

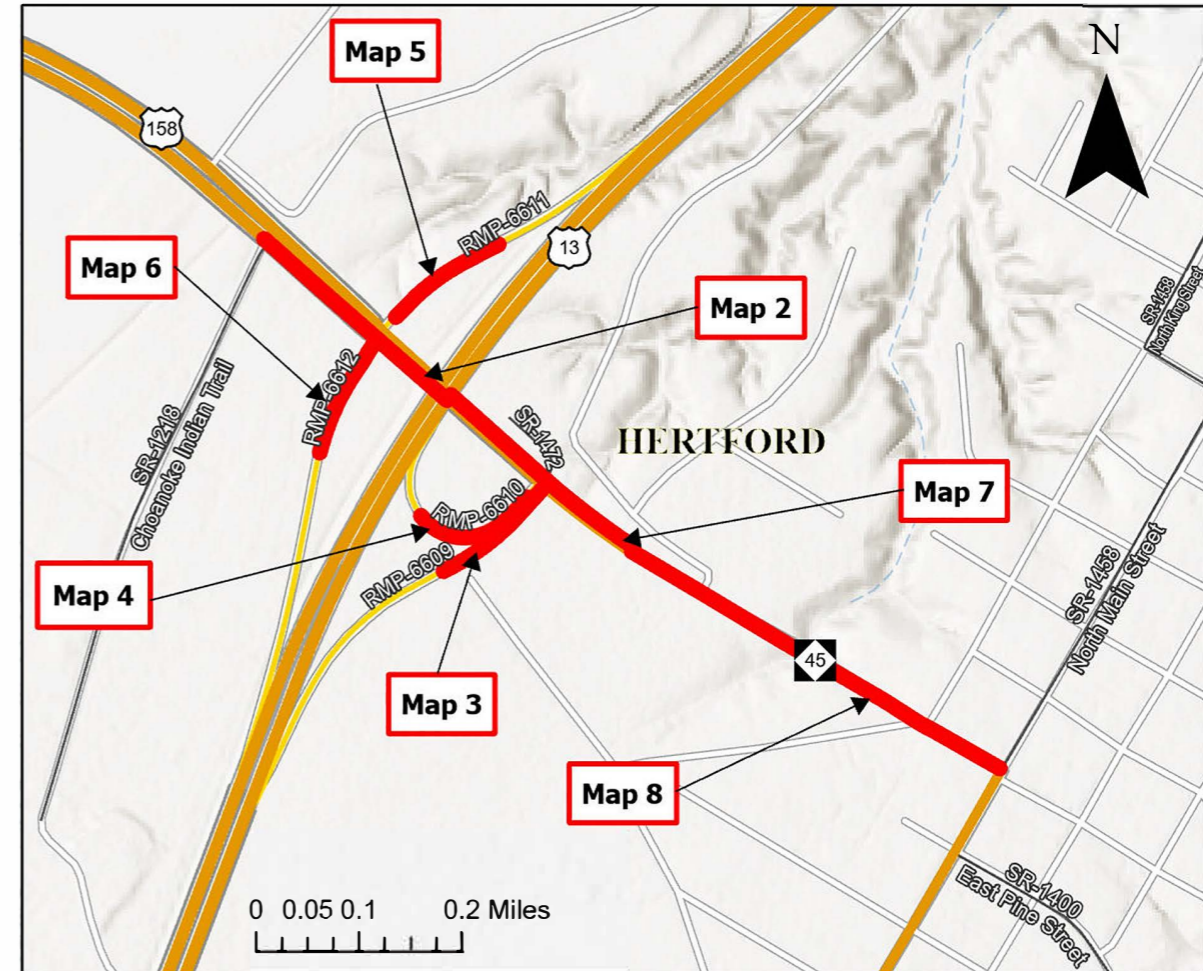
**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS**

HERTFORD

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2024CPT.01.02.10461, ETC.	2
STATE PROJECT NUMBER		DESCRIPTION
2024CPT.01.02.10461		P.E., CONST.
		P.E., CONST.
		P.E., CONST.
		P.E., CONST.

TYPE OF WORK: GUARDRAIL, MILLING, RESURFACING, SHOULDER RECONSTRUCTION, & LONG LIFE PAVEMENT MARKINGS

MAP	ROUTE	FROM	TO
02	US 158	SR 1218 (Industrial Park Rd.)	NC 45
03	RMP-6609	NC 45	Approx. 500FT towards US 13
04	RMP-6610	NC 45	Approx. 500FT towards US 13
05	RMP-6611	US 158	Approx. 500FT towards US 13
06	RMP-6612	US 158	Approx. 500FT towards US 13
07	NC 45	US 158	Begin C&G
08	NC 45 (W. Mulberry St.)	Begin C&G	SR 1458 (N. Main Street)



PROJECT LENGTH

MAP	MILES
02	0.19
03	0.10
04	0.10
05	0.10

MAP	MILES
06	0.10
07	0.33
08	0.20

Prepared in the Office of:
DIVISION OF HIGHWAYS
113 AIRPORT DR., EDENTON, NC 27932

B. N. BRASWELL, PE
DIV. PROJ. DEVELOPMENT ENGINEER

C. E. SLACHTA
DIVISION CONTRACT ENGINEER

J. S. ABEL, JR.
DIVISION PROJECT TEAM LEAD

D. H. STALLINGS
DIVISION DESIGN ENGINEER



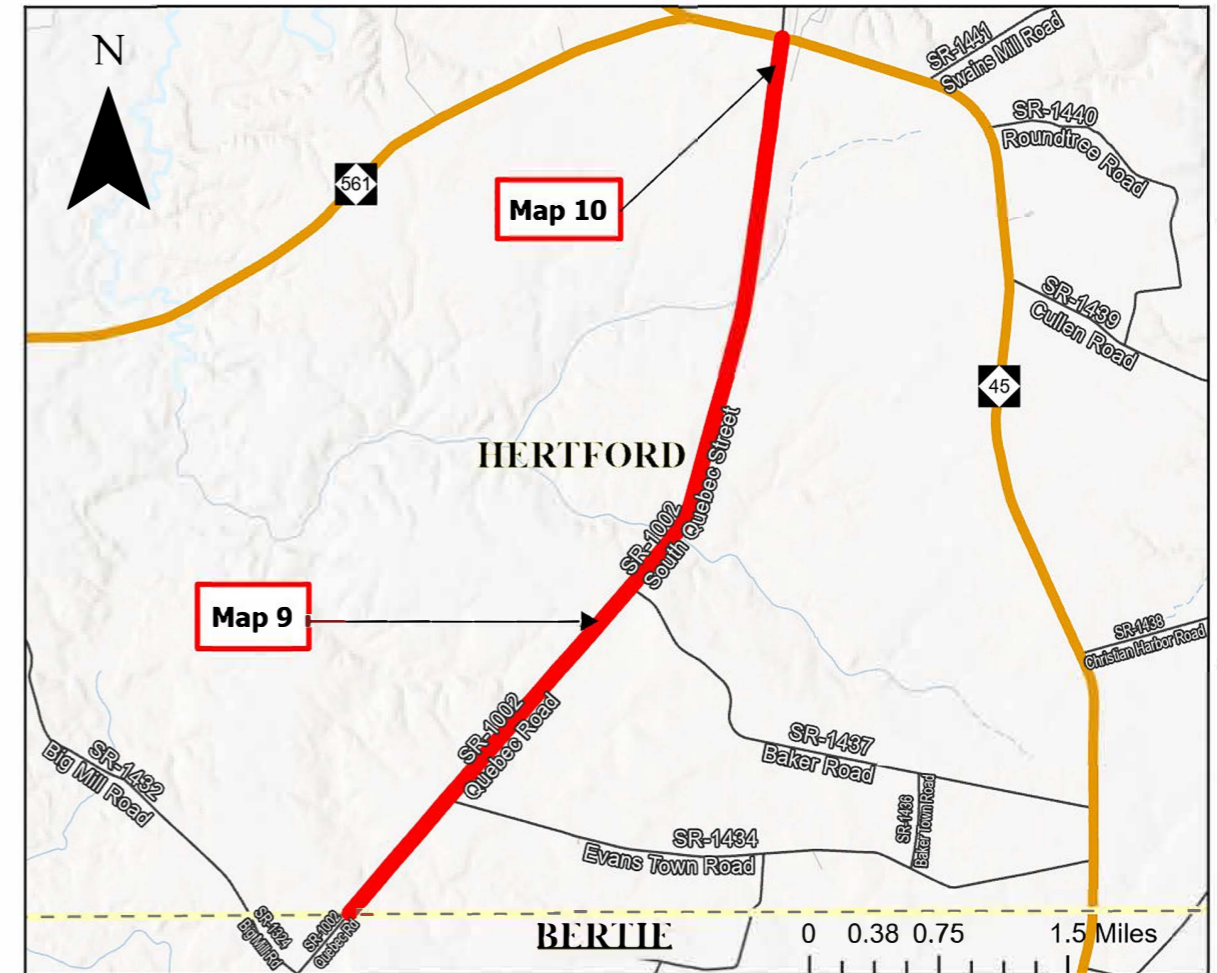
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HERTFORD

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2024CPT.01.02.10461, ETC.	3
STATE PROJECT NUMBER		DESCRIPTION
2024CPT.01.02.20461		P.E., CONST.
		P.E., CONST.
		P.E., CONST.
		P.E., CONST.

TYPE OF WORK: GUARDRAIL, MILLING, RESURFACING, SHOULDER RECONSTRUCTION, & LONG LIFE PAVEMENT MARKINGS

MAP	ROUTE	FROM	TO
09	SR 1002 (Quebec Rd.)	Bertie Co	Harrellsville CL
10	SR 1002 (Quebec Rd.)	Harrellsville CL	NC 45



PROJECT LENGTH

MAP	MILES
09	4.53
10	0.18

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113 AIRPORT DR., EDENTON, NC 27932

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DIVISION PROJECT TEAM LEAD

D. H. STALLINGS
DIVISION DESIGN ENGINEER

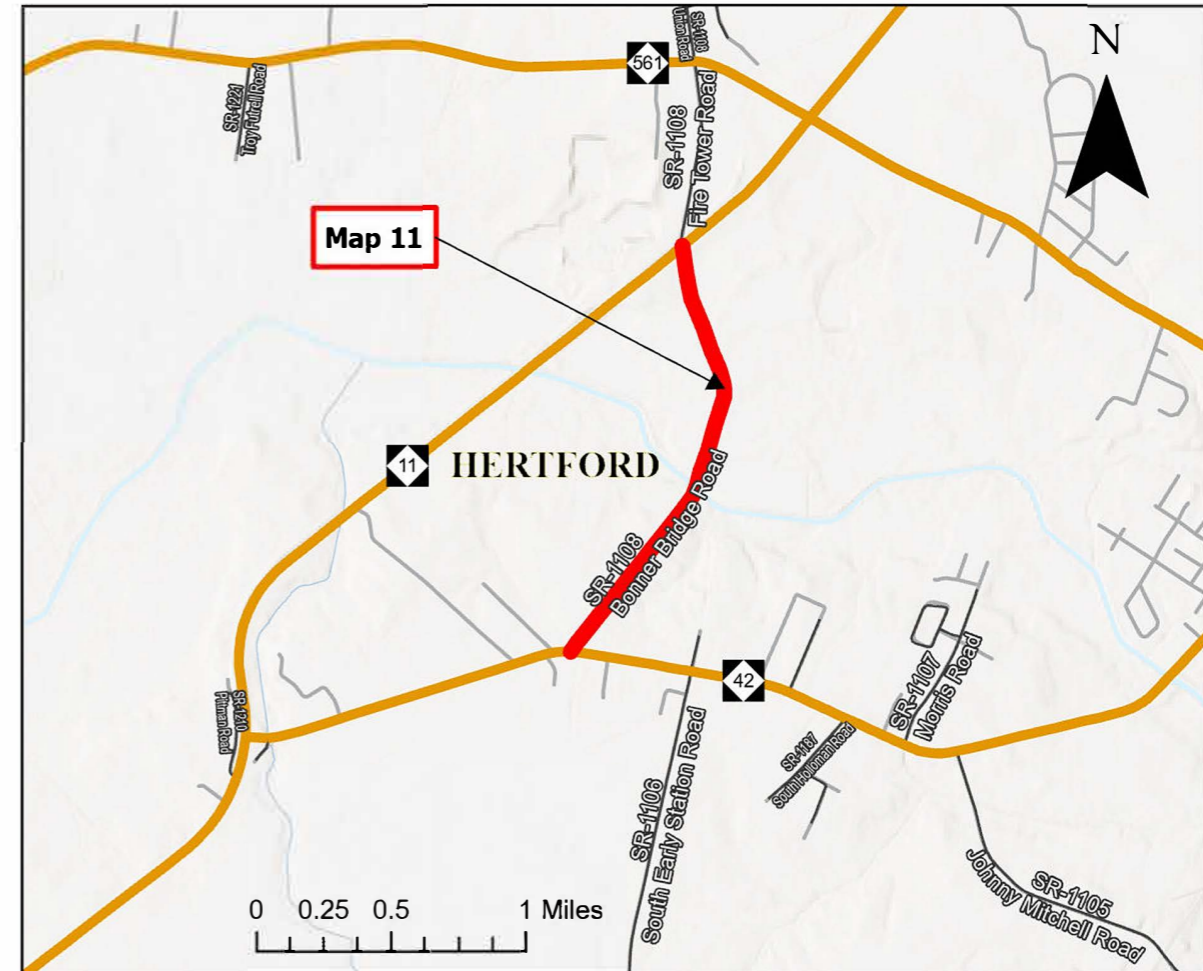


STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
HERTFORD

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2024CPT.01.02.10461, ETC.	4
STATE PROJECT NUMBER		DESCRIPTION
2024CPT.01.02.20461		P.E., CONST.
		P.E., CONST.
		P.E., CONST.
		P.E., CONST.

TYPE OF WORK: GUARDRAIL, MILLING, RESURFACING, SHOULDER RECONSTRUCTION, & LONG LIFE PAVEMENT MARKINGS

MAP	ROUTE	FROM	TO
11	SR 1108 (Bonner Bridge Rd.)	NC 11	NC 42



PROJECT LENGTH

MAP	MILES
11	1.37

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 113 AIRPORT DR., EDENTON, NC 27932

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D. H. STALLINGS
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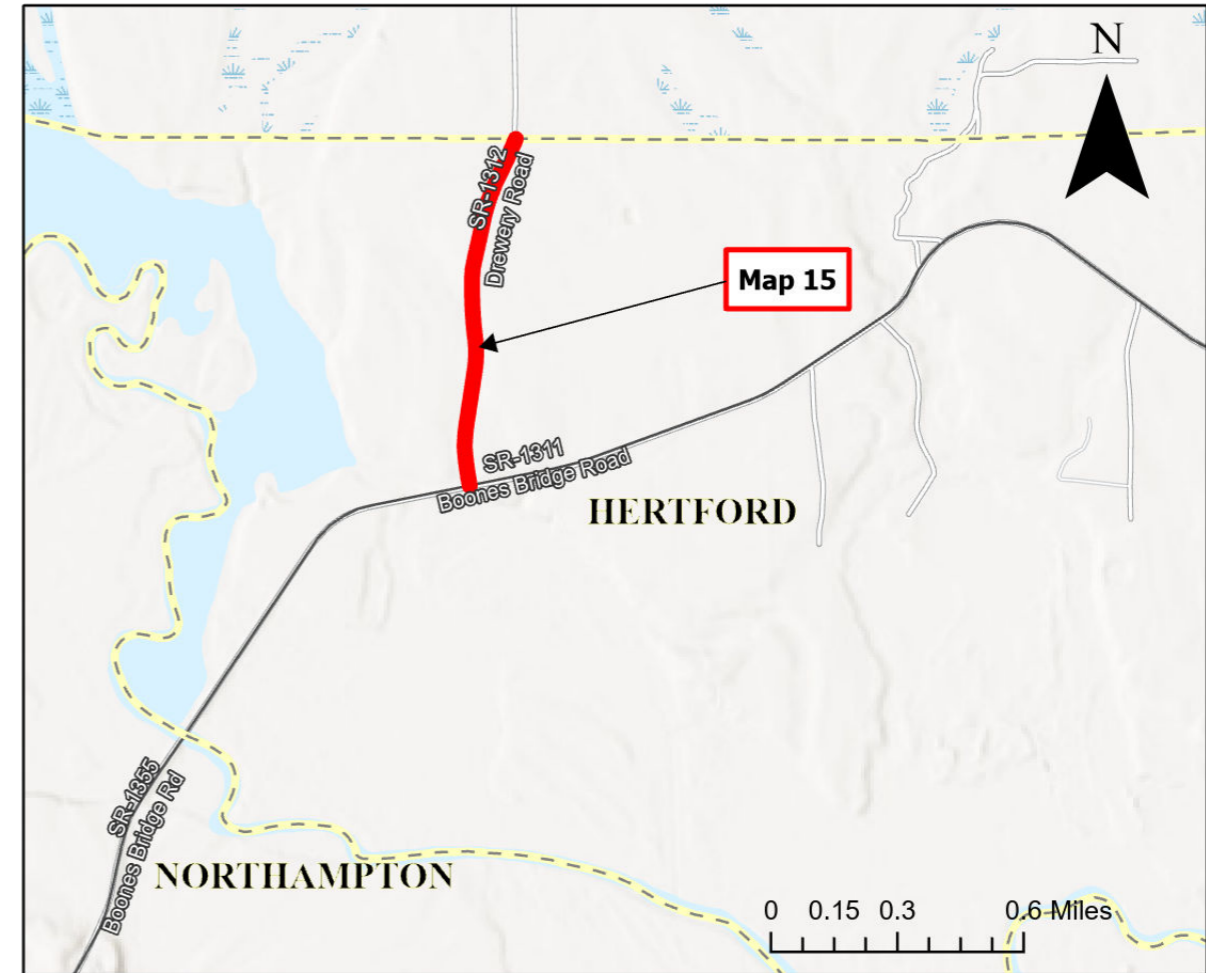
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HERTFORD

STATE	STATE PROJECT REFERENCE NUMBER	SHEET NO.
NC	2024CPT.01.02.10461, ETC.	6
STATE PROJECT NUMBER		DESCRIPTION
2024CPT.01.02.20461		P.E., CONST.
		P.E., CONST.
		P.E., CONST.
		P.E., CONST.

