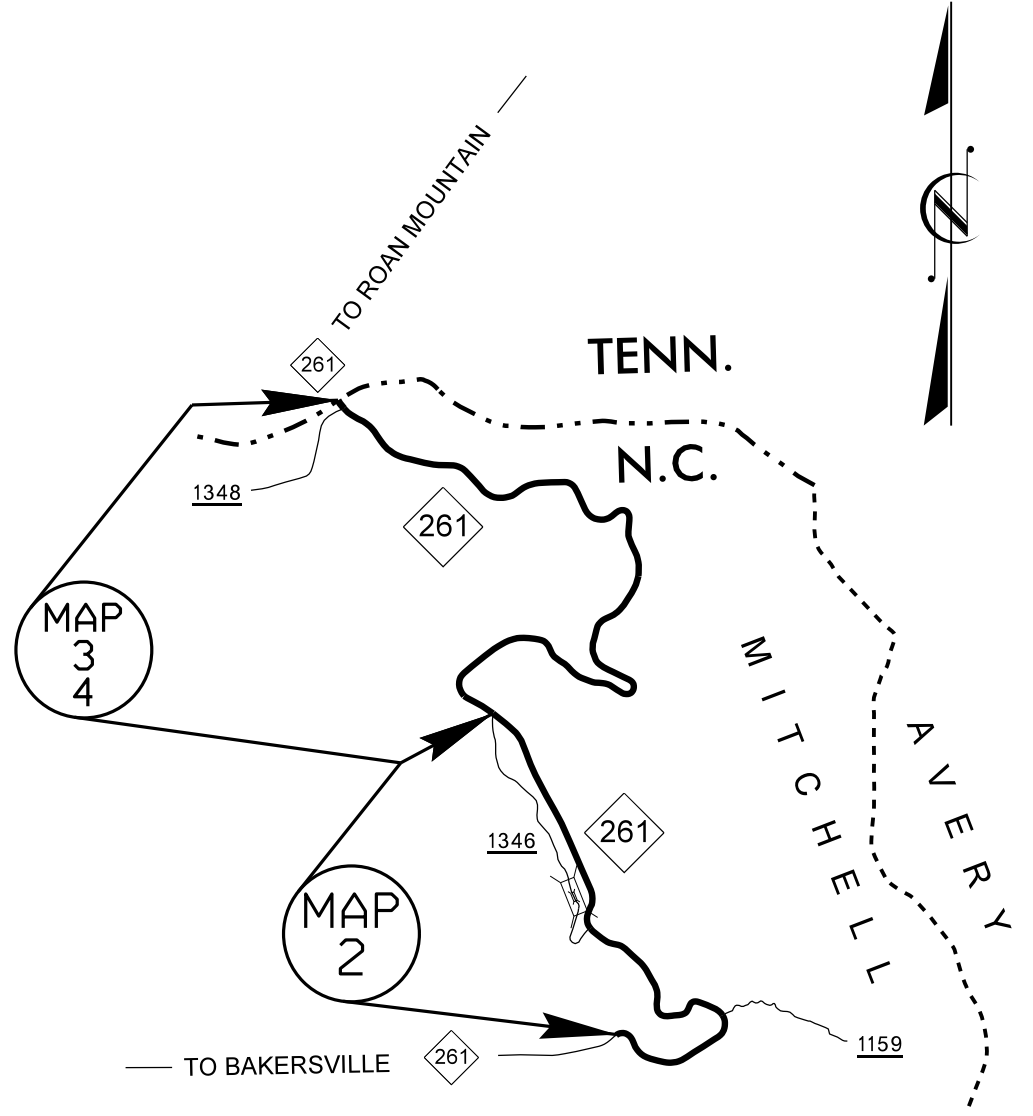
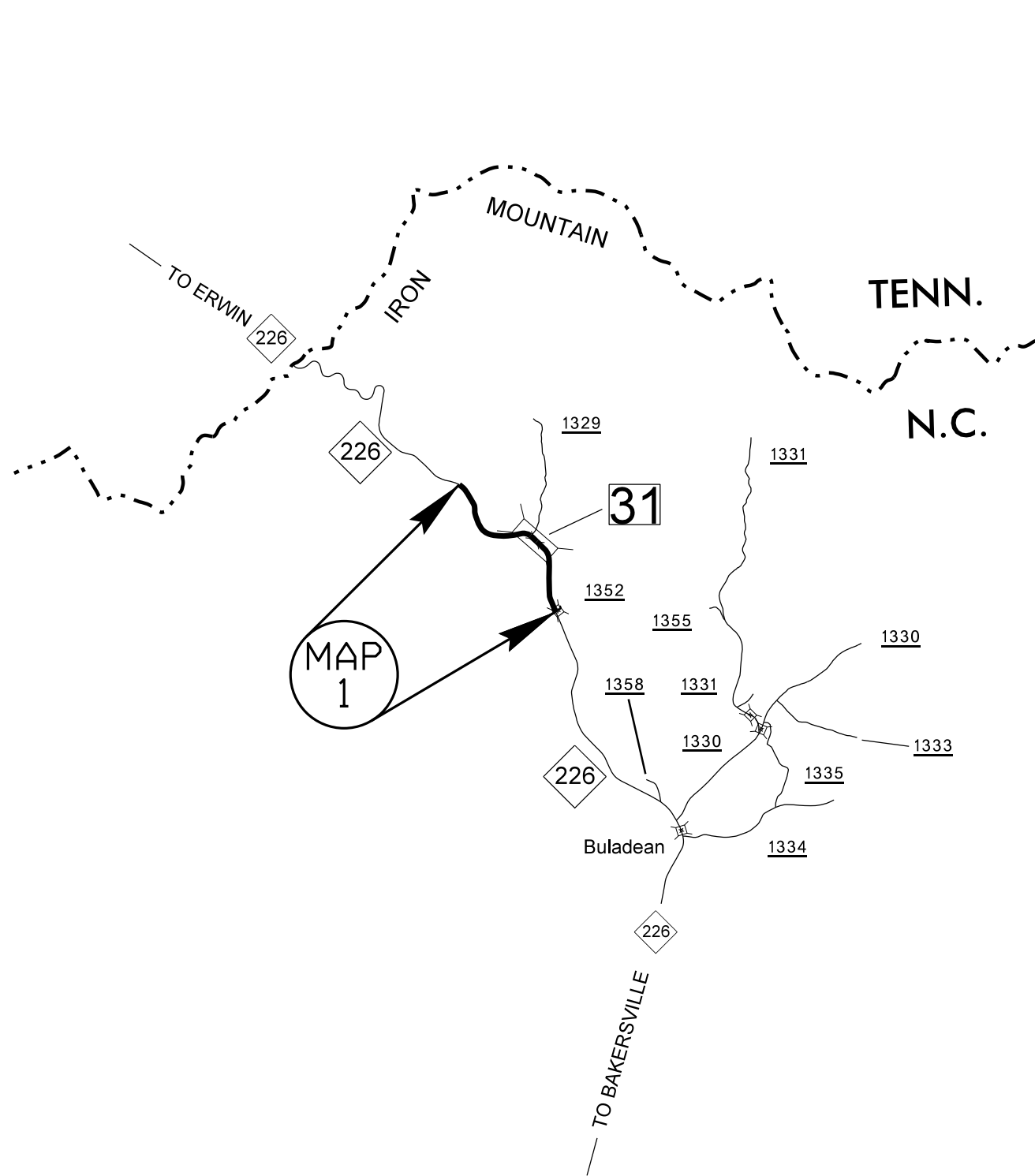
