

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2023CPT.01.09.10461.1, ETC	1
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
2023CPT.01.09.10461.1		PE, CONST

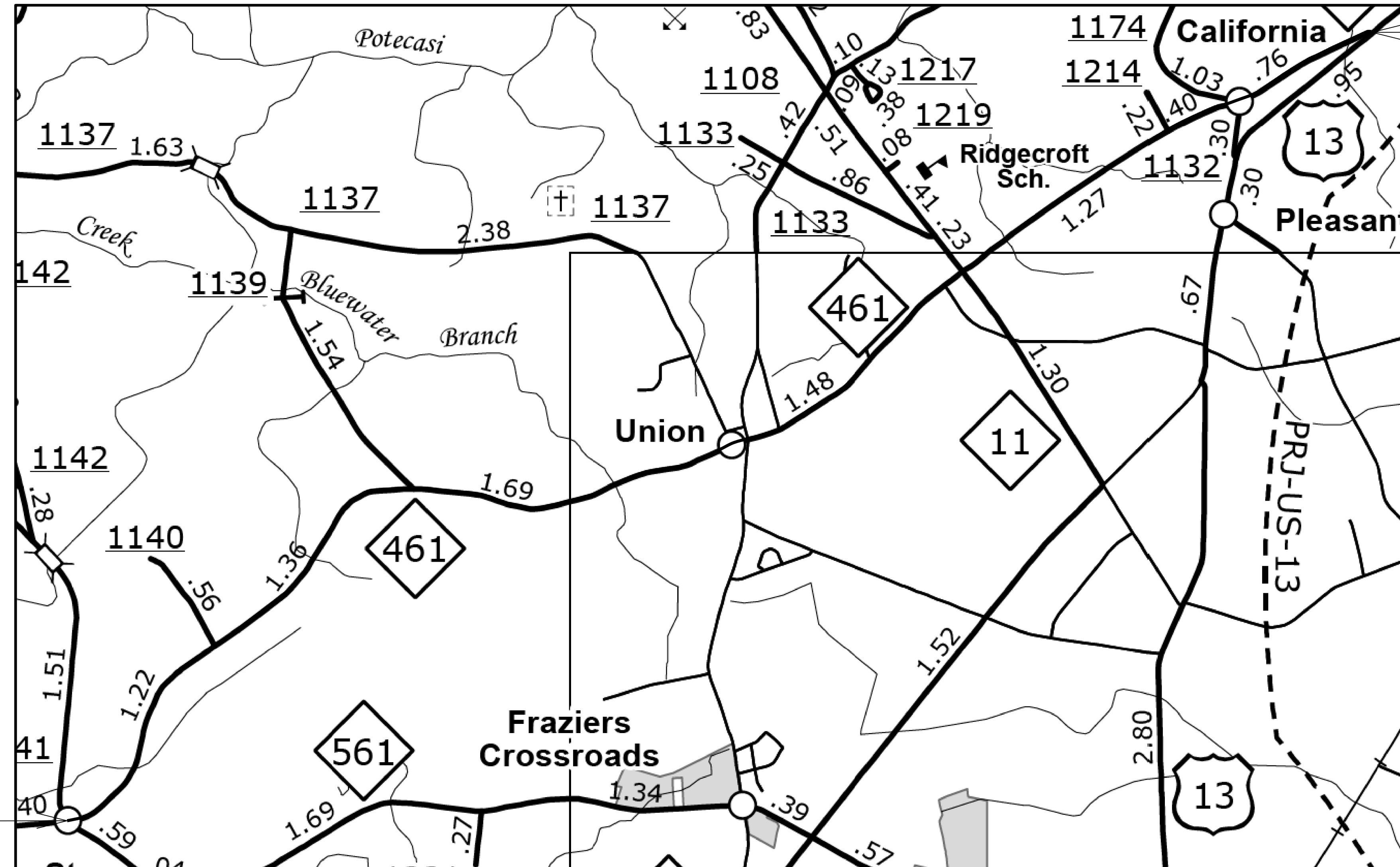
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HERTFORD COUNTY

LOCATION: MAP 1 - NC 461 FROM NC 561 TO US 13

TYPE OF WORK: MILLING, RESURFACING AND SHOULDER RECONSTRUCTION

CONTRACT: C204801 WBS NO.: 2023CPT.01.09.10461.1, ETC.