TYPE OF WORK: GUARDRAIL, MILLING, RESURFACING, SHOULDER RECONSTRUCTION, & LONG LIFE PAVEMENT MARKINGS

MAP	ROUTE	FROM	TO
15	SR 1312 (Drewery Rd.)	SR 1311 (Boones Bridge Rd.)	VA Line



PROJECT LENGTH

MAP	MILES
15	0.68

Prepared in the Office of:
DIVISION OF HIGHWAYS
 113 AIRPORT DR., EDENTON, NC 27932

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 DIV. PROJ. DEVELOPMENT ENGINEER

C. E. SLACHTA
 DIVISION CONTRACT ENGINEER

J. S. ABEL, JR.
 DIVISION PROJECT TEAM LEAD

D. H. STALLINGS
 DIVISION DESIGN ENGINEER



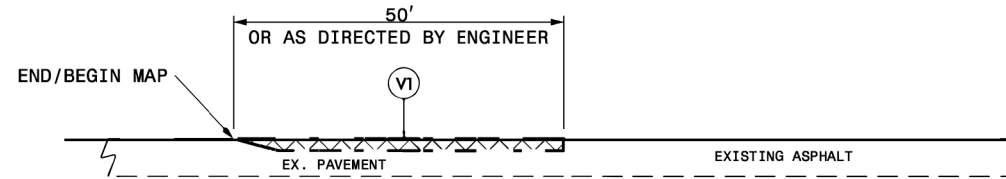
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 4.0" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
N2	PROPOSED SELF-ADHESIVE PAVEMENT INTERLAYER
R1	EXISTING UNDERLYING CONCRETE PAVEMENT
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V1	INCIDENTAL MILLING ASPHALT PAVEMENT.
V2	MILLING ASPHALT PAVEMENT, 1.5" DEPTH

NOTES:

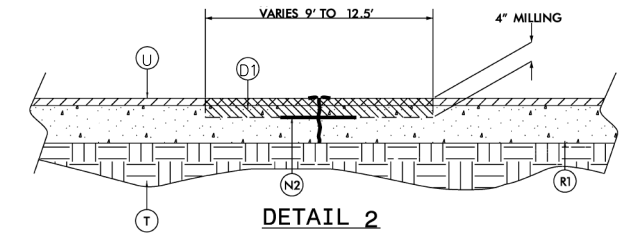
PROJECT REFERENCE NO.	SHEET NO.
2024CPT.01.02.10461, ETC.	7

- * ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- * EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.
- * 1.5" OF S9.5C TO BE APPLIED THE FULL WIDTH OF THE ROADWAY



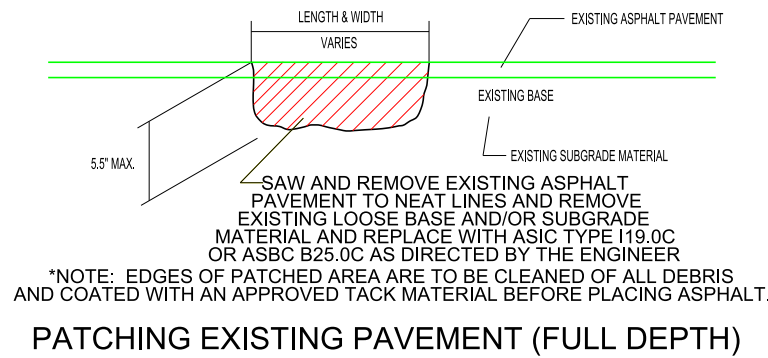
DETAIL 1

- NOTE:
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
 2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.

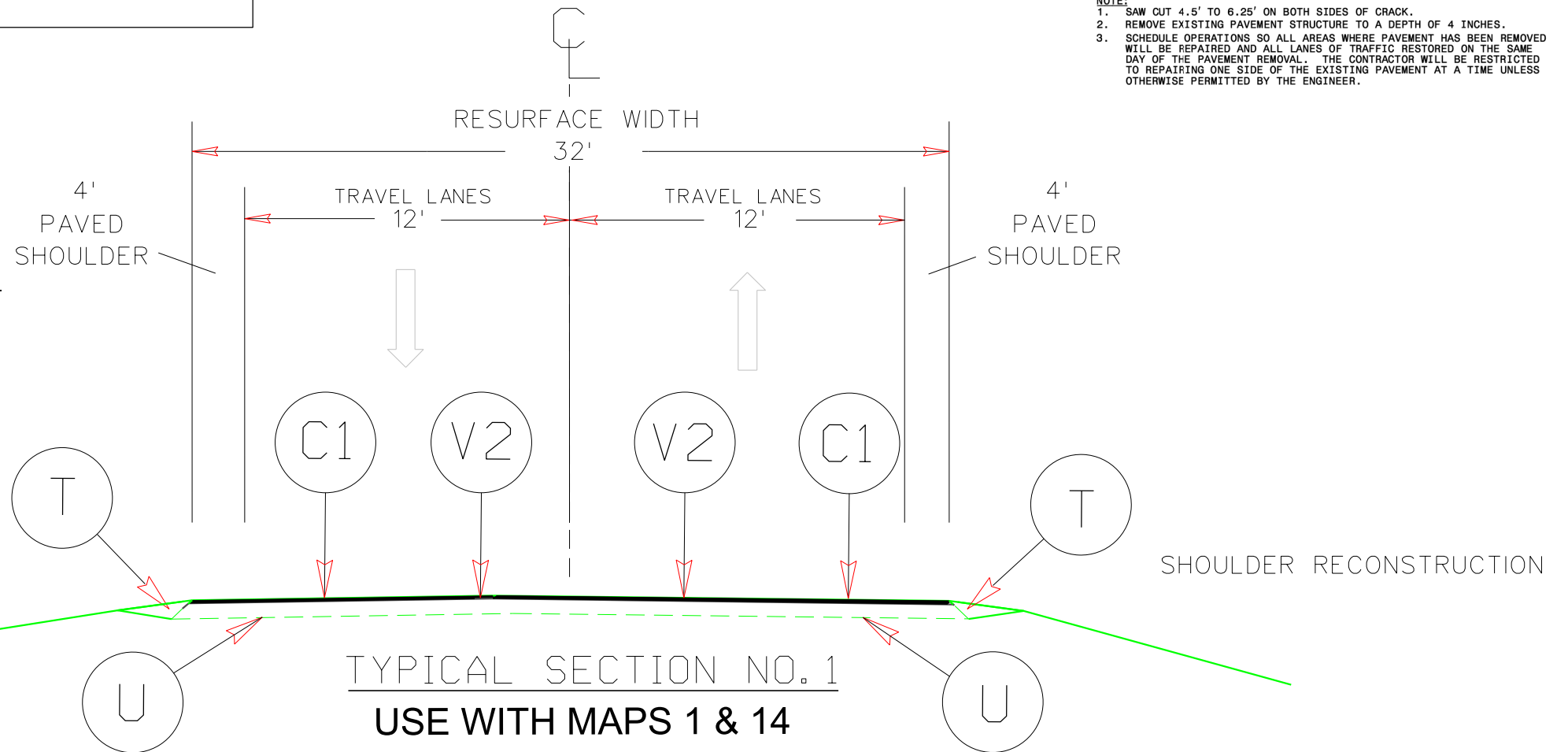


DETAIL 2
JOINT REPAIR DETAIL

- NOTE:
1. SAW CUT 4.5' TO 6.25' ON BOTH SIDES OF CRACK.
 2. REMOVE EXISTING PAVEMENT STRUCTURE TO A DEPTH OF 4 INCHES.
 3. SCHEDULE OPERATIONS SO ALL AREAS WHERE PAVEMENT HAS BEEN REMOVED WILL BE REPAIRED AND ALL LANES OF TRAFFIC RESTORED ON THE SAME DAY OF THE PAVEMENT REMOVAL. THE CONTRACTOR WILL BE RESTRICTED TO REPAIRING ONE SIDE OF THE EXISTING PAVEMENT AT A TIME UNLESS OTHERWISE PERMITTED BY THE ENGINEER.



*NOTE: EDGES OF PATCHED AREA ARE TO BE CLEANED OF ALL DEBRIS AND COATED WITH AN APPROVED TACK MATERIAL BEFORE PLACING ASPHALT.



TYPICAL SECTION NO. 1
USE WITH MAPS 1 & 14

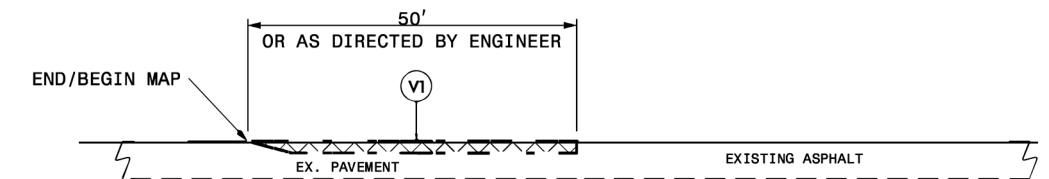
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING ASPHALT PAVEMENT.
V3	MILLING ASPHALT PAVEMENT, 4.0" DEPTH
T	EARTH MATERIAL
U	EXISTING PAVEMENT

NOTES:

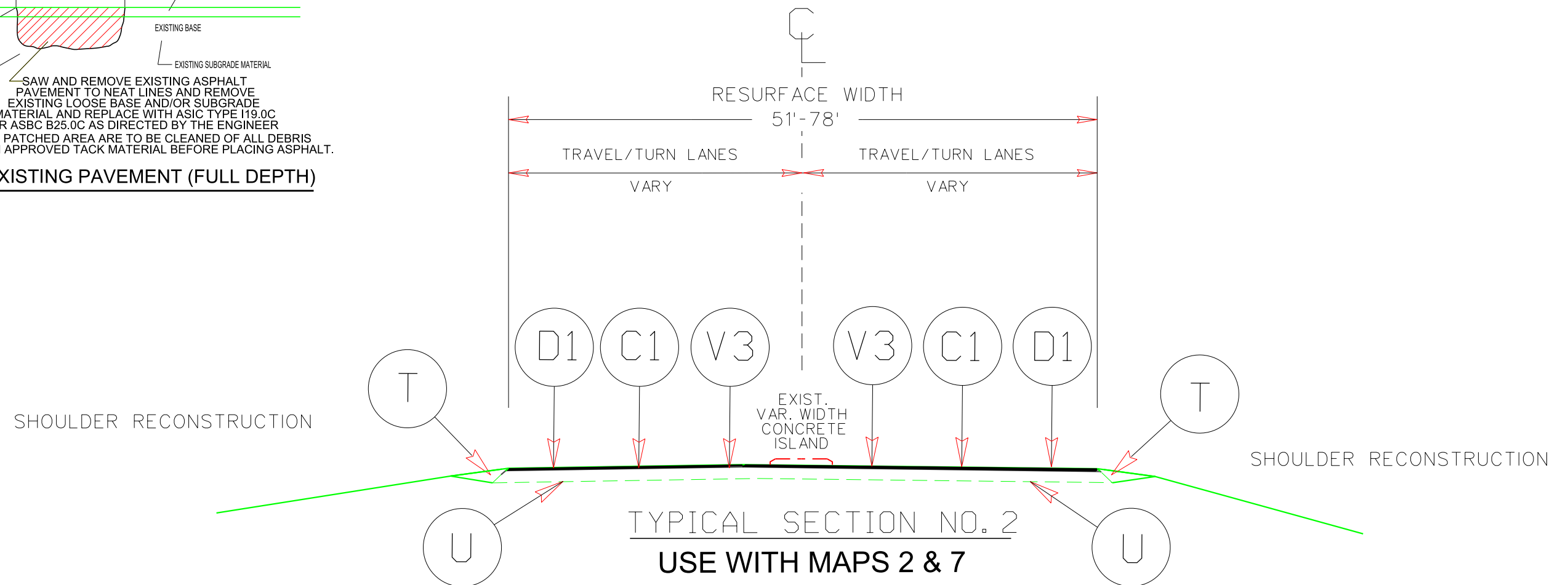
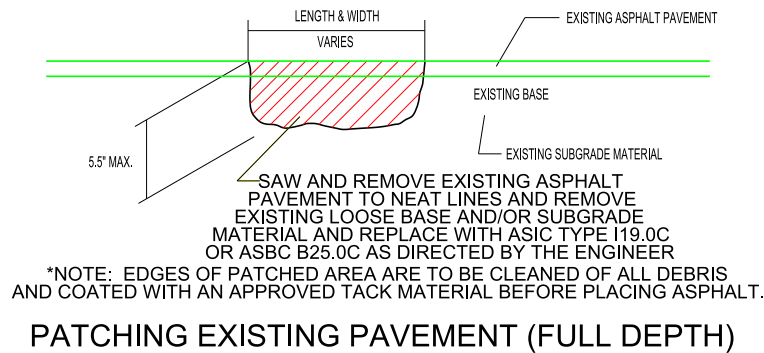
PROJECT REFERENCE NO.	SHEET NO.
2024CPT.01.02.10461, ETC.	8

- * ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- * EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.
- * 1.5" OF S9.5C TO BE APPLIED THE FULL WIDTH OF THE ROADWAY



DETAIL 1

- NOTE:
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
 2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.



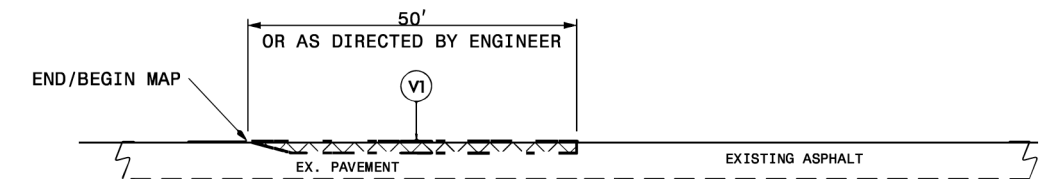
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
D1	PROP. APPROX. 2.5" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 285 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING ASPHALT PAVEMENT.
V3	MILLING ASPHALT PAVEMENT, 4.0" DEPTH
T	EARTH MATERIAL
U	EXISTING PAVEMENT

NOTES:

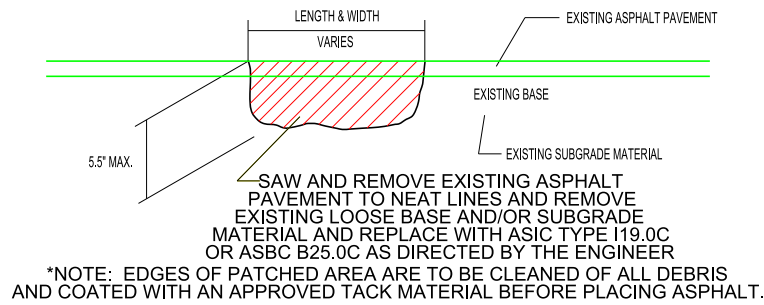
PROJECT REFERENCE NO.	SHEET NO.
2024CPT.01.02.10461, ETC.	9

- * ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- * EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.
- * 1.5" OF S9.5C TO BE APPLIED THE FULL WIDTH OF THE ROADWAY

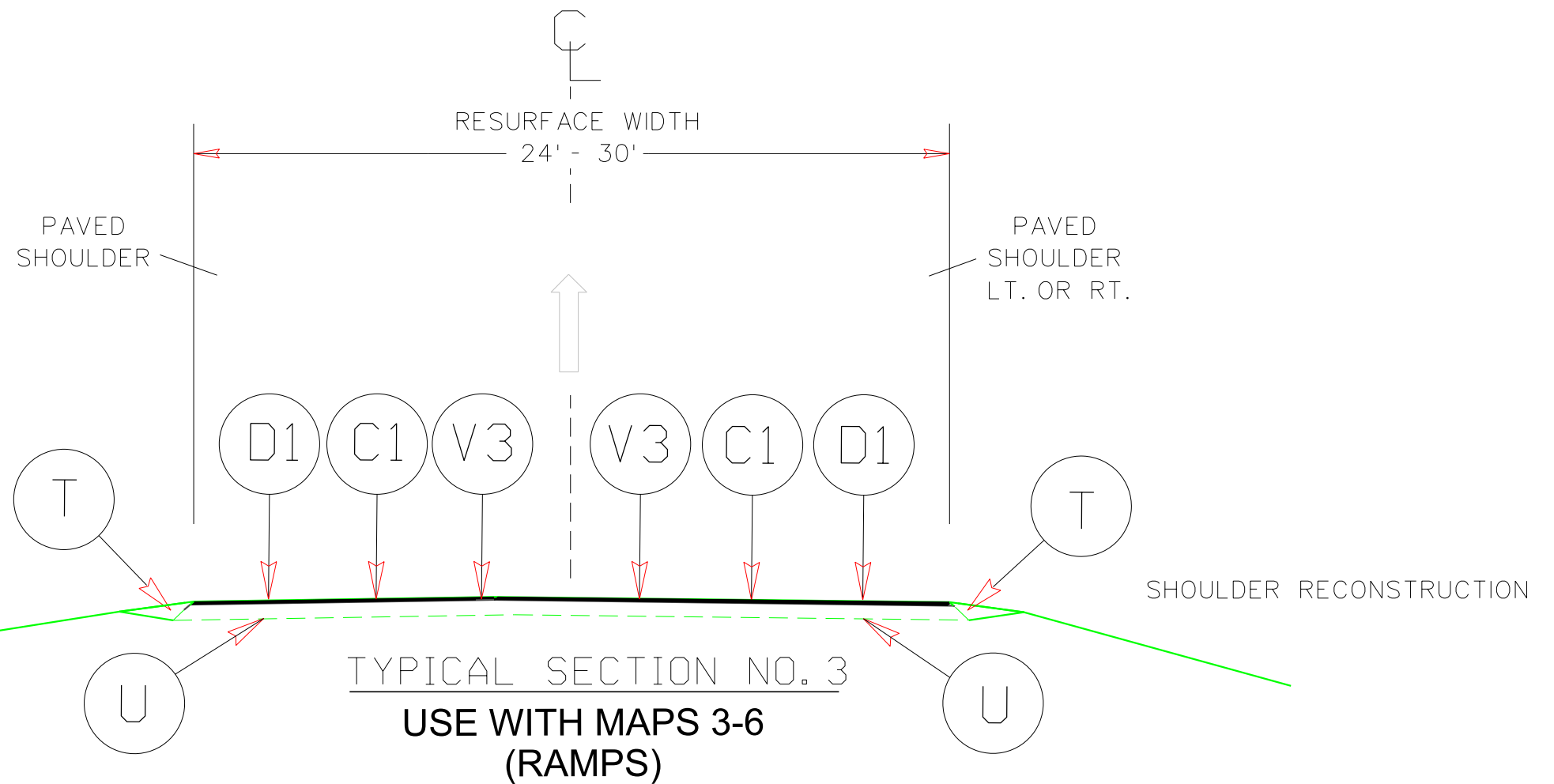


DETAIL 1

- NOTE:
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
 2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.