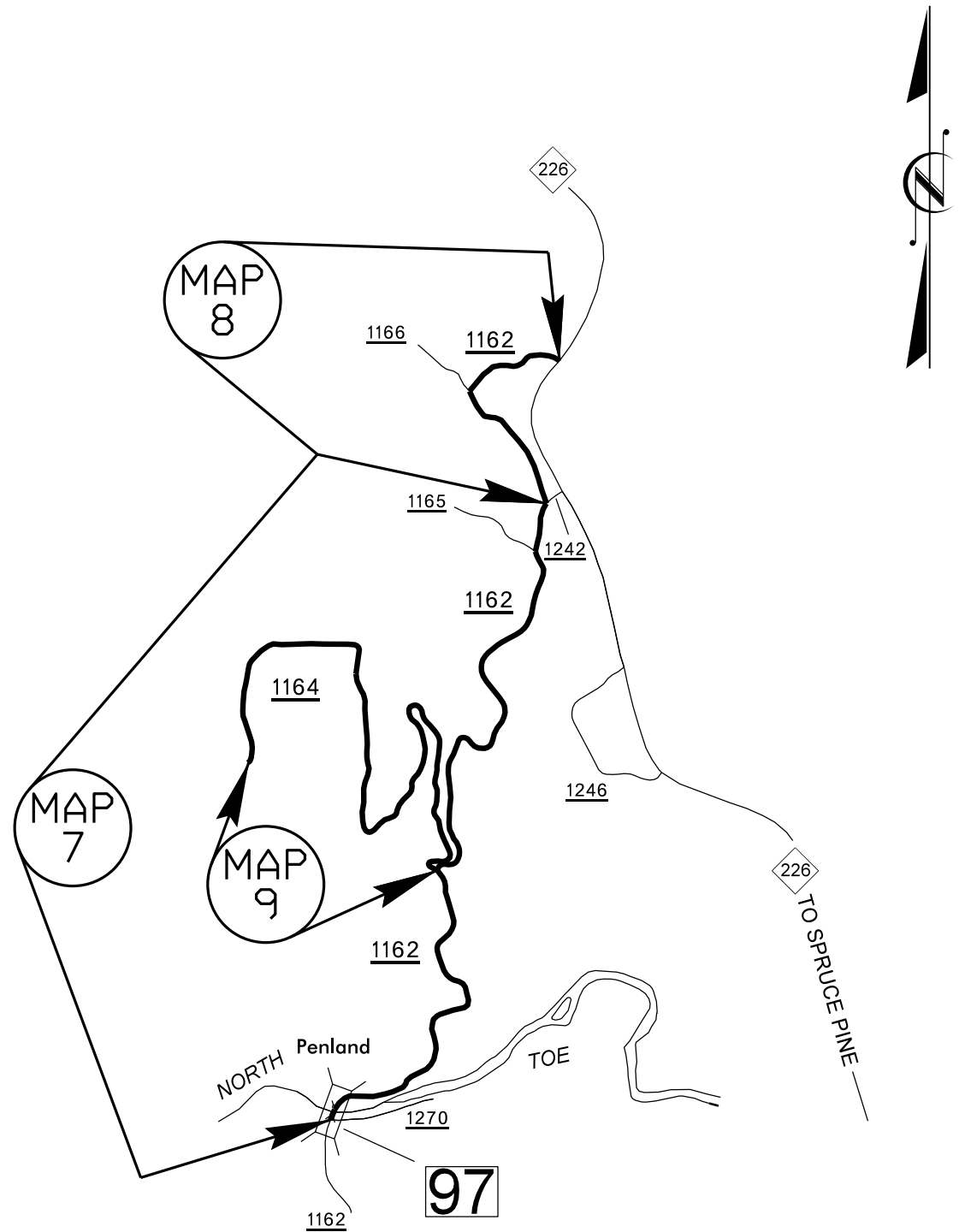
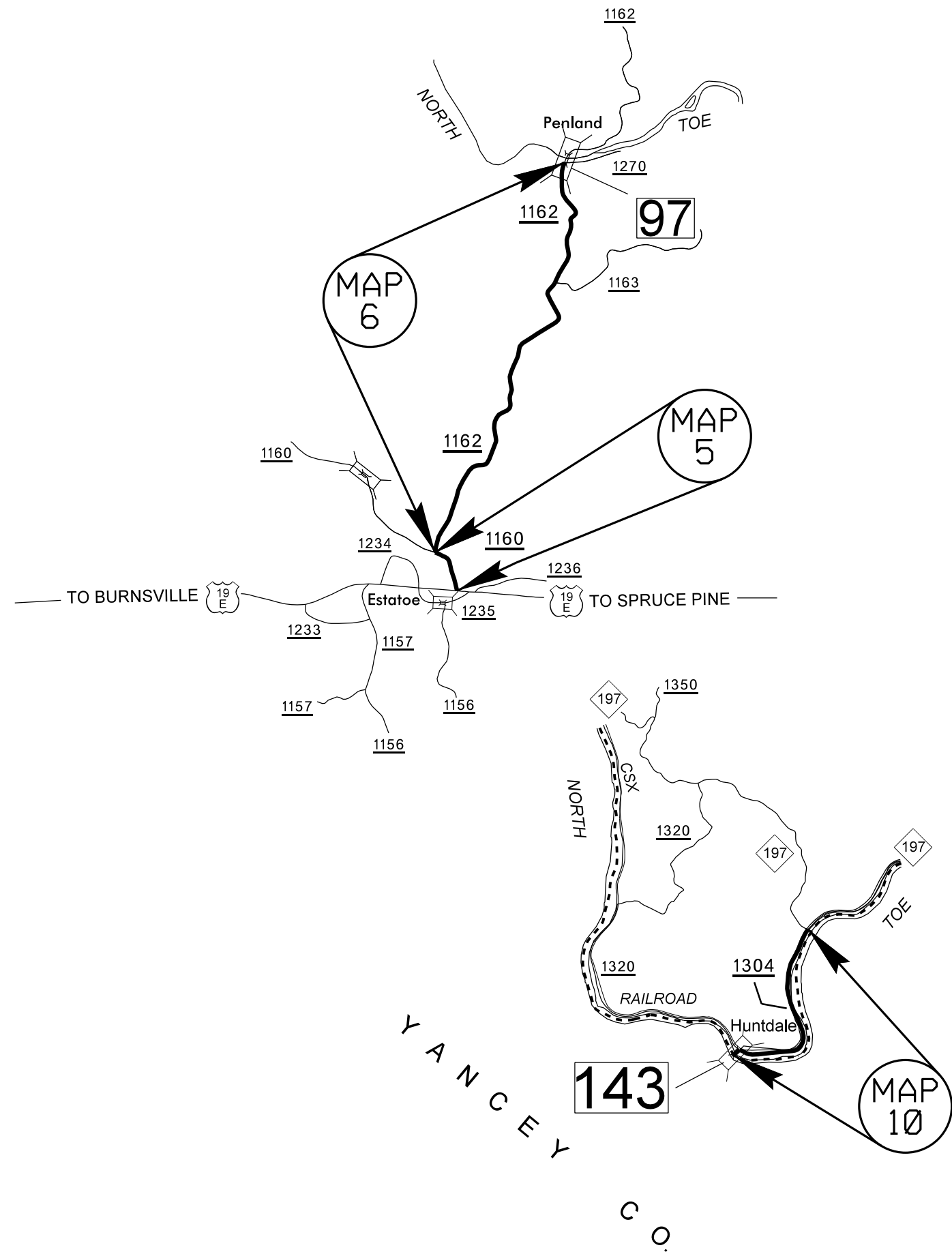