MAP 1

MAP 1

GRAPHIC SCALES

NTS

MAP LENGTH

MAP 1 = 8.15 MILES

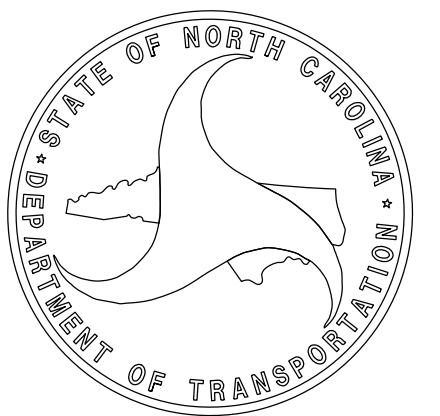
Prepared in the Office of:
DIVISION OF HIGHWAYS
113 Airport Dr., Edenton NC, 27932

2018 STANDARD SPECIFICATIONS

W. B. HOBBS, PE
DIVISION PROJECT TEAM LEAD

C. E. SLACHTA
DIVISION CONTRACT ENGINEER

S. P. FENWICK, PLS
DIVISION DESIGN ENGINEER



22-SEP-2022 13:17 S:\Contracts\6) Proposed Resurfacing\2023-2024 Preservation_ Resurfacing\C204801-Bertie(North)-Hertford\Design Files\DAO0538_tsh1-tsh2.dgn

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BERTIE COUNTY

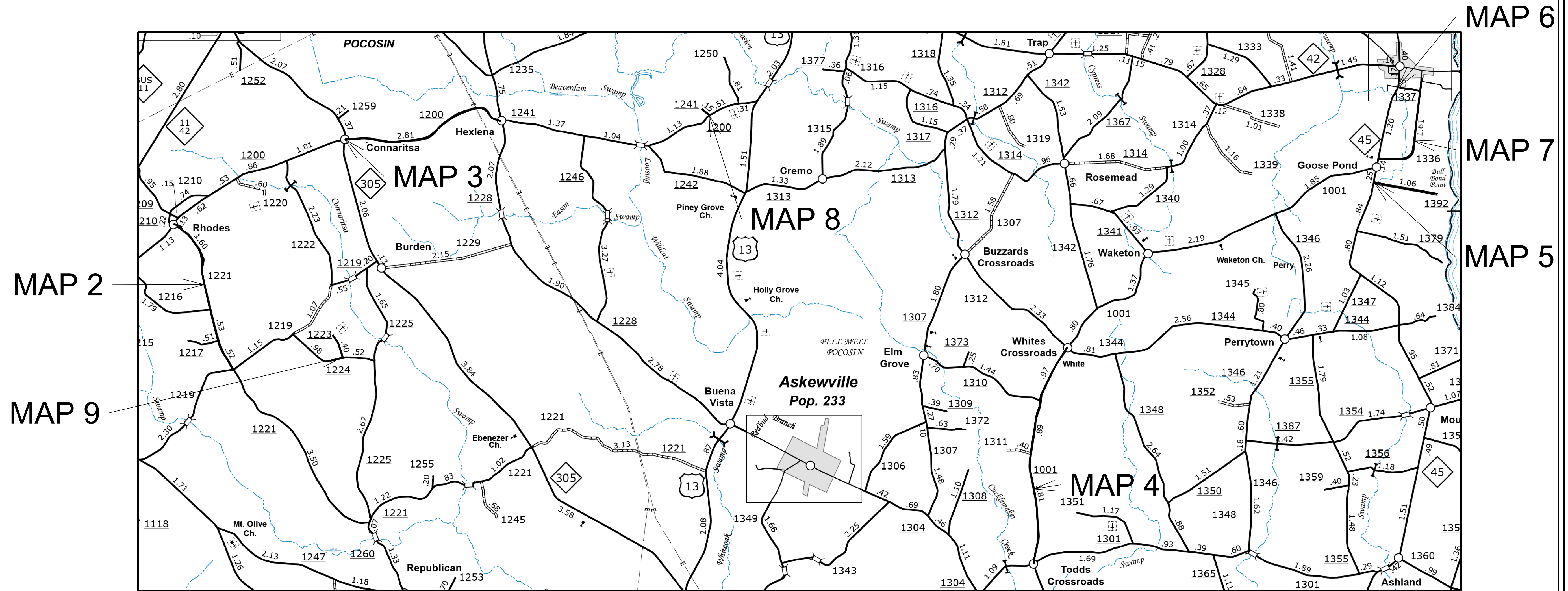
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.
N.C.	2023CPT.01.09.10461.1, ETC	2
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
2023CPT.01.09.20081.1		PE, CONST.
2023CPT.01.09.20082.1		PE, CONST.

LOCATION:

- MAP 9 - SR 1223 (JERNIGAN LANE) FROM SR 1224 TO DEAD END
- MAP 8 - SR 1241 (OAKLAND FARM RD) FROM SR 1200 TO DEAD END
- MAP 7 - SR 1336 (DEW DROP RD) FROM NC 45 TO BEGIN CURB & GUTTER
- MAP 6 - SR 1337 (ETHRIDGE RD) FROM NC 45 TO SR 1336

- MAP 5 - SR 1392 (POINT COMFORT RD) FROM NC 45 TO END OF STATE MAINTENANCE
- MAP 4 - SR 1001 (WAKELON RD) FROM SR 1301 TO SR 1344
- MAP 3 - SR 1200 (HEXLENA RD) FROM NC 305 TO SR 1228
- MAP 2 - SR 1221 (CHARLES TAYLOR RD) FROM SR 1200 TO SR 1219

TYPE OF WORK: AST (MAT COAT), MILLING, RESURFACING AND SHOULDER RECONSTRUCTION



CONTRACT: C204801 WBS NO.: 2023CPT.01.09.10461.1, ETC.

