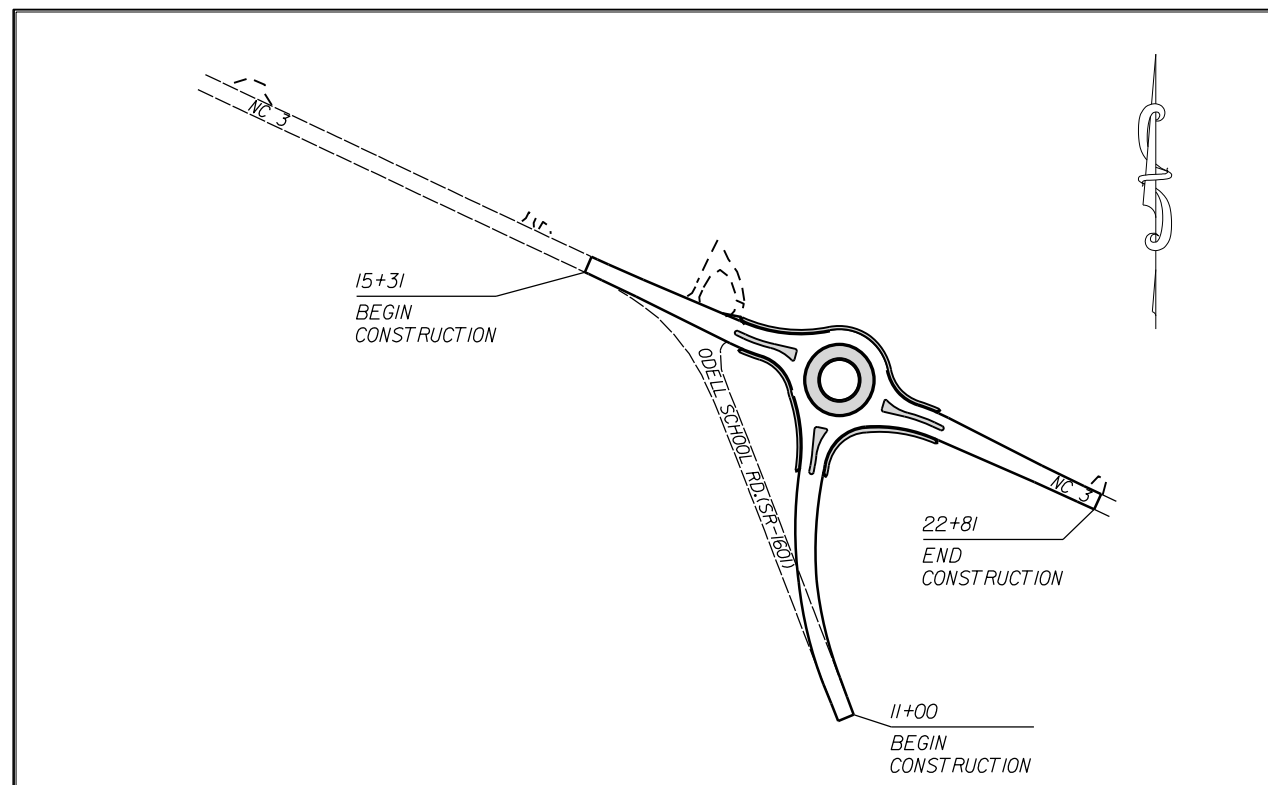
VICINITY MAP NOT TO SCALE

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
CABARRUS COUNTY

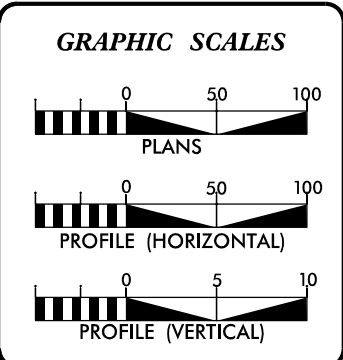
LOCATION: ROUNDABOUT AT THE INTERSECTION OF NC 3
 AND ODELL SCHOOL RD. (SR-1601)

TYPE OF WORK: GRADING, DRAINAGE, MILLING, PAVING, MONOLITHIC CONCRETE ISLANDS,
 AND THERMOPLASTIC PAVEMENT MARKINGS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	47858	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
50138.1.226	HSIP-0003(011)	P.E.	
50138.2.226	HSIP-0003(011)	R/W	
47858		CONST.	



CLEARING ON THIS PROJECT SHALL BE TO THE LIMITS ESTABLISHED BY METHOD III AS DESCRIBED IN THE NCDOT STANDARD DRAWINGS



DESIGN DATA

ADT	=	
ADT	=	
DHV	=	%
D	=	%
T	=	%
V	=	MPH

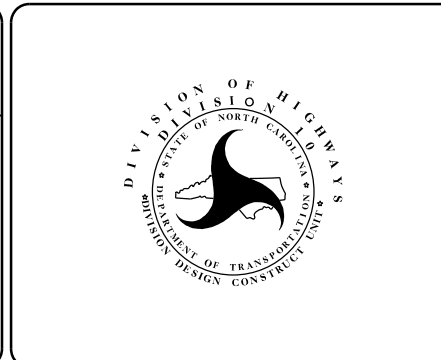
PROJECT LENGTH

LENGTH OF ROADWAY PROJECT 50138.3.226	=	0.24	MILES
TOTAL LENGTH OF STATE PROJECT 50138.3.226	=	0.24	MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
 DIVISION TEN
 DIVISION DESIGN / CONSTRUCT UNIT

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:	DONALD HARWARD PROJECT ENGINEER
LETTING DATE: JUNE 15, 2022	JASON BROOKS PROJECT DESIGN ENGINEER



ROADWAY DESIGN ENGINEER

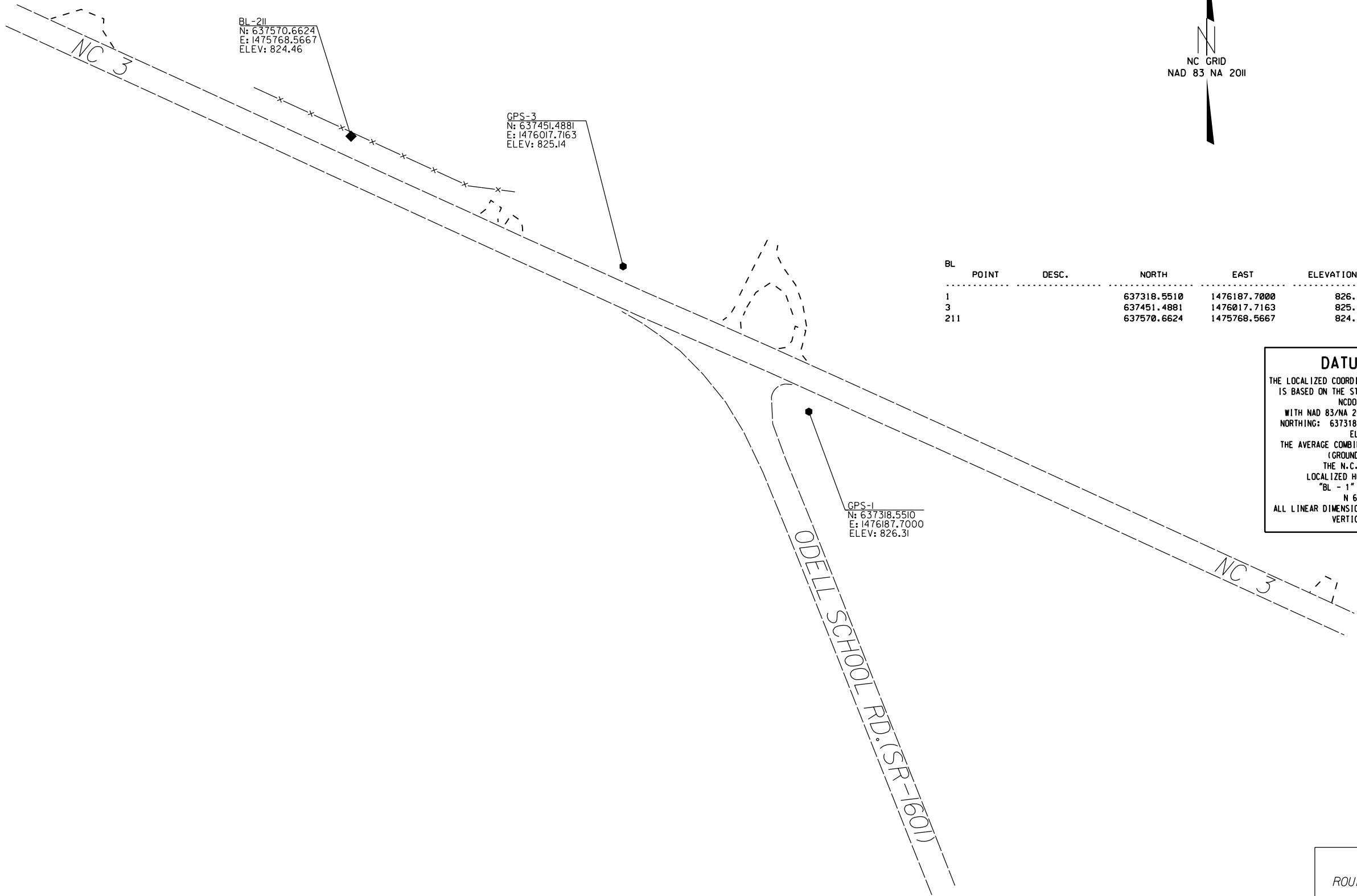
DESIGNED by:

 A92E75CC0FFB43B...

SIGNATURE

SURVEY CONTROL SHEET

PROJECT NO.	SHEET NO.
47858	IA
F.A. PROJECT NO.	



BL	POINT	DESC.	NORTH	EAST	ELEVATION	L-RAB STATION	OFFSET
	1		637318.5510	1476187.7000	826.31	17+75.20	28.02 RT
	3		637451.4881	1476017.7163	825.14	15+65.77	23.99 LT
	211		637570.6624	1475768.5667	824.46	12+89.38	29.07 LT

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "BL - 1" WITH NAD 83/NA 2011 STATE PLANE GRID COORDINATES OF NORTHING: 637318.551(±) EASTING: 1476187.7000(±) ELEVATION: 826.31(±)

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99984643

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "BL - 1" TO -L- RAB STATION 10+00 IS
 N 63° 29' 09" W 775.88'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

NOTES:

1. PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
2. THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED BY THE DIVISION IO DDC UNIT. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE DIVISION IO DDC UNIT.

ROUNDABOUT AT THE INTERSECTION OF NC 3
AND ODELL SCHOOL RD.(SR-1601)

SCALE	1"=50'		REVISIONS
DATE	11-2019		
DWG. BY	JCB		
DESIGN BY	JDH		
APPROVED	JDH		

RIGHT OF WAY, EASEMENT AND PROPOSED ALIGNMENT SHEET

ROW MARKER IRON PIN & CAP

ALIGN	STATION	OFFSET	NORTH	EAST
L_RAB	15+31.00	30.00	637416.3778	1475963.9413
L_RAB	15+31.00	22.00	637423.6817	1475967.2052
L_RAB	15+31.00	-30.00	637471.1571	1475988.4205
L_RAB	15+31.00	-22.00	637463.8532	1475985.1566
L_RAB	16+78.56	30.00	637356.1768	1476098.6584
L_RAB	17+00.00	-30.00	637402.2073	1476142.7154
L_RAB	17+47.70	36.00	637322.4876	1476159.3413
L_RAB	17+60.00	-38.00	637385.0320	1476200.7586
L_RAB	18+00.00	36.00	637301.1515	1476207.0871
L_RAB	18+70.00	-105.00	637401.3237	1476328.5224
L_RAB	19+30.00	-105.00	637376.1878	1476384.0763
L_RAB	20+00.00	36.00	637218.8448	1476388.9963
L_RAB	20+15.00	-50.00	637290.7852	1476438.4491
L_RAB	21+05.00	30.00	637180.5715	1476486.9562
L_RAB	22+50.00	30.00	637120.1848	1476618.7836
L_RAB	22+50.00	-22.00	637167.4609	1476640.4395
L_RAB	22+50.00	22.00	637127.4581	1476622.1153
L_RAB	22+50.00	-30.00	637174.7341	1476643.7712

L_RAB			
TYPE	STATION	NORTH	EAST
POT	10+00.00	637664.9178	1475493.4263
POT	15+00.00	637456.4150	1475947.8783
POT	19+00.00	637293.2204	1476313.0734
POT	25+00.00	637043.3445	1476858.5659

ROW MARKER IRON PIN & CAP

ALIGN	STATION	OFFSET	NORTH	EAST
Y_RAB	11+25.00	30.00	636845.2985	1476357.0817
Y_RAB	11+25.00	22.00	636842.3508	1476349.6446
Y_RAB	11+25.00	-30.00	636823.1906	1476301.3032
Y_RAB	11+25.00	-22.00	636826.1383	1476308.7403
Y_RAB	11+96.55	30.00	636911.8118	1476330.7190
Y_RAB	11+96.55	-30.00	636889.7038	1476274.9405
Y_RAB	12+83.52	-30.00	636977.9235	1476248.5799
Y_RAB	13+50.00	30.00	637051.9054	1476298.8164
Y_RAB	13+73.00	-37.00	637071.8610	1476230.8110
Y_RAB	14+30.00	-35.30	637132.8610	1476234.5002
Y_RAB	15+00.00	-41.00	637208.0882	1476240.8413
Y_RAB	15+00.00	45.00	637188.5200	1476324.5854

Y_RAB			
TYPE	STATION	NORTH	EAST
POT	10+00.00	636718.0394	1476375.2506
PC	11+96.55	636900.7578	1476302.8298
PT	16+00.00	637293.2204	1476313.0734

PERMANENT DRAINAGE EASEMENT

ALIGN	STATION	OFFSET	NORTH	EAST
L_RAB	21+05.00	35.00	637176.0257	1476484.8739
L_RAB	21+10.00	-48.00	637249.4032	1476523.9859
L_RAB	21+10.00	-41.91	637243.8709	1476521.4517
L_RAB	21+25.00	35.00	637167.6965	1476503.0570
L_RAB	21+25.00	30.00	637172.2423	1476505.1393
L_RAB	21+30.00	-40.21	637233.9942	1476538.9259
L_RAB	21+30.00	-48.00	637241.0740	1476542.1689

I, Barry D. Davis, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item, R/W and Easement Staking, was performed under my responsible charge meeting NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures as of 2017. Those standards can be found at <https://connect.ncdot.gov/resources/Location/Pages/>.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from survey control established under my supervision; that the depicted property data shown herein were surveyed under my supervision; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (see deeds for final determination).

Witness my signature, registration number and seal this 30th day of SEP 2020

Barry D. Davis, DocuSigned by: PLS# L-4384
Professional Land Surveyor *Barry Davis*
0E2AAE4F48174DC...



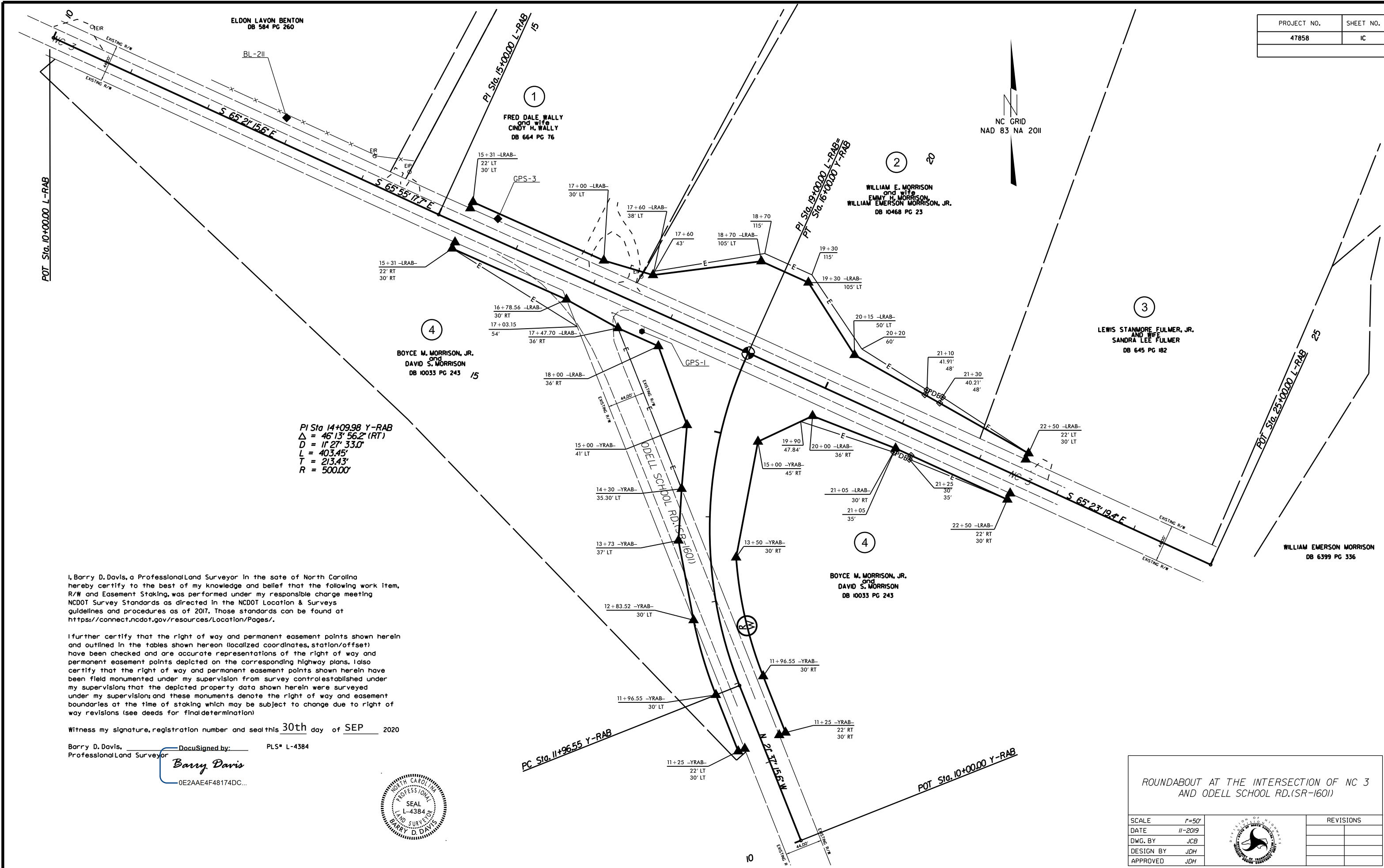
NOTES:

- PROJECT CONTROL WAS ESTABLISHED USING GNSS, THE GLOBAL NAVIGATION SATELLITE SYSTEM.
- THE SURVEY CONTROL DATA FOR THIS PROJECT HAS BEEN COMPILED BY THE DIVISION IO DDC UNIT. IF FURTHER INFORMATION REGARDING PROJECT CONTROL IS NEEDED, PLEASE CONTACT THE DIVISION IO DDC UNIT.

ROUNDABOUT AT THE INTERSECTION OF NC 3
AND ODELL SCHOOL RD. (SR-1601)

SCALE	N/A		REVISIONS
DATE	11-2019		
DWG. BY	JCB		
DESIGN BY	JDH		
APPROVED	JDH		

PROJECT NO.	SHEET NO.
47858	1C



PI Sta 14+09.98 Y-RAB
 $\Delta = 46^{\circ} 13' 56.2''$ (RT)
 $D = 11^{\circ} 27' 33.0''$
 $L = 403.45'$
 $T = 213.43'$
 $R = 500.00'$

I, Barry D. Davis, a Professional Land Surveyor in the state of North Carolina hereby certify to the best of my knowledge and belief that the following work item, R/W and Easement Staking, was performed under my responsible charge meeting NCDOT Survey Standards as directed in the NCDOT Location & Surveys guidelines and procedures as of 2017. Those standards can be found at <https://connect.ncdot.gov/resources/Location/Pages/>.