PROJECT NO.	SHEET NO.	TOTAL SHEETS
2020CPT.13.05.10611, 2020CPT.13.05.20611	1	12

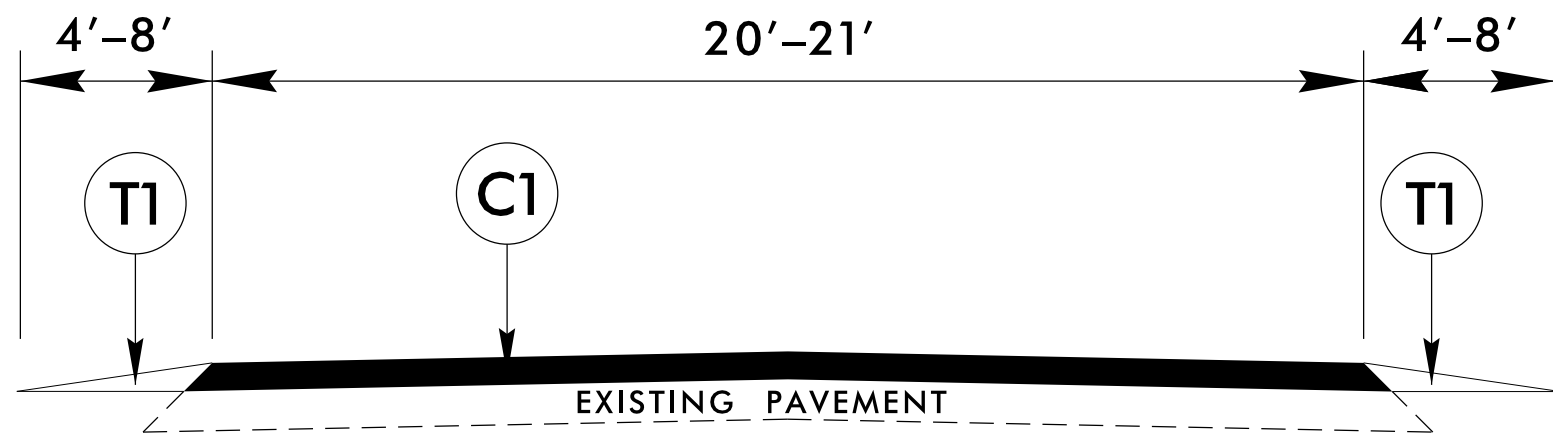


MITCHELL COUNTY

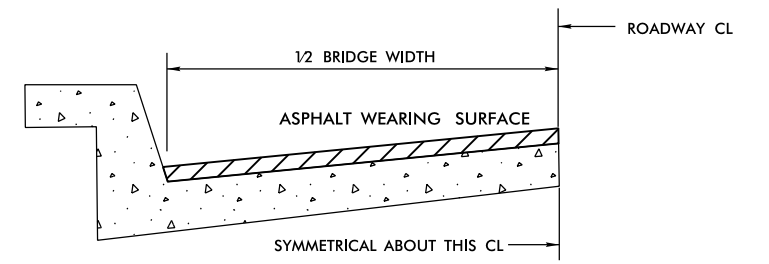
PROJECT NO.	SHEET NO.	TOTAL SHEETS
2020CPT.13.05.10611, 2020CPT.13.05.20611	2	12



MITCHELL COUNTY



TYPICAL SECTION #1



BRIDGE HALF TYPICAL SECTION

FOR BRIDGES WITH FLOOR DRAINS, CARE SHALL BE EXERCISED IN PLACING THE WEARING SURFACE AROUND FLOOR DRAINS SO AS NOT TO HINDER EFFECTIVE DRAINAGE. ALL DRAINS SHALL BE LEFT OPEN.

THE PROPOSED WEARING SURFACE SHALL VARY IN THICKNESS AS NECESSARY TO PROVIDE A SMOOTH RIDING SURFACE. THE MINIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1/2", S9.5B 1", S9.5C,D 1.5" - 2". ULTRA-THIN HOT MIX ASPHALT - TYPE A 3/4". ULTRA-THIN HOT MIX ASPHALT - TYPE B 5/8". ULTRA-THIN HOT MIX ASPHALT - TYPE C 1/2". THE MAXIMUM THICKNESS SHOULD DEPEND ON PAVEMENT TYPE AS FOLLOWS: S4.75A 1", S9.5B 1.5", S9.5C,D 2". ULTRA-THIN HOT MIX ASPHALT - TYPE A 3/4", ULTRA-THIN HOT MIX ASPHALT - TYPE B 5/8", ULTRA-THIN HOT MIX ASPHALT - TYPE C 1/2".

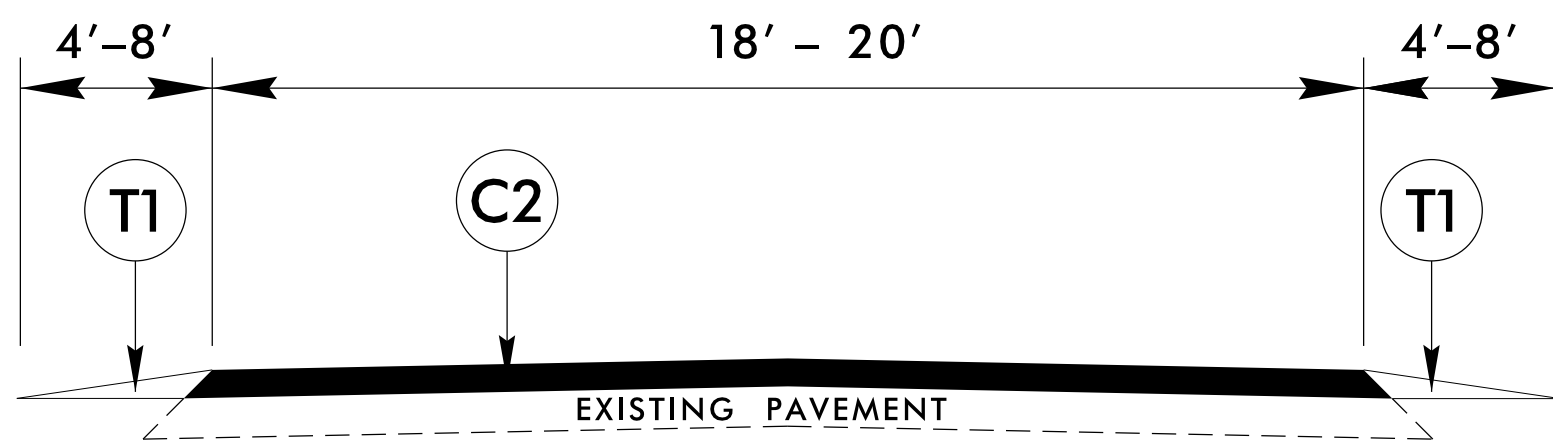
NOTES

ALL UNPAVED ROADS TO BE RESURFACED 50' FROM EDGE OF PAVEMENT OF MAIN PROJECT. ALL PAVED S.R. ROADS TO BE RESURFACED TO THE ENDS OF THE RADII, OR AS DIRECTED BY THE ENGINEER.

EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE TABLE OF QUANTITIES.

SHOULDERS AND DITCHES ARE TO BE CONSTRUCTED BY OTHERS UNLESS OTHERWISE INDICATED.

BRIDGES ARE TO BE RESURFACED AT LOCATIONS AND TO DEPTH AS DIRECTED BY THE ENGINEER.