PATCHING EXISTING PAVEMENT (FULL DEPTH)



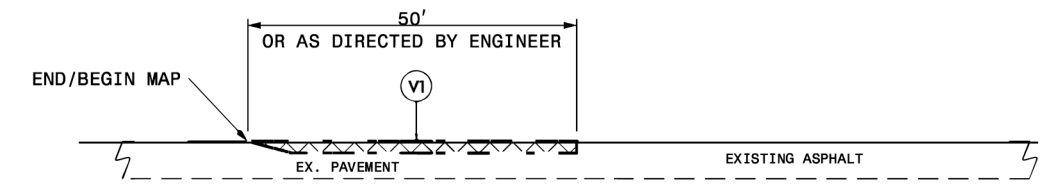
PAVEMENT SCHEDULE

C1	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING ASPHALT PAVEMENT.
V2	MILLING ASPHALT PAVEMENT, 1.5" DEPTH
U	EXISTING PAVEMENT

NOTES:

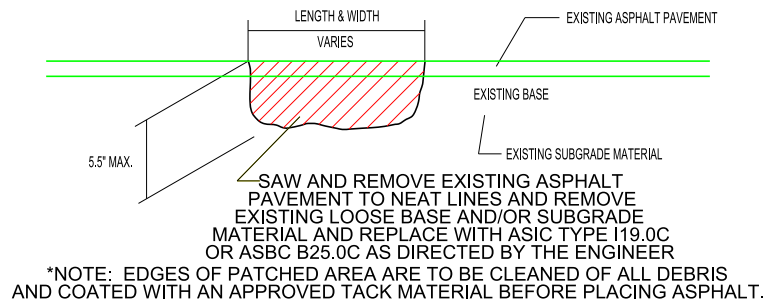
PROJECT REFERENCE NO.	SHEET NO.
2024CPT.01.02.10461, ETC.	10

- * ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- * EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.
- * 1.5" OF S9.5C TO BE APPLIED THE FULL WIDTH OF THE ROADWAY

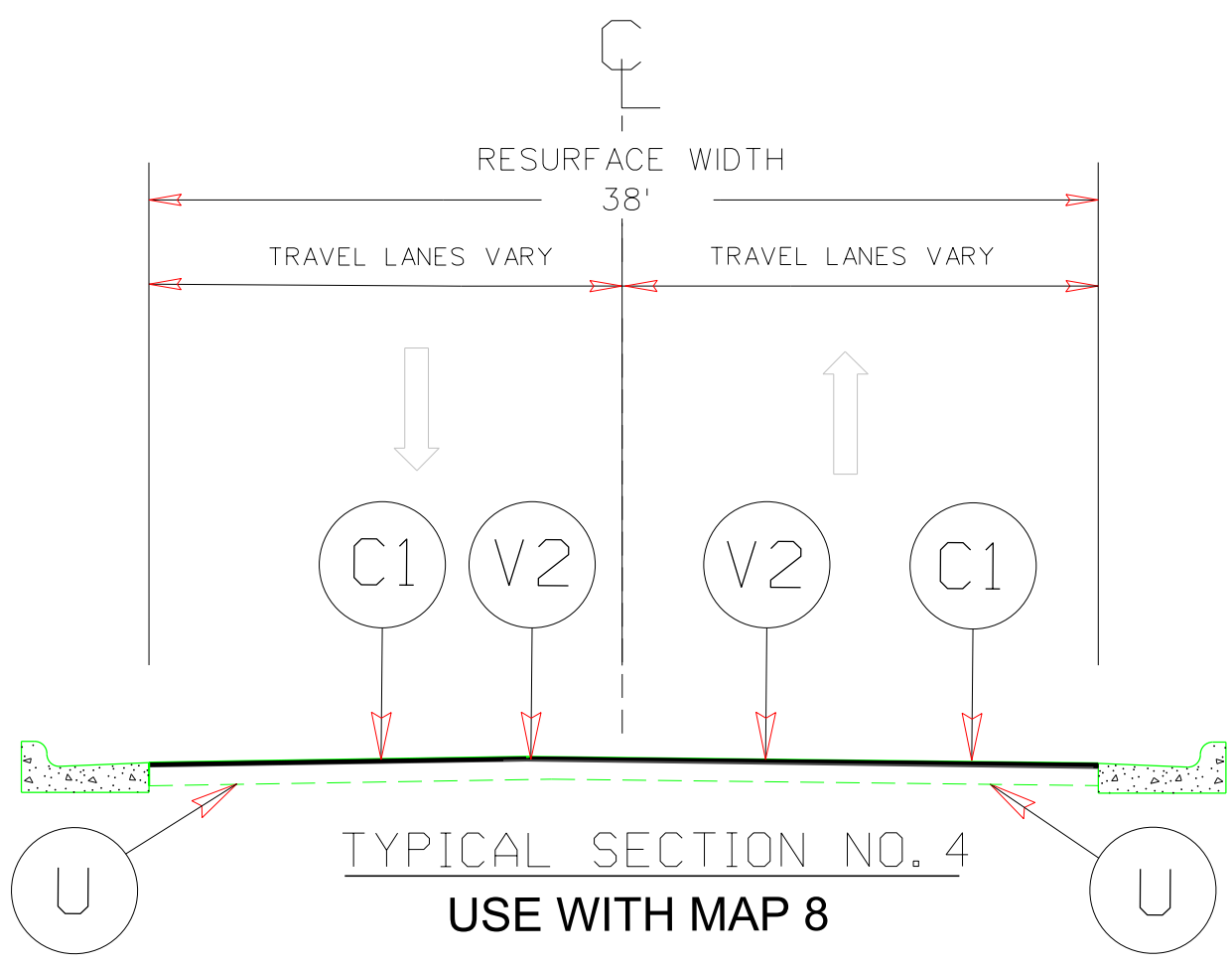


DETAIL 1

- NOTE:
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
 2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.



PATCHING EXISTING PAVEMENT (FULL DEPTH)



TYPICAL SECTION NO. 4
USE WITH MAP 8

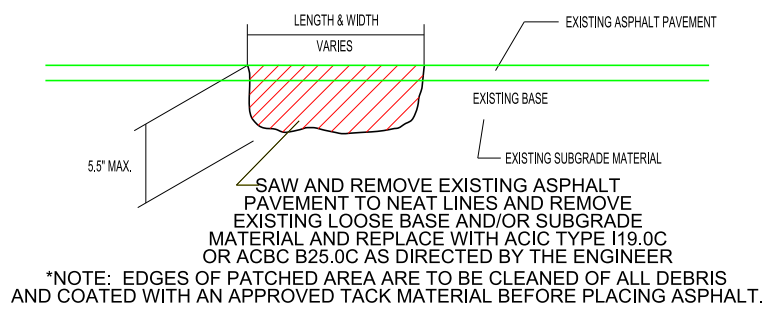
PAVEMENT SCHEDULE

C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, MAT COAT #67 STONE
V1	INCIDENTAL MILLING ASPHALT PAVEMENT.
T	EARTH MATERIAL
U	EXISTING PAVEMENT

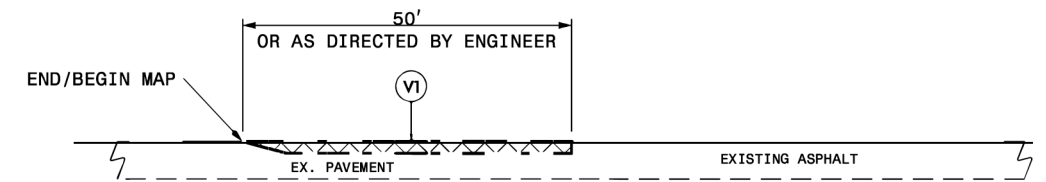
NOTES:

PROJECT REFERENCE NO.	SHEET NO.
2024CPT.01.02.10461, ETC.	11

- * ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- * EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.
- * 1.5" OF S9.5B TO BE APPLIED THE FULL WIDTH OF THE ROADWAY
- * ASPHALT SURFACE TREATMENT (MAT COAT) CONSISTS OF ONE LAYER OF EMULSIFIED ASPHALT GRADE CRS-2L AT A RATE OF 0.38± GAL/SY AND ONE LAYER OF #67 STONE AT A RATE OF 20-25± LBS/SY. CONSTRUCT THE MAT COAT IN ACCORDANCE WITH SUBARTICLE 660-8(D) OF THE *NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES*. AFTER THE MAT COAT HAS BEEN SATISFACTORILY APPLIED AND ROLLED, THE APPLICATION OF THE PLANT MIX OVERLAY SHALL BE COMPLETED WITHIN THE SAME DAY.
- * FOR AST MAT COAT #67 STONE, CONTRACTOR MUST PROVIDE A SPREADER CAPABLE OF SPREADING UP TO 12' WIDE FOR IRREGULAR AREAS ALONG THESE MAPS.
- * CONTRACTOR SHALL PERFORM PATCHING EXISTING PAVEMENT, FULL DEPTH BEFORE APPLICATION OF AST MAT COAT #67 STONE



PATCHING EXISTING PAVEMENT (FULL DEPTH)



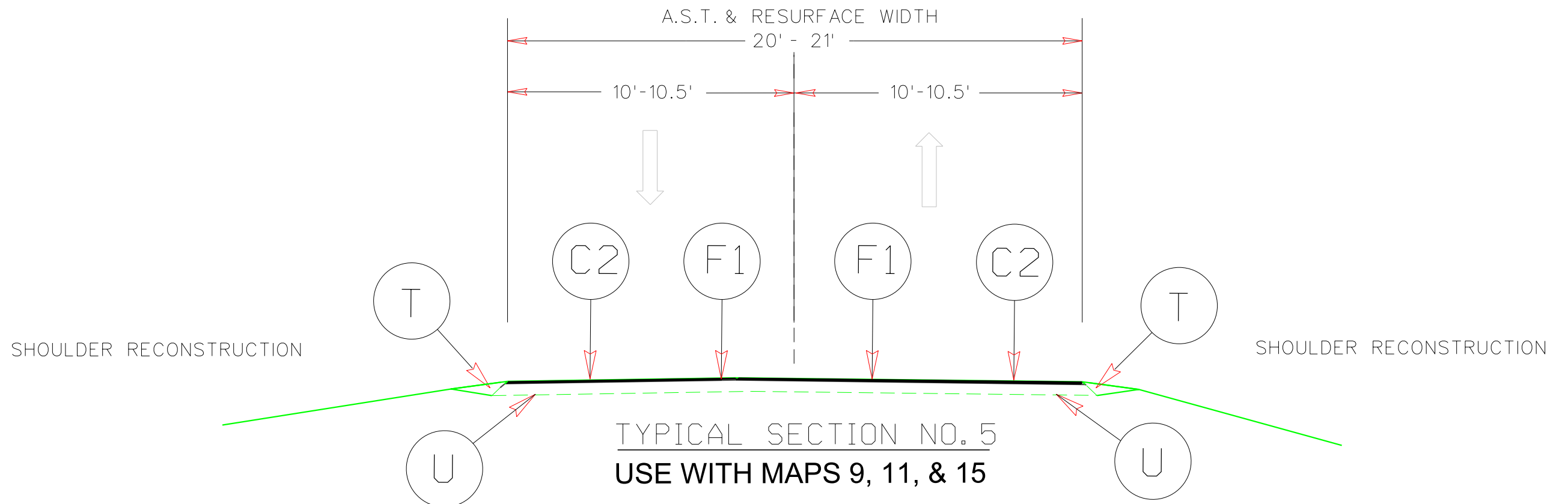
DETAIL 1

MAIN LINE MILLING

- NOTE:
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
 2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.

*NOTE: EDGES OF PATCHED AREA ARE TO BE CLEANED OF ALL DEBRIS AND COATED WITH AN APPROVED TACK MATERIAL BEFORE PLACING ASPHALT.

PATCHING EXISTING PAVEMENT (FULL DEPTH)



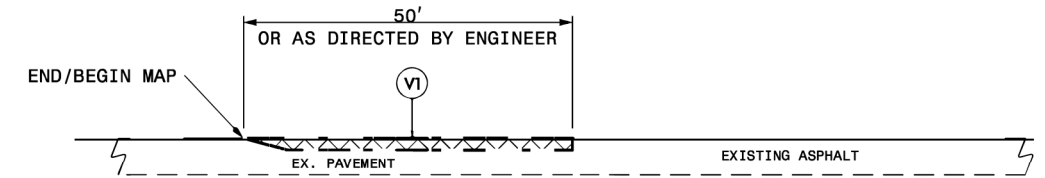
PAVEMENT SCHEDULE

C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING ASPHALT PAVEMENT.
V2	MILLING ASPHALT PAVEMENT, 1.5" DEPTH.
U	EXISTING PAVEMENT

NOTES:

PROJECT REFERENCE NO.	SHEET NO.
2024CPT.01.02.10461, ETC.	12

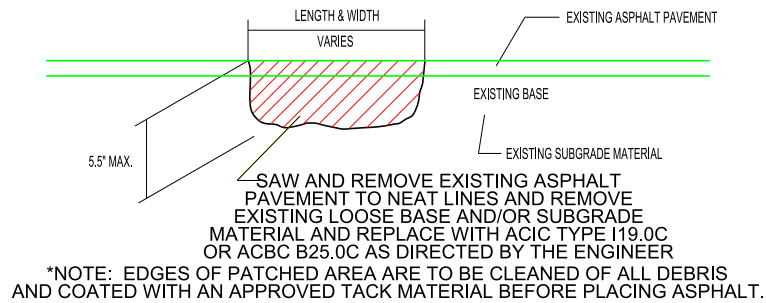
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- * EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.
- * 1.5" OF S9.5B TO BE APPLIED THE FULL WIDTH OF THE ROADWAY



DETAIL 1

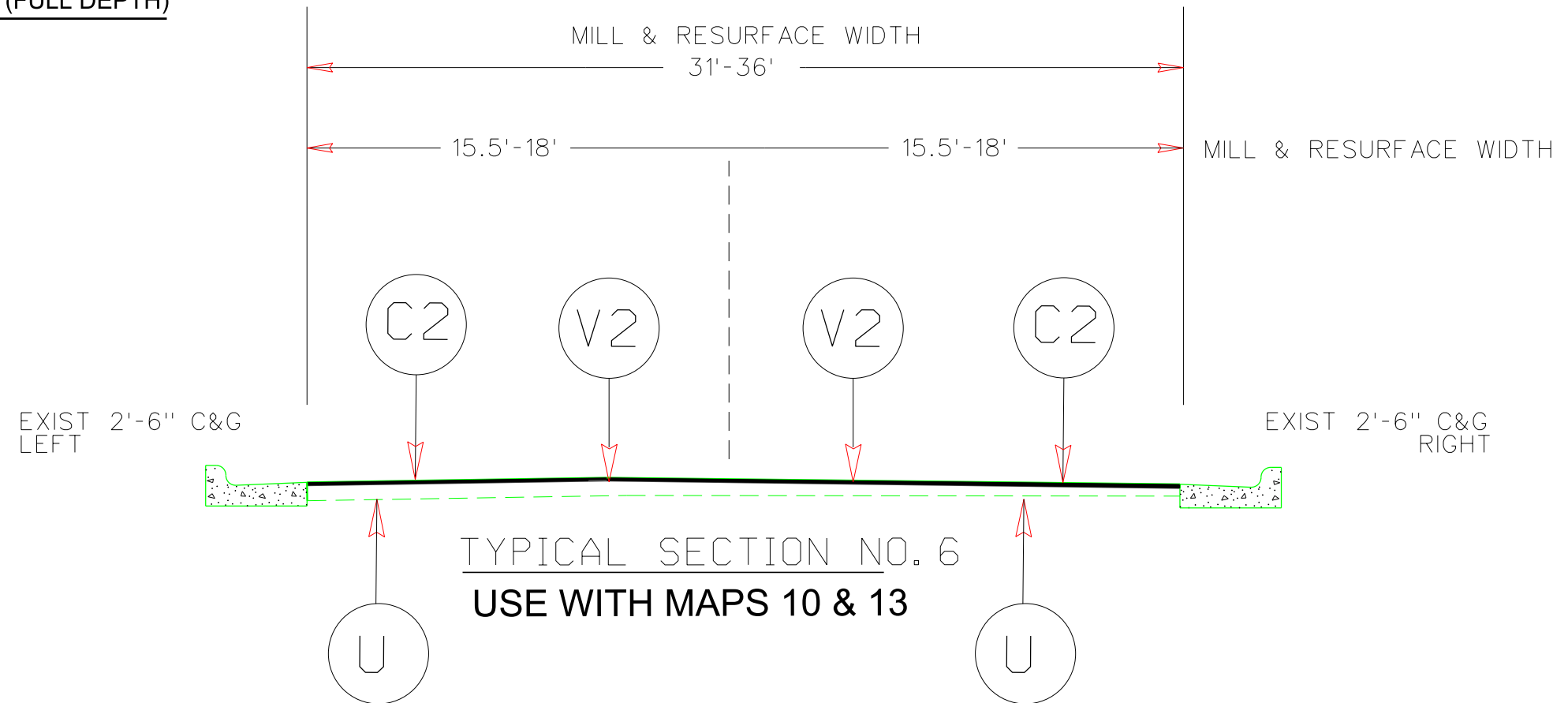
MAIN LINE MILLING

- NOTE:
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
 2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.