I further certify that the right of way and permanent easement points shown herein and outlined in the tables shown hereon (localized coordinates, station/offset) have been checked and are accurate representations of the right of way and permanent easement points depicted on the corresponding highway plans. I also certify that the right of way and permanent easement points shown herein have been field monumented under my supervision from survey control established under my supervision; that the depicted property data shown herein were surveyed under my supervision; and these monuments denote the right of way and easement boundaries at the time of staking which may be subject to change due to right of way revisions (see deeds for final determination).

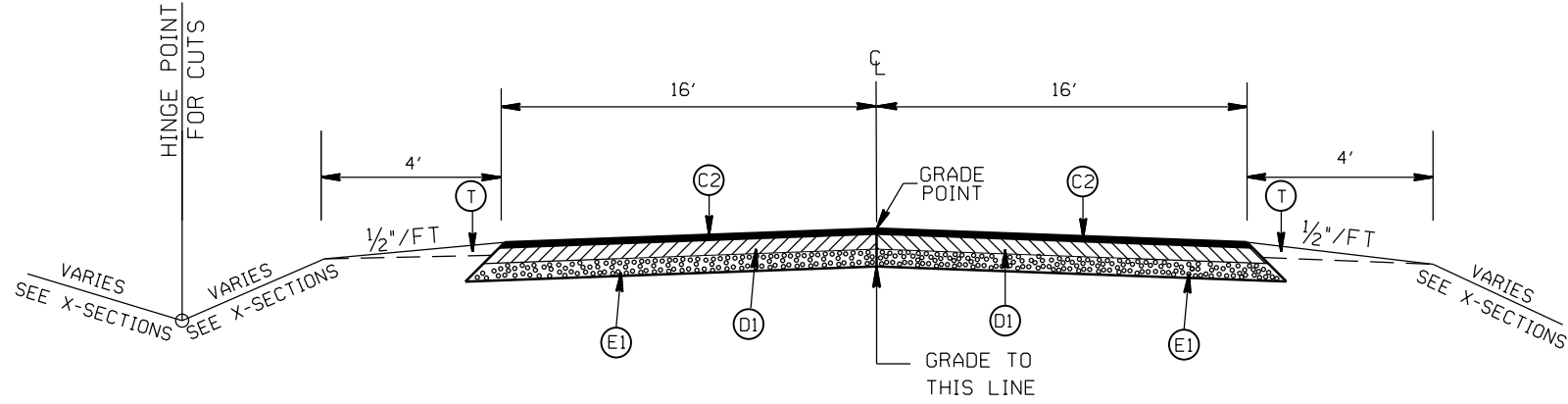
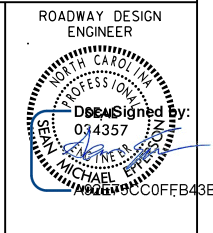
Witness my signature, registration number and seal this 30th day of SEP 2020

Barry D. Davis, Professional Land Surveyor
 DocuSigned by: Barry Davis
 PLS# L-4384
 0E2AAE4F48174DC...



ROUNDABOUT AT THE INTERSECTION OF NC 3 AND ODELL SCHOOL RD. (SR-1601)	
SCALE	1"=50'
DATE	11-2019
DWG. BY	JCB
DESIGN BY	JDH
APPROVED	JDH
REVISIONS	



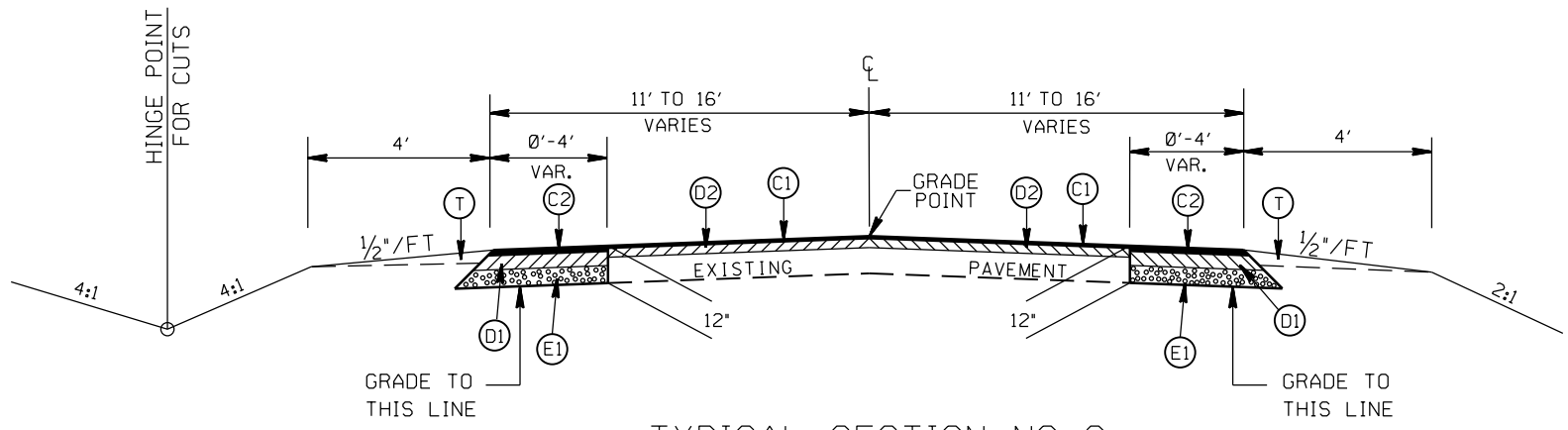


TYPICAL SECTION NO. 3
 STA. 17+30.00 TO 17+46.48 -LRAB-
 STA. 12+00.00 TO 14+71.356 -YRAB-

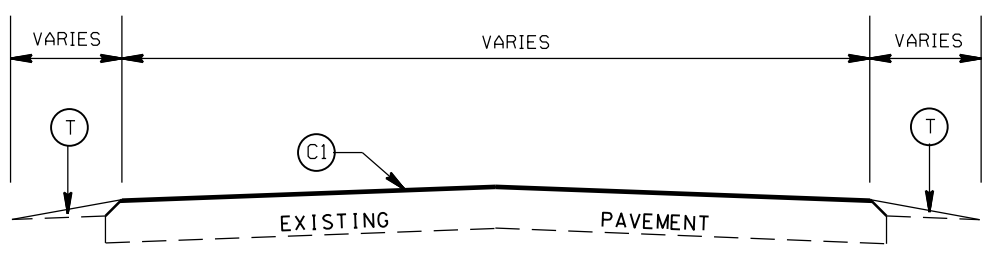
*UTILIZE WELDED WIRE MESH (EITHER 4X4 W3.5XW3.5 OR 6X6 W5XW5)
 IN PROP. 7" TRUCK MOUNTABLE CONC. ISLAND

PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1 1/2" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(D1)	PROP. APPROX. 4" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
(D2)	PROP. VARIABLE DEPTH ASPHALT CONC. INTERMEDIATE COURSE.
(E1)	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(J)	PROP. 6" ABC STONE
(R1)	PROP. 2'-6" CONC. CURB & GUTTER
(R2)	PROP. 1'-6" CONC. CURB & GUTTER, CLASS AA CONCRETE
(R3)	PROP. 7" TRUCK MOUNTABLE CONC. ISLAND, CLASS AA CONCRETE
(R4)	PROP. 5" MONOLITHIC CONC. ISLAND (SURFACE MOUNTED)
(R5)	PROP. 1'-6" CONC. CURB & GUTTER W/ BLACK TINT, CLASS AA CONCRETE
(R6)	PROP. 7" TRUCK MOUNTABLE CONC. ISLAND W/ BLACK TINT, CLASS AA CONCRETE
(T)	EARTH MATERIAL



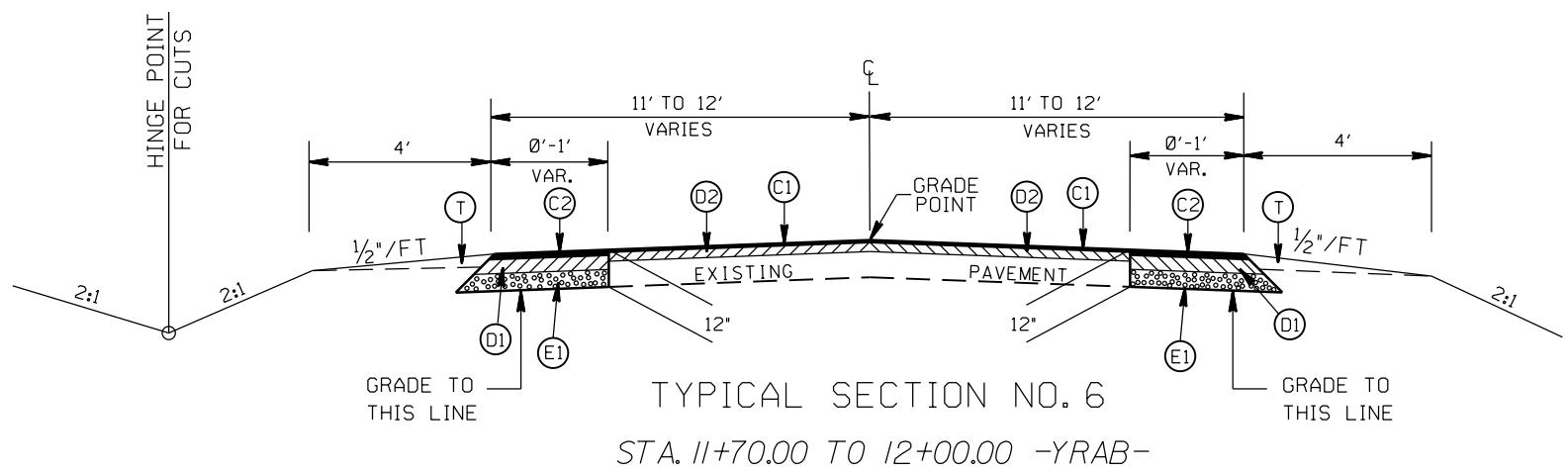
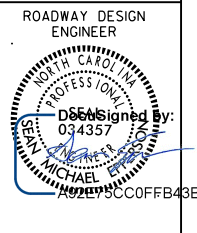
TYPICAL SECTION NO. 2
 STA. 15+56.00 TO 17+30.00 -LRAB-
 STA. 20+53.52 TO 22+56.00 -LRAB-



TYPICAL SECTION NO. 1
 STA 15+31.00 TO 15+56.00 -LRAB-
 STA 22+56.00 TO 22+81.00 -LRAB-
 STA 11+00.00 TO 11+70.00 -YRAB-

ROUNDABOUT AT THE INTERSECTION
 OF NC 3 AND ODELL SCHOOL RD. (SR-1601)

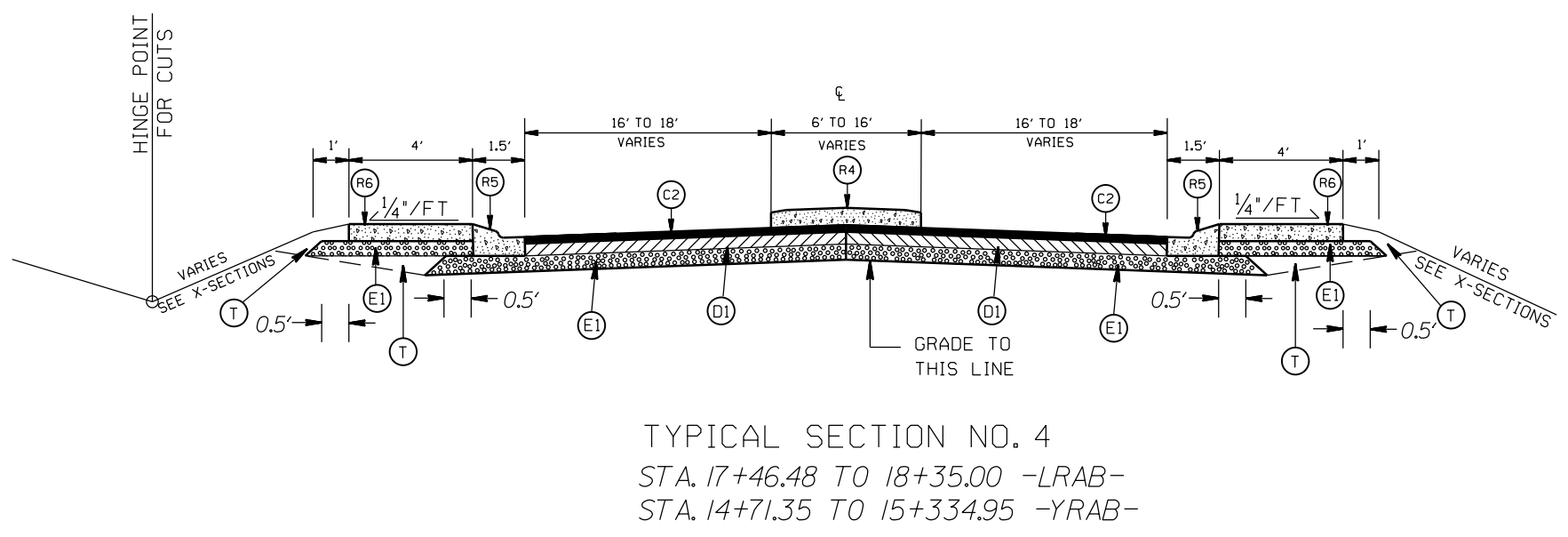
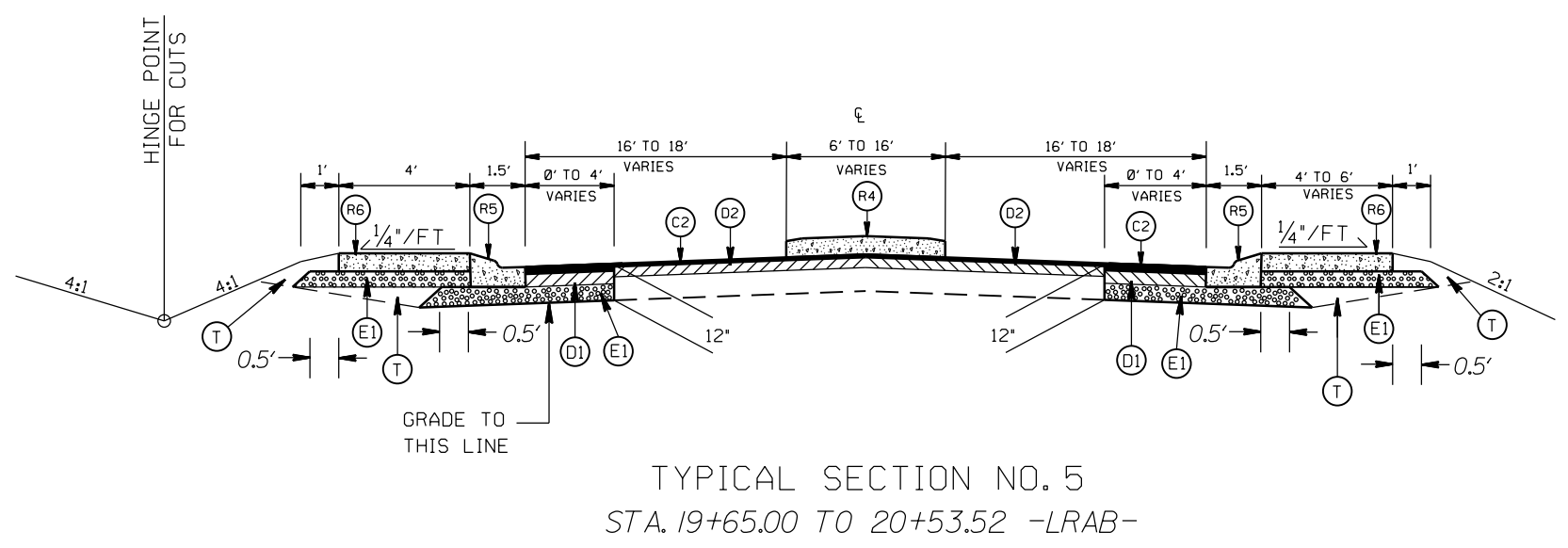
SCALE	N/A		REVISIONS
DATE	3-2019		
DWG. BY	JCB		
DESIGN BY	JDH		
APPROVED	JDH		



*UTILIZE WELDED WIRE MESH (EITHER 4X4 W3.5XW3.5 OR 6X6 W5XW5)
IN PROP. 7" TRUCK MOUNTABLE CONC. ISLAND

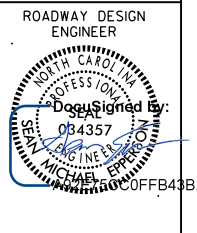
PAVEMENT SCHEDULE

(C1)	PROP. APPROX. 1 1/2" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(D1)	PROP. APPROX. 4" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
(D2)	PROP. VARIABLE DEPTH ASPHALT CONC. INTERMEDIATE COURSE.
(E1)	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(J)	PROP. 6" ABC STONE
(R1)	PROP. 2'-6" CONC. CURB & GUTTER
(R2)	PROP. 1'-6" CONC. CURB & GUTTER, CLASS AA CONCRETE
(R3)	PROP. 7" TRUCK MOUNTABLE CONC. ISLAND, CLASS AA CONCRETE
(R4)	PROP. 5" MONOLITHIC CONC. ISLAND (SURFACE MOUNTED)
(R5)	PROP. 1'-6" CONC. CURB & GUTTER W/ BLACK TINT, CLASS AA CONCRETE
(R6)	PROP. 7" TRUCK MOUNTABLE CONC. ISLAND W/ BLACK TINT, CLASS AA CONCRETE
(T)	EARTH MATERIAL

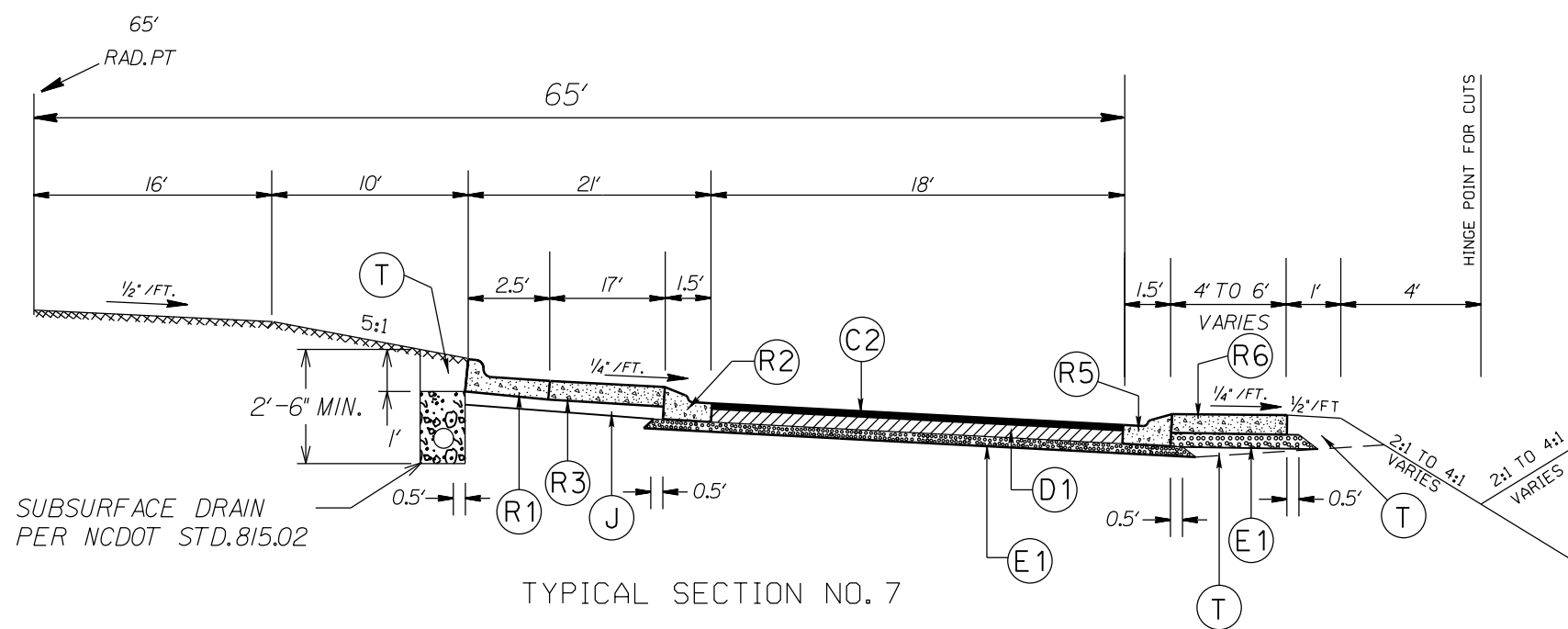


ROUNDABOUT AT THE INTERSECTION
OF NC 3 AND ODELL SCHOOL RD. (SR-1601)