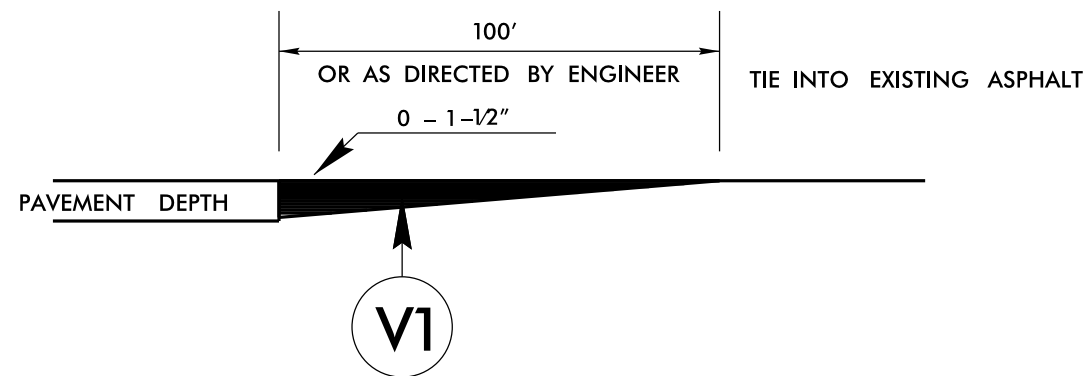


TYPICAL SECTION #2

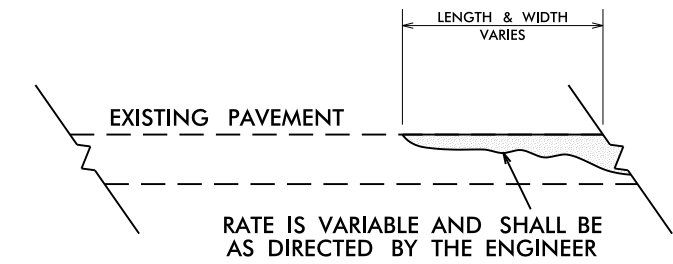
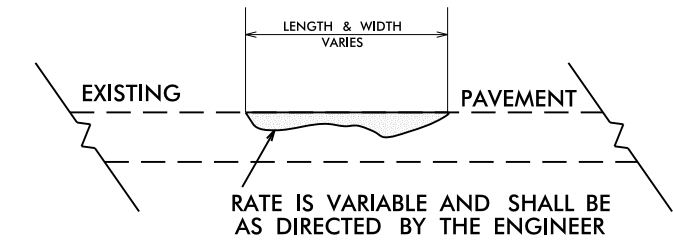
PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ.YD.
C2	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ.YD.
T1	SHOULDER RECONSTRUCTION
V1	INCIDENTAL MILLING

6/2/19

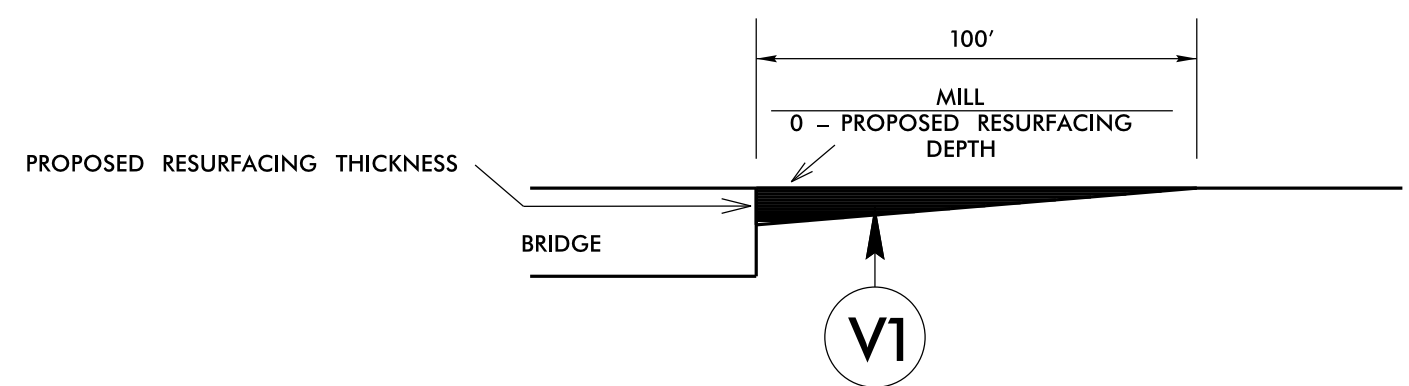
Q3-061-2018 09:31
 S:\00\Resurfacing\2020 Resurfacing\Mitchell\2020_Mitchell_Resurfacing_TYP.dgn



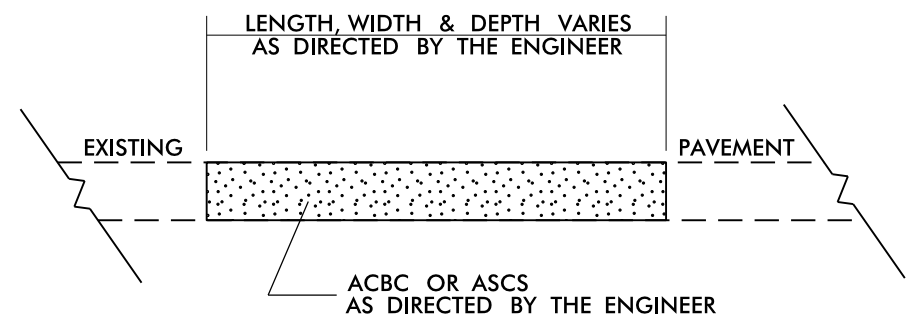
DETAIL TO TIE INTO EXIST PAVEMENT
 THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT HE WILL BE REQUIRED TO MILL THE EXISTING ASPHALT PAVEMENT TO ENSURE A PROPER TIE-IN WITH THE EXISTING SURFACE AT THE BEGINNING, END AND Y LINES OF EACH MAP TO BE RESURFACED WITH ASPHALT CONC SURFACE COURSE, TYPE S9.5C. THIS WILL BE PAID FOR AS INCIDENTAL MILLING.



DETAIL SHOWING METHOD OF WEDGING



MILLING DETAIL AT BRIDGE APPROACHES
 WHERE BRIDGES WILL NOT BE RESURFACED. THIS WILL BE PAID FOR AS INCIDENTAL MILLING. USE AT BRIDGE NUMBER: 31 MAP 1, 97 MAP 8, AND 143 MAP 10.