GRAPHIC SCALES

NTS

MAP LENGTH

- MAP 9 = 0.35 MILES
- MAP 8 = 0.17 MILES
- MAP 7 = 1.82 MILES
- MAP 6 = 0.36 MILES
- MAP 5 = 1.06 MILES
- MAP 4 = 3.60 MILES
- MAP 3 = 2.80 MILES
- MAP 2 = 2.63 MILES

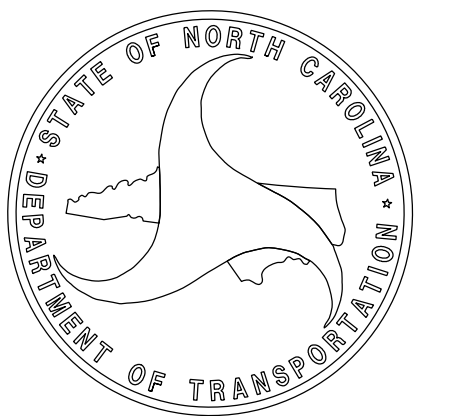
Prepared in the Office of:
DIVISION OF HIGHWAYS
113 AIRPORT DR., EDENTON NC, 27932

2018 STANDARD SPECIFICATIONS

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CHRIS SLACHTA
DIVISION CONTRACT ENGINEER

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DIVISION DESIGN ENGINEER

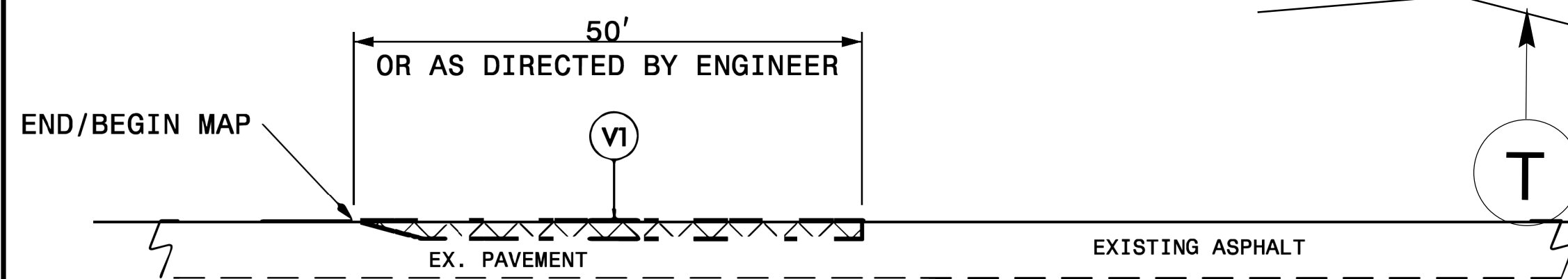


PAVEMENT SCHEDULE

C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD.
C2	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROP. APPROX. 1.0" ASPHALT CONCRETE SURFACE COURSE, TYPE S4.75A, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD.
F1	ASPHALT SURFACE TREATMENT, MAT COAT, #67 STONE
T	EARTH MATERIAL
V1	INCIDENTAL MILLING
V2	MILLING ASPHALT PAVEMENT 1½".
U	EXISTING PAVEMENT.

NOTES:

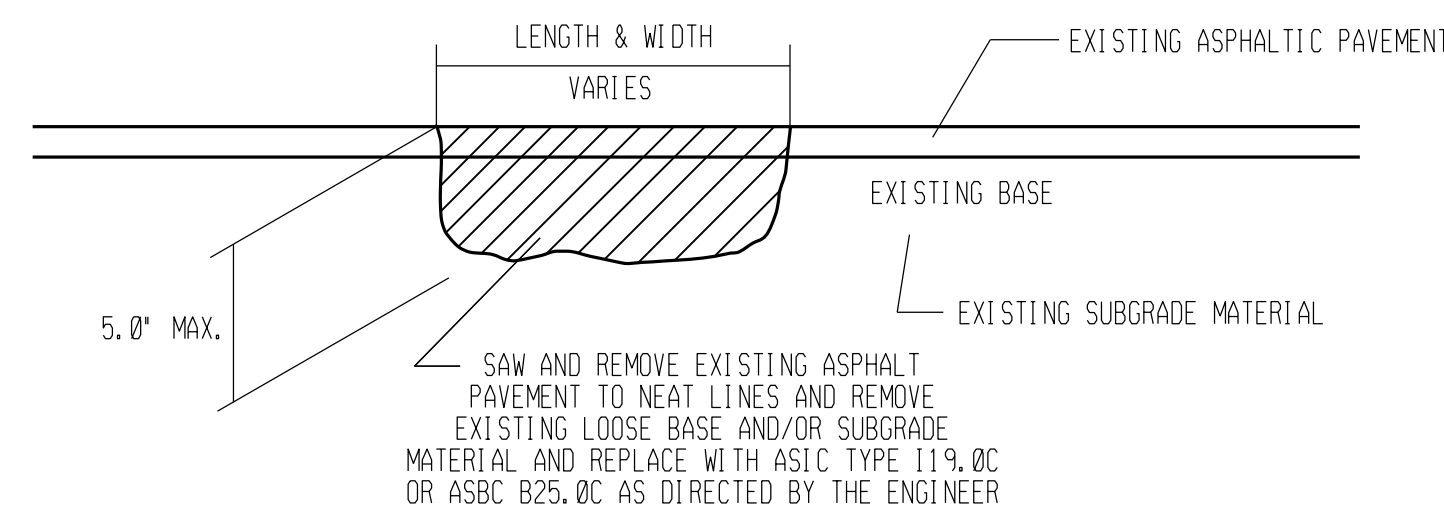
- * ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
- * EDGES, PAVEMENT WIDENING, INTERSECTIONS AND BRIDGE FLARES ARE INCLUDED IN THE SUMMARY OF QUANTITIES.
- * 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 *MCDOT 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.
- * ASPHALT SURFACE TREATMENT, MAT COAT, #67 (GRANITE) STONE SHALL ONLY BE APPLIED TO THE MAINLINE AND NOT TO THE RADIUS OF ANY SIDE ROAD OR DRIVEWAY.
- * THE CONTRACTOR MUST PROVIDE A SPREADER THAT IS AT LEAST 12' WIDE FOR IRREGULAR AREAS ALONG THE MAPS.



DETAIL 1
MAIN LINE MILLING

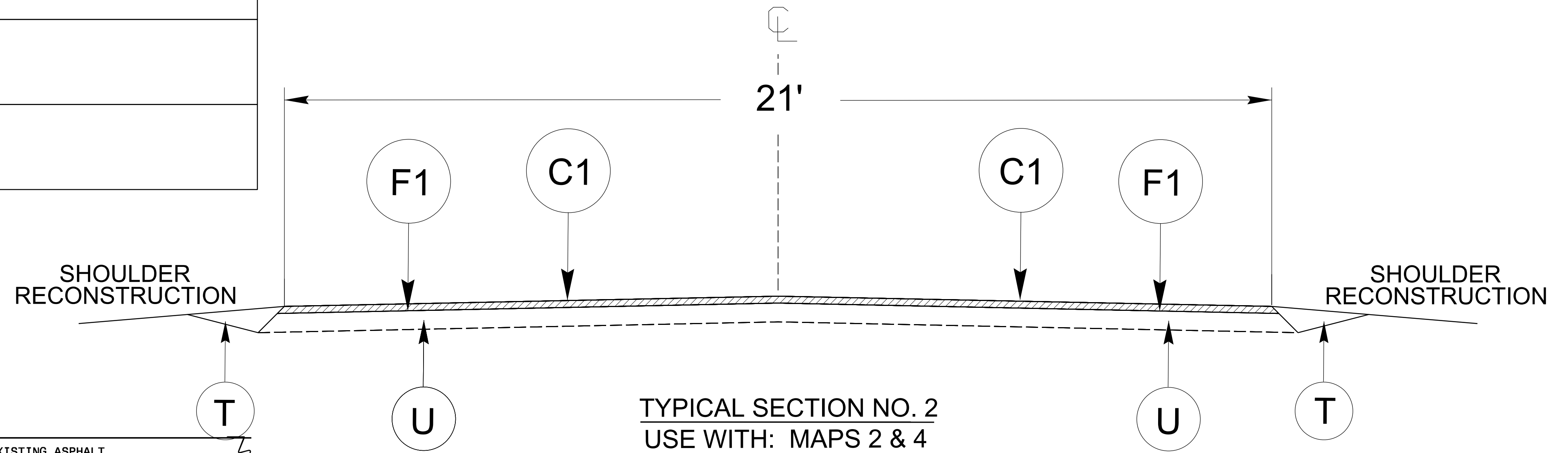
NOTE:

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.