SCALE	N/A		REVISIONS
DATE	3-2019		
DWG. BY	JCB		
DESIGN BY	JDH		
APPROVED	JDH		



*UTILIZE WELDED WIRE MESH (EITHER 4X4 W3.5XW3.5 OR 6X6 W5XW5)
IN PROP. 7" TRUCK MOUNTABLE CONC. ISLAND



SUBSURFACE DRAIN
PER NCDOT STD. 815.02

TYPICAL SECTION NO. 7
ROUNDBOUT
STA. 18+35.00 TO 19+65.00 -LRAB-
STA. 15+34.95 TO 16+64.95 -YRAB-

PAVEMENT SCHEDULE

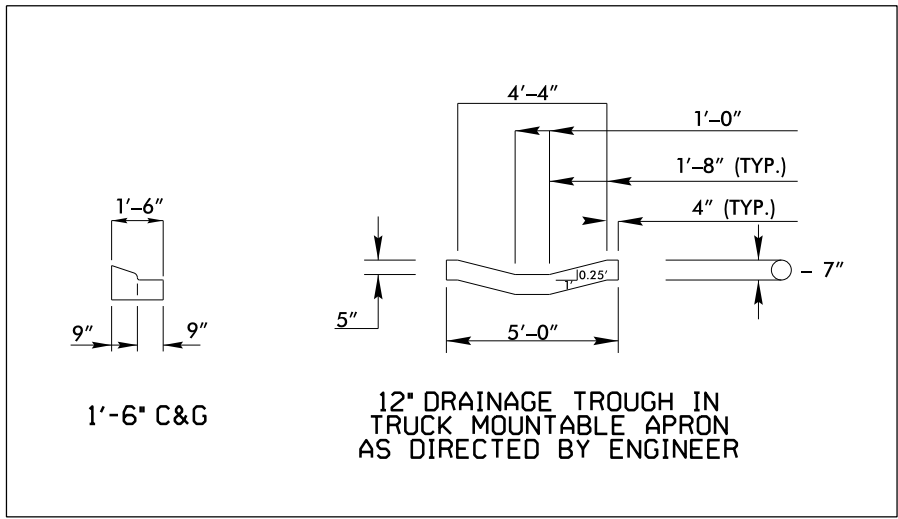
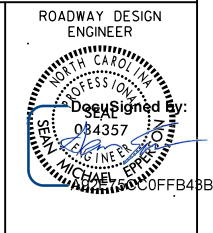
(C1)	PROP. APPROX. 1½" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(D1)	PROP. APPROX. 4" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
(D2)	PROP. VARIABLE DEPTH ASPHALT CONC. INTERMEDIATE COURSE.
(E1)	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(J)	PROP. 6" ABC STONE
(R1)	PROP. 2'-6" CONC. CURB & GUTTER
(R2)	PROP. 1'-6" CONC. CURB & GUTTER, CLASS AA CONCRETE
(R3)	PROP. 7" TRUCK MOUNTABLE CONC. ISLAND, CLASS AA CONCRETE
(R4)	PROP. 5" MONOLITHIC CONC. ISLAND (SURFACE MOUNTED)
(R5)	PROP. 1'-6" CONC. CURB & GUTTER W/ BLACK TINT, CLASS AA CONCRETE
(R6)	PROP. 7" TRUCK MOUNTABLE CONC. ISLAND W/ BLACK TINT, CLASS AA CONCRETE
(T)	EARTH MATERIAL

ROUNDBOUT AT THE INTERSECTION
OF NC 3 AND ODELL SCHOOL RD. (SR-1601)

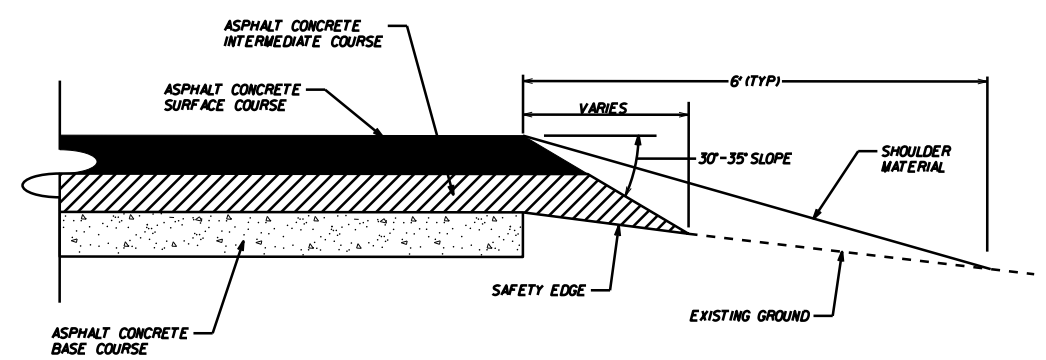
SCALE	N/A
DATE	3-2019
DWG. BY	JCB
DESIGN BY	JDH
APPROVED	JDH



REVISIONS



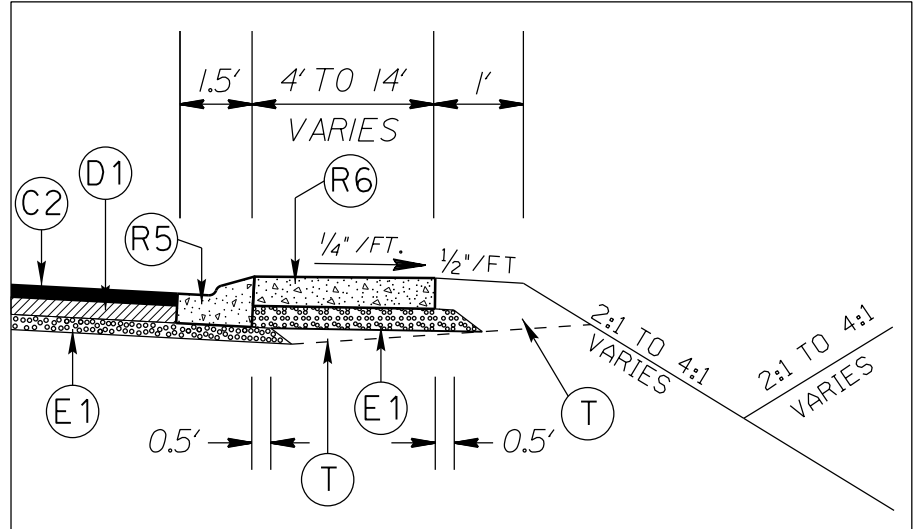
DRAINAGE TROUGH DETAIL



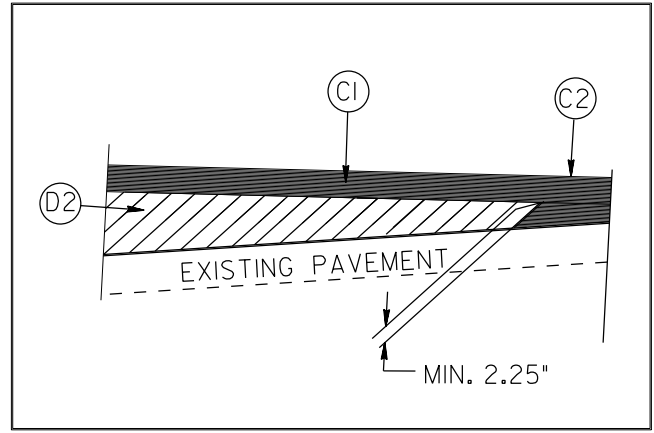
SAFETY EDGE DETAIL

PAVEMENT SCHEDULE

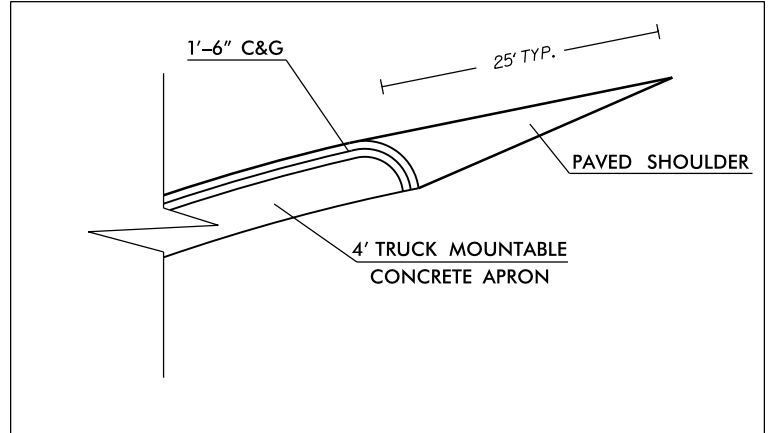
(C1)	PROP. APPROX. 1½" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
(C2)	PROP. APPROX. 3" ASPHALT CONC. SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
(D1)	PROP. APPROX. 4" ASPHALT CONC. INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
(D2)	PROP. VARIABLE DEPTH ASPHALT CONC. INTERMEDIATE COURSE.
(E1)	PROP. APPROX. 5" ASPHALT CONC. BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
(J)	PROP. 6" ABC STONE
(R1)	PROP. 2'-6" CONC. CURB & GUTTER
(R2)	PROP. 1'-6" CONC. CURB & GUTTER, CLASS AA CONCRETE
(R3)	PROP. 7" TRUCK MOUNTABLE CONC. ISLAND, CLASS AA CONCRETE
(R4)	PROP. 5" MONOLITHIC CONC. ISLAND (SURFACE MOUNTED)
(R5)	PROP. 1'-6" CONC. CURB & GUTTER W/ BLACK TINT, CLASS AA CONCRETE
(R6)	PROP. 7" TRUCK MOUNTABLE CONC. ISLAND W/ BLACK TINT, CLASS AA CONCRETE
(T)	EARTH MATERIAL



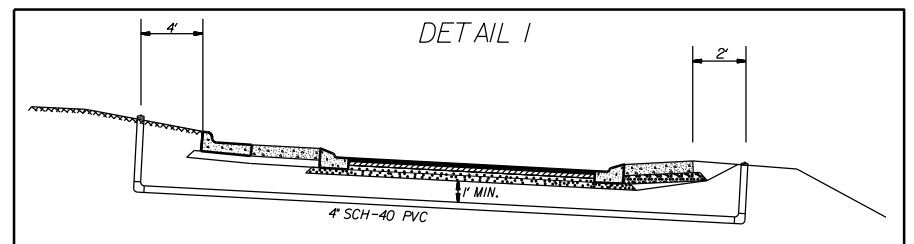
APRON DETAIL



WEDGING DETAIL



CURB DETAIL

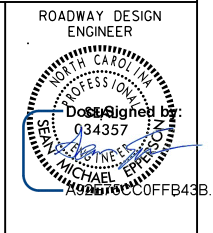


PVC PIPE DETAIL

*UTILIZE WELDED WIRE MESH (EITHER 4X4 W3.5XW3.5 OR 6X6 W5XW5) IN PROP. 7" TRUCK MOUNTABLE CONC. ISLAND

ROUNDBOUT AT THE INTERSECTION OF NC 3 AND ODELL SCHOOL RD.(SR-1601)

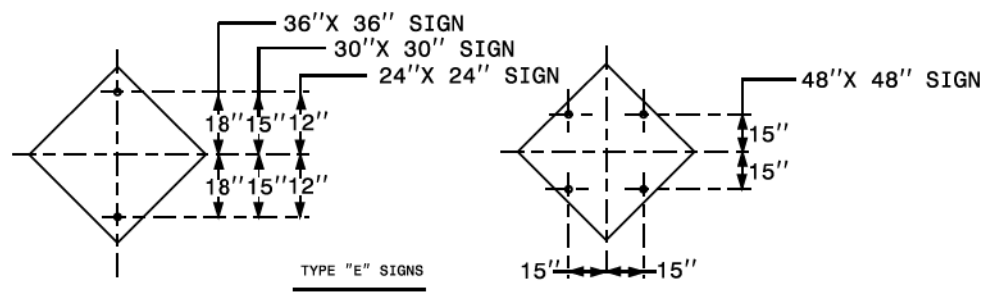
SCALE	N/A		REVISIONS
DATE	3-2019		
DWG. BY	JCB		
DESIGN BY	JDH		
APPROVED	JDH		



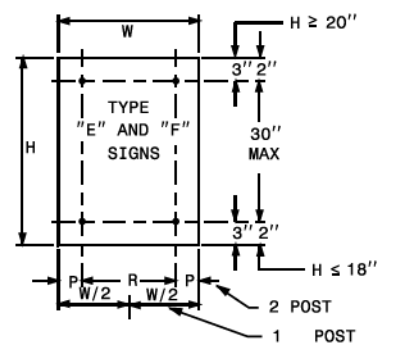
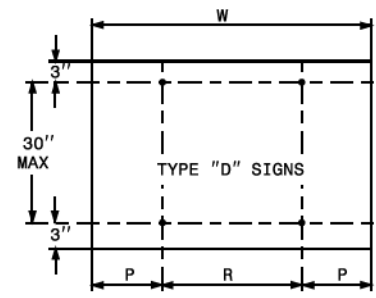
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS
ON 'U' CHANNEL POSTS



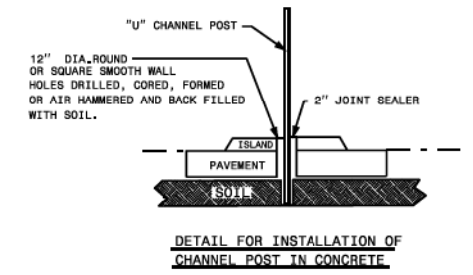
TYPE "E" SIGNS



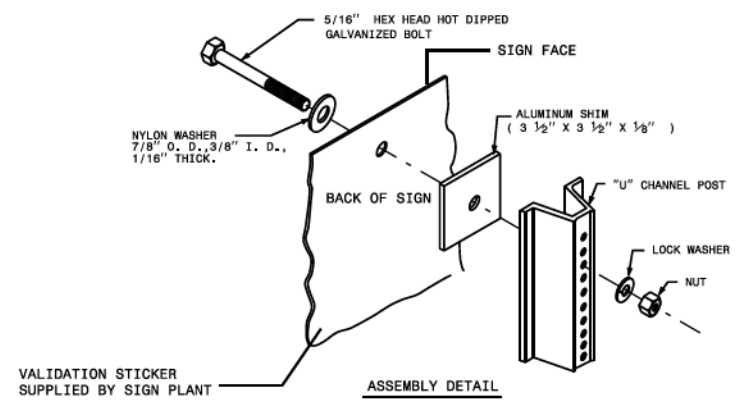
	NO. SUPPORTS		
	2	3 *	4
P	.207W	.145W	.107W
R	.586W	.355W	.262W

UNITS ON ATTACHED SHEET
* MINIMUM 4 FT. BETWEEN CHANNEL POSTS

HOLE PUNCHING DETAIL



DETAIL FOR INSTALLATION OF CHANNEL POST IN CONCRETE



VALIDATION STICKER SUPPLIED BY SIGN PLANT

ASSEMBLY DETAIL

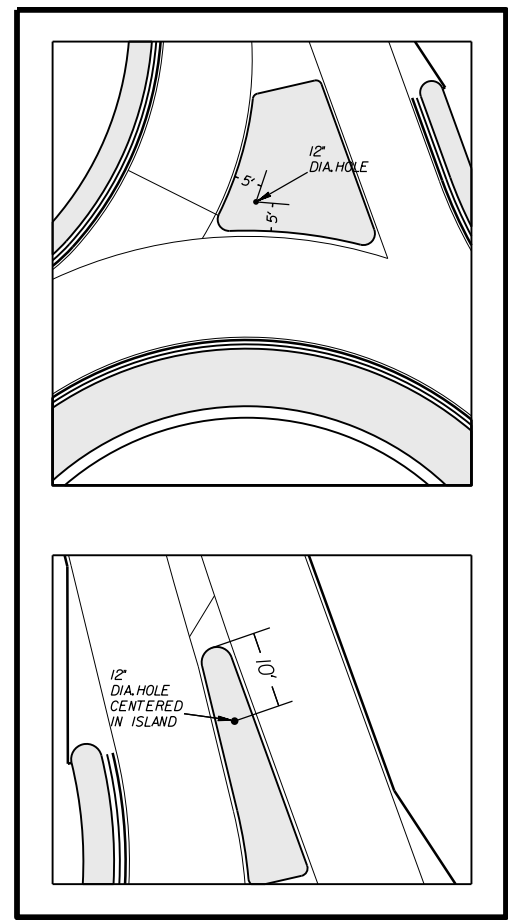
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

1-12

ENGLISH STANDARD DRAWING FOR
MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS
ON 'U' CHANNEL POSTS

SHEET 2 OF 2
904.50

12" DIA. HOLE LOCATION FOR SIGN U-CHANNEL POST IN SPLITTER ISLANDS



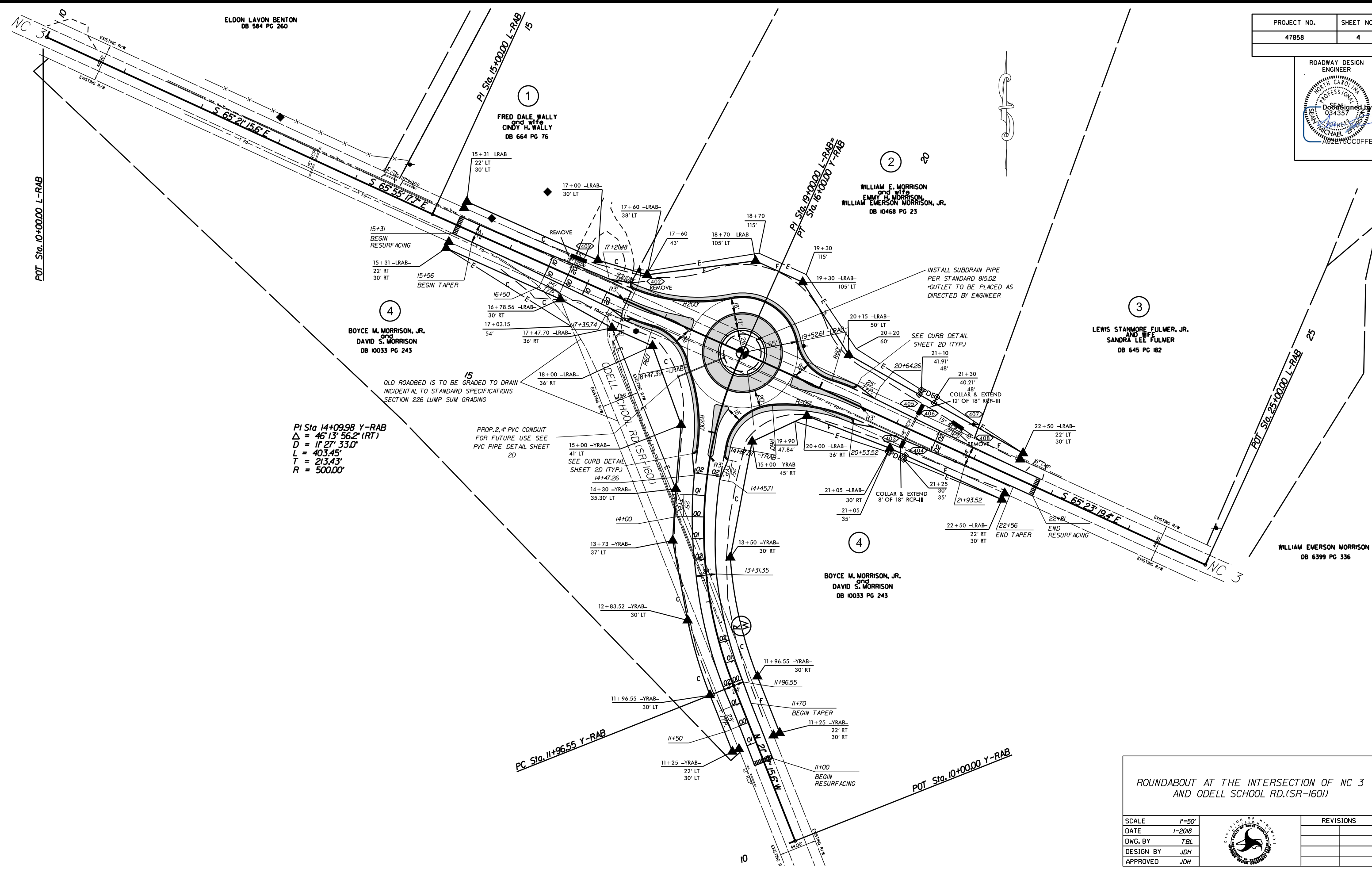
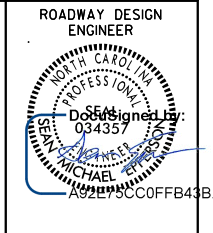
ROUNDABOUT AT THE INTERSECTION OF NC 3 AND ODELL SCHOOL RD. (SR-1601)