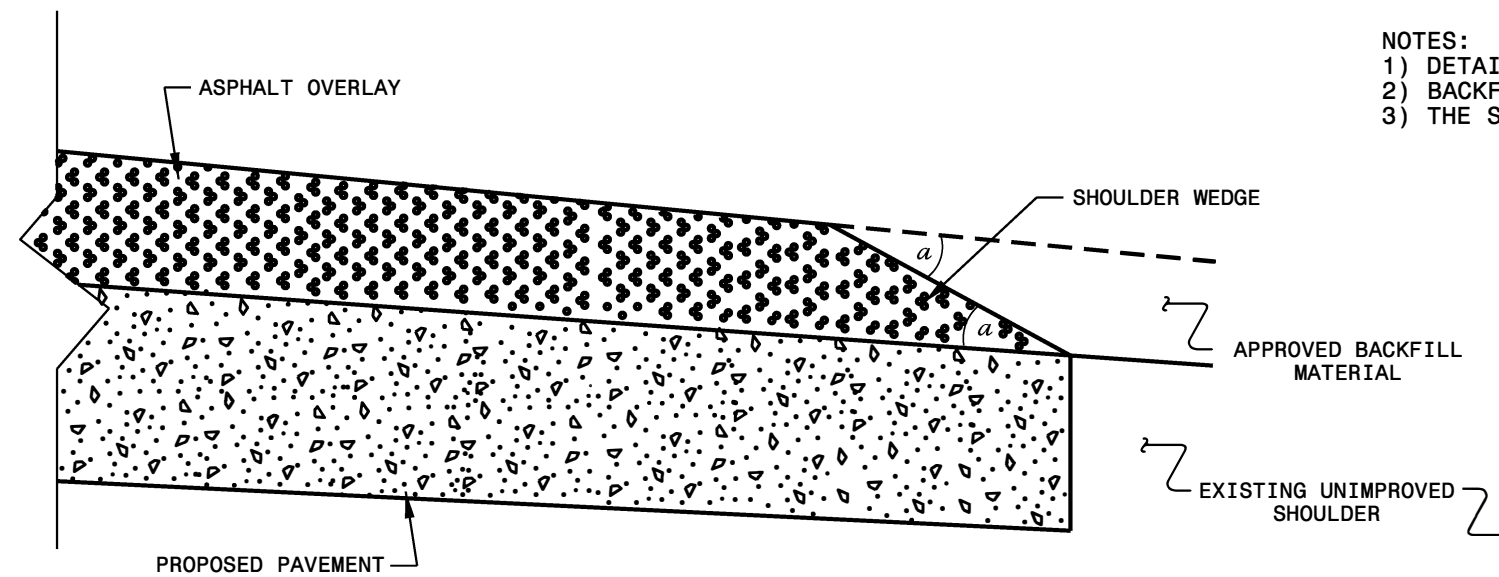
PATCHING EXISTING PAVEMENT

PAVEMENT SCHEDULE	
V1	INCIDENTAL MILLING

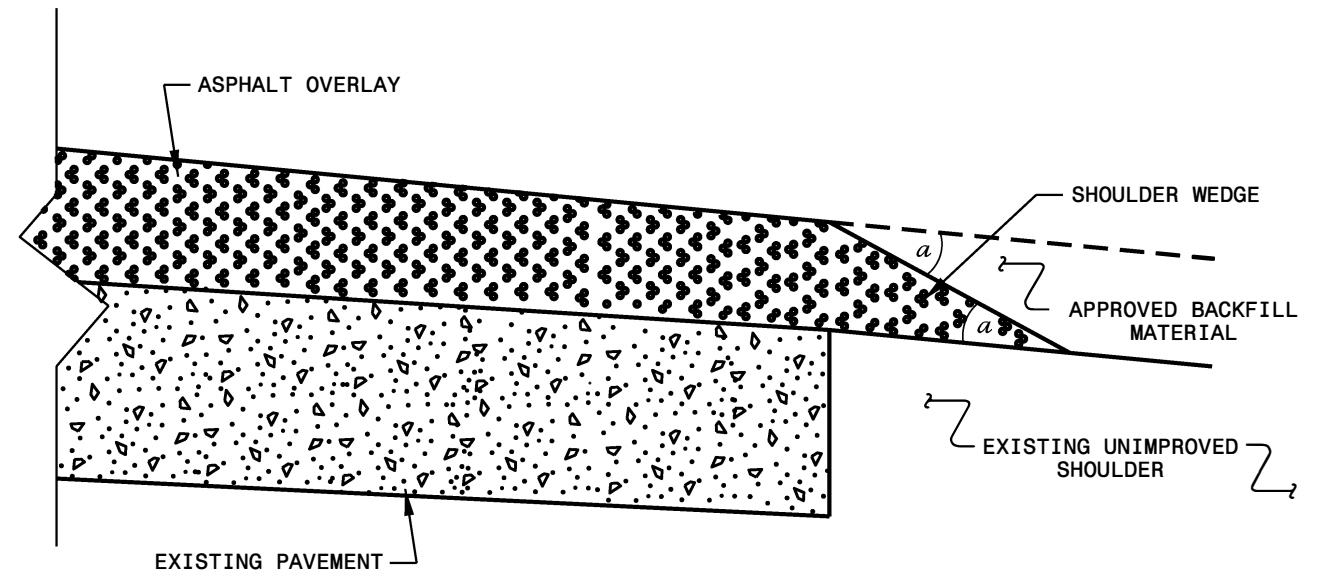
6/2/19
 Q2_061_2018 13:43
 S:\00\Resurfacing\2020 Resurfacing\Mitchell\2020_Mitchell_Resurfacing_TYP.dgn

PROJECT NO.	SHEET NO.	TOTAL NO.
2020CPT.13.05.10611, 2020CPT.13.05.20611	5	12

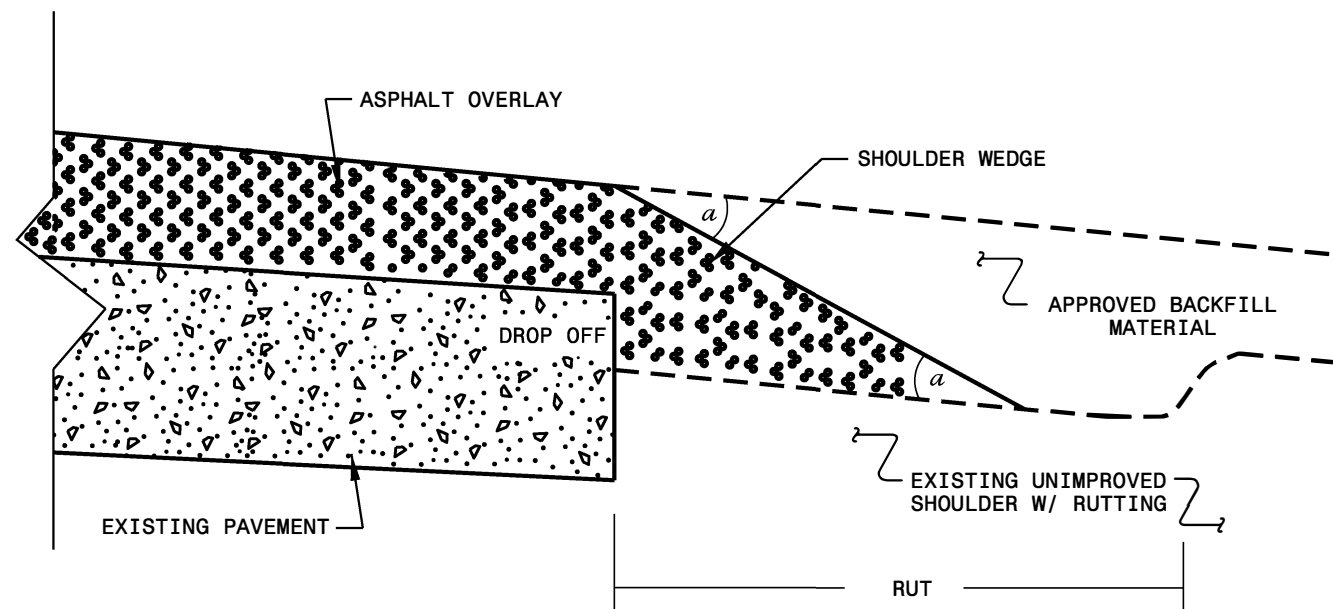
- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFD AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS AND SIDE STREETS.