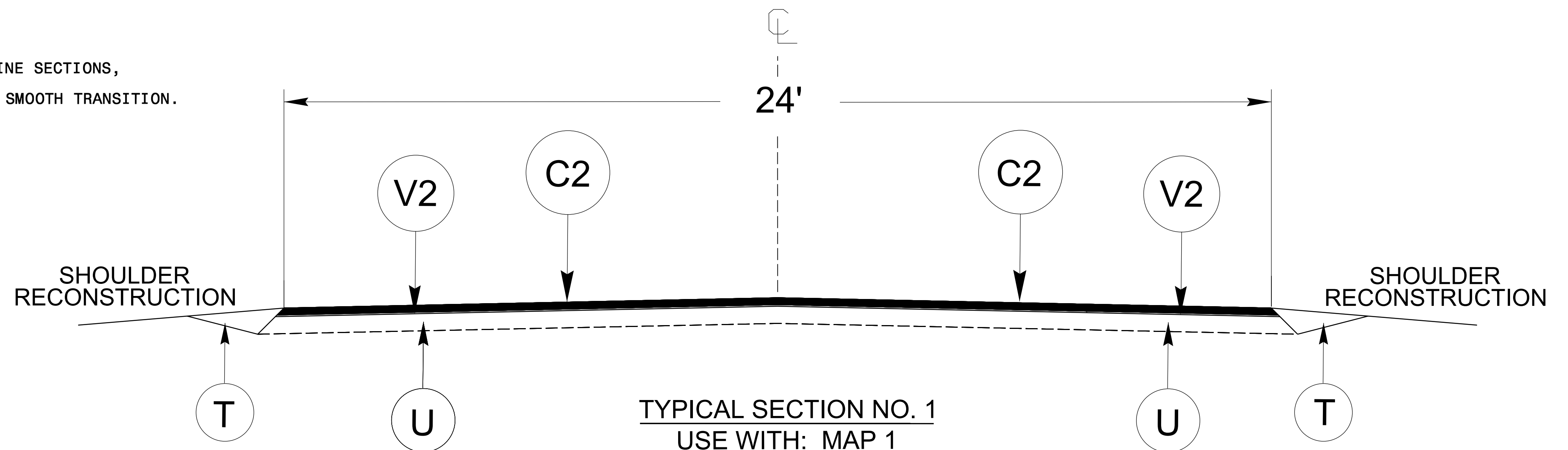


*NOTE: EDGES OF PATCHED AREA ARE TO BE CLEANED OF ALL DEBRIS, AND COATED WITH AN APPROVED TACK MATERIAL BEFORE PLACING ASPHALT.

FULL DEPTH PATCHING Ø - 5"



TYPICAL SECTION NO. 2
USE WITH: MAPS 2 & 4



TYPICAL SECTION NO. 1
USE WITH: MAP 1

21-SEP-2022 14:52 S:\Contracts\671\Proposed Resurfacing\2023-2024 Preservation-Resurfacing\XXXXXX-BertieNor-th Secondary & Thin Lift\Design Files\DA00538-DL-sh5-sh14.dgn

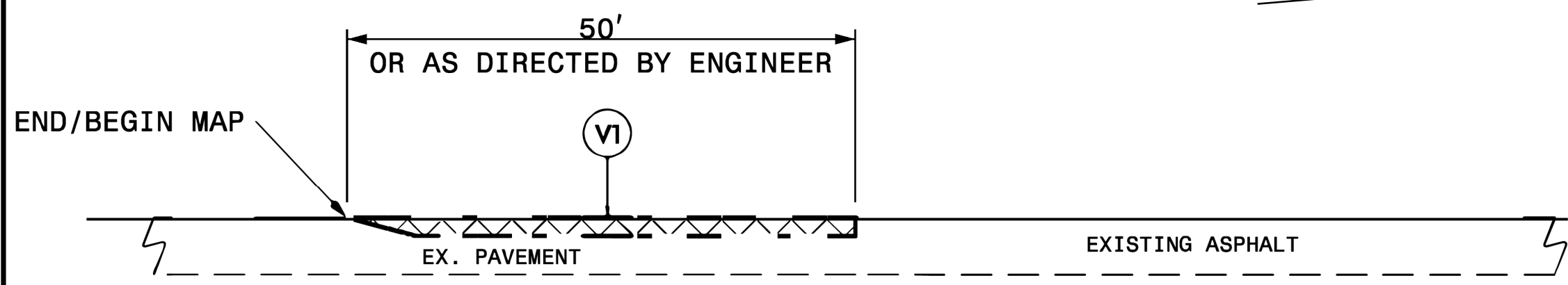
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NOTES:

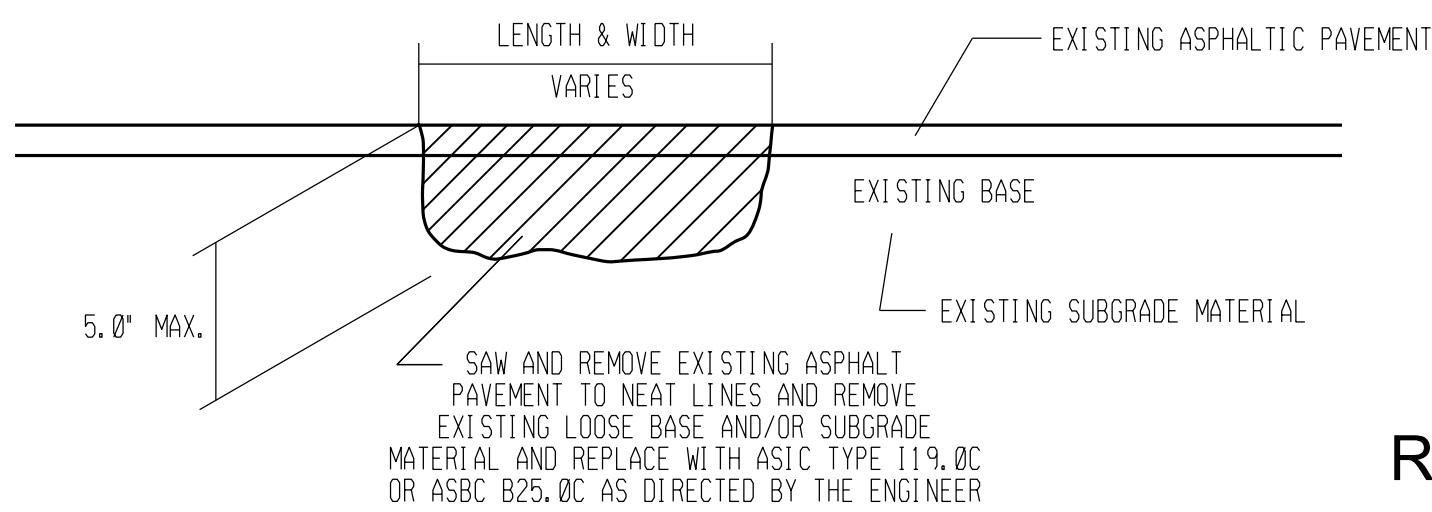
- * ALL INTERSECTING ROADS ARE TO BE RESURFACED TO THE ENDS OF THEIR RADII, THE MAIN LINE RIGHT OF WAY OR AS DIRECTED BY THE ENGINEER. THIS SHALL INCLUDE ANY TAPERS AND TURN LANES LOCATED BOTH ON THE MAIN LINE OR INTERSECTING PAVED ROADWAY.
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- * CONSTRUCT 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.
- * ASPHALT SURFACE TREATMENT, MAT COAT, #67 (GRANITE) STONE SHALL ONLY BE APPLIED TO THE MAINLINE AND NOT TO THE RADIUS OF ANY SIDE ROAD OR DRIVEWAY.
- * THE CONTRACTOR MUST PROVIDE A SPREADER THAT IS AT LEAST 12' WIDE FOR IRREGULAR AREAS ALONG THE MAPS.

22-SEP-2022 13:08 S:\Contractors\617\Proposed Resurfacing\2023-2024 Preservation-Resurfacing\C204801-Ber-tie(Nor-th)-Her-tford\Design Files\DA00538-DL-sh5-sh14.dgn