SCALE	N/A
DATE	3-2019
DWG. BY	JCB
DESIGN BY	JDH
APPROVED	JDH



REVISIONS	

SHEET 2 OF 2
904.50



PI Sta 14+09.98 Y-RAB
 $\Delta = 46^{\circ}13'56.2''$ (RT)
 $D = 11^{\circ}27'33.0''$
 $L = 403.45'$
 $T = 213.43'$
 $R = 500.00'$

PROP. 2.4" PVC CONDUIT
 FOR FUTURE USE SEE
 PVC PIPE DETAIL SHEET
 2D

15
 OLD ROADBED IS TO BE GRADED TO DRAIN
 INCIDENTAL TO STANDARD SPECIFICATIONS
 SECTION 226 LUMP SUM GRADING

INSTALL SUBDRAIN PIPE
 PER STANDARD 815.02
 *OUTLET TO BE PLACED AS
 DIRECTED BY ENGINEER

SEE CURB DETAIL
 SHEET 2D (TYP)

COLLAR & EXTEND
 8' OF 18" RCP-III

ROUNDABOUT AT THE INTERSECTION OF NC 3
 AND ODELL SCHOOL RD.(SR-1601)

SCALE	1"=50'
DATE	1-2018
DWG. BY	TBL
DESIGN BY	JDH
APPROVED	JDH

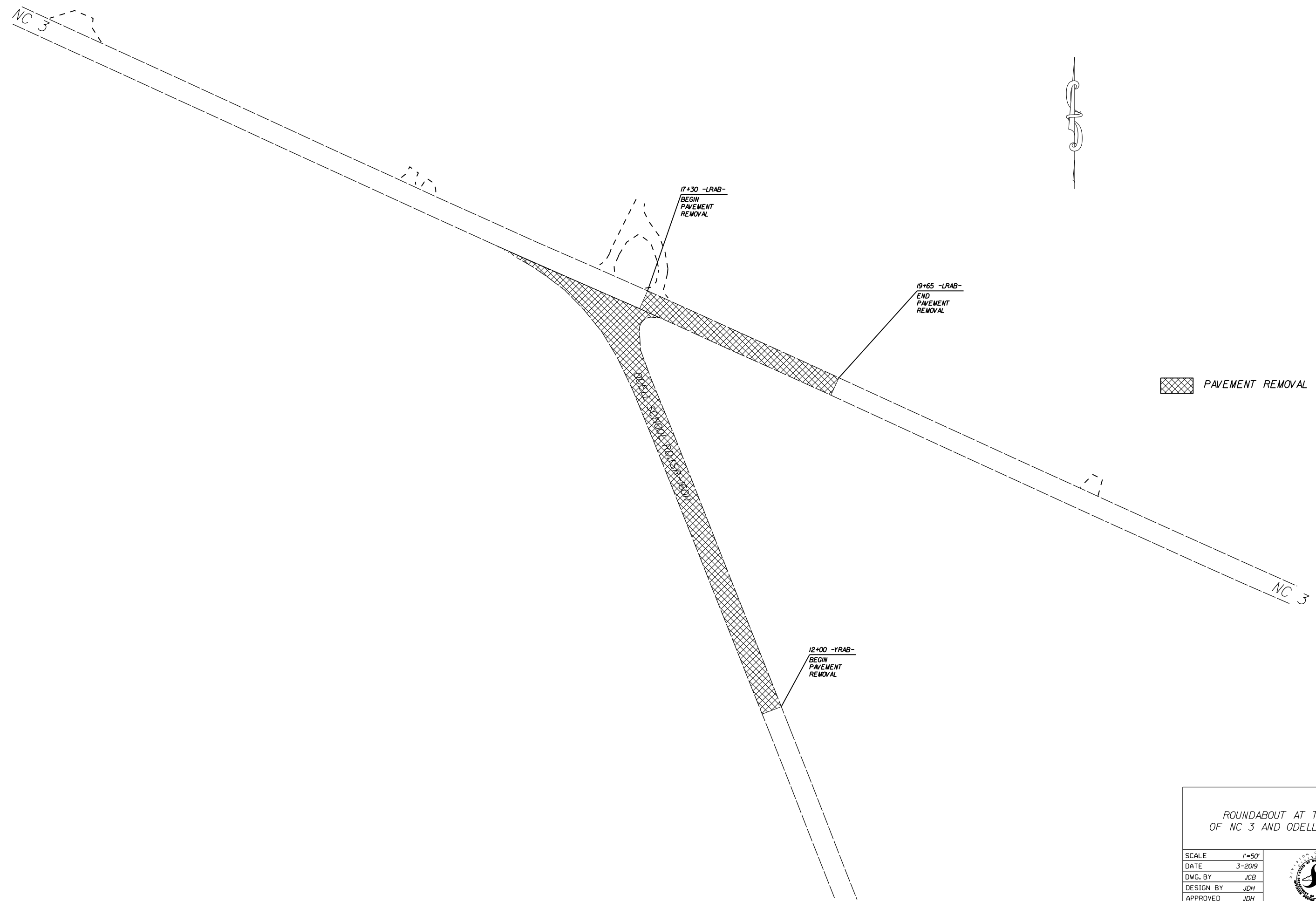


REVISIONS

PROJECT NO.	SHEET NO.
47858	4A

ROADWAY DESIGN ENGINEER

Designed By: MICHAEL E. COFFEY

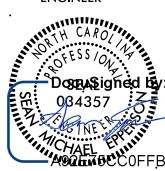


PAVEMENT REMOVAL

ROUNDABOUT AT THE INTERSECTION OF NC 3 AND ODELL SCHOOL RD.(SR-1601)

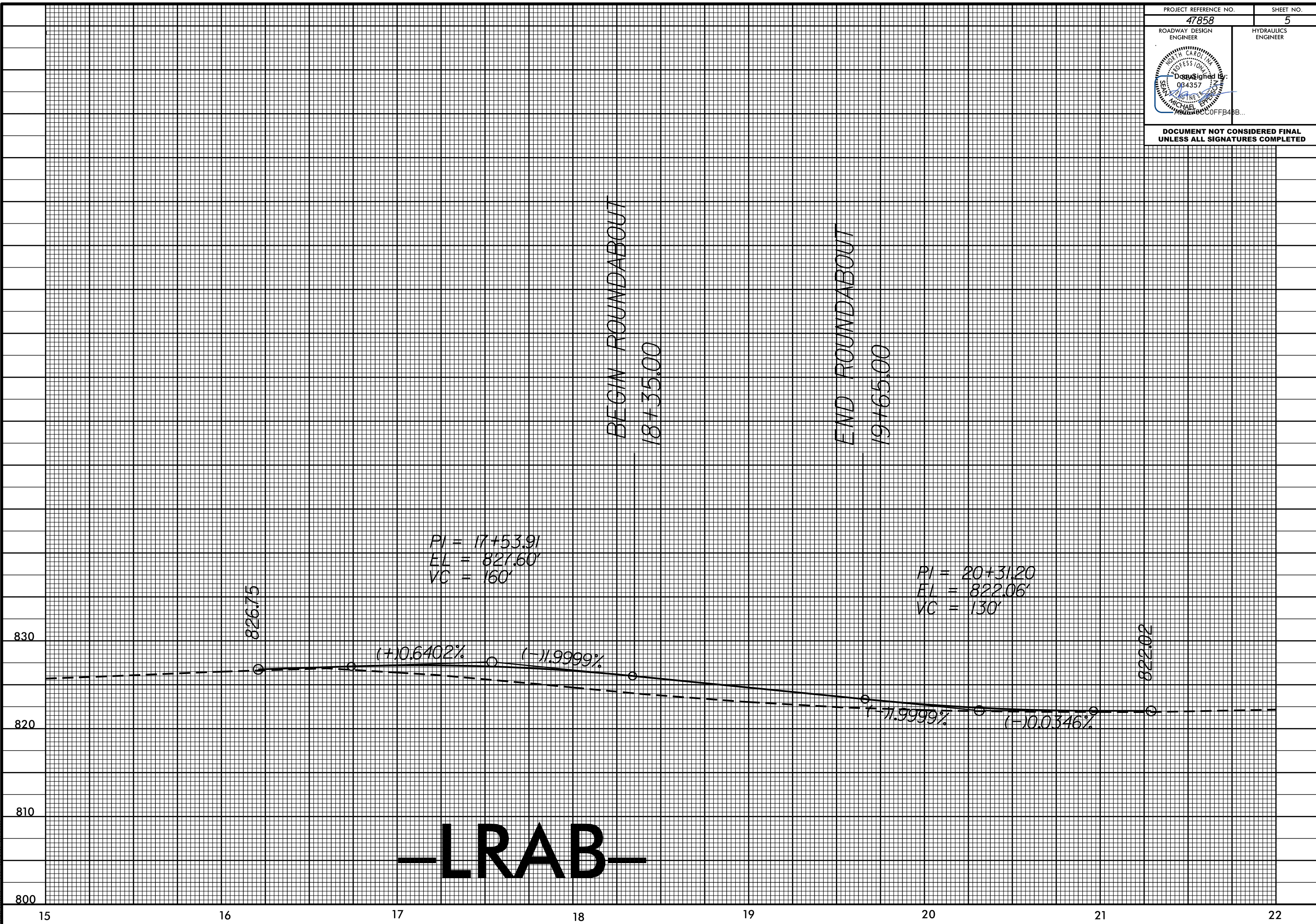
SCALE	r=50'		REVISIONS
DATE	3-2019		
DWG. BY	JCB		
DESIGN BY	JDH		
APPROVED	JDH		

5/14/99

PROJECT REFERENCE NO. 47858	SHEET NO. 5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	

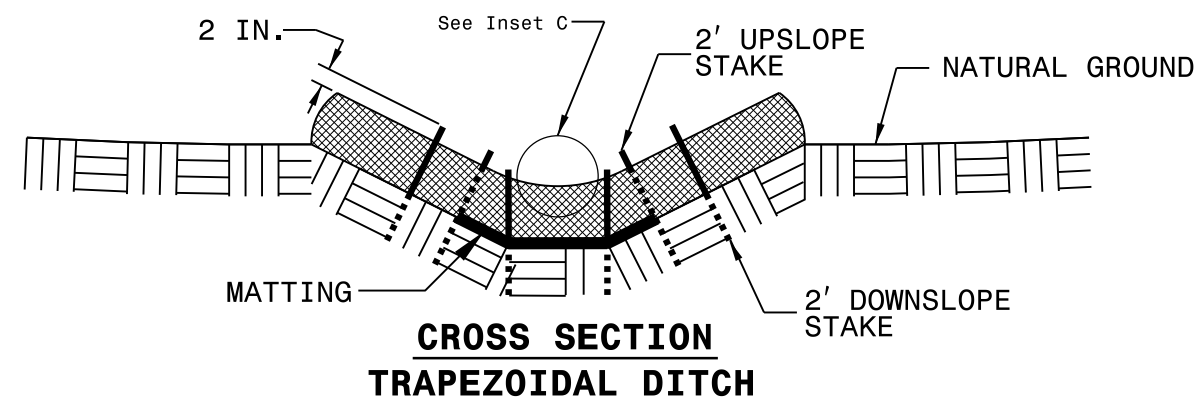
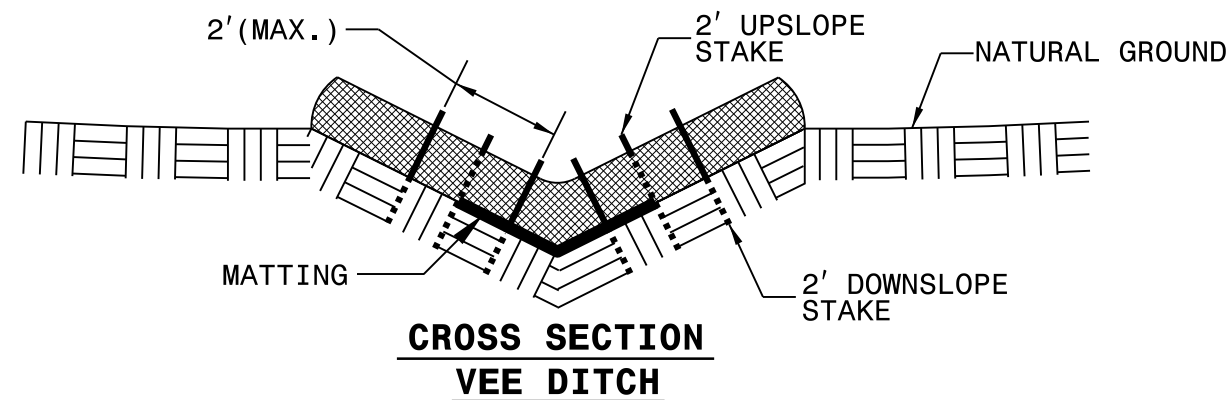
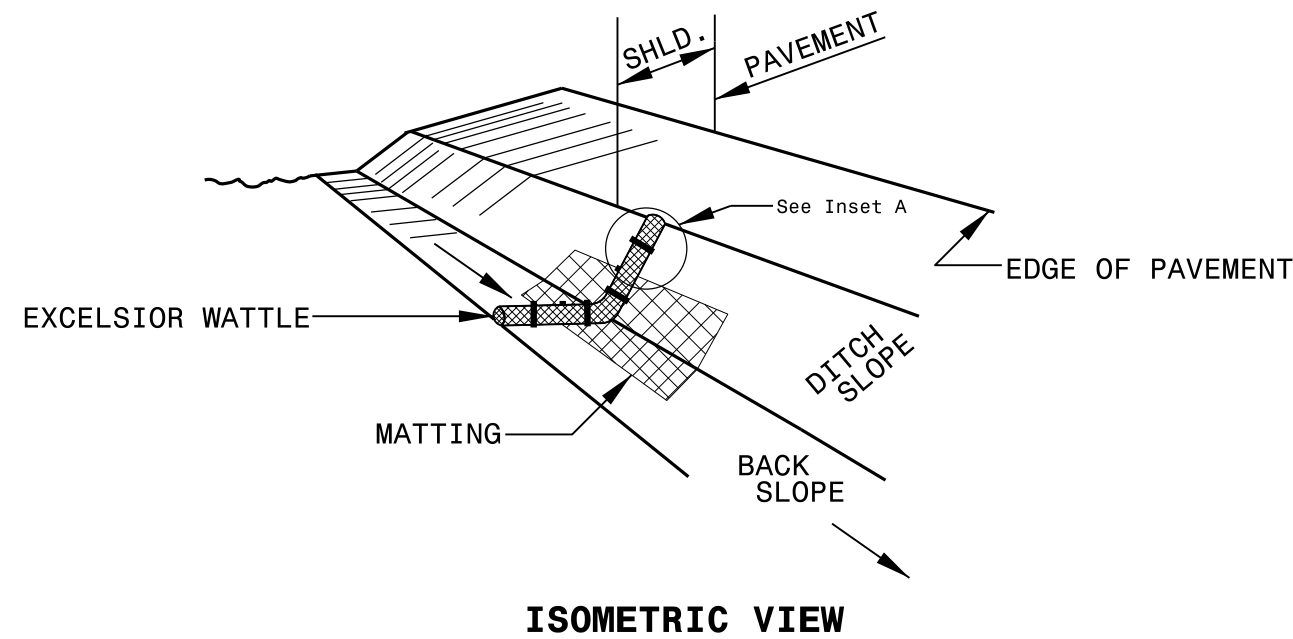
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

9:00CT:2020_07:35
S:\DC\200Y_Cabernus\W-5691H0_NC 3.0de11 School_RAB\PROF_V25 Scale\nc3_ode11 school_ca5_pf1_LRAB.dgn
11/10/2017 11:14:57



LRAB

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

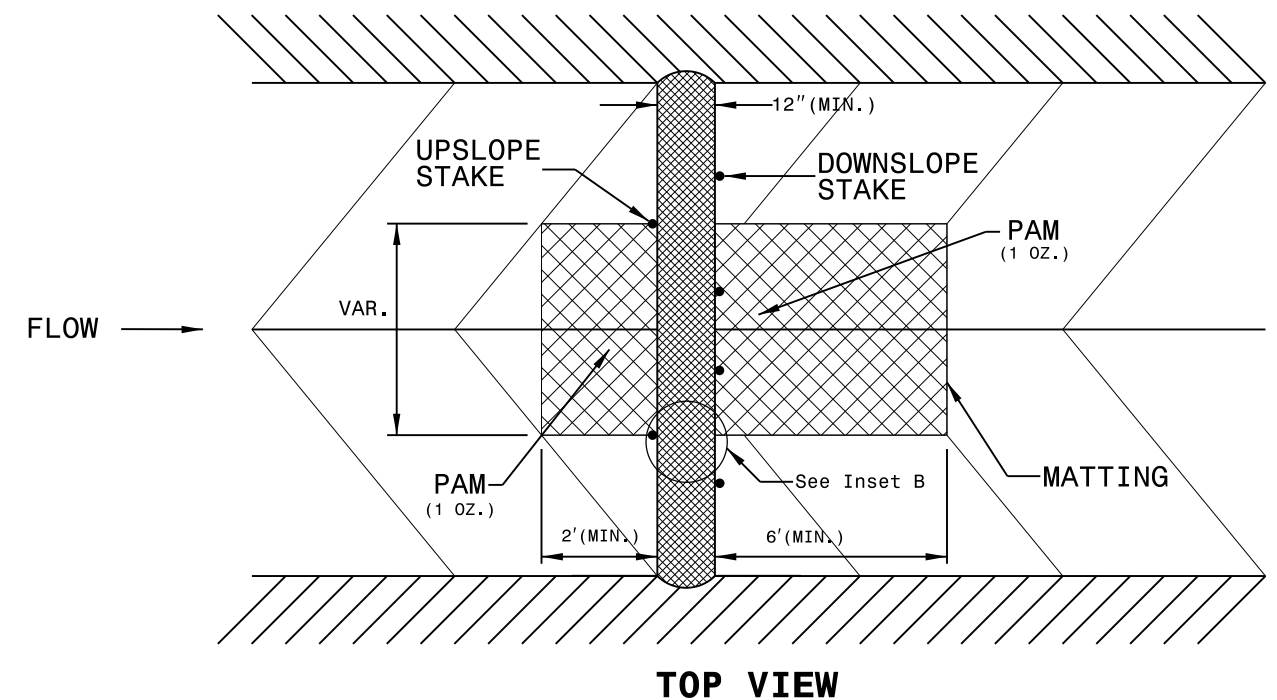
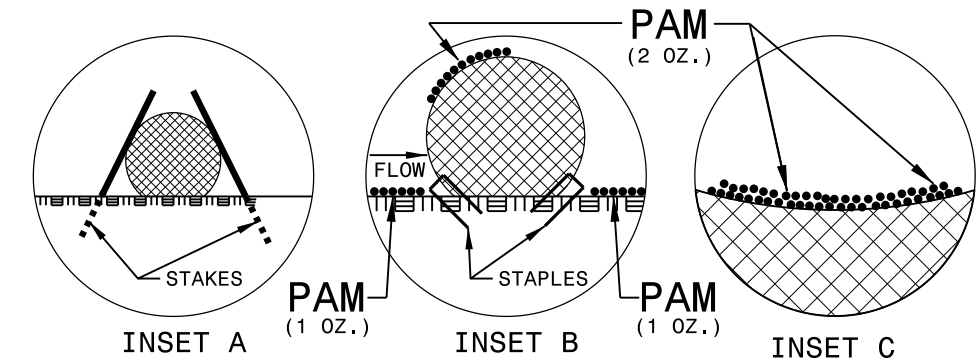
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