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ Widening or
 with Existing Paved Shoulder having no dropoffs)



SHOULDER WEDGE DETAIL
 (Resurfacing Projects w/ NO Widening)



SHOULDER WEDGE DETAIL
 (Resurfacing Adjacent to
 Rutted Shoulder)

- SHOULDER WEDGE ANGLE = 30°

CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
SHOULDER WEDGE DETAILS	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 10/16/12
CHECKED BY:	DATE:
FILE SPEC: suser/dot_all/stand/shoulderwed_detail.dwg	

SYTIME
 CON
 US
 ERNAME

PROJECT NO.	SHEET NO.	TOTAL NO.
2020CPT.13.05.10611	6	12
2020CPT.13.05.20611		

SUMMARY OF QUANTITIES

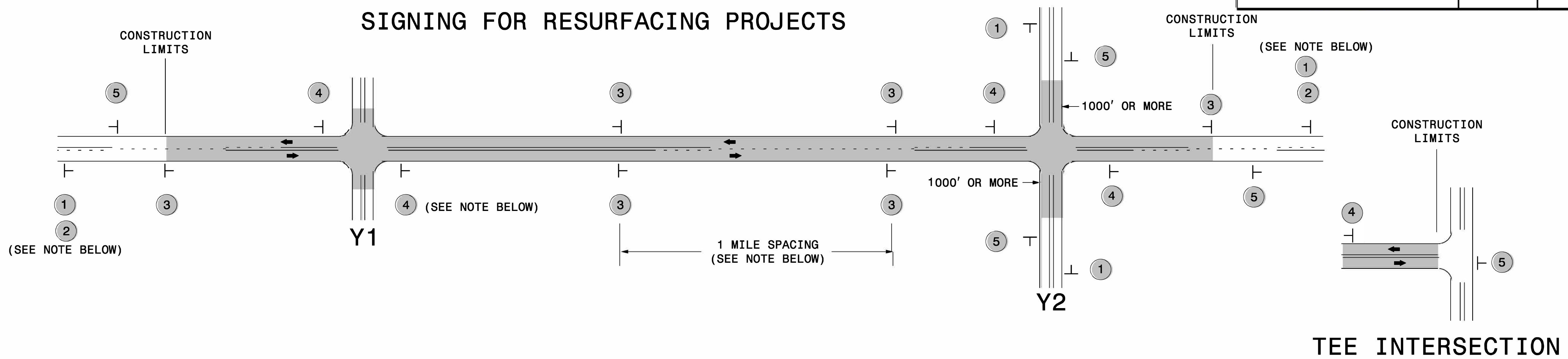
PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH	WIDTH	1220000000-E	1245000000-E	1260000000-E	1330000000-E	1519000000-E	1523000000-E	1575000000-E	1704000000-E	2800000000-N		
												INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	INCIDENTAL MILLING	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT	ADJUSTMENT OF CATCH BASINS		
												MI	FT	TON	SMI	TON	SY	TON	TON	TON	TON	EA
2020CPT.13.05.10611	Mitchell	1	NC 226	FROM SR 1352 TO BRIDGE #31 + 0.78 MILES (MP 28.736 - MP 29.986)	1	2	2WU	NO	NO	1.25	21	63	2.50	325	1,445		1,431	86	300			
2020CPT.13.05.10611	Mitchell	2	NC 261	FROM 0.5 MI SOUTH OF SR 1159 TO SR 1346 (MP 7.932 - MP 9.952)	1	2	2WU	NO	YES	2.02	20	101	4.04	525	1,000		2,204	132	825			
2020CPT.13.05.10611	Mitchell	3	NC 261	FROM SR 1346 TO SR1346 +2MILES(MP 9.952 - MP 11.952)	1	2	2WU	NO	YES	2	20	100	4.00	520			2,182	131	800			
2020CPT.13.05.10611	Mitchell	4	NC 261	FROM SR 1346 +2 MILES TO TENN. STATE LINE (MP 11.952 - MP 12.842)	1	2	2WU	NO	YES	0.89	20	45	1.78	231	623		971	58	375			
TOTAL FOR PROJ NO. 2020CPT.13.05.10611											6.16		309	12.32	1,601	3,068		6,788	407	2,300		
2020CPT.13.05.20611	Mitchell	5	SR 1160	FROM US 19 TO SR 1162 (MP 0.00 - MP 0.19)	2	2	2WU	NO	NO	0.19	20	10	0.38	49		204		14	10			
2020CPT.13.05.20611	Mitchell	6	SR 1162	FROM SR 1160 TO SR 1270 (MP 0.00 - MP 1.88)	2	2	2WU	NO	NO	1.88	20	94	3.76	489	225	2,014		135	150			
2020CPT.13.05.20611	Mitchell	7	SR 1162	FROM SR 1270 TO SR 1242 (MP 1.88 - MP 3.74)	2	2	2WU	NO	NO	1.86	20	93	3.72	484	225	1,993		134	150	1		
2020CPT.13.05.20611	Mitchell	8	SR 1162	FROM SR 1142 TO NC 226 (MP 3.74 - MP 4.30)	2	2	2WU	NO	NO	0.56	20	28	1.12	146		600		40	10			
2020CPT.13.05.20611	Mitchell	9	SR 1164	FROM SR 1162 TO END PVMT (MP 0.00 - MP 1.73)	2	2	2WU	NO	NO	1.73	18	87	3.46	450		1,669		112	160			
2020CPT.13.05.20611	Mitchell	10	SR 1304	FROM YANCEY COUNTY TO NC 197 (MP 0.00 - MP 1.373)	2	2	2WU	NO	NO	1.373	20	69	2.75	357	445	1,471		99	350			
TOTAL FOR PROJ NO. 2020CPT.13.05.20611											7.593		381	15.19	1,975	895	7,951		534	830	1	
GRAND TOTAL											13.753		690	27.51	3,576	3,963	7,951		6,788	941	3,130	1

PROJECT NO.	SHEET NO.	TOTAL NO.
2020CPT.13.05.10611	7	12
2020CPT.13.05.20611		

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	441300000-E	445700000-N	470500000-E	471000000-E	472100000-E		481000000-E		484701000-E		490500000-N			
										WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL	THERMOPLASTIC PAVEMENT MARKING LINES (16", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS) RXR	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS) SCHOOL	PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	POLYUREA PAVEMENT MARKING LINES WHITE (4", 20 MILS) (HIGHLY REFLECTIVE MEDIA)	POLYUREA PAVEMENT MARKING LINES YELLOW (4", 20 MILS) (HIGHLY REFLECTIVE MEDIA)	SNOWPLOWABLE PAVEMENT MARKERS			
									MI	FT	SF	LS	LF	LF	EA	EA	LF	LF	LF	LF	EA		
2020CPT.13.05.10611	Mitchell	1	NC 226	FROM SR 1352 TO BRIDGE #31 + 0.78 MILES (MP 28.736 - MP 29.986)	1	2	2WU	1.25	21	691	*								13,200	13,200	110		
2020CPT.13.05.10611	Mitchell	2	NC 261	FROM 0.5 MI SOUTH OF SR 1159 TO SR 1346 (MP 7.932 - MP 9.952)	1	2	2WU	2.02	20												21,331	21,331	180
2020CPT.13.05.10611	Mitchell	3	NC 261	FROM SR 1346 TO SR1346 +2MILES(MP 9.952 - MP 11.952)	1	2	2WU	2	20												21,120	21,120	175
2020CPT.13.05.10611	Mitchell	4	NC 261	FROM SR 1346 +2 MILES TO TENN. STATE LINE (MP 11.952 - MP 12.842)	1	2	2WU	0.89	20												9,398	9,398	80
TOTAL FOR PROJ NO. 2020CPT.13.05.10611								6.16		691	*									65,049	65,049	545	
										130,098													
2020CPT.13.05.20611	Mitchell	5	SR 1160	FROM US 19 TO SR 1162 (MP 0.00 - MP 0.19)	2	2	2WU	0.19	20	853	*					4,013	4,013						
2020CPT.13.05.20611	Mitchell	6	SR 1162	FROM SR 1160 TO SR 1270 (MP 0.00 - MP 1.88)	2	2	2WU	1.88	20									39,706	39,706				
2020CPT.13.05.20611	Mitchell	7	SR 1162	FROM SR 1270 TO SR 1242 (MP 1.88 - MP 3.74)	2	2	2WU	1.86	20			88	60	4				39,283	39,283				
2020CPT.13.05.20611	Mitchell	8	SR 1162	FROM SR 1142 TO NC 226 (MP 3.74 - MP 4.30)	2	2	2WU	0.56	20									11,827	11,827				
2020CPT.13.05.20611	Mitchell	9	SR 1164	FROM SR 1162 TO END PVMT (MP 0.00 - MP 1.73)	2	2	2WU	1.73	18					40		12		36,538	36,538				
2020CPT.13.05.20611	Mitchell	10	SR 1304	FROM YANCEY COUNTY TO NC 197 (MP 0.00 - MP 1.373)	2	2	2WU	1.373	20									28,998	28,998				
TOTAL FOR PROJ NO. 2020CPT.13.05.20611								7.593		853	*	88	100	4	12	160,365	160,365						
										320,730													
GRAND TOTAL								13.753		1,544	1	88	100	4	12	160,365	160,365	65,049	65,049	545			
										320,730													
										130,098													