*NOTE: EDGES OF PATCHED AREA ARE TO BE CLEANED OF ALL DEBRIS AND COATED WITH AN APPROVED TACK MATERIAL BEFORE PLACING ASPHALT.

PATCHING EXISTING PAVEMENT (FULL DEPTH)



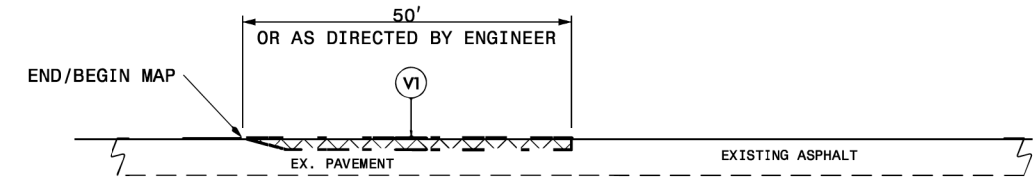
P A V E M E N T S C H E D U L E

C2	PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
V1	INCIDENTAL MILLING ASPHALT PAVEMENT.
T	EARTH MATERIAL
U	EXISTING PAVEMENT

NOTES:

PROJECT REFERENCE NO.	SHEET NO.
2024CPT.01.02.10461, ETC.	13

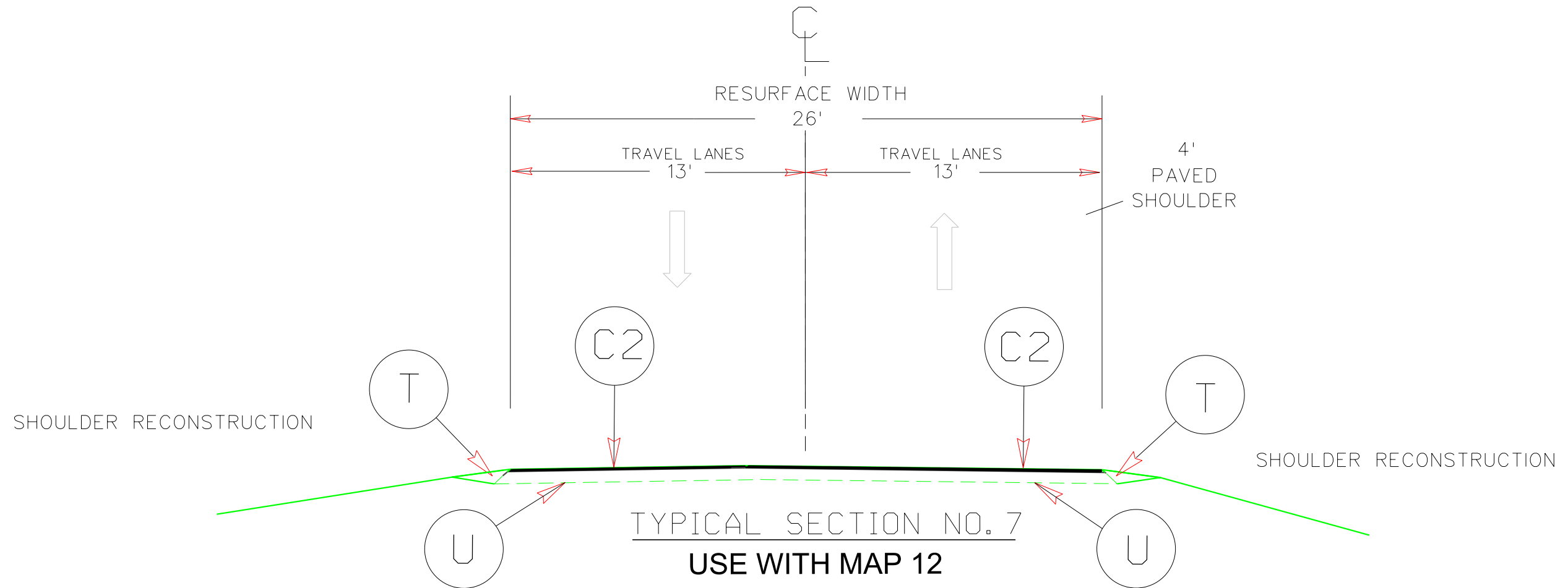
- * ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- * EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.
- * 1.5" OF S9.5B TO BE APPLIED THE FULL WIDTH OF THE ROADWAY



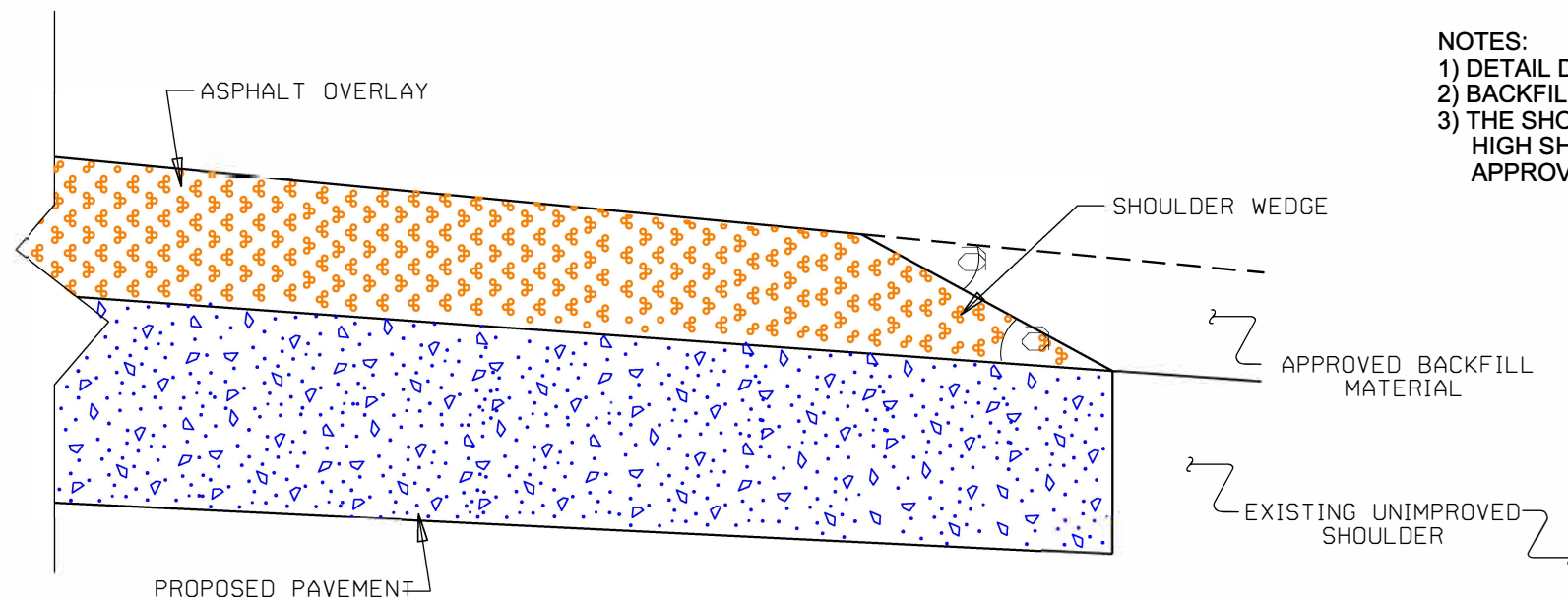
DETAIL 1

MAIN LINE MILLING

- NOTE:
1. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS, OR AS DIRECTED BY THE ENGINEER.
 2. PAVE TO THE END OF THE MILLED SURFACE TO CREATE A SMOOTH TRANSITION.

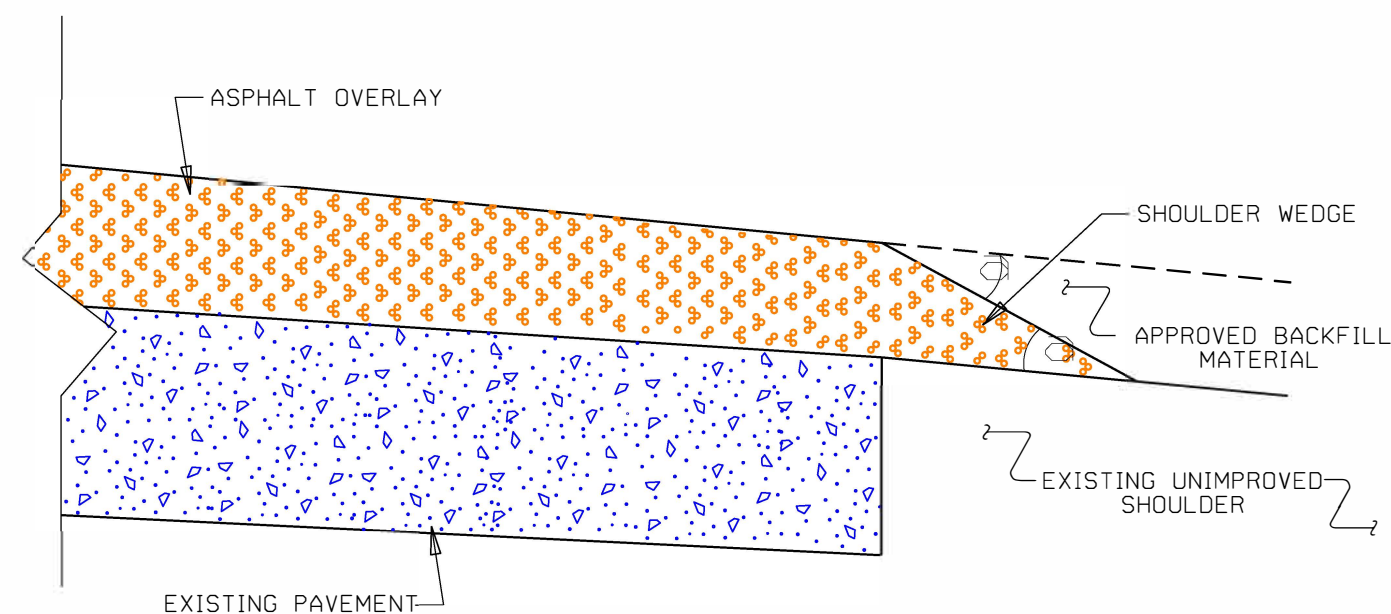


- NOTES:
- 1) DETAIL DOES NOT APPLY TO OGAFC AND ULTRA-THIN BONDED WEARING COURSE.
 - 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
 - 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



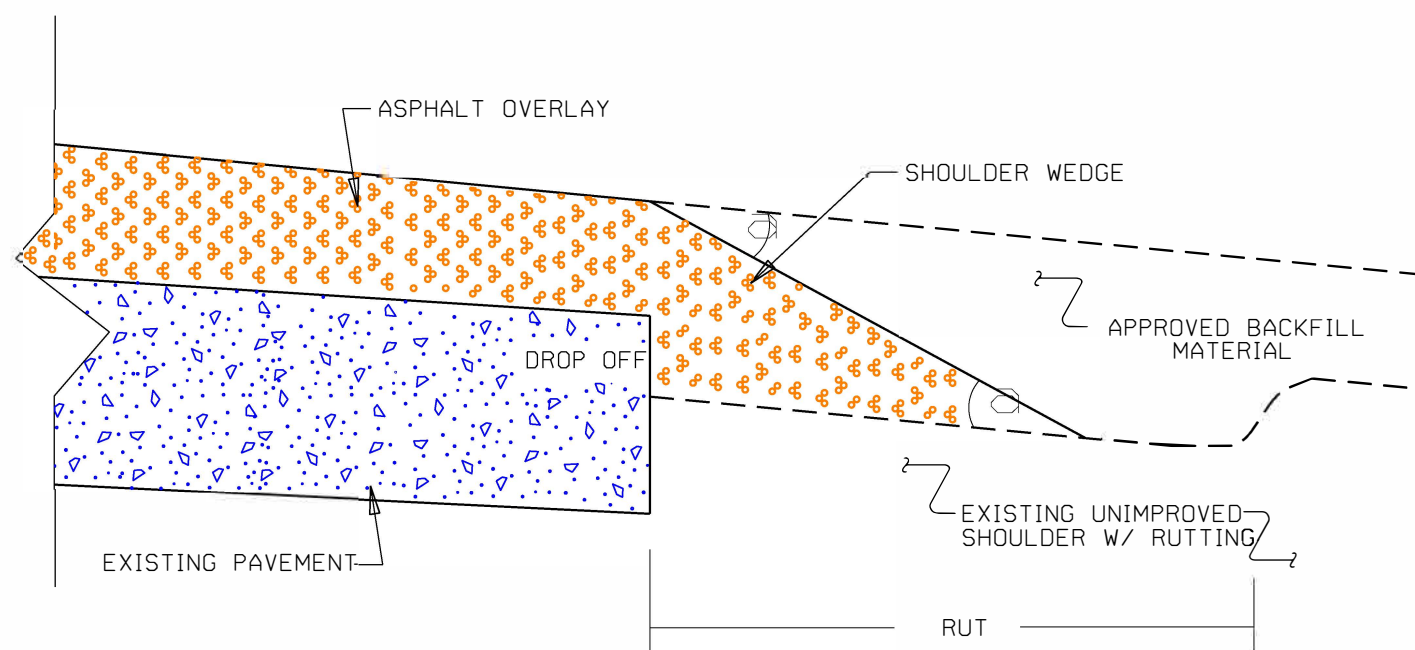
SHOULDER WEDGE DETAIL

(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

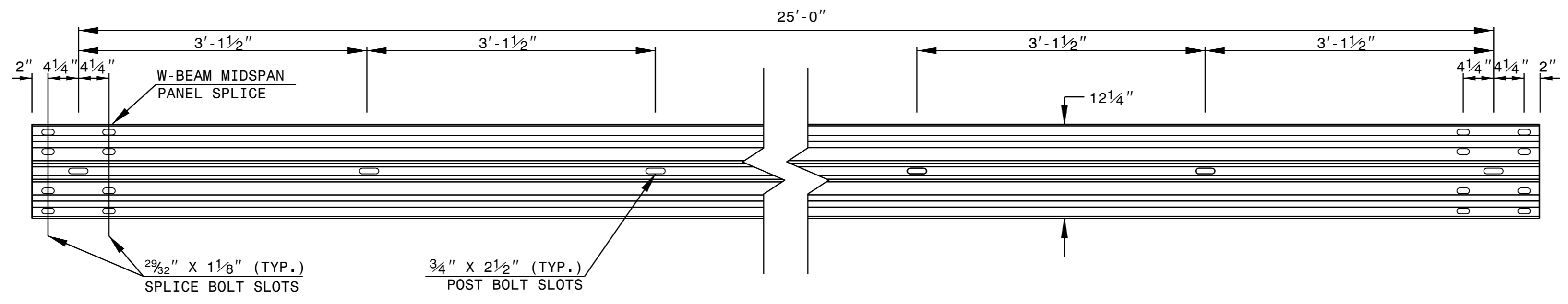
SHOULDER WEDGE DETAILS

ORIGINAL BY: T.SPELL DATE: 7-19-11
 MODIFIED BY: DATE: 10/16/12
 CHECKED BY: DATE:
 FILE SPEC.: ssusr/details/stand/shoulderwedgedetail.dgn