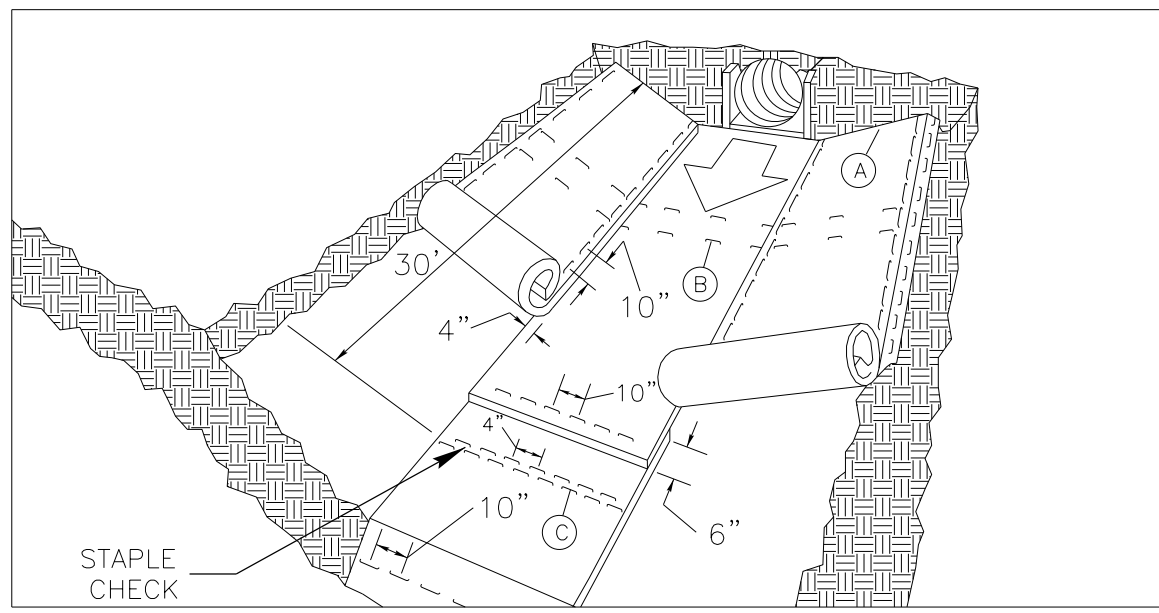
PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.



PROJECT REFERENCE NO. 47858	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

MATTING INSTALLATION DETAIL



MATTING IN DITCHES

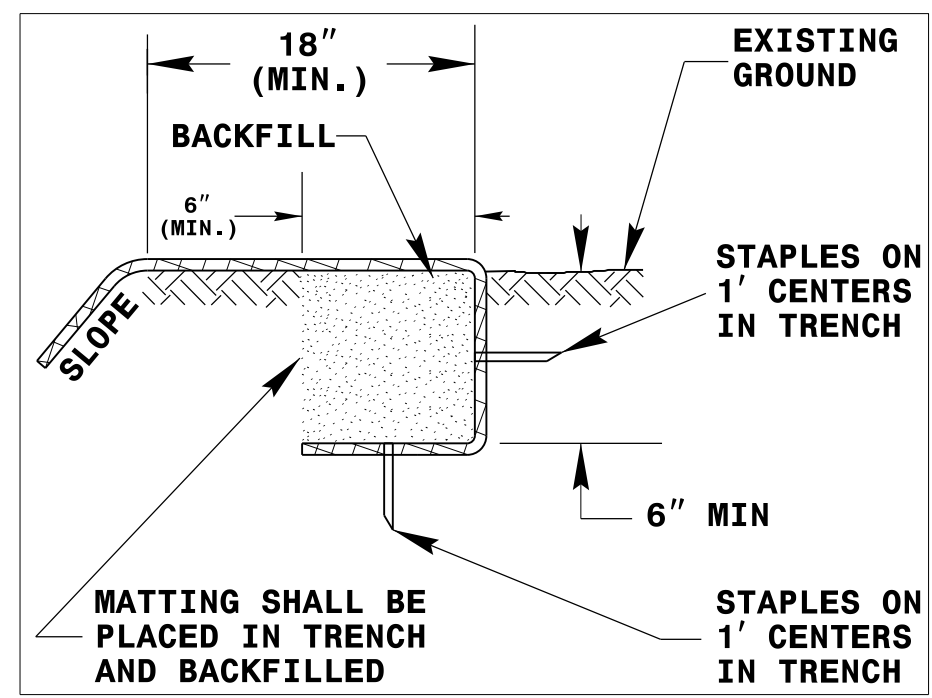
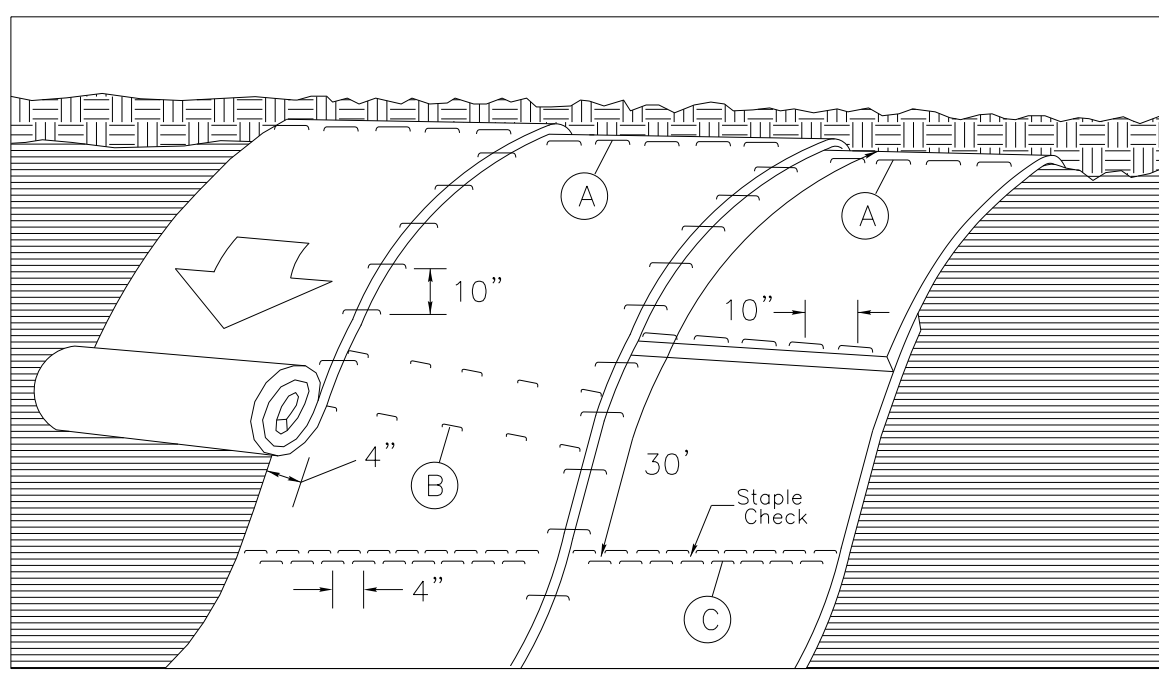


DIAGRAM (A)



MATTING ON SLOPES

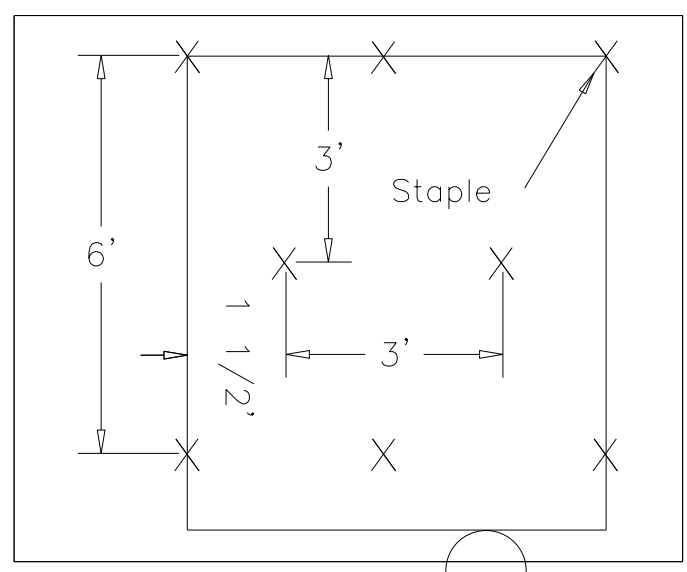


DIAGRAM (B)

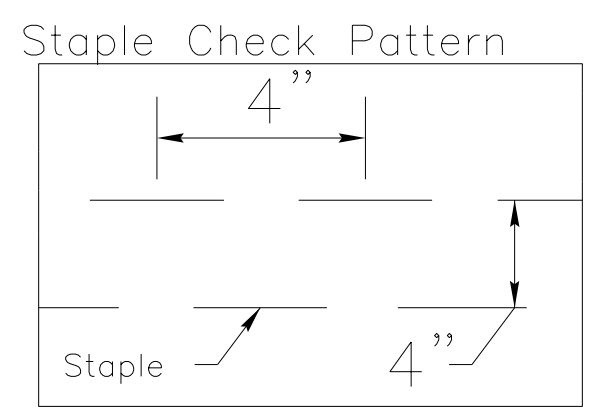


DIAGRAM (C)

NOTES:

THIS DETAIL APPLIES TO STRAW, EXCELSIOR, AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION.
 STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1 INCH AND NOT LESS THAN 6 INCHES IN LENGTH.

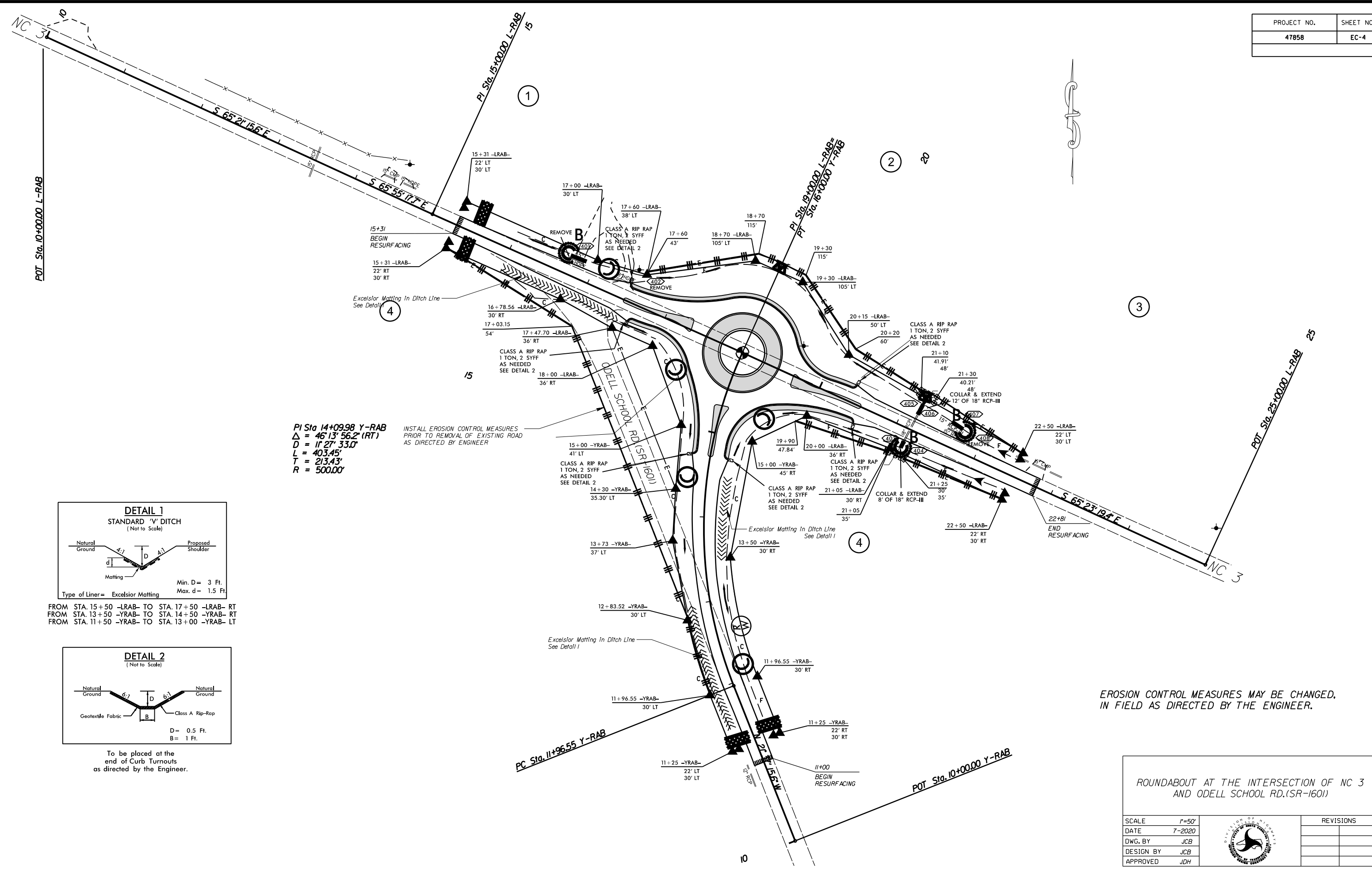
NOT TO SCALE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. 47858	SHEET NO. EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

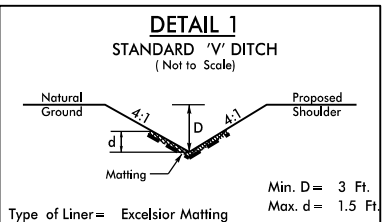
SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HOW ZONES.

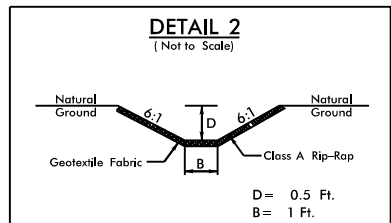


PI Sta 14+09.98 Y-RAB
 $\Delta = 46^{\circ}13'56.2''$ (RT)
 $D = 11^{\circ}27'33.0''$
 $L = 403.45'$
 $T = 213.43'$
 $R = 500.00'$

INSTALL EROSION CONTROL MEASURES
 PRIOR TO REMOVAL OF EXISTING ROAD
 AS DIRECTED BY ENGINEER



FROM STA. 15+50 -LRAB- TO STA. 17+50 -LRAB- RT
 FROM STA. 13+50 -YRAB- TO STA. 14+50 -YRAB- RT
 FROM STA. 11+50 -YRAB- TO STA. 13+00 -YRAB- LT

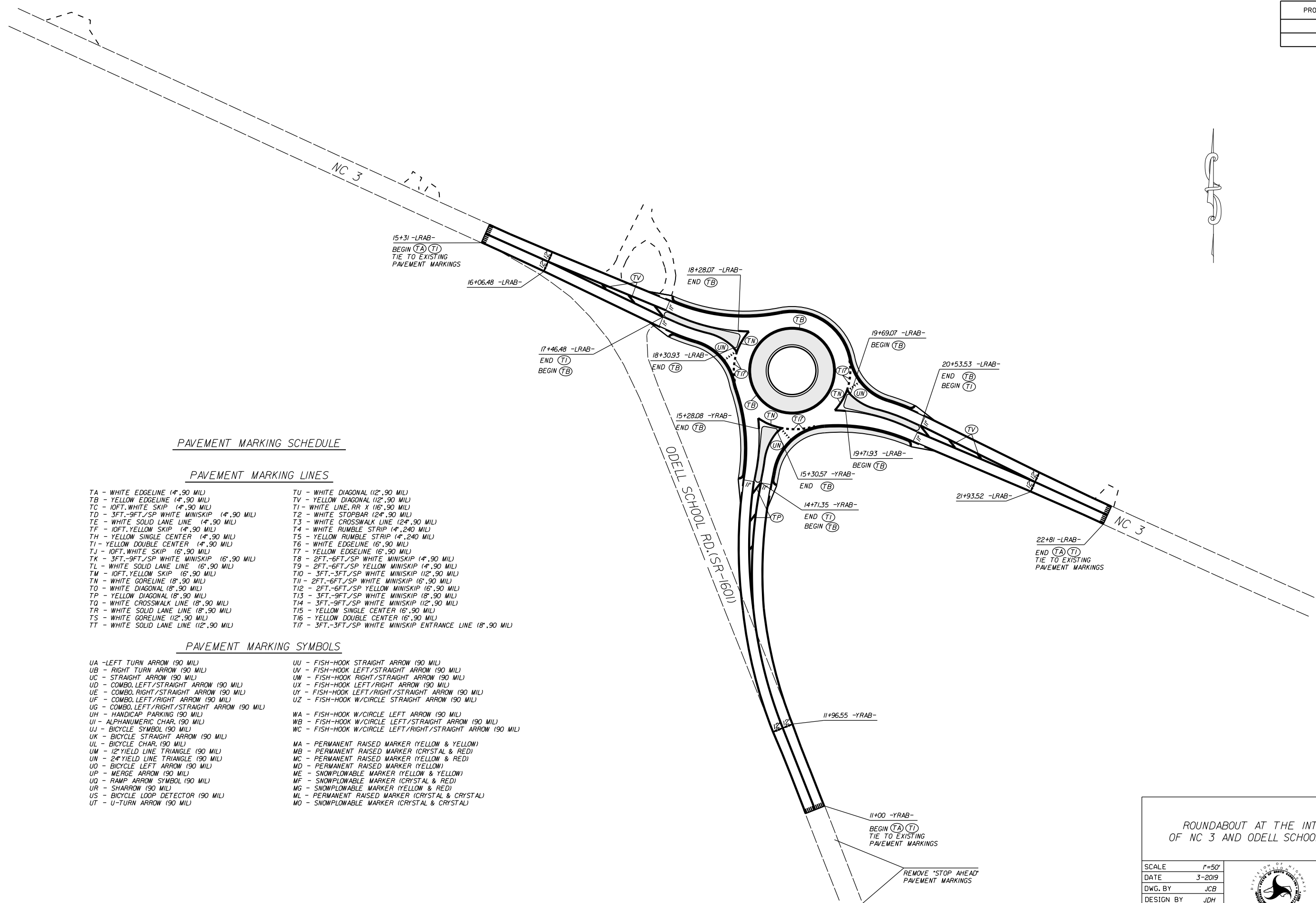
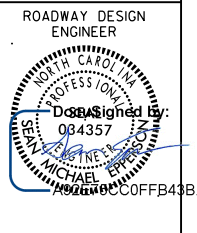


To be placed at the
 end of Curb Turnouts
 as directed by the Engineer.