SIGNING FOR RESURFACING PROJECTS



MAINLINE (-L-) SIGNING

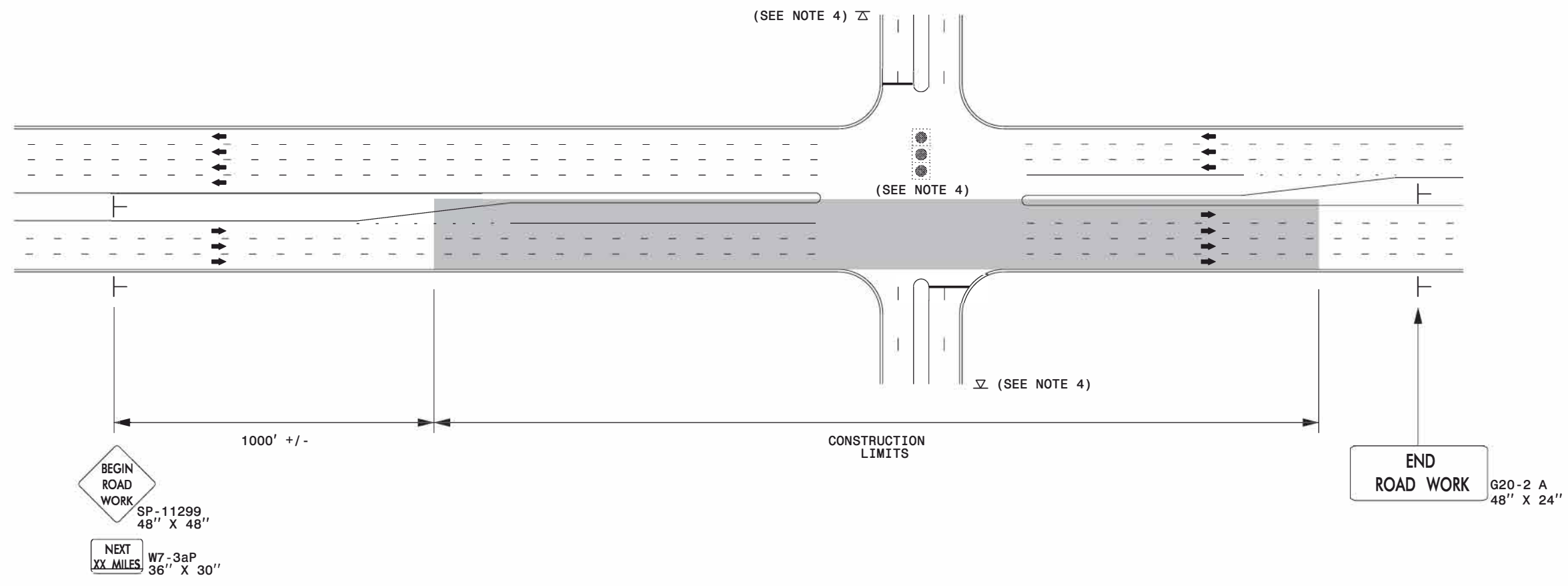
-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	MAINLINE (-L-) SIGNING		-Y- LINE SIGNING	
	1	 W20-1 48" X 48"	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <ol style="list-style-type: none"> 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS 	
	2	 W7-3aP 24" X 18"	<p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p>	
	3	 SP 13107 48" X 48"	 W20-1 48" X 48"	
	4	 SP 13106 48" X 48"	 W20-7 A 48" X 48"	
5	 G20-2 A 48" X 24"	<p>PLACED 500' IN ADVANCE OF FLAGGER. PLACED 250' IN ADVANCE OF FLAGGER.</p>		

**RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS**

4/20/2016 C:\Users\rmgarrett\Desktop\Resurfacing_Advilarn_2Ln.dgn User:rmgarrett

URBAN / SUBURBAN WORKZONES



NOTES:

- 1) 48" x 48" SIZED SIGNS (SP- 11299) MAY BE REDUCED TO 36" X 36" ON ROADWAYS WITH SPEED LIMITS OF 40 MPH OR LESS.
- 2) MOUNT SIGNS THAT ARE LARGER THAN 10 SQUARE FEET IN AREA ON TWO OR MORE WOOD OR U-CHANNEL SUPPORTS. PERFORATED SQUARE TUBING SUPPORT SYSTEMS MAY SUPPORT LARGER AREAS ON A SINGLE SUPPORT. FOLLOW MANUFACTURER'S RECOMMENDATIONS. THESE SYSTEMS SHALL BE NCHRP 350 COMPLIANT AND NCDOT APPROVED.
- 3) ADVANCE WARNING SIGNS NOT REQUIRED ON NON-SIGNALIZED SIDE STREETS.
- 4) MAY USE LAW ENFORCEMENT TO CONTROL TRAFFIC AT SIGNALIZED INTERSECTIONS AS DIRECTED BY THE ENGINEER. PROVIDE PORTABLE "ROAD WORK AHEAD" (W20-1) SIGNS 500' IN ADVANCE ALONG BOTH APPROACHES FROM THE SIDE STREETS WHEN PAVING PROCEEDS THROUGH THE INTERSECTION.
- 5) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 2' AS MEASURED FROM THE EDGE OF PAVEMENT OR THE FACE OF THE CURB. WHEN UNABLE TO OBTAIN THE LATERAL CLEARANCE WITHIN THE MEDIAN AREA USE SHOULDER MOUNTS ONLY.
- 6) SIGN MOUNT LOCATIONS SHALL NOT BLOCK SIDEWALKS OR DRIVEWAYS.
- 7) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 8) IF MILLED AREAS ARE NOT PAVED BACK BY THE END OF THE WORK DAY, PORTABLE SIGNS SHALL BE USED TO WARN DRIVERS OF THE PRESENT CONDITIONS. THESE ARE TO INCLUDE, BUT NOT LIMITED TO "ROUGH ROAD" W8-8, "UNEVEN LANES" W8-11, "GROOVED PAVEMENT" W8-15 w/MOTORCYCLE PLAQUE MOUNTED BELOW. THESE ARE TO BE DOUBLE INDICATED ON MULTI-LANE ROADWAYS WITH SPEED LIMITS 45 MPH AND GREATER WHERE LATERAL CLEARANCE CAN BE OBTAINED WITHIN THE MEDIAN AREAS. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

┆ STATIONARY SIGN

➔ DIRECTION OF TRAFFIC FLOW

**RESURFACING ADVANCE
WARNING SIGNS FOR
URBAN / SUBURBAN
FACILITIES**

4/8/2015
 C:\Users\mgarrrett\Downloads\Resurfacing_AdvWarn_Ur-Su (2).dgn
 User: mgarrrett

SIGN NUMBER: 11299

BACKG COLOR: Fluorescent Orange

DESIGN BY: WJ

CHECKED BY:

DATE: Jun 22, 2011

TYPE: B

COPY COLOR: Black

PROJECT ID: ALL

DIV: ALL

QUANTITY: SEE PLANS

SYMBOL	X	Y	WID	HT

SIGN WIDTH: 5'-6"

HEIGHT: 5'-6"

SP 11299

PROJECT NO.	SHEET NO.	TOTAL NO.
2020CPT.13.05.10611, 2020CPT.13.05.20611	10	12

TOTAL AREA: 30.5 Sq.Ft.