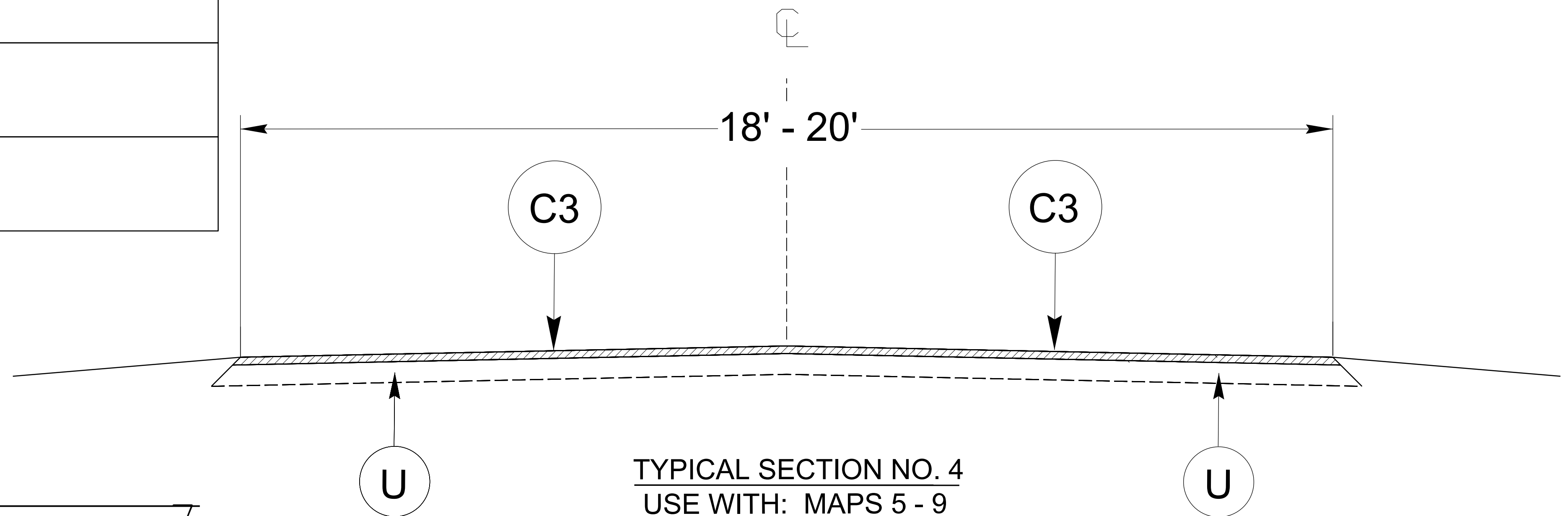
DETAIL 1
MAIN LINE MILLING

- 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.

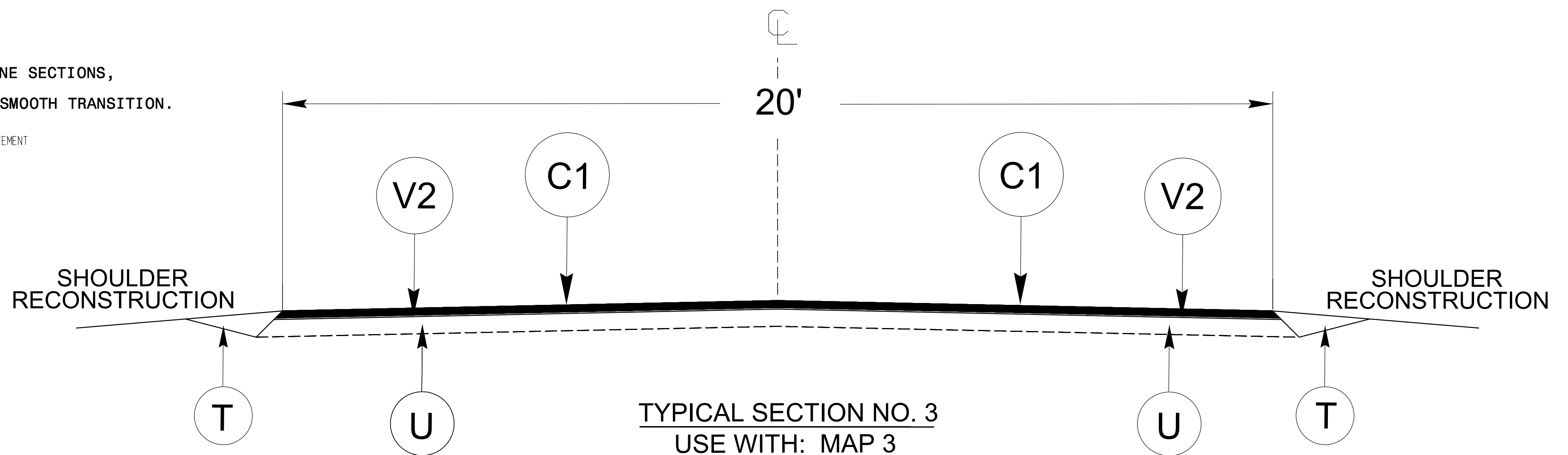


*NOTE: EDGES OF PATCHED AREA ARE TO BE CLEANED OF ALL DEBRIS AND COATED WITH AN APPROVED TACK MATERIAL BEFORE PLACING ASPHALT.

FULL DEPTH PATCHING Ø - 5"