EROSION CONTROL MEASURES MAY BE CHANGED,
 IN FIELD AS DIRECTED BY THE ENGINEER.

ROUNDABOUT AT THE INTERSECTION OF NC 3
 AND ODELL SCHOOL RD.(SR-1601)

SCALE	$r=50'$		REVISIONS
DATE	7-2020		
DWG. BY	JCB		
DESIGN BY	JCB		
APPROVED	JDH		



PAVEMENT MARKING SCHEDULE

PAVEMENT MARKING LINES

- | | |
|---|--|
| TA - WHITE EDGELINE (4',.90 MIL) | TU - WHITE DIAGONAL (12',.90 MIL) |
| TB - YELLOW EDGELINE (4',.90 MIL) | TV - YELLOW DIAGONAL (12',.90 MIL) |
| TC - 10FT. WHITE SKIP (14',.90 MIL) | T1 - WHITE LINE, RR X (16',.90 MIL) |
| TD - 3FT.-9FT./SP WHITE MINISKIP (4',.90 MIL) | T2 - WHITE STOPBAR (24',.90 MIL) |
| TE - WHITE SOLID LANE LINE (4',.90 MIL) | T3 - WHITE CROSSWALK LINE (24',.90 MIL) |
| TF - 10FT. YELLOW SKIP (4',.90 MIL) | T4 - WHITE RUMBLE STRIP (4',.240 MIL) |
| TH - YELLOW SINGLE CENTER (4',.90 MIL) | T5 - YELLOW RUMBLE STRIP (4',.240 MIL) |
| TI - YELLOW DOUBLE CENTER (4',.90 MIL) | T6 - WHITE EDGELINE (6',.90 MIL) |
| TJ - 10FT. WHITE SKIP (6',.90 MIL) | T7 - YELLOW EDGELINE (6',.90 MIL) |
| TK - 3FT.-9FT./SP WHITE MINISKIP (6',.90 MIL) | T8 - 2FT.-6FT./SP WHITE MINISKIP (4',.90 MIL) |
| TL - WHITE SOLID LANE LINE (6',.90 MIL) | T9 - 2FT.-6FT./SP YELLOW MINISKIP (4',.90 MIL) |
| TM - 10FT. YELLOW SKIP (6',.90 MIL) | T10 - 3FT.-3FT./SP WHITE MINISKIP (12',.90 MIL) |
| TN - WHITE GORELINE (8',.90 MIL) | T11 - 2FT.-6FT./SP WHITE MINISKIP (6',.90 MIL) |
| TO - WHITE DIAGONAL (8',.90 MIL) | T12 - 2FT.-6FT./SP YELLOW MINISKIP (6',.90 MIL) |
| TP - YELLOW DIAGONAL (8',.90 MIL) | T13 - 3FT.-9FT./SP WHITE MINISKIP (8',.90 MIL) |
| TQ - WHITE CROSSWALK LINE (8',.90 MIL) | T14 - 3FT.-9FT./SP WHITE MINISKIP (12',.90 MIL) |
| TR - WHITE SOLID LANE LINE (8',.90 MIL) | T15 - YELLOW SINGLE CENTER (6',.90 MIL) |
| TS - WHITE GORELINE (12',.90 MIL) | T16 - YELLOW DOUBLE CENTER (6',.90 MIL) |
| TT - WHITE SOLID LANE LINE (12',.90 MIL) | T17 - 3FT.-3FT./SP WHITE MINISKIP ENTRANCE LINE (8',.90 MIL) |

PAVEMENT MARKING SYMBOLS

- | | |
|--|--|
| UA - LEFT TURN ARROW (90 MIL) | UU - FISH-HOOK STRAIGHT ARROW (90 MIL) |
| UB - RIGHT TURN ARROW (90 MIL) | UV - FISH-HOOK LEFT/STRAIGHT ARROW (90 MIL) |
| UC - STRAIGHT ARROW (90 MIL) | UW - FISH-HOOK RIGHT/STRAIGHT ARROW (90 MIL) |
| UD - COMBO. LEFT/STRAIGHT ARROW (90 MIL) | UX - FISH-HOOK LEFT/RIGHT ARROW (90 MIL) |
| UE - COMBO. RIGHT/STRAIGHT ARROW (90 MIL) | UY - FISH-HOOK LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UF - COMBO. LEFT/RIGHT ARROW (90 MIL) | UZ - FISH-HOOK W/CIRCLE STRAIGHT ARROW (90 MIL) |
| UG - COMBO. LEFT/RIGHT/STRAIGHT ARROW (90 MIL) | WA - FISH-HOOK W/CIRCLE LEFT ARROW (90 MIL) |
| UH - HANDICAP PARKING (90 MIL) | WB - FISH-HOOK W/CIRCLE LEFT/STRAIGHT ARROW (90 MIL) |
| UI - ALPHANUMERIC CHAR. (90 MIL) | WC - FISH-HOOK W/CIRCLE LEFT/RIGHT/STRAIGHT ARROW (90 MIL) |
| UJ - BICYCLE SYMBOL (90 MIL) | MA - PERMANENT RAISED MARKER (YELLOW & YELLOW) |
| UK - BICYCLE STRAIGHT ARROW (90 MIL) | MB - PERMANENT RAISED MARKER (CRYSTAL & RED) |
| UL - BICYCLE CHAR. (90 MIL) | MC - PERMANENT RAISED MARKER (YELLOW & RED) |
| UM - 12" YIELD LINE TRIANGLE (90 MIL) | MD - PERMANENT RAISED MARKER (YELLOW) |
| UN - 24" YIELD LINE TRIANGLE (90 MIL) | ME - SNOWPLOWABLE MARKER (YELLOW & YELLOW) |
| UO - BICYCLE LEFT ARROW (90 MIL) | MF - SNOWPLOWABLE MARKER (CRYSTAL & RED) |
| UP - MERGE ARROW (90 MIL) | MG - SNOWPLOWABLE MARKER (YELLOW & RED) |
| UQ - RAMP ARROW SYMBOL (90 MIL) | ML - PERMANENT RAISED MARKER (CRYSTAL & CRYSTAL) |
| UR - SHARROW (90 MIL) | MO - SNOWPLOWABLE MARKER (CRYSTAL & CRYSTAL) |
| US - BICYCLE LOOP DETECTOR (90 MIL) | |
| UT - U-TURN ARROW (90 MIL) | |

ROUNDABOUT AT THE INTERSECTION
OF NC 3 AND ODELL SCHOOL RD.(SR-1601)


SCALE	r=50'		REVISIONS
DATE	3-2019		
DWG. BY	JCB		
DESIGN BY	JDH		
APPROVED	JDH		

T.I.P.: W-5601HQ

**STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION**

**SIGNING PLAN
CABARRUS COUNTY**

LOCATION: ROUNDABOUT AT THE INTERSECTION ON NC 3 AND ODELL SCHOOL RD (SR-1601)

PROJECT REFERENCE NO. W-5601HQ	SHEET NO. SIGN-1
Drawn by: <i>Renee B. Roach</i> APPROVED: _____ <small>3E84908D316431</small>	
DATE: 03/15/2022	
	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	
904.10	ORIENTATION OF GROUND MOUNTED SIGNS
904.50	MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
910.40	SINGLE/TWO LANE ROUNDABOUT WITH PEDESTRIAN

GENERAL NOTES

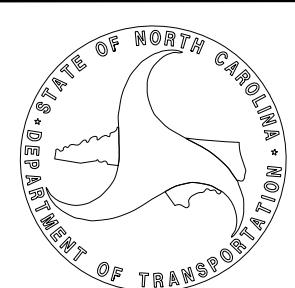
- . SIGNS FURNISHED BY STATE
- . CONFIRM IN WRITING AT LEAST 4 MONTHS IN ADVANCE, THE ACTUAL DATE THE DEPARTMENT FURNISHED SIGNS WILL BE REQUIRED.
- . ALL TYPE 'D' SIGNS SHALL BE MOUNTED ON TWO U-CHANNEL POSTS UNLESS OTHERWISE INDICATED ON THE PLANS.
- . IF REMOVAL OR RELOCATION OF SIGNS ON PRIVATE STREET (NON-STATE MAINTAINED) IS REQUIRED DUE TO CONSTRUCTION, THE CONTRACTOR SHALL INFORM THE ENGINEER. THE WORK WILL BE COMPLETED BY OTHERS.
- . WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER
- . ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.
- . WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.
- . THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.
- . SEE ROADWAY PLANS FOR GUARD/GUIDE RAIL DETAILS.

SUMMARY OF QUANTITIES

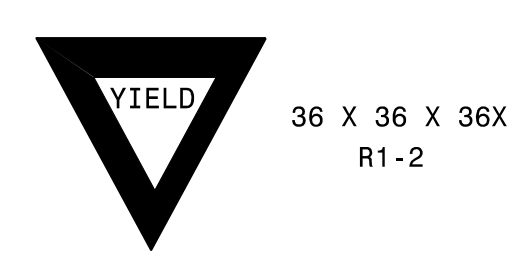
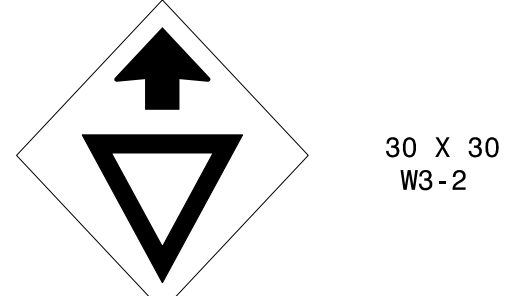
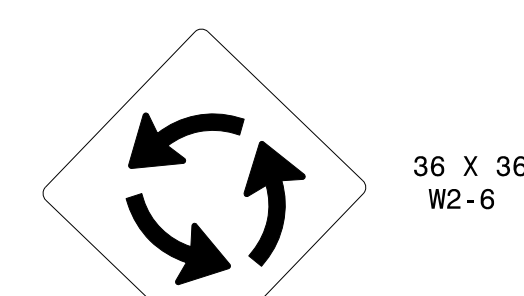
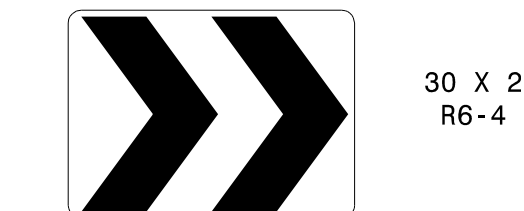
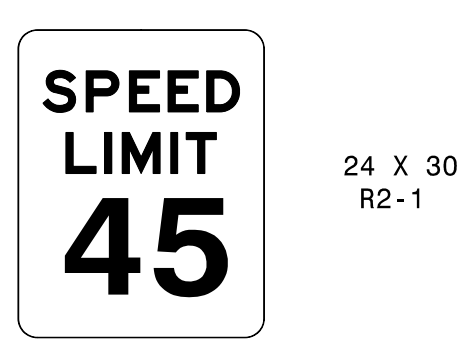


ITEM NO.		ITEM DESCRIPTION	QUANTITY	UNIT
DESC. NO.	SECT. NO.			
4072000000	903	SUPPORTS, 3 LB STEEL U-CHANNEL	296	L.F.
4102000000	904	SIGN ERECTION, TYPE E	19	EA.
4108000000	904	SIGN ERECTION, TYPE F	4	EA.
4116100000	904	SIGN ERECTION, RELOCATE SIGN TYPE E (GROUND MOUNTED)	1	EA.
4155000000	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	4	EA.
4192000000	907	DISPOSAL OF SUPPORT, U-CHANNEL	1	EA.

PLAN PREPARED BY: N.C.D.O.T. SIGNING AND DELINEATION UNIT

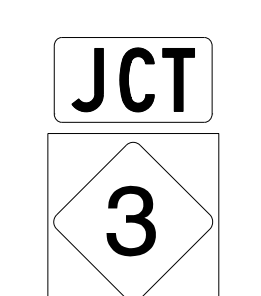




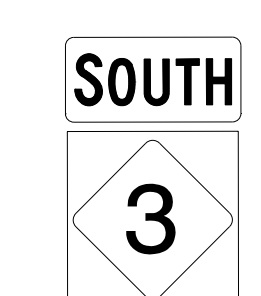
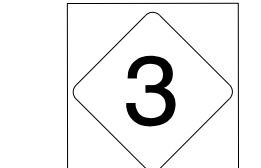
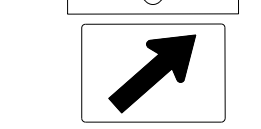
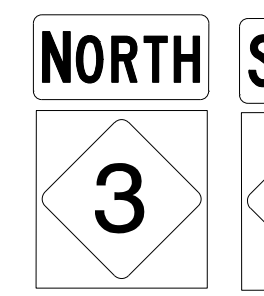
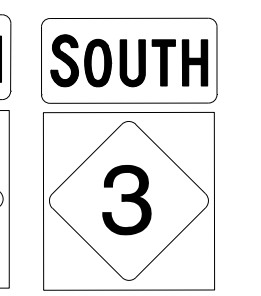
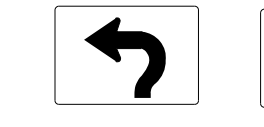
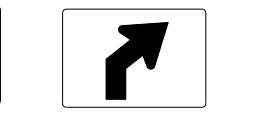
KELVIN JORDAN SIGNING & DELINEATION REGIONAL ENGINEER
ERIC WARD SIGNING & DELINEATION PROJECT DESIGN ENGINEER



TYPE "E" SIGNS

<p>401 QUANTITY REQ'D <u>6</u></p>  <p>36 X 36 X 36X R1-2</p> <p>ONE "U" POST PER SIGN</p>	<p>402 QUANTITY REQ'D <u>3</u></p>  <p>30 X 30 W3-2</p> <p>ONE "U" POST PER SIGN</p>	<p>403 QUANTITY REQ'D <u>3</u></p>  <p>36 X 36 W2-6</p> <p>ONE "U" POST PER SIGN</p>
<p>404 QUANTITY REQ'D <u>3</u></p>  <p>30 X 24 R6-4</p> <p>ONE "U" POST PER SIGN</p>	<p>405 QUANTITY REQ'D <u>1</u></p>  <p>24 X 30 R2-1</p> <p>ONE "U" POST PER SIGN</p>	<p>406 QUANTITY REQ'D <u>1</u></p>  <p>30 X 8 W16-8P SEE TYPE "E" SIGN DESIGNS</p> <p>MOUNT BELOW SIGN 403</p>
<p>407 QUANTITY REQ'D <u>2</u></p>  <p>36 X 8 W16-8P SEE TYPE "E" SIGN DESIGNS</p> <p>MOUNT BELOW SIGN 403</p>		

TYPE "F" SIGNS

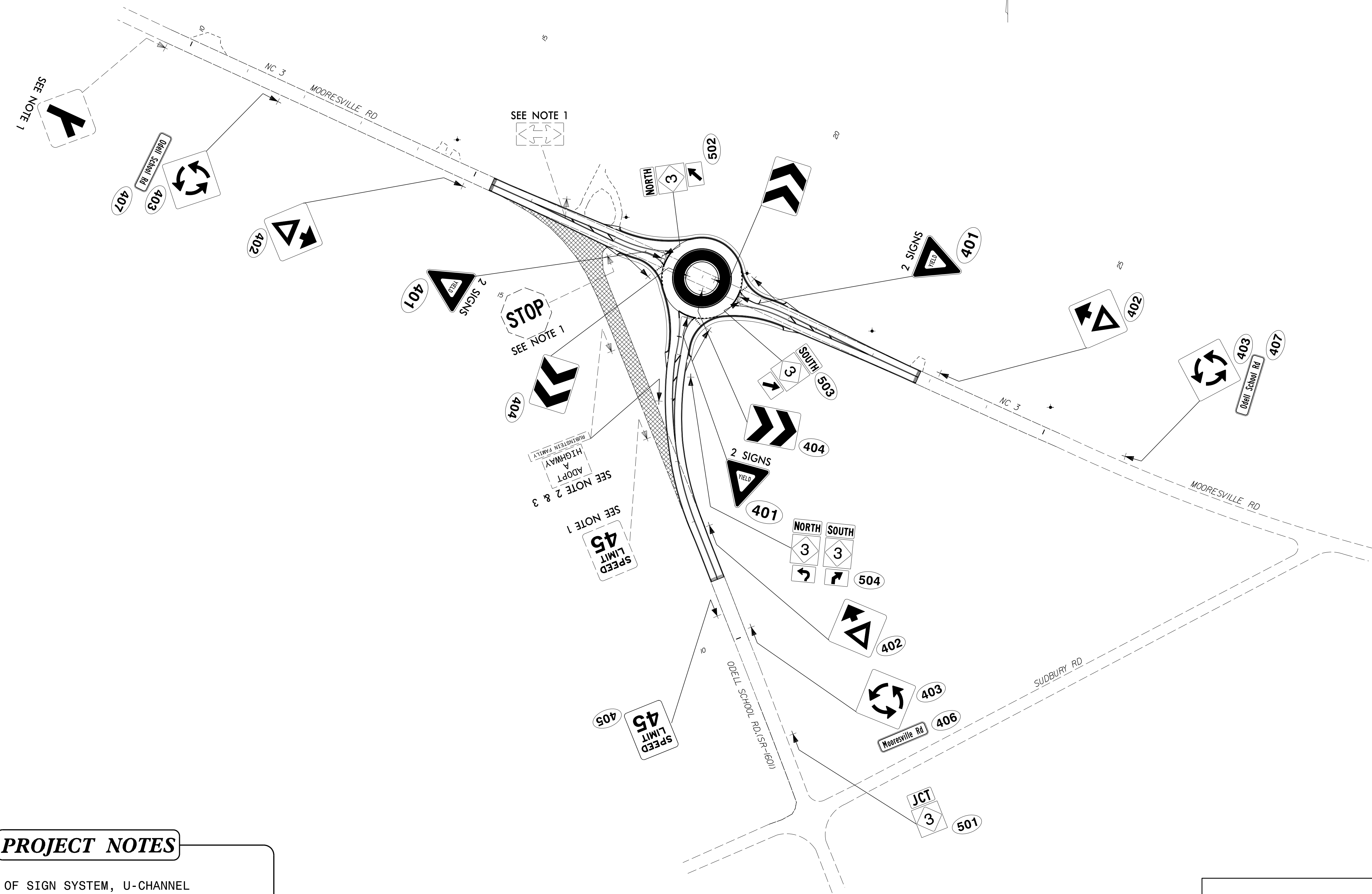
<p>501</p>  <p>1 - 21 X 15</p>  <p>1 - 24 X 24</p> <p>ONE "U" POST PER SIGN</p>	<p>502</p>  <p>1 - 24 X 12</p>  <p>1 - 24 X 24</p>  <p>1 - 21 X 15</p> <p>ONE "U" POST PER SIGN</p>	<p>503</p>  <p>1 - 24 X 12</p>  <p>1 - 24 X 24</p>  <p>1 - 21 X 15</p> <p>ONE "U" POST PER SIGN</p>
<p>504</p>  <p>2 - 24 X 12</p>  <p>2 - 24 X 24</p>   <p>2 - 21 X 15</p> <p>TWO "U" POSTS PER SIGN</p>		