BORDER TYPE: INSET

RECESS: 0.59"

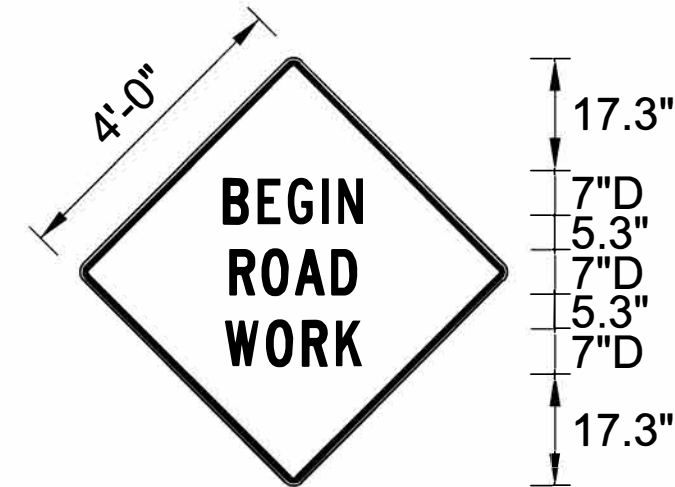
WIDTH: 0.75"

RADII: 1.38"

NO. Z BARS: N/A

LENGTH: N/A

MAT'L: 0.125" (3.2 mm) ALUMINUM



BORDER
R=1.38"
TH=0.75"
IN=0.59"

Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

1. Legend and border shall be direct applied black non-reflective sheeting.
2. Background shall be Type VII, VIII, or IX (prismatic) fluorescent orange retroreflective sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size
Text Length

Letter spacings are to start of next letter														Series/Size Text Length	
		B	E	G	I	N									D 2000
20.5	6	5.4	6.3	2.8	4.8	20.5									25.2
		R	O	A	D										D 2000
21.4	5.8	5.9	7	4.8	21.4										23.5
		W	O	R	K										D 2000
20.9	7.1	6.5	5.9	4.9	20.9										24.5

SIGN NUMBER: SP13106
 TYPE: STATIONARY
 QUANTITY: SEE PLANS

BACKG COLOR: Fluorescent Orange
 COPY COLOR: Black

DESIGN BY: B. RASHID
 PROJECT ID:

CHECKED BY: AIA
 DIV:

DATE: Apr 26, 2013

SYMBOL	X	Y	WID	HT

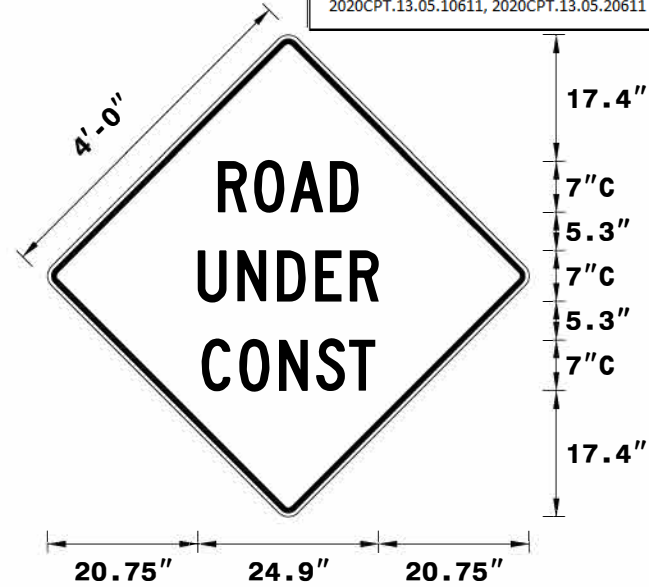
SIGN WIDTH: 4'-0"
 HEIGHT: 4'-0"
 TOTAL AREA: 16.00 Sq.Ft.

BORDER TYPE: INSET
 RECESS: 0.75"
 WIDTH: 1.25"
 RADII: 3"

NO. Z BARS:
 LENGTH:

MAT'L: 0.080" (2.0 mm) ALUMINUM

PROJECT NO.	SHEET NO.	TOTAL NO.
2020CPT.13.05.10611, 2020CPT.13.05.20611	11	12



Spacing Factor is 1 unless specified otherwise

USE NOTES: 1,2

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

LETTER POSITIONS

Letter spacings are to start of next letter

Letter spacings are to start of next letter															Series/Size	
															Text Length	
		R	O	A	D											C 2000
23.5	5	5	5.5	3.9	23.5											19.3
		U	N	D	E	R										C 2000
20.7	5.5	5.5	5.3	4.8	3.9	20.7										24.9
		C	O	N	S	T										C 2000
21.2	5.2	5.5	5.1	4.6	3.6	21.2										23.9

SIGN NUMBER: SP13107
 TYPE: STATIONARY
 QUANTITY: SEE PLANS

BACKG COLOR: Fluorescent Orange
 COPY COLOR: Black

DESIGN BY: B. RASHID
 PROJECT ID:

CHECKED BY: AIA
 DIV:

DATE: Apr 26, 2013

SYMBOL	X	Y	WID	HT

SIGN WIDTH: 4'-0"
 HEIGHT: 4'-0"
 TOTAL AREA: 16.00 Sq.Ft.

BORDER TYPE: INSET
 RECESS: 0.75"
 WIDTH: 1.25"
 RADII: 3"

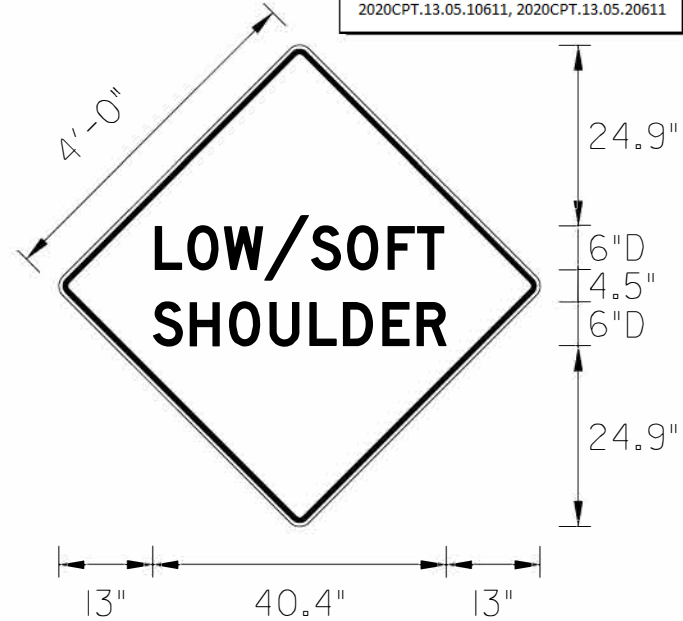
NO. Z BARS:
 LENGTH:

MAT'L: 0.080" (2.0 mm) ALUMINUM

USE NOTES: 1,2

- Legend and border shall be direct applied black non-reflective sheeting.
- Background shall be NC GRADE B fluorescent orange retroreflective sheeting.

PROJECT NO.	SHEET NO.	TOTAL NO.
2020CPT.13.05.10611, 2020CPT.13.05.20611	12	12



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter											Series/Size
L	O	W	/	S	O	F	T				Text Length
13.2	4.5	5	5.5	6.5	5	5.6	4.1	3.7	13.2		D 2000
											39.9
S	H	O	U	L	D	E	R				Series/Size
13	5.1	5.4	5.6	5.5	4.6	5.4	4.7	4.1	13		D 2000
											40.4