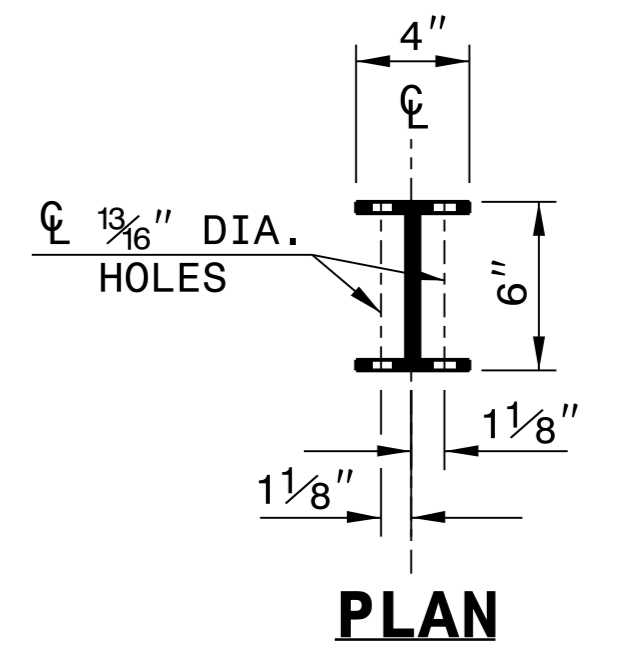
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