PROJECT NOTES

1. DISPOSAL OF SIGN SYSTEM, U-CHANNEL
2. DISPOSAL OF SUPPORT, U-CHANNEL
3. SIGN ERECTION, RELOCATE SIGN TYPE E

INDEX

SHEET NO.	DESCRIPTION
SIGN-1	TITLE SHEET & TYPE "E" & "F" SIGNS
SIGN-2	TYPE "E" SIGN DESIGNS SHEET
SIGN-3	SIGNING PLAN SHEETS



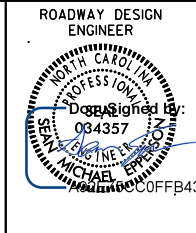
PROJECT NOTES

1. DISPOSAL OF SIGN SYSTEM, U-CHANNEL
2. DISPOSAL OF SUPPORT, U-CHANNEL
3. SIGN ERECTION, RELOCATE SIGN TYPE E

SIGNING DETAIL

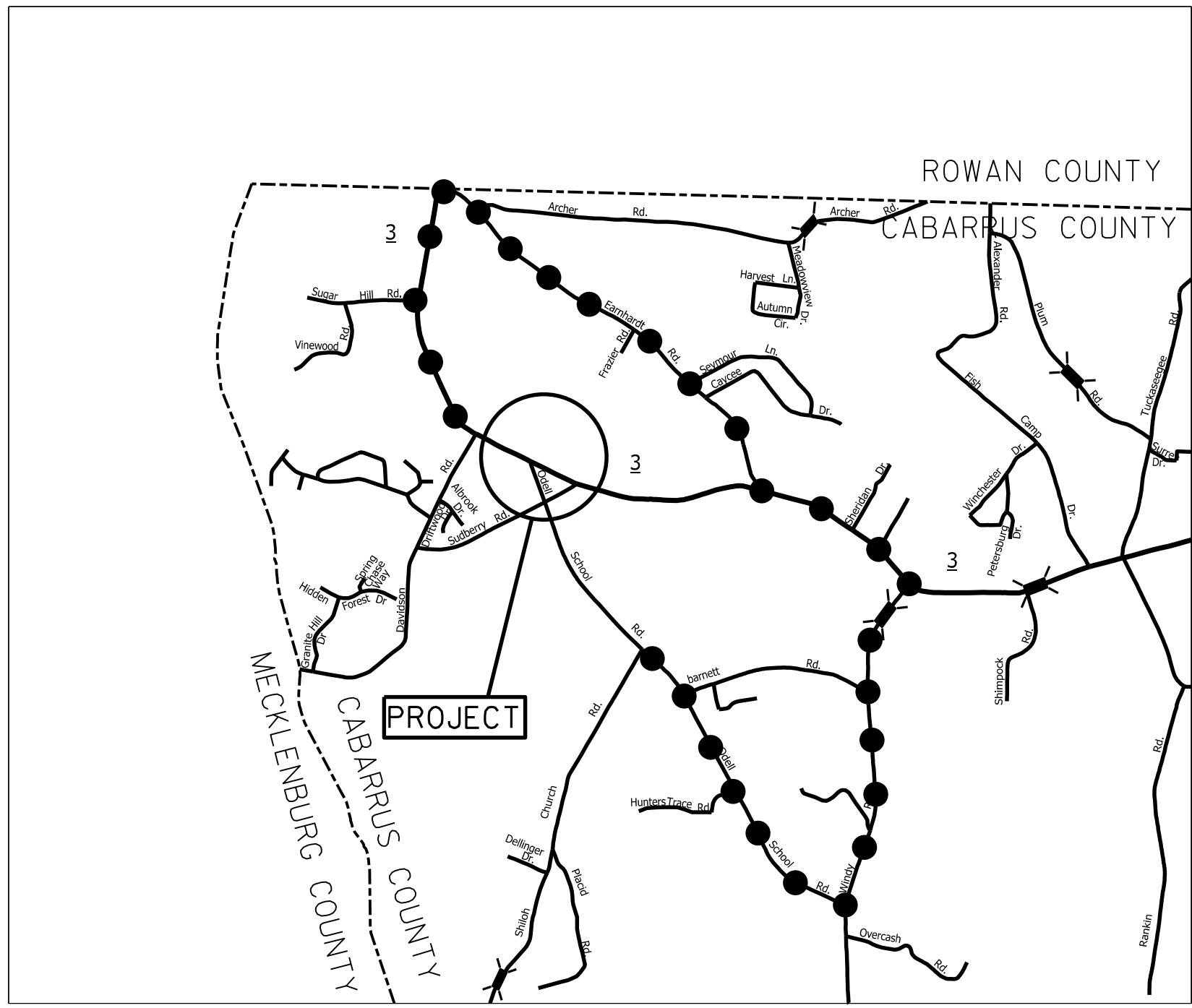
03/14/22
 S:\S&U\Western Region\Div 10\W-5601HQ\W-5601HQ_sgn_psh_2.dgn
 User: rward

PROJECT NO.	SHEET NO.
47858	TCP-1

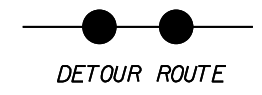



OFFSITE DETOUR

OFFSITE DETOUR TO BE INSTALLED AND MAINTAINED BY NCDOT.

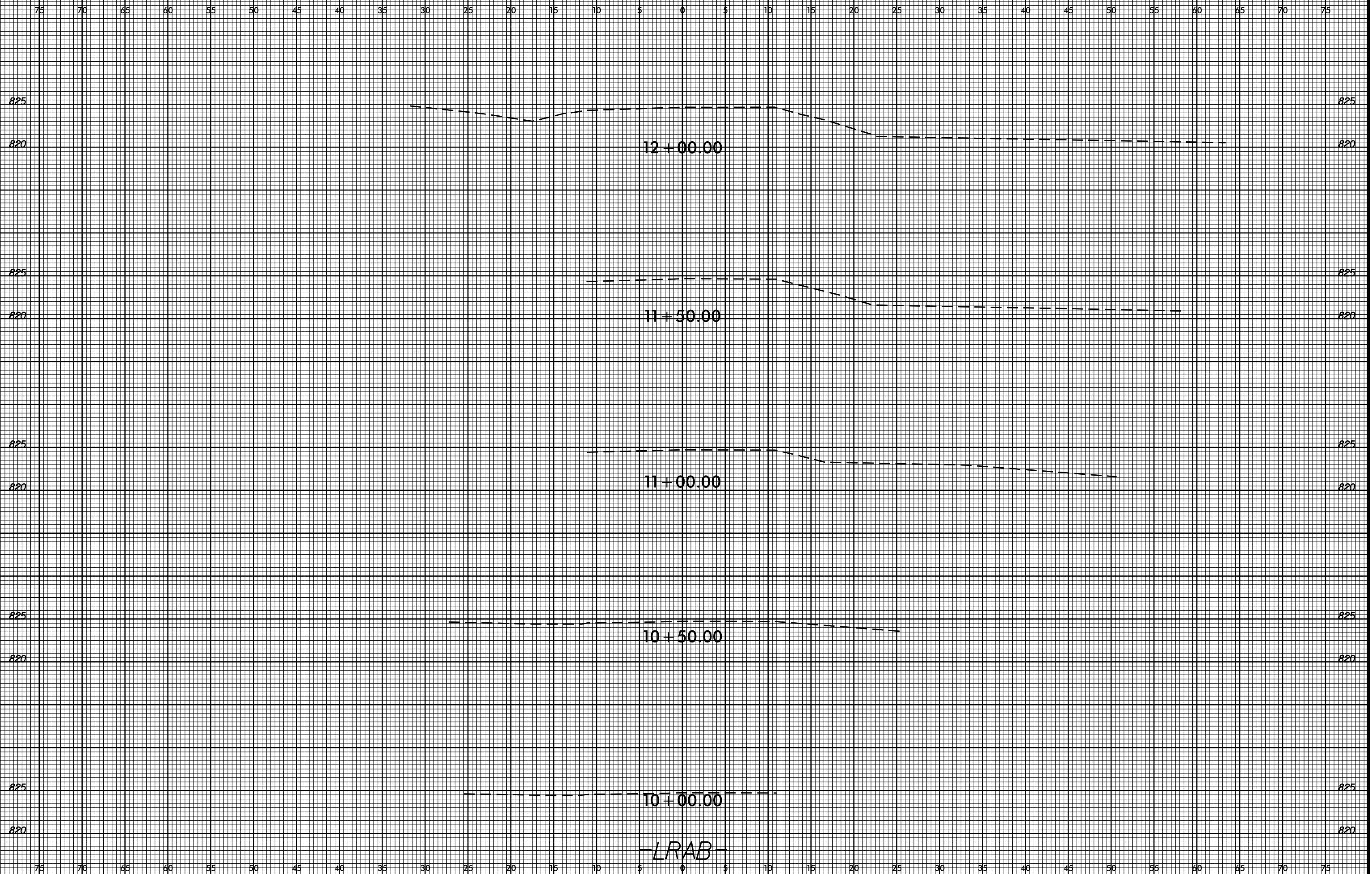


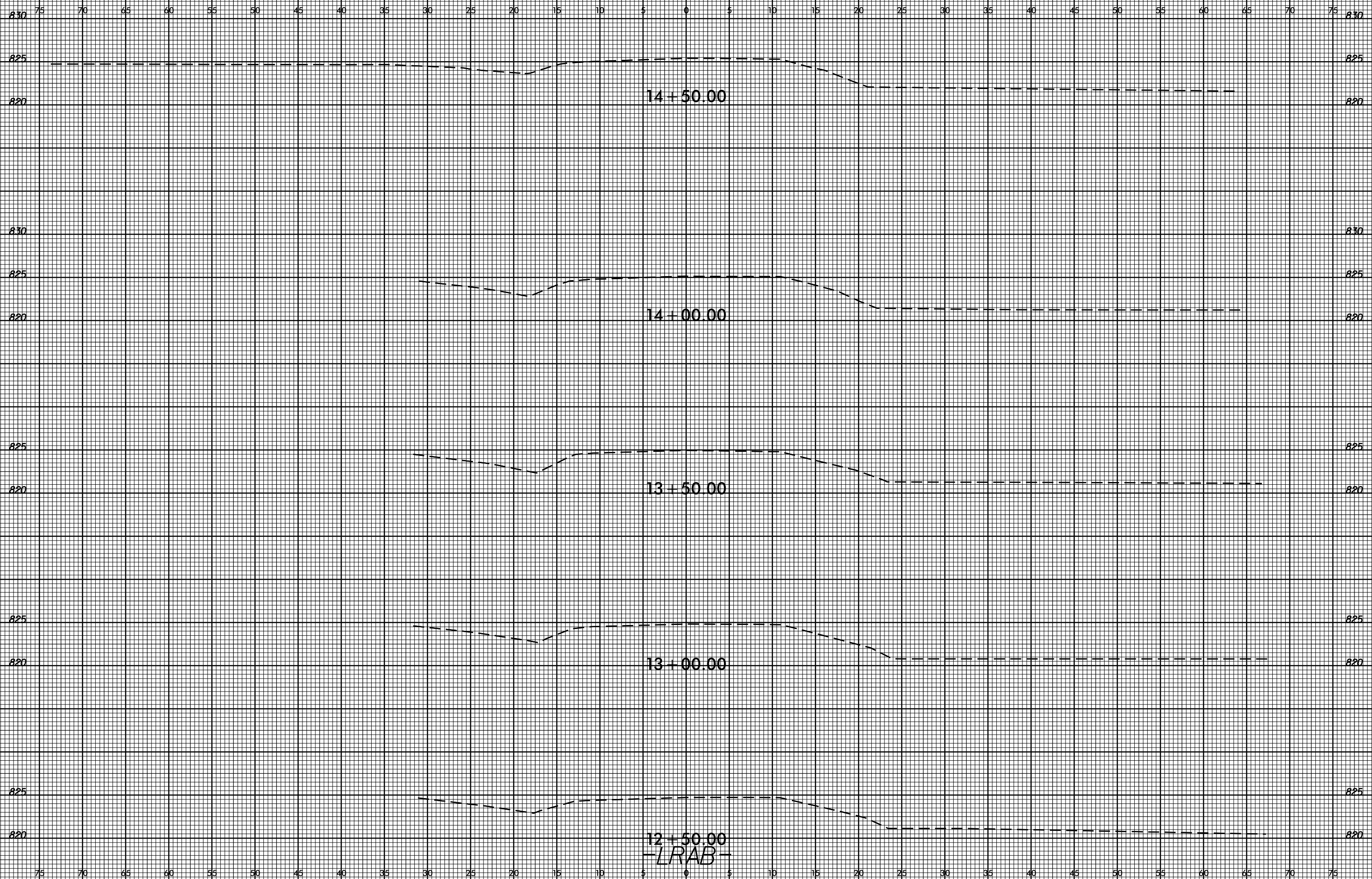
NOTE: CONTRACTOR SHALL CONTACT SALINA BLALOCK AT 704-244-8270 TWO WEEKS PRIOR TO ROAD CLOSURE.



SCALE		N/A		REVISIONS
DATE		4-2019		
DWG. BY		JCB		
DESIGN BY		JDH		
APPROVED		JDH		

ROUNDBABOUT AT THE INTERSECTION OF NC 3 AND ODELL SCHOOL RD. (SR-1601)

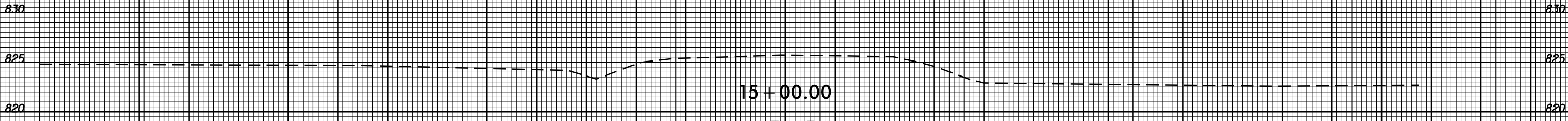
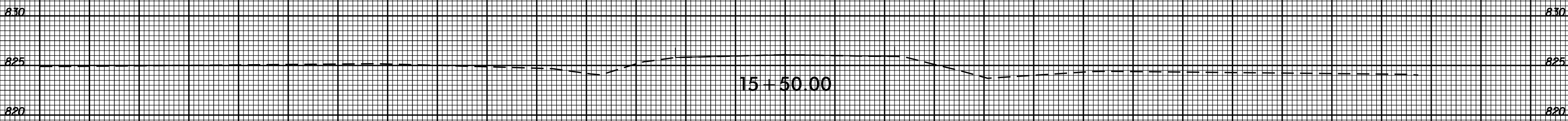
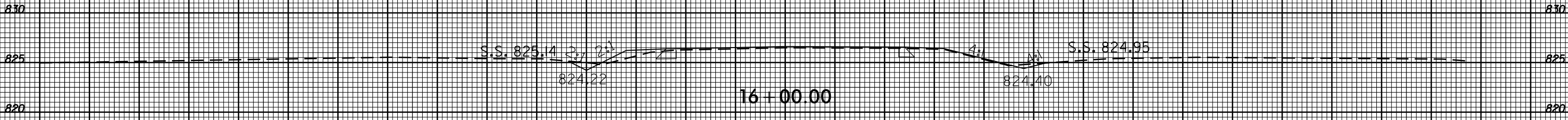




12+50.00
 -LRAB-



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

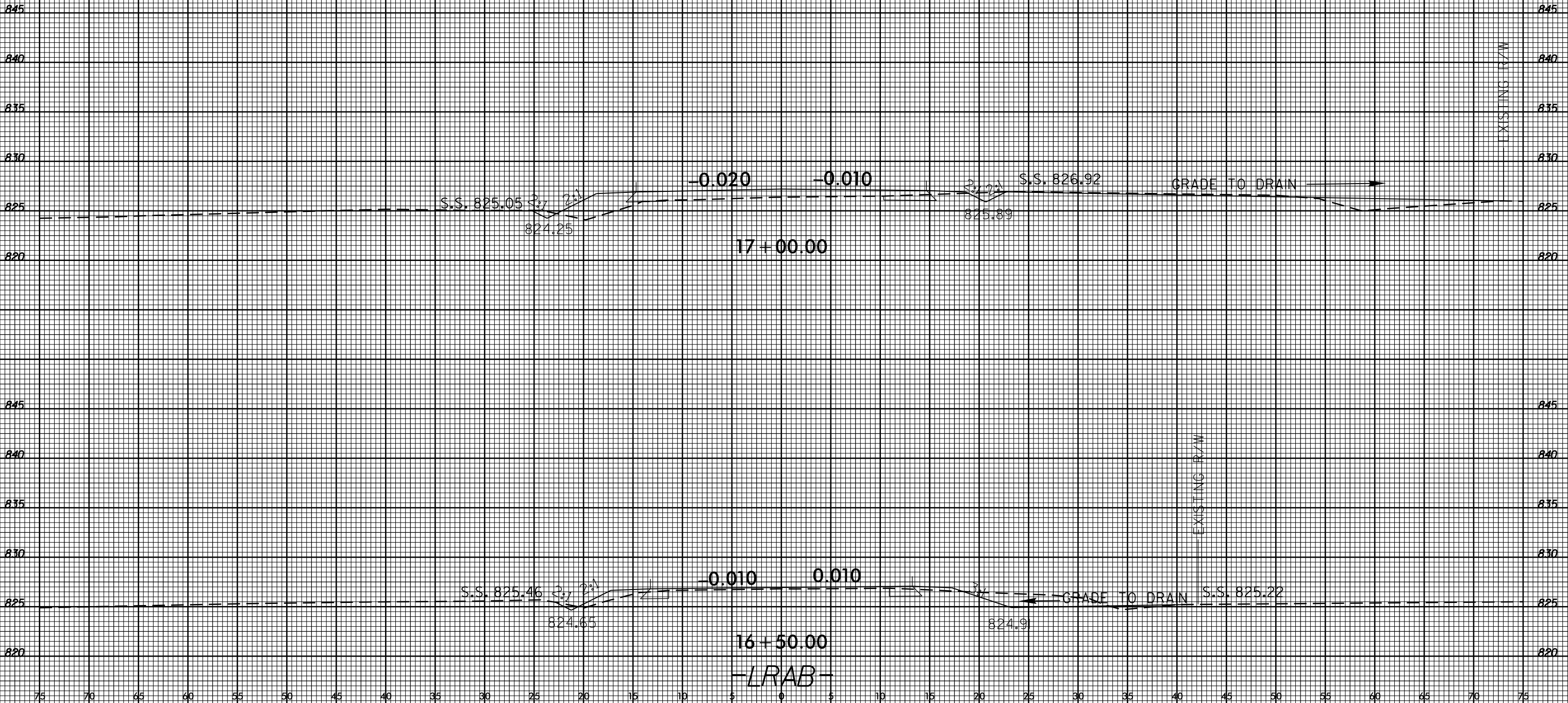


-LRAB-

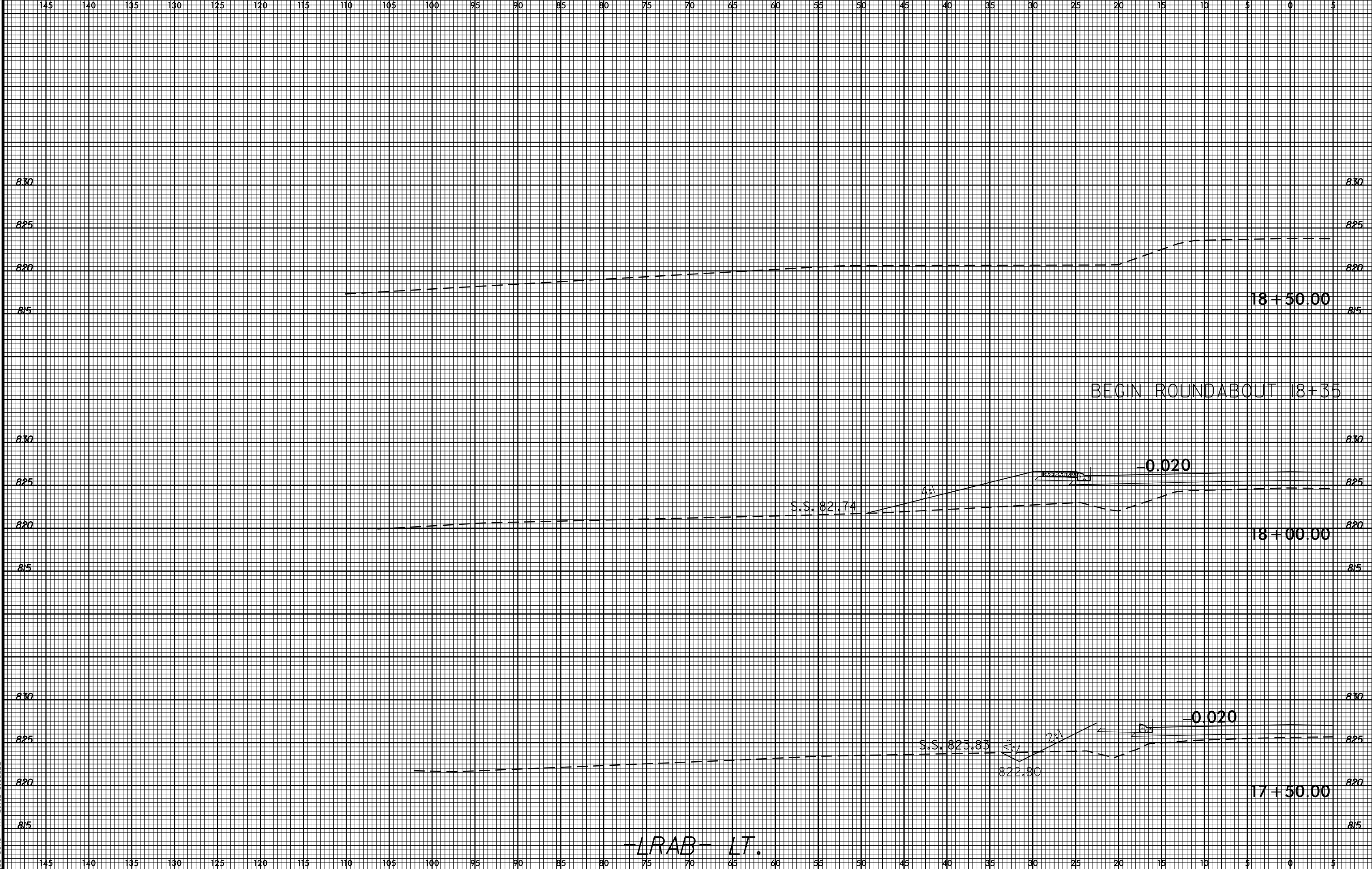
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