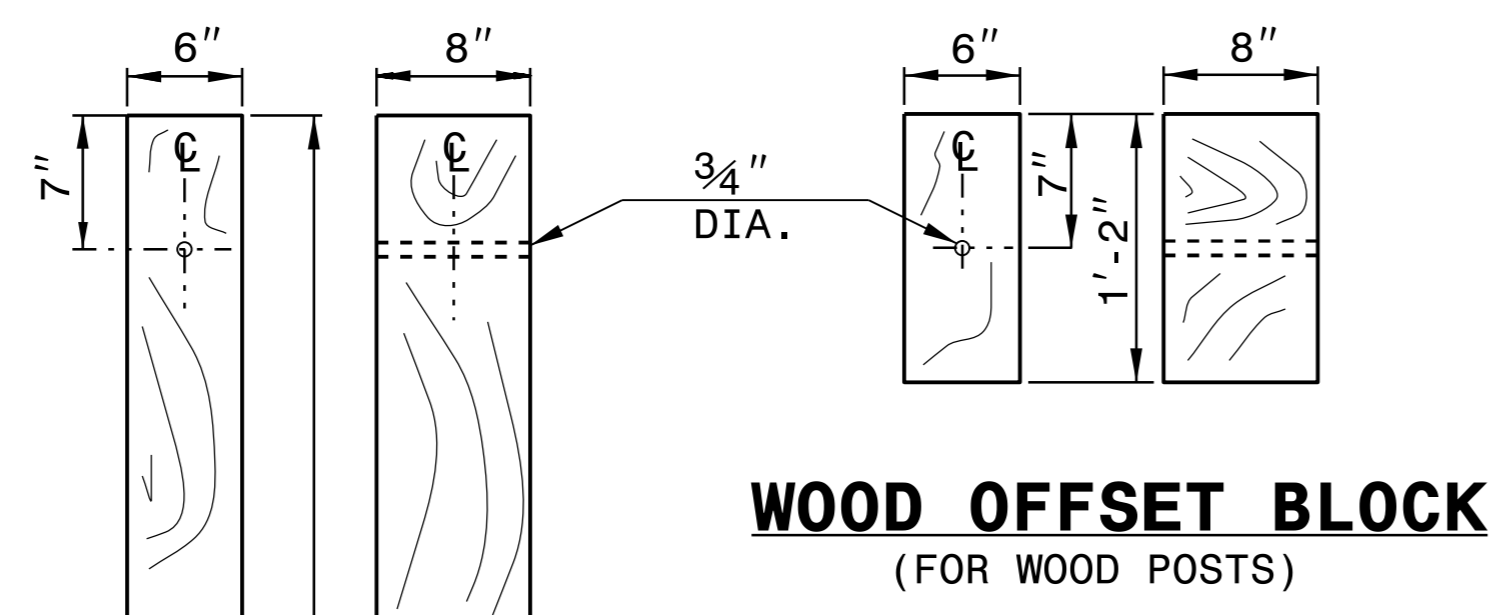
SHEET 6 OF 8
862D02



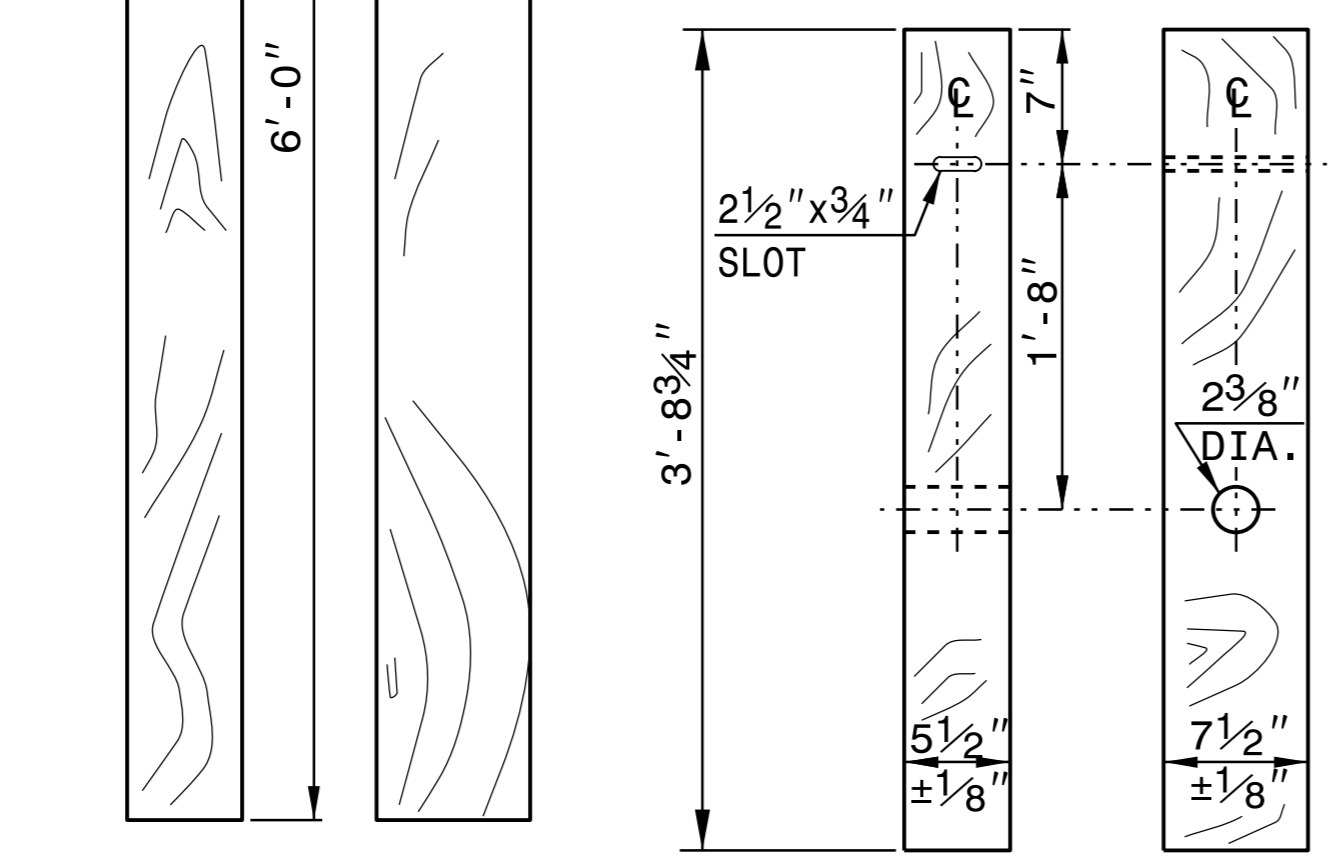
STANDARD W-BEAM GUARDRAIL



PLAN

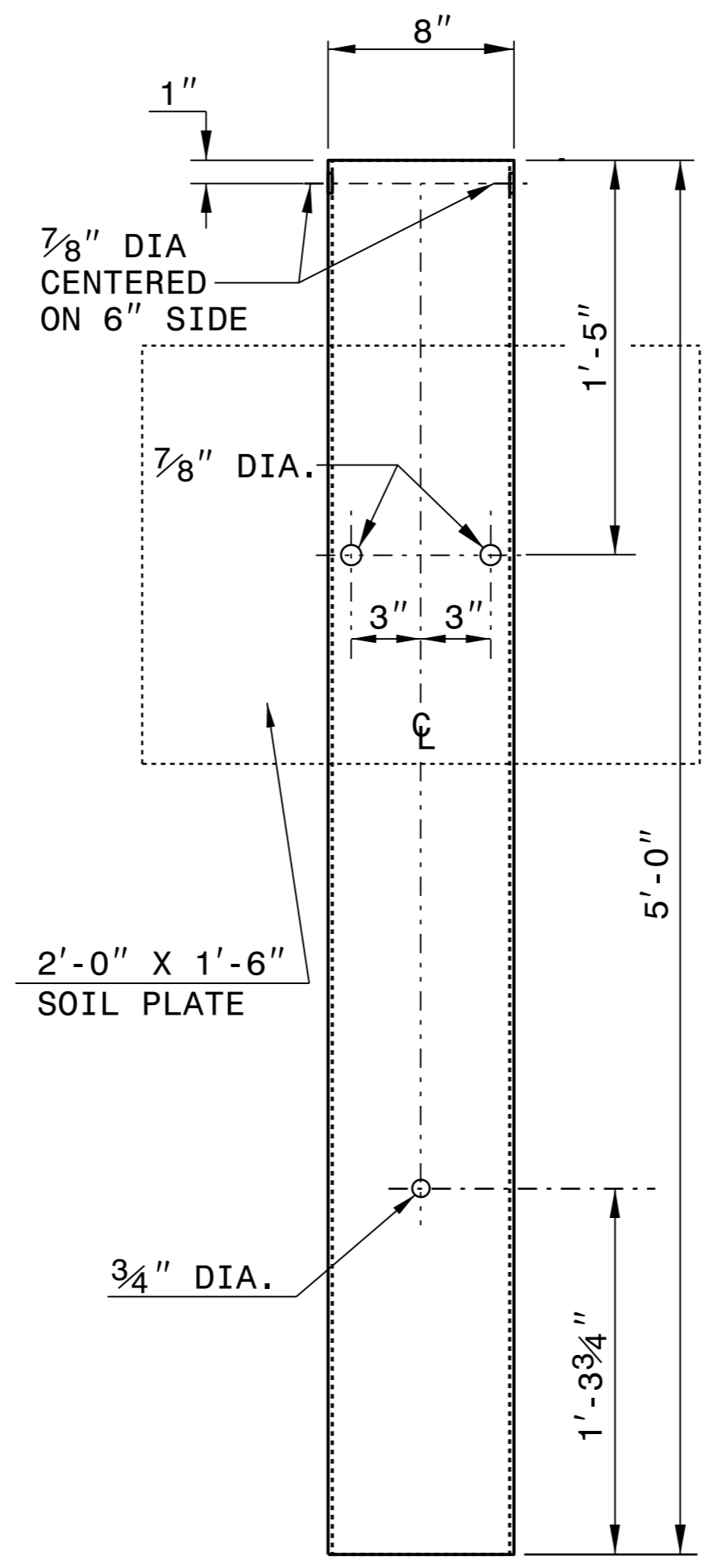


**WOOD OFFSET BLOCK
(FOR WOOD POSTS)**

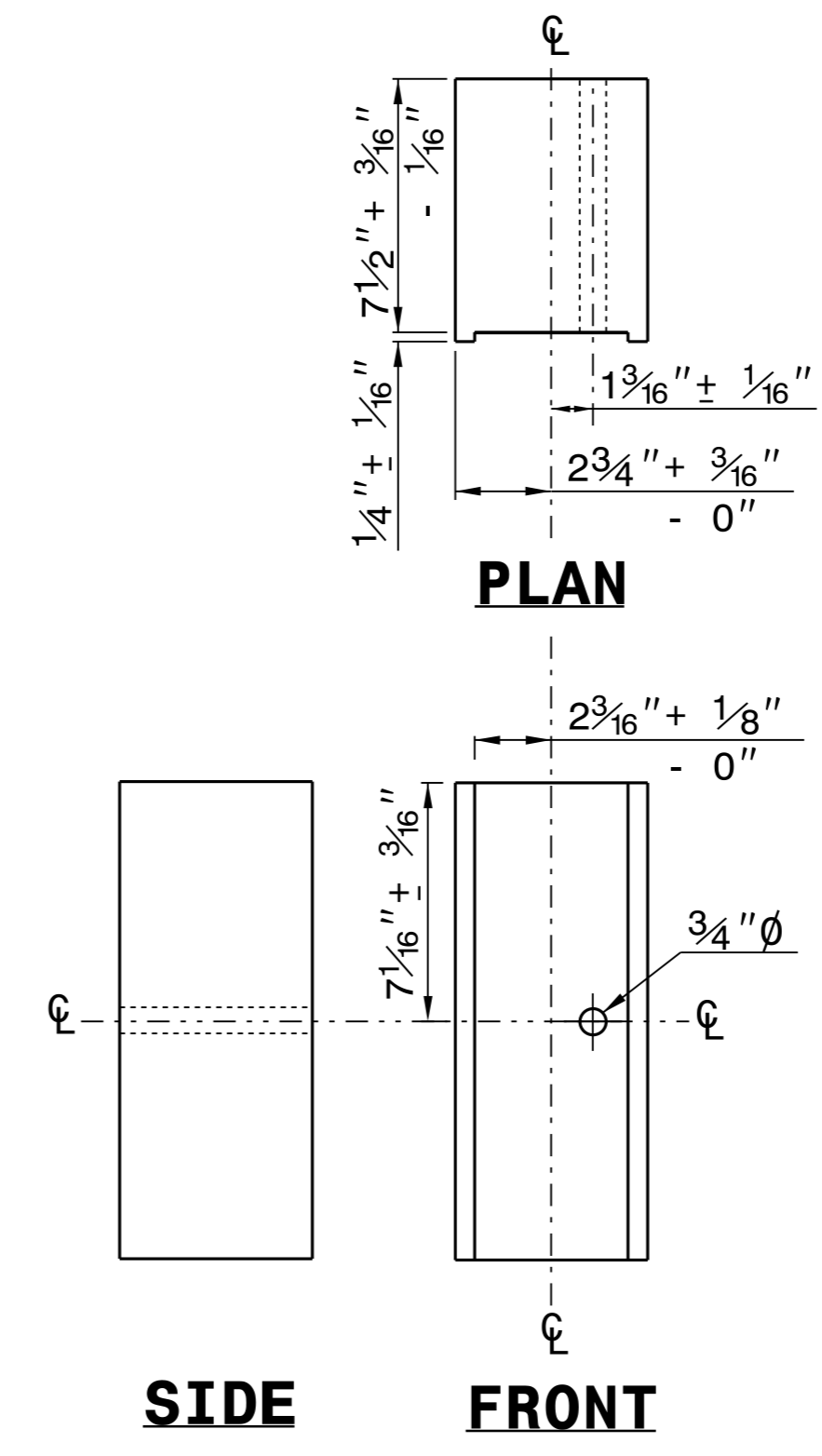


**STANDARD
LINE POST**

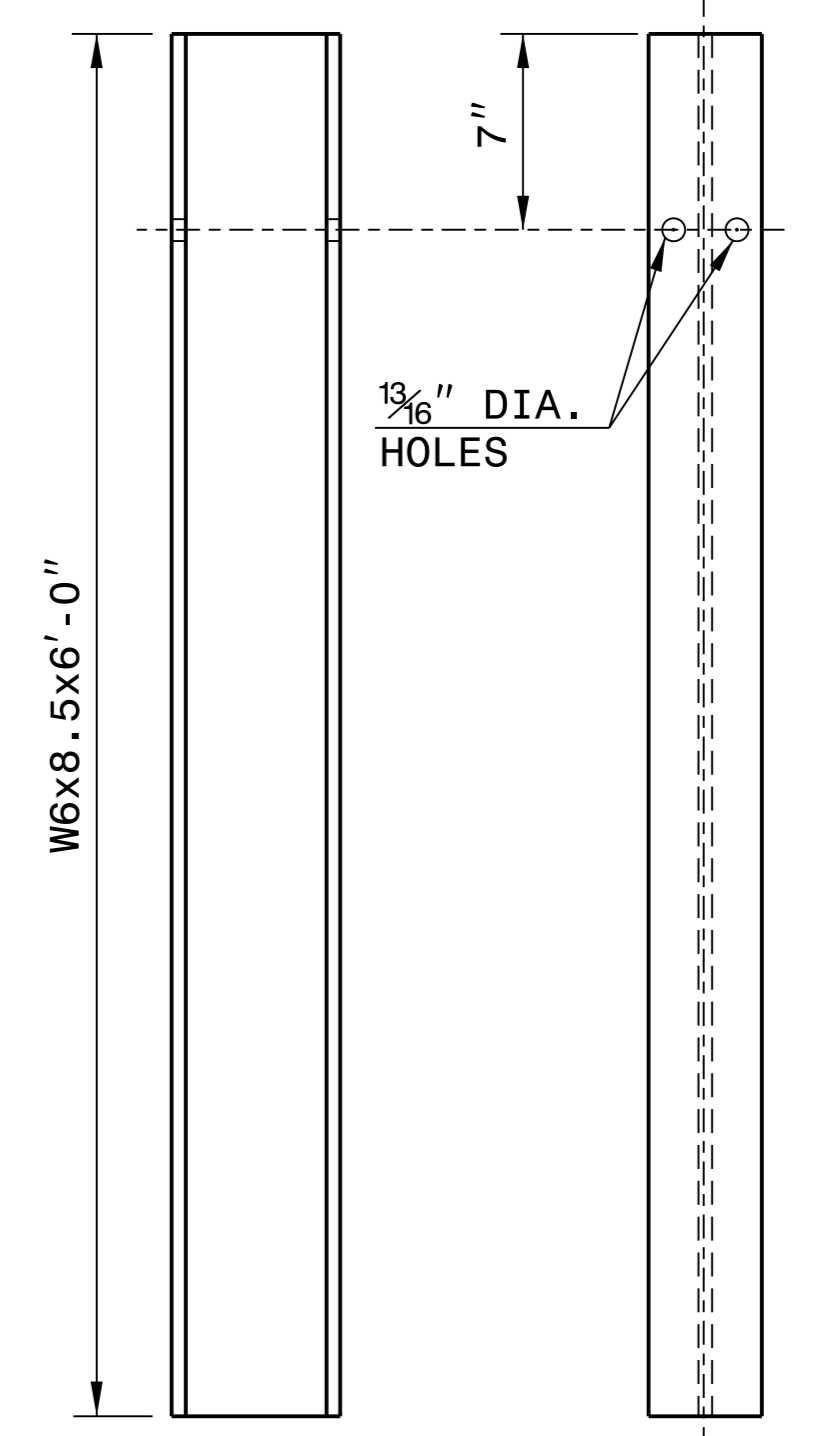
**SHORT WOOD
BREAKAWAY POST**



**STEEL TUBE
TS 6"x8"x0.1875"**



**ROUTED
OFFSET BLOCK**



"W6" STEEL POST

SYSTEM PARTS

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

ROADWAY DETAIL DRAWING FOR
GUARDRAIL INSTALLATION

SHEET 6 OF 8
862D02



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

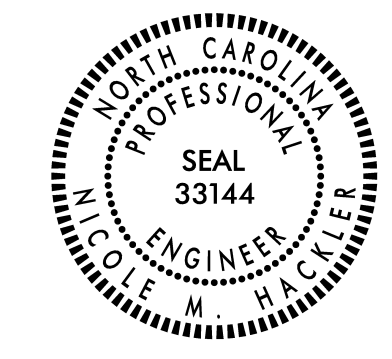
SEE TITLE BLOCK

ORIGINAL BY: J.HOWERTON DATE: 3-7-2018
MODIFIED BY: DATE: _____
CHECKED BY: DATE: _____
FILE SPEC.: _____

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 Jhowerton AT:CSU-212855

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE	SHEET 1 OF 7 862D03
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> </div> <div style="width: 45%;"> <p>NOTE:</p> <ul style="list-style-type: none"> **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER. *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½" IF CONCRETE BACKWALL IS NOT PRESENT. -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" X 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB. -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER). -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW. -SEE SHEET 3 FOR POST SECTIONS 1 THRU 9. </div> </div>		
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE		

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.	ROADWAY DETAIL DRAWING FOR STRUCTURE ANCHOR UNITS GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE - SUB REGIONAL TIER	SHEET 2 OF 7 862D03
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> </div> <div style="width: 45%;"> <p>NOTE:</p> <ul style="list-style-type: none"> **POST NOT REQUIRED FOR SKEW ANGLES GREATER THAN 150° OR LESS THAN 30° UNLESS OTHERWISE DIRECTED BY THE ENGINEER. *THE DISTANCE FROM END OF BRIDGE RAIL TO CENTER LINE OF THE FIRST POST SHOULD BE 11½" IF CONCRETE BACKWALL IS NOT PRESENT. -SHOULDER BERM GUTTER MUST BE INSTALLED TO THE LIMITS 8" X 4" LIP CURB IS SHOWN IF ANCHOR UNIT IS NOT ADJACENT TO AN APPROACH SLAB. -MEASURE GUARDRAIL HEIGHT FROM THE TOP OF ADJACENT SURFACE (SHOULDER, BERM, OR GUTTER). -LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW. -SEE SHEET 3 FOR POST SECTIONS 1 THRU 9. </div> </div>		
GUARDRAIL ANCHOR UNIT, TYPE III FOR ATTACHMENT TO RAIL ON BRIDGE - SUB REGIONAL TIER		



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

SEE TITLE BLOCK

ORIGINAL BY: J. HOWERTON	DATE: 06-22-12
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC.:	

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.01.02.10461, ETC.	18	

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	MATERIAL TRANSFER VEHICLE REQUIRED	000100000-N	010600000-E	122000000-E	124500000-E	126000000-E	129700000-E	129700000-E	133000000-E	150300000-E	151900000-E	152300000-E	157500000-E	170500000-E	177500000-E	183800000-E	188000000-E	188000000-E	254900000-E								
													MOBILIZATION	BORROW EXCAVATION	INCIDENTAL STONE BASE	SHOULDER RECONSTRUCTION	AGGREGATE SHOULDER BORROW	MILLING ASPHALT PAVEMENT (1 1/2")	MILLING ASPHALT PAVEMENT (4")	INCIDENTAL MILLING	ASPHALT CONC INTERMEDIATE COURSE, 119.0C	ASPHALT CONC SURFACE COURSE, 59.5B	ASPHALT CONC SURFACE COURSE, 59.5C	ASPHALT BINDER FOR PLANT MIX	PATCHING EXISTING PAVEMENT (FULL DEPTH)	ASPHALT SURFACE TREATMENT MAT #67 STONE	EMULSION FOR ASPHALT SURFACE TREATMENT	GENERIC PAVING ITEM JOINT REPAIR	GENERIC PAVING ITEM SELF ADHESIVE PAVEMENT INTERLAYER	2'-6" CONCRETE CURB & GUTTER								
													LS	CY	TONS	SMI	TON	SY	SY	SY	TONS	TONS	TONS	TONS	TONS	SY	GAL	TON	LF									
2024CPT.01.02.10461	Hertford	1	US-13	FROM SR 1212 (SHORT CUT ROAD) TO PAVEMENT JOINT @ 4 LANE DIVIDE	1	2	2WU	NO	NO	3.75	32	YES	1		75	3.75		79,902		7,640			7,426	439	20			30	192									
2024CPT.01.02.10461	Hertford	2	US-158 E	FROM 250' WEST OF SR 1218 (INDUSTRIAL PARK ROAD) TO NC 45 @ US 13 OVERPASS	2	4	MD	NO	NO	0.23	78	NO	*		5	0.23	18		11,495	1,805	1,803		1,062	150	10													
2024CPT.01.02.10461	Hertford	3	RMP-6609 OI	FROM US 13 NORTH TO NC 45	3	1		NO	NO	0.10	24	NO	*		2	0.10	8		1,408		225		131	19	5													
2024CPT.01.02.10461	Hertford	4	RMP-6610 OI	FROM NC 45 TO US 13 NORTH	3	1		NO	NO	0.10	30	NO	*		2	0.10	8		1,760		280		163	23	5													
2024CPT.01.02.10461	Hertford	5	RMP-6611 OI	FROM US 13 SOUTH TO US 158	3	1		NO	NO	0.10	30	NO	*		2	0.10	8		1,760		280		163	23	2													
2024CPT.01.02.10461	Hertford	6	RMP-6612 OI	FROM US 158 TO US 13 SOUTH	3	1		NO	NO	0.10	30	NO	*		2	0.10	8		1,760		280		163	23	2													
2024CPT.01.02.10461	Hertford	7	NC-45	FROM BEG C&G TO OVERPASS @ US 13 NORTH	2	2	MD	NO	NO	0.33	51	NO	*		7	0.33	26		9,874	910	1,535		904	127	5													
2024CPT.01.02.10461	Hertford	8	NC-45	FROM NC 45 (MAIN STREET) TO END C&G	4	2	2WU	NO	NO	0.20	38	NO	*		2				4,459		275		439	26	5													
TOTAL FOR PROJ NO. 2024CPT.01.02.10461																*			97	4.71	76	84,361	28,057	10,630	4,403		10,451	830	54			30	192					
2024CPT.01.02.20461	Hertford	9	SR-1002 / QUEBEC ROAD	FROM HARRELLSVILLE CITY LIMITS SOUTH TO BERTIE COUNTY LINE	5	2	2WU	NO	NO	4.52	21	NO	*	226	90	9.04				880		5,132		339	115	55,686	22,410											
2024CPT.01.02.20461	Hertford	10	SR-1002 / QUEBEC ROAD	FROM NC 45 TO HARRELLSVILLE CITY LIMITS SOUTH	6	2	2WU	NO	NO	0.20	31	NO	*		4			3,637			331		22															
2024CPT.01.02.20461	Hertford	11	SR-1108 / BONNER BRIDGE ROAD	FROM NC 42 TO NC 11	5	2	2WU	NO	NO	1.35	21	NO	*	68	27	2.70				1,844		1,677		110	25	17,983	7,200											
2024CPT.01.02.20461	Hertford	12	SR-1179 / UNION STREET/ CHOWAN COLLEGE ROAD	FROM END OF CURB & GUTTER TO US 158	7	2	2WU	NO	NO	0.62	26	NO	*	31	12	1.24				231		889		58														
2024CPT.01.02.20461	Hertford	13	SR-1179 / UNION STREET/ CHOWAN COLLEGE ROAD	FROM HIGH STREET TO BEG CURB AND GUTTER	6	2	2WU	NO	NO	0.66	36	NO	*					13,929		1,071		1,349		88	5					100								
2024CPT.01.02.20461	Hertford	14	SR-1212 / SHORT CUT ROAD	FROM JOINT NORTH OF NC 11 OVERPASS TO US 13 BUS.	1	2	2WU	NO	NO	0.61	32	YES	*		12	0.61		12,511		230			1,181	70	5													
2024CPT.01.02.20461	Hertford	15	SR-1312 / DREWERY ROAD	FROM SR 1311 (BOONES BRIDGE ROAD) TO VIRGINIA STATE LINE	5	2	2WU	NO	NO	0.68	20	NO	*	34	14	1.36						729		53	124	7,979	3,200											
TOTAL FOR PROJ NO. 2024CPT.01.02.20461																*	359	159	14.95			30,077		4,256		10,107	1,181	740	274	81,648	32,810							100
GRAND TOTAL																		13.55			1	359	256	19.66	76	114,438	28,057	14,886	4,403	10,107	11,632	1,570	328	81,648	32,810	30	192	100

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	MATERIAL TRANSFER VEHICLE REQUIRED	261250000-N	281500000-N	283000000-N	284500000-N	303000000-E	321500000-N	328700000-N	328800000-N	331700000-N	336000000-E	600000000-E	6071012000-E	608400000-E	611700000-N	732400000-N	744400000-E	745610000-E					
													REMOVE AND REPLACE CONCRETE CURB RAMPS	ADJUSTMENT OF DROP INLETS	ADJUSTMENT OF MANHOLES	ADJUSTMENT OF METER OR VALVE BOXES	STEEL BEAM GUARDRAIL	GUARDRAIL ANCHOR UNITS, TYPE III	GUARDRAIL END UNITS, TYPE TL-3 (SP)	GUARDRAIL END UNITS, TYPE TL-2	GR ANCH B-77	REMOVE EXISTING GUARDRAIL	TEMPORARY SILT FENCE	COIR FIBER WATTLE	SEEDING & MULCHING	RESPONSE FOR EROSION CONTROL	JUNCTION BOX (STD SIZE)	INDUCTIVE LOOP SAWCUT	LEAD-IN CABLE (14 2)					
													EA	EA	EA	EA	LF	EA	EA	EACH	EA	LF	LF	LF	ACR	EA	EA	LF	LF					
2024CPT.01.02.10461	Hertford	1	US-13	FROM SR 1212 (SHORT CUT ROAD) TO PAVEMENT JOINT @ 4 LANE DIVIDE	1	2	2WU	NO	NO	3.75	32	YES							2			100	50	25	3.8	1								
2024CPT.01.02.10461	Hertford	2	US-158 E	FROM 250' WEST OF SR 1218 (INDUSTRIAL PARK ROAD) TO NC 45 @ US 13 OVERPASS	2	4	MD	NO	NO	0.23	78	NO				207			1	1	280	50	25	0.2	*									
2024CPT.01.02.10461	Hertford	3	RMP-6609 OI	FROM US 13 NORTH TO NC 45	3	1		NO	NO	0.10	24	NO												0.1	*									
2024CPT.01.02.10461	Hertford	4	RMP-6610 OI	FROM NC 45 TO US 13 NORTH	3	1		NO	NO	0.10	30	NO												0.1	*									
2024CPT.01.02.10461	Hertford	5	RMP-6611 OI	FROM US 13 SOUTH TO US 158	3	1		NO	NO	0.10	30	NO												0.1	*									
2024CPT.01.02.10461	Hertford	6	RMP-6612 OI	FROM US 158 TO US 13 SOUTH	3	1		NO	NO	0.10	30	NO												0.1	*									
2024CPT.01.02.10461	Hertford	7	NC-45	FROM BEG C&G TO OVERPASS @ US 13 NORTH	2	2	MD	NO	NO	0.33	51	NO			137				1	1	210	50	25	0.3	*									
2024CPT.01.02.10461	Hertford	8	NC-45	FROM NC 45 (MAIN STREET) TO END C&G	4	2	2WU	NO	NO	0.20	38	NO			2																			
TOTAL FOR PROJ NO. 2024CPT.01.02.10461															2			344		2	2	2	590	150	75	4.8	1							
2024CPT.01.02.20461	Hertford	9	SR-1002 / QUEBEC ROAD	FROM HARRELLSVILLE CITY LIMITS SOUTH TO BERTIE COUNTY LINE	5	2	2WU	NO	NO	4.52	21	NO										50	25	4.5	1									
2024CPT.01.02.20461	Hertford	10	SR-1002 / QUEBEC ROAD	FROM NC 45 TO HARRELLSVILLE CITY LIMITS SOUTH	6	2	2WU	NO	NO	0.20	31	NO																						
2024CPT.01.02.20461	Hertford	11	SR-1108 / BONNER BRIDGE ROAD	FROM NC 42 TO NC 11	5	2	2WU	NO	NO	1.35	21	NO				140	2	2				278	50	25	1.4	*								
2024CPT.01.02.20461	Hertford	12	SR-1179 / UNION STREET/ CHOWAN COLLEGE ROAD	FROM END OF CURB & GUTTER TO US 158	7	2	2WU	NO	NO	0.62	26	NO											50	25	0.6	*								
2024CPT.01.02.20461	Hertford	13	SR-1179 / UNION STREET/ CHOWAN COLLEGE ROAD	FROM HIGH STREET TO BEG CURB AND GUTTER	6	2	2WU	NO	NO	0.66	36	NO	2	9	6	4											1	246	90					
2024CPT.01.02.20461	Hertford	14	SR-1212 / SHORT CUT ROAD	FROM JOINT NORTH OF NC 11 OVERPASS TO US 13 BUS.	1	2	2WU	NO	NO	0.61	32	YES				276			4			476	50	25	0.6	*								
2024CPT.01.02.20461	Hertford	15	SR-1312 / DREWERY ROAD	FROM SR 1311 (BOONES BRIDGE ROAD) TO VIRGINIA STATE LINE	5	2	2WU	NO	NO	0.68	20	NO										50	25	0.7	*									
TOTAL FOR PROJ NO. 2024CPT.01.02.20461															2	9	6	4	416	2	6		754	250	125	7.8	1	1	246	90				
GRAND TOTAL															13.55			2	9	8	4	760	2	8	2	2	1,344	400	200	12.6	2	1	246	90

PROJECT NO.	SHEET NO.	TOTAL NO.
2024CPT.01.02.10461, ETC.	19	

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	MATERIAL TRANSFER VEHICLE REQUIRED	441300000-E	445700000-N	468800000-E	469500000-E	470900000-E	472500000-E			
											WORK ZONE ADVANCE/GENERAL WARNING SIGNING	TEMPORARY TRAFFIC CONTROL (SP)	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS) WHITE	THERMOPLASTIC PAVEMENT MARKING LINES (6", 90 MILS) YELLOW	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS) YELLOW	THERMO PAVEMENT MARKING LINES (24" 90 MILS) (SP)	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS), LT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS), RT ARROW	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS), STR ARROW
											SF	LS	LF	LF	LF	EA	EA	EA	
2024CPT.01.02.10461	Hertford	1	US-13	FROM SR 1212 (SHORT CUT ROAD) TO PAVEMENT JOINT @ 4 LANE DIVIDE	1	2	2WU	3.75	32	YES									
2024CPT.01.02.10461	Hertford	2	US-158 E	FROM 250' WEST OF SR 1218 (INDUSTRIAL PARK ROAD) TO NC 45 @ US 13 OVERPASS	2	4	MD	0.23	78	NO	264	*	2,475	1,419			12	4	12
2024CPT.01.02.10461	Hertford	3	RMP-6609 OI	FROM US 13 NORTH TO NC 45	3	1		0.10	24	NO	120	*	538	330					
2024CPT.01.02.10461	Hertford	4	RMP-6610 OI	FROM NC 45 TO US 13 NORTH	3	1		0.10	30	NO	120	*	538	330					
2024CPT.01.02.10461	Hertford	5	RMP-6611 OI	FROM US 13 SOUTH TO US 158	3	1		0.10	30	NO	120	*	538	330					
2024CPT.01.02.10461	Hertford	6	RMP-6612 OI	FROM US 158 TO US 13 SOUTH	3	1		0.10	30	NO	24	*	538	330					
2024CPT.01.02.10461	Hertford	7	NC-45	FROM END C&G TO OVERPASS @ US 13 NORTH	2	2	MD	0.33	51	NO		*	3,551	2,178					
2024CPT.01.02.10461	Hertford	8	NC-45	FROM NC 45 (MAIN STREET) TO END C&G	4	2	2WU	0.20	38	NO	108	*		1,320					
TOTAL FOR PROJ NO. 2024CPT.01.02.10461								4.91			1,188	*	48,528	30,987	400	15	6	12	
													79,515				33		
2024CPT.01.02.20461	Hertford	9	SR-1002 / QUEBEC ROAD	FROM HARRELLSVILLE CITY LIMITS SOUTH TO BERTIE COUNTY LINE	5	2	2WU	4.52	21	NO	336	*							
2024CPT.01.02.20461	Hertford	10	SR-1002 / QUEBEC ROAD	FROM NC 45 TO HARRELLSVILLE CITY LIMITS SOUTH	6	2	2WU	0.20	31	NO		*							
2024CPT.01.02.20461	Hertford	11	SR-1108 / BONNER BRIDGE ROAD	FROM NC 42 TO NC 11	5	2	2WU	1.35	21	NO		*							
2024CPT.01.02.20461	Hertford	12	SR-1179 / UNION STREET / CHOWAN COLLEGE ROAD	FROM END OF CURB & GUTTER TO US 158	7	2		0.62	26	NO		*		10					
2024CPT.01.02.20461	Hertford	13	SR-1179 / UNION STREET / CHOWAN COLLEGE ROAD	FROM HIGH STREET TO END CURB AND GUTTER	6	2	2WU	0.66	36	NO		*			31	210	21		
2024CPT.01.02.20461	Hertford	14	SR-1212 / SHORT CUT ROAD	FROM JOINT NORTH OF NC 11 OVERPASS TO US 13 BUS.	1	2	2WU	0.61	32	YES		*	6,564	4,026	40				
2024CPT.01.02.20461	Hertford	15	SR-1312 / DREWERY ROAD	FROM SR 1311 (BOONES BRIDGE ROAD) TO VIRGINIA STATE LINE	5	2	2WU	0.68	20	NO		*							
TOTAL FOR PROJ NO. 2024CPT.01.02.20461								8.64			336	*	6,564	4,026	31	260	21	21	
													10,590						
GRAND TOTAL								13.55			1,524	1	55,092	35,013	31	660	36	6	12
													90,105				54		

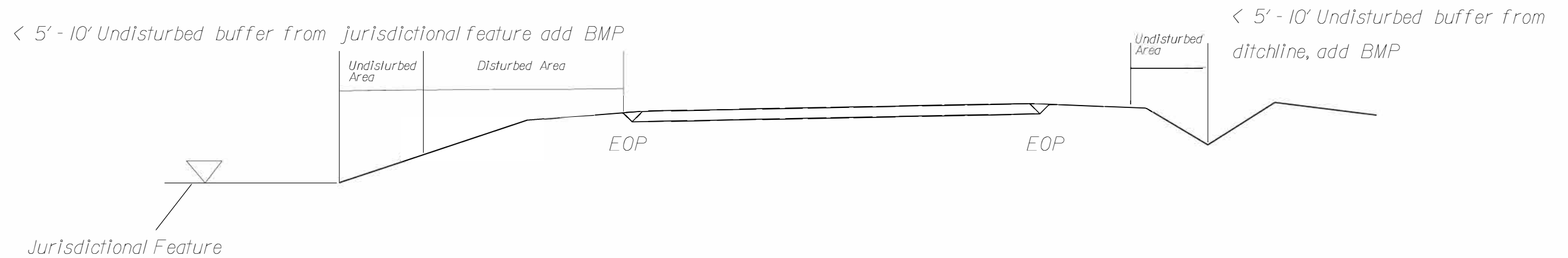
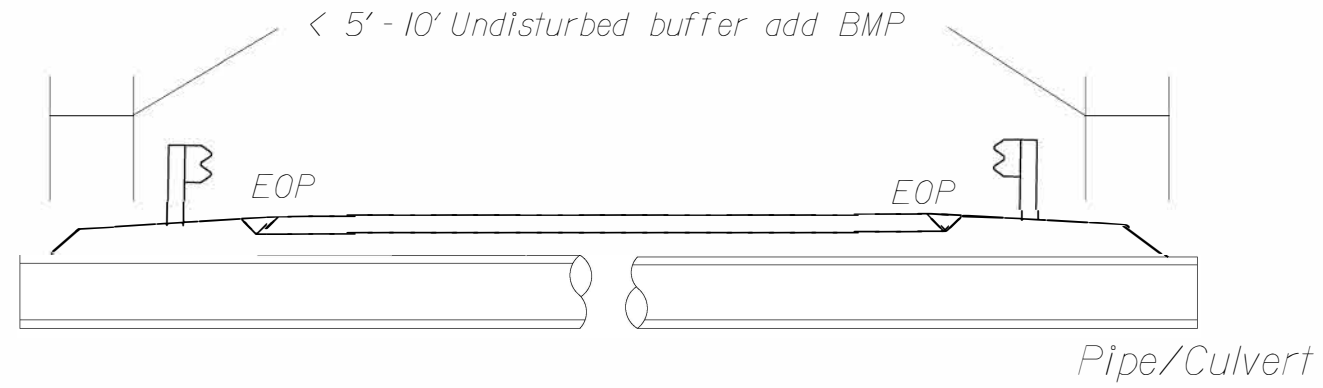
THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	MATERIAL TRANSFER VEHICLE REQUIRED	481000000-E				484500000-N			489000000-E		490510000-N
											PAINT PAVEMENT MARKING LINES (4") WHITE	PAINT PAVEMENT MARKING LINES (4") YELLOW	PAINT PAVEMENT MARKING LINES (8") YELLOW	PAINT PAVEMENT MARKING LINES (24")	PAINT PAVEMENT MARKING SYMBOL (LT ARROW)	PAINT PAVEMENT MARKING SYMBOL (RT ARROW)	PAINT PAVEMENT MARKING SYMBOL (STR ARROW)	GEN PAVEMENT MARKING ITEM, THERMO HOT SPRAY LINES (4" 55 MILS) WHITE	GEN PAVEMENT MARKING ITEM, THERMO HOT SPRAY LINES (4" 55 MILS) YELLOW	NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKER
											LF	LF	LF	LF	EA	EA	EA	LF	LFT	EA
2024CPT.01.02.10461	Hertford	1	US-13	FROM SR 1212 (SHORT CUT ROAD) TO PAVEMENT JOINT @ 4 LANE DIVIDE	1	2	2WU	3.75	32	YES	40,350	24,750		400	3	2			236	
2024CPT.01.02.10461	Hertford	2	US-158 E	FROM 250' WEST OF SR 1218 (INDUSTRIAL PARK ROAD) TO NC 45 @ US 13 OVERPASS	2	4	MD	0.23	78	NO	2,475	1,419		12	4	12			14	
2024CPT.01.02.10461	Hertford	3	RMP-6609 OI	FROM US 13 NORTH TO NC 45	3	1		0.1	24	NO	538	330								
2024CPT.01.02.10461	Hertford	4	RMP-6610 OI	FROM NC 45 TO US 13 NORTH	3	1		0.1	30	NO	538	330								
2024CPT.01.02.10461	Hertford	5	RMP-6611 OI	FROM US 13 SOUTH TO US 158	3	1		0.1	30	NO	538	330								
2024CPT.01.02.10461	Hertford	6	RMP-6612 OI	FROM US 158 TO US 13 SOUTH	3	1		0.1	30	NO	538	330								
2024CPT.01.02.10461	Hertford	7	NC-45	FROM END C&G TO OVERPASS @ US 13 NORTH	2	2	MD	0.33	51	NO	3,551	2,178							21	
2024CPT.01.02.10461	Hertford	8	NC-45	FROM NC 45 (MAIN STREET) TO END C&G	4	2	2WU	0.2	38	NO		1,320							13	
TOTAL FOR PROJ NO. 2024CPT.01.02.10461								4.91			48,528	30,987	400	15	6	12			284	
											79,515				33					
2024CPT.01.02.20461	Hertford	9	SR-1002 / QUEBEC ROAD	FROM HARRELLSVILLE CITY LIMITS SOUTH TO BERTIE COUNTY LINE	5	2	2WU	4.52	21	NO	48,635	29,832						48,635	29,832	
2024CPT.01.02.20461	Hertford	10	SR-1002 / QUEBEC ROAD	FROM NC 45 TO HARRELLSVILLE CITY LIMITS SOUTH	6	2	2WU	0.2	31	NO		1,320							1,320	
2024CPT.01.02.20461	Hertford	11	SR-1108 / BONNER BRIDGE ROAD	FROM NC 42 TO NC 11	5	2	2WU	1.35	21	NO	14,526	8,910						14,526	8,910	
2024CPT.01.02.20461	Hertford	12	SR-1179 / UNION STREET / CHOWAN COLLEGE ROAD	FROM END OF CURB & GUTTER TO US 158	7	2		0.62	26	NO	6,671	4,092		10				6,671	4,092	
2024CPT.01.02.20461	Hertford	13	SR-1179 / UNION STREET / CHOWAN COLLEGE ROAD	FROM HIGH STREET TO END CURB AND GUTTER	6	2	2WU	0.66	36	NO	100	8,712	31	210	21			100	8,712	
2024CPT.01.02.20461	Hertford	14	SR-1212 / SHORT CUT ROAD	FROM JOINT NORTH OF NC 11 OVERPASS TO US 13 BUS.	1	2	2WU	0.61	32	YES	6,564	4,026		40					38	
2024CPT.01.02.20461	Hertford	15	SR-1312 / DREWERY ROAD	FROM SR 1311 (BOONES BRIDGE ROAD) TO VIRGINIA STATE LINE	5	2	2WU	0.68	20	NO	7,317	4,488						7,317	4,488	
TOTAL FOR PROJ NO. 2024CPT.01.02.20461								8.64			83,813	61,380	31	260	21	21	77,249	57,354	38	
											145,193						134,603			
GRAND TOTAL								13.55			132,341	92,367	31	660	36	6	12	77,249	57,354	322
											224,708				54		134,603			

NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

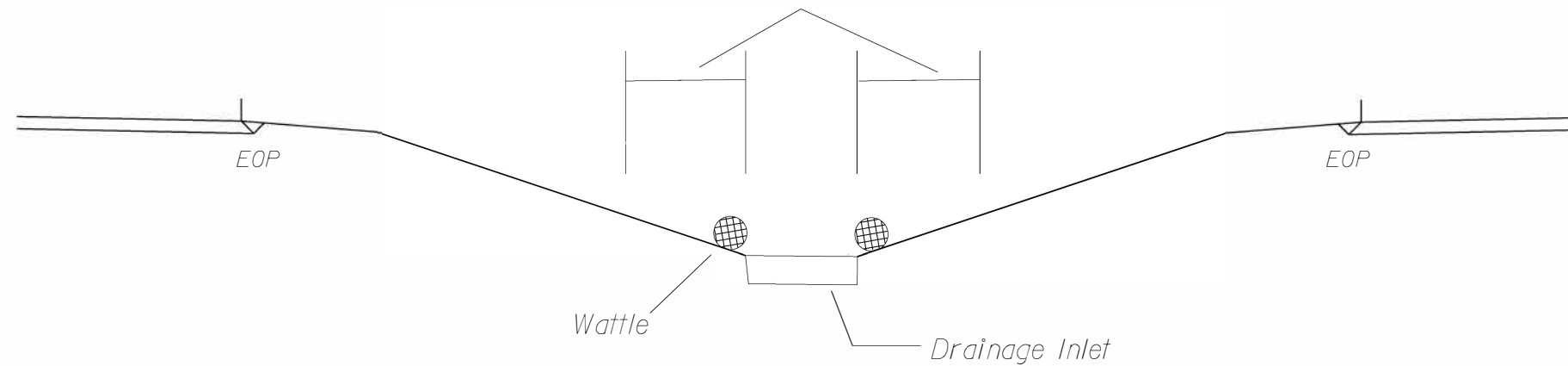
EROSION CONTROL DETAIL



Use BMP's if shoulders and/or frontslopes and/or ditchline and/or backslopes are disturbed

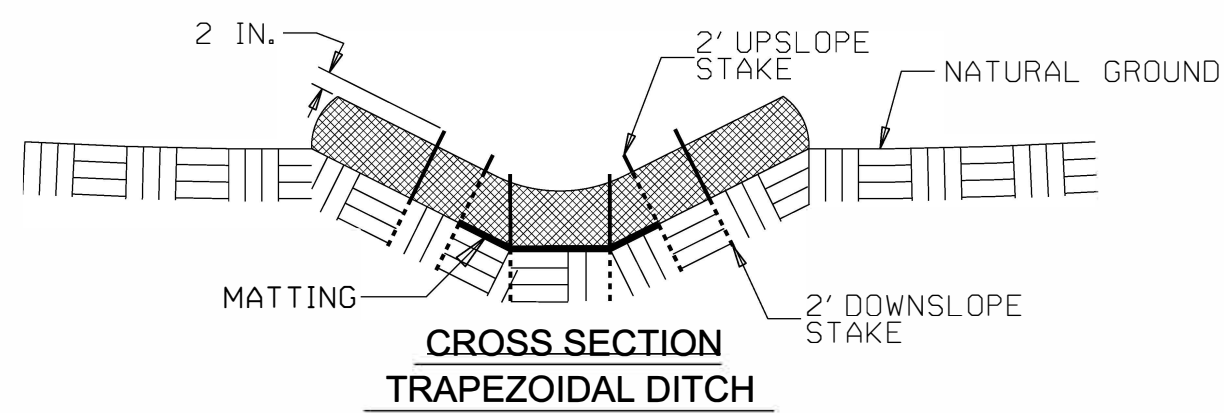
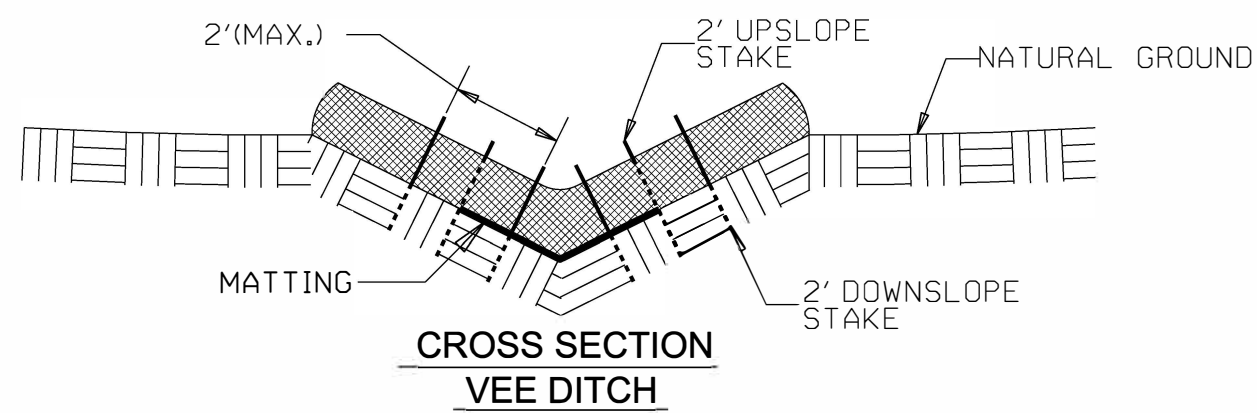
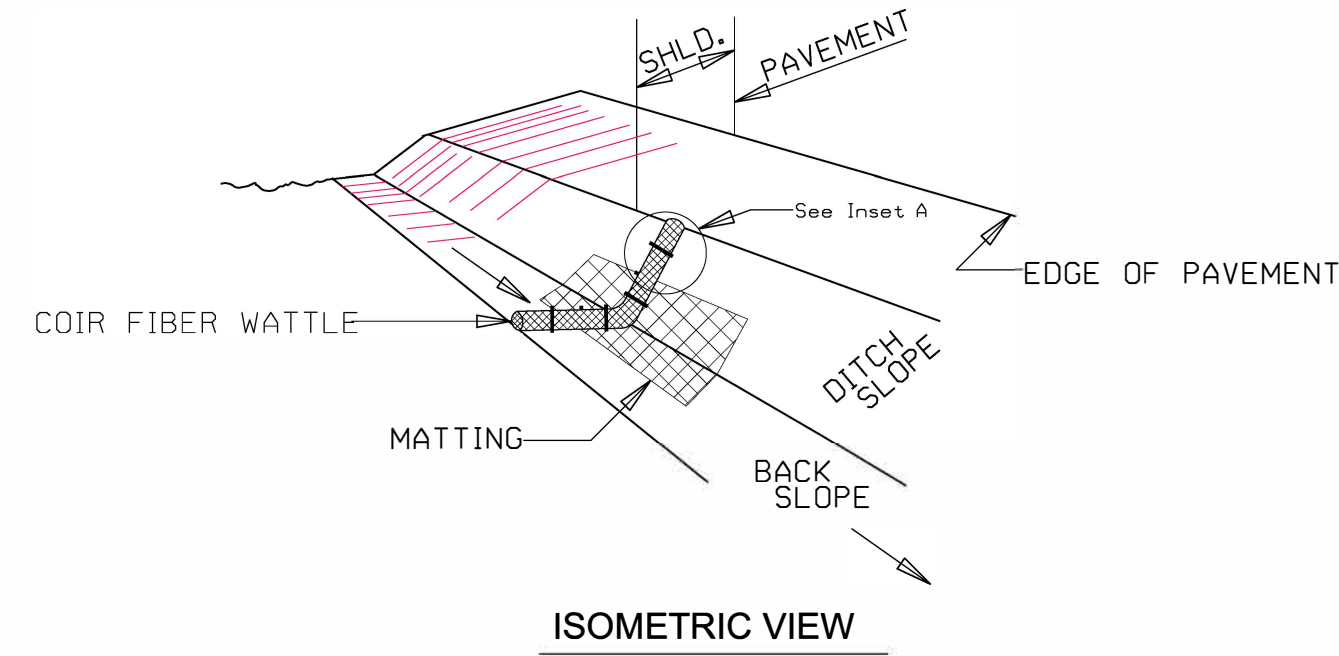