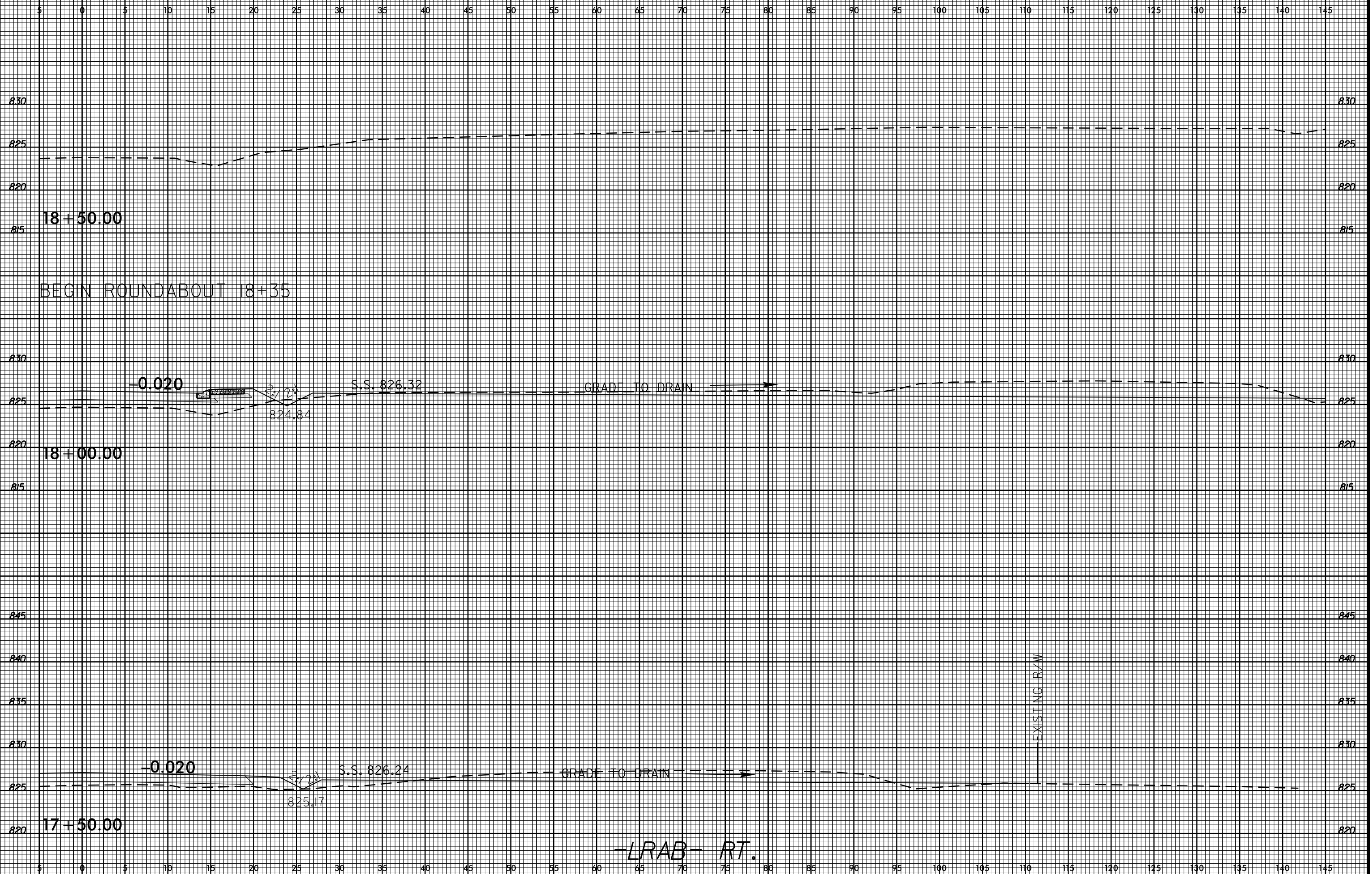
75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



01-OCT-2020 08:02 S:\DDC\PROJ_CAD\DWG\16-314137\16-314137.dwg



I:\MAY-2016\0826
 S:\D\DC\RD\Y\G\B\B\T\US-W-560\140_NC_3_0\del1_School_RAB\XSC\nc3_0\del1_school_cas_xp1_L_LRAB.dgn
 At 01:10:33

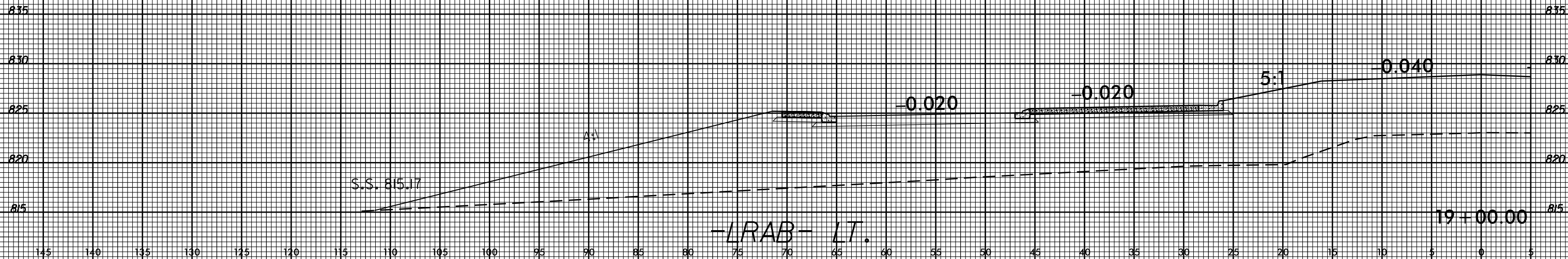


I:\MAY-2016\08\29
S:\D\DC\RD\Y\G\p\p\us\W-560\H0_NC_3_0\del1\School_RAB\XSC\nc3_0\del1\school_cas_xp1_L_L_RAB.dgn
16brooks At 01:10:318330

-LRAB- RT.

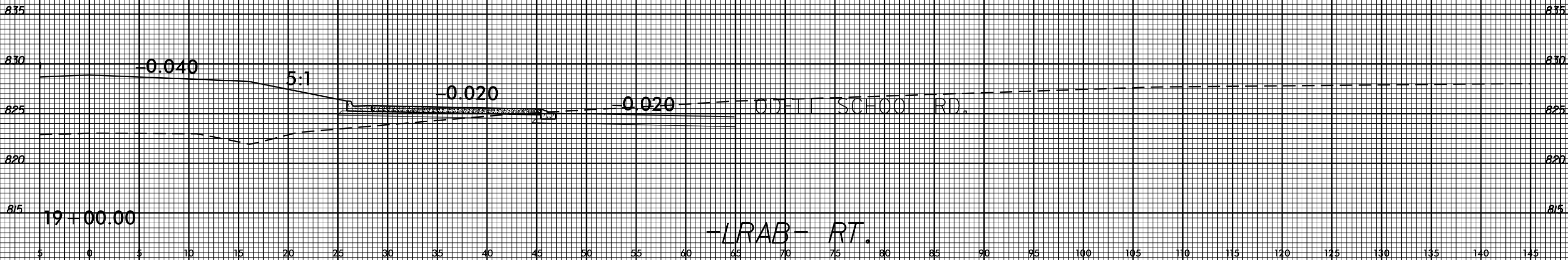


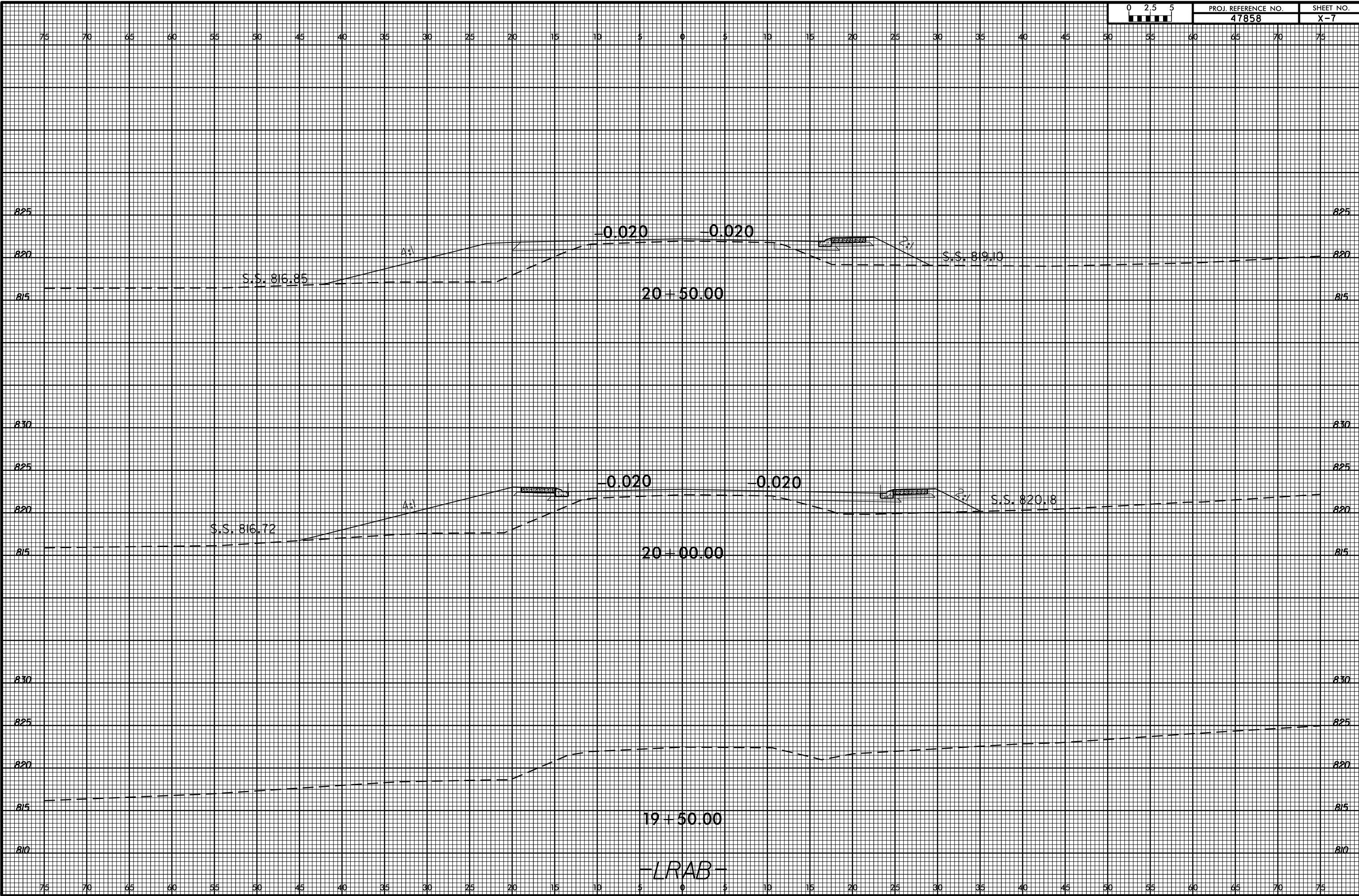
145 140 135 130 125 120 115 110 105 100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5

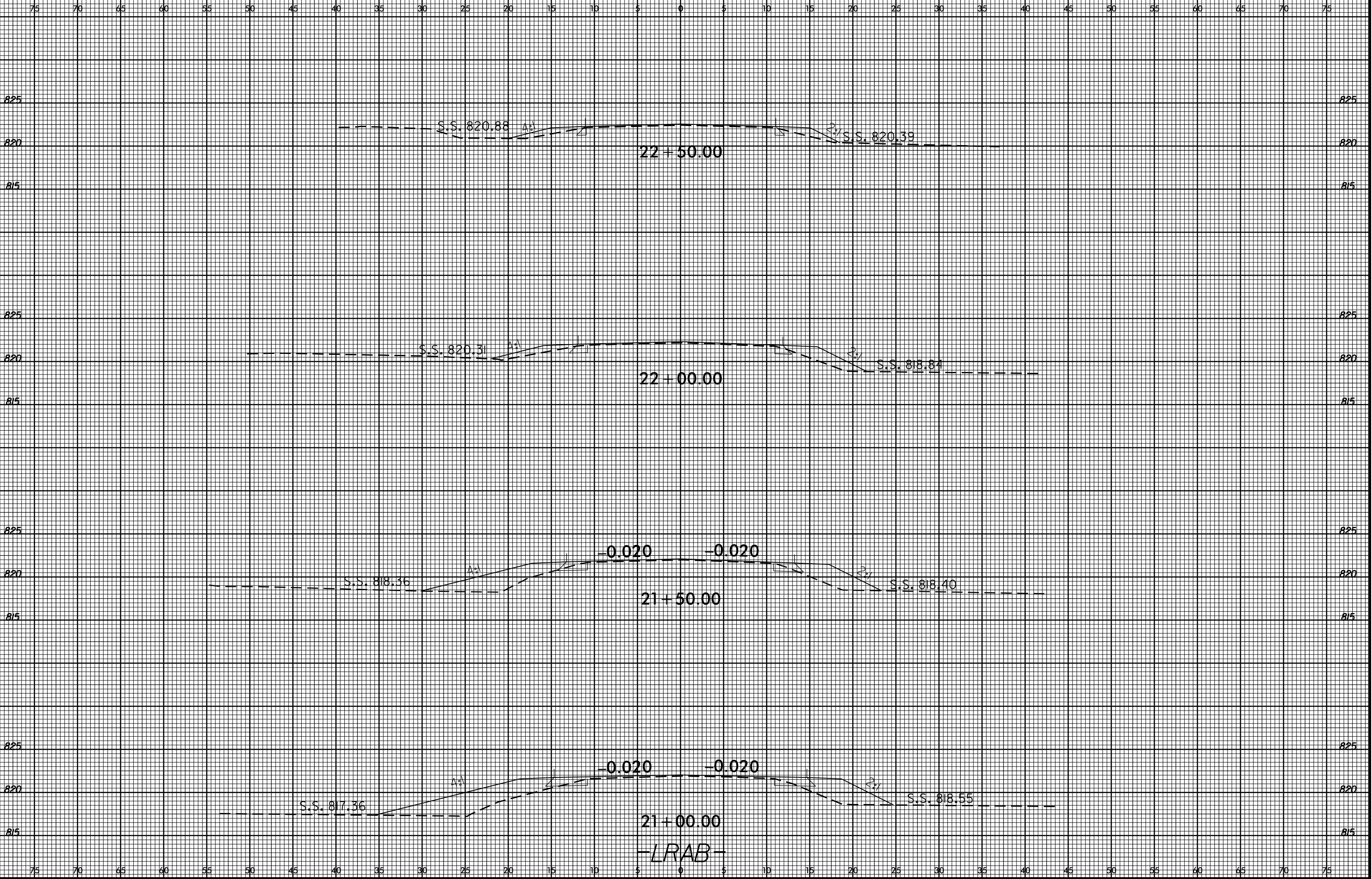




5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140 145

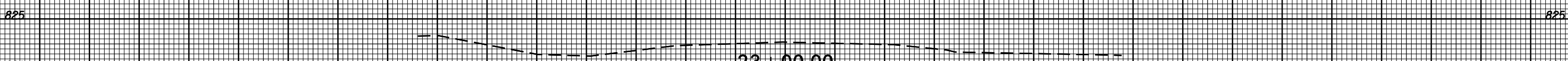
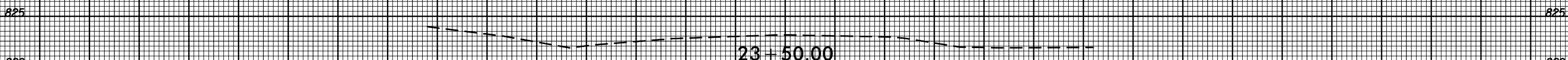
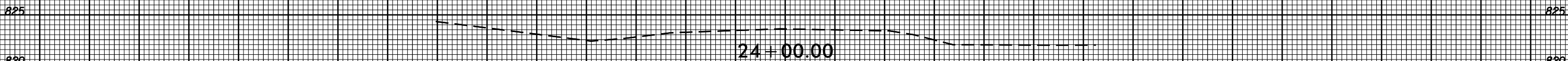
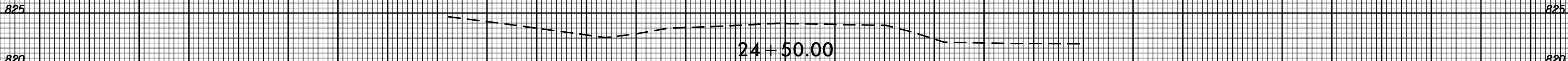
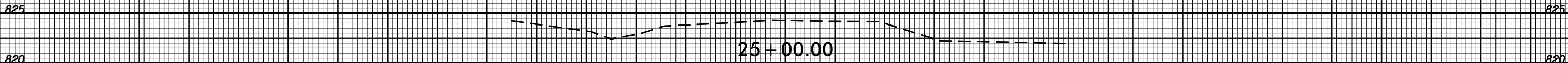








75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

-LRAB-