< 5' - 10' Undisturbed buffer from inlet, add wattle

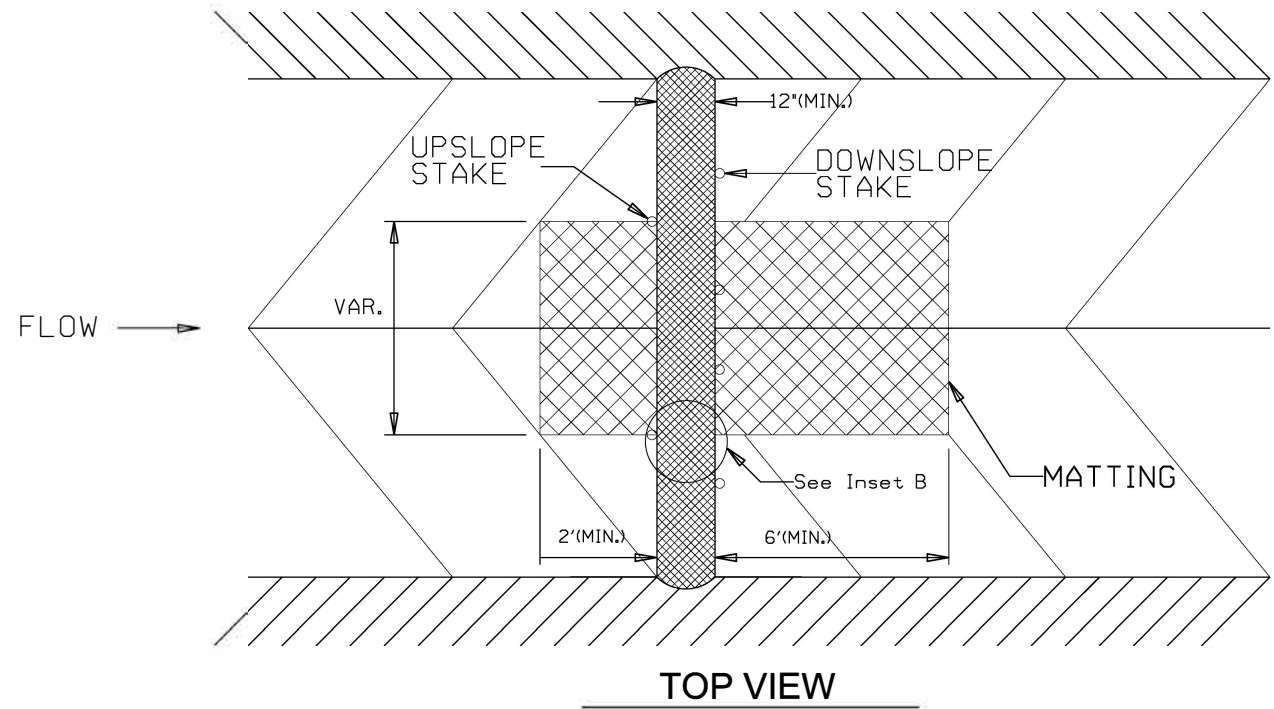
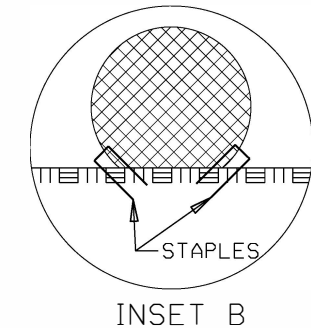
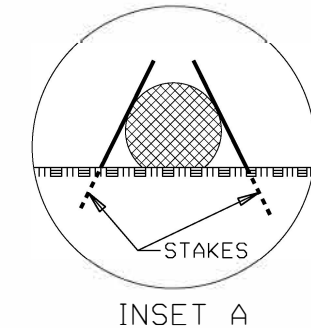


NOT TO SCALE

COIR FIBER WATTLE DETAIL



- NOTES:**
- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) 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.



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

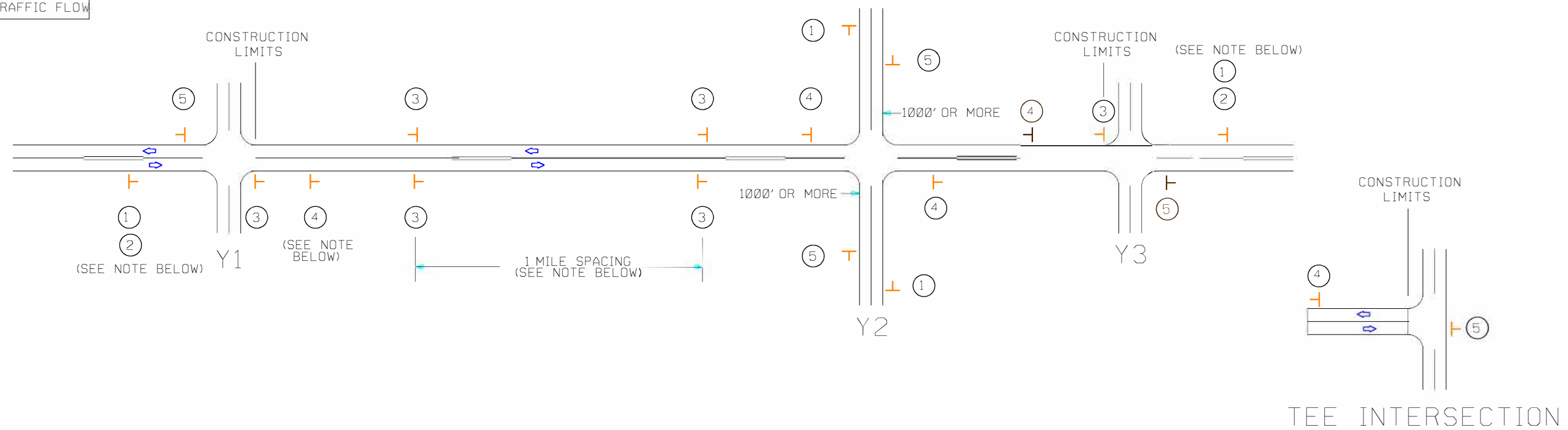
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	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 HQW ZONES.

SIGNING FOR RESURFACING PROJECTS

LEGEND

┣ STATIONARY SIGN

⇨ DIRECTION OF TRAFFIC FLOW



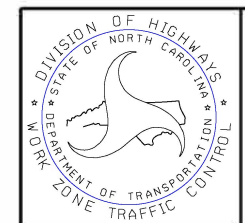
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	<p>① ROAD WORK AHEAD W20-1 48" X 48"</p> <p>② NEXT SIGN W7-3aP 24" X 18" ROUND UP TO NEXT WHOLE NUMBER.(NO FRACTIONAL OR DECIMAL NUMBERS)</p>	<p>PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH.</p>	<p>NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <p>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS</p> <p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p> <p> W20-1 48" X 48"</p> <p> W20-7 A 48" X 48"</p> <p>PLACED 500' IN ADVANCE OF FLAGGER.</p>
	<p>③ LOW/SOFT SHOULDER SP 13107 48" X 48"</p> <p> UNMARKED PAVEMENT SP 48" X 48"</p>	<p>- ALTERNATE THE FOLLOWING TWO SIGNS:</p> <p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 5/64 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>	
	<p>④ ROAD UNDER CONST SP 13106 48" X 48"</p>	<p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS.</p> <p>- DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH.</p> <p>- A MAXIMUM OF 2 SIGN SETS PER MILE.DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</p> <p>- FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.</p>	
	<p>⑤ END ROAD WORK G20-2 A 48" X 24"</p>	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	
	<p>THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.</p>		

MAPS LESS THAN 2 MILES

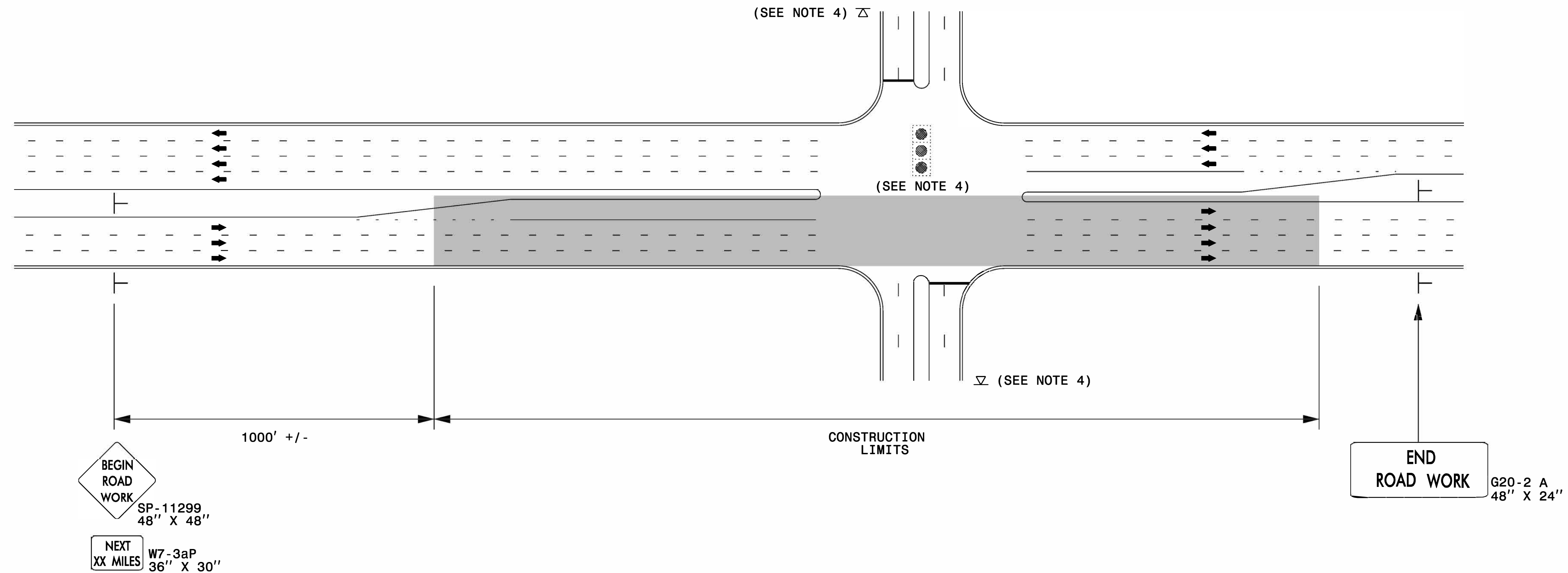
FOR RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, NO STATIONARY SIGNS ARE REQUIRED. USE PORTABLE "ROAD UNDER CONSTRUCTION" OR "ROAD WORK AHEAD" SIGNS IN LIEU OF STATIONARY ADVANCE WARNINGS SIGNS.



ADVANCE WARNING SIGNS FOR RURAL AND SUBURBAN 2-LANE ROADWAY RESURFACING

\$\$\$\$\$SYTIME\$\$\$\$\$
\$\$\$\$\$CON\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$

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

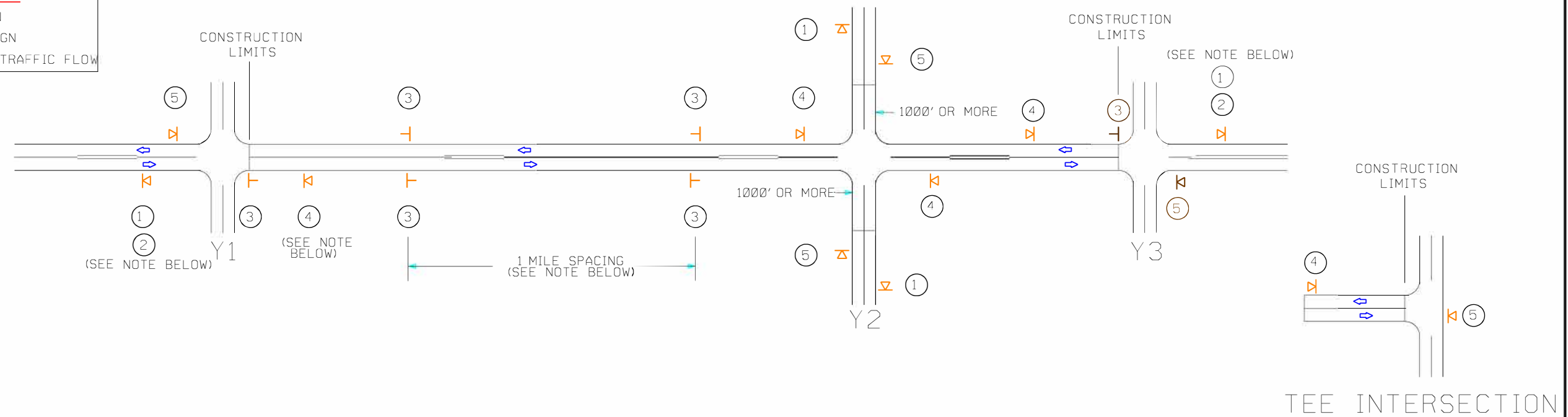


**RESURFACING ADVANCE
WARNING SIGNS FOR
URBAN / SUBURBAN
FACILITIES**

SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND

- PORTABLE SIGN
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW



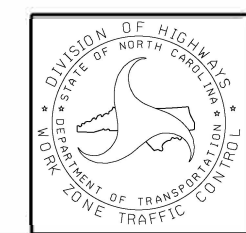
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	<p>① ROAD WORK AHEAD W20-1 48" X 48"</p> <p>② NEXT XX MILES W7-3aP 24" X 18"</p>	<p>- PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.</p> <p>- SIGN #2 ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO THE NEAREST WHOLE NUMBER. DO NOT USE FRACTIONAL OR DECIMAL NUMBERS.</p>	<p>STATIONARY SIGNING NOT REQUIRED FOR THE FOLLOWING -Y- LINE CONDITIONS:</p> <p>1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE 2) SUBDIVISION ROADS 3) DEAD END ROADS</p>
	<p>③ LOOSE GRAVEL W8-7 48" X 48"</p> <p> UNMARKED PAVEMENT SP 48" X 48"</p>	<p>- ALTERNATE THE FOLLOWING TWO SIGNS:</p> <p>- STARTING WITH "LOOSE GRAVEL" (W8-7) FOLLOWED BY "UNMARKED PAVEMENT".</p> <p>- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACED 1 MILE APART THEREAFTER.</p> <p>- AT TEE INTERSECTIONS INSTALL INITIALLY 0.5 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.</p>	<p>WHEN PAVING/CONSTRUCTION ACTIVITIES PROCEED ACROSS AN UNSIGNED -Y- LINE, PORTABLE ADVANCE WARNING SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.</p>
	<p>④ ROAD UNDER CONST SP 13106 48" X 48"</p>	<p>- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS.</p> <p>- INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE.</p> <p>- FOR MULTIPLE -Y- LINES THAT ARE SEPARATED BY 0.25 MILES OR LESS, TREAT AS A SINGLE UNIT AND INSTALL WITHIN 500' OF EACH APPROACH.</p> <p>- A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN.</p>	<p> ROAD WORK AHEAD W20-1 48" X 48"</p> <p>PLACED 500' IN ADVANCE OF FLAGGER.</p> <p> W20-7 A 48" X 48"</p> <p>PLACED 250' IN ADVANCE OF FLAGGER.</p>
	<p>⑤ END ROAD WORK G20-2 A 48" X 24"</p>	<p>PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.</p>	
	<p>THE ABOVE SIGNS ARE ALL THAT ARE REQUIRED FOR A CONTRACTOR TO BEGIN A RESURFACING CONTRACT. ANY ADDITIONAL SIGNS REQUESTED BY NCDOT DIVISIONS SHALL BE INSTALLED WITHIN 7 BUSINESS DAYS OF THE START OF CONTRACT WORK.</p>		

MAPS LESS THAN 2 MILES

FOR AST RESURFACING MAPS WITH CONSTRUCTION LIMITS LESS THAN 2 MILES IN LENGTH, USE A STATIONARY "LOOSE GRAVEL" SIGN AT THE BEGINNING CONSTRUCTION LIMIT FOLLOWED BY AN "UNMARKED PAVEMENT" SIGN MIDWAY THROUGH AND AN "END ROAD WORK" SIGN AT THE END CONSTRUCTION LIMIT.



ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT

\$\$\$\$SYTIME\$\$\$\$
\$\$\$\$SUBSERNAME\$\$\$\$