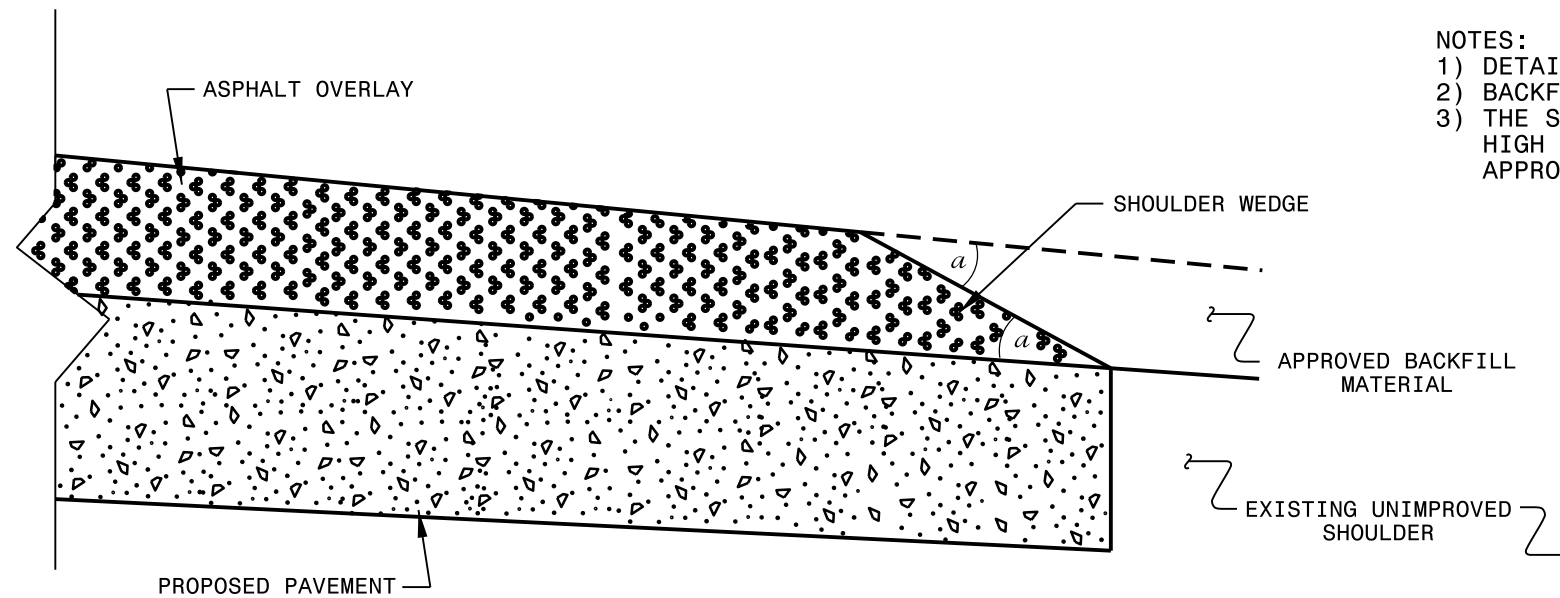
TYPICAL SECTION NO. 4
USE WITH: MAPS 5 - 9



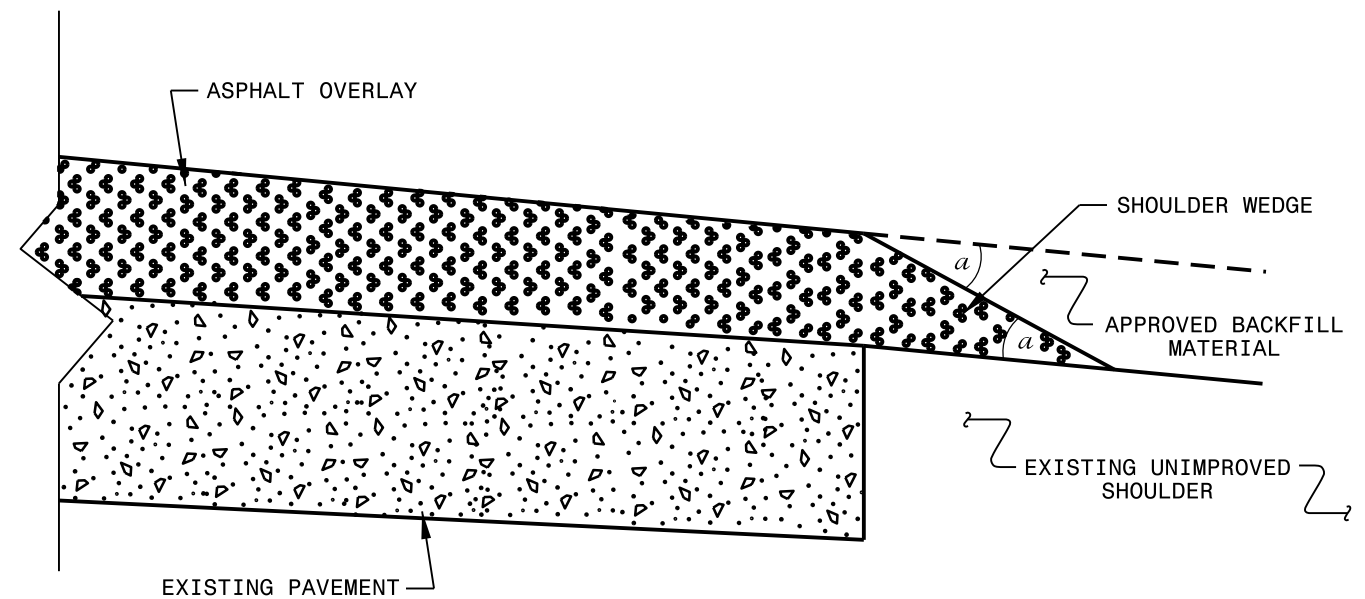
TYPICAL SECTION NO. 3
USE WITH: MAP 3

NOTES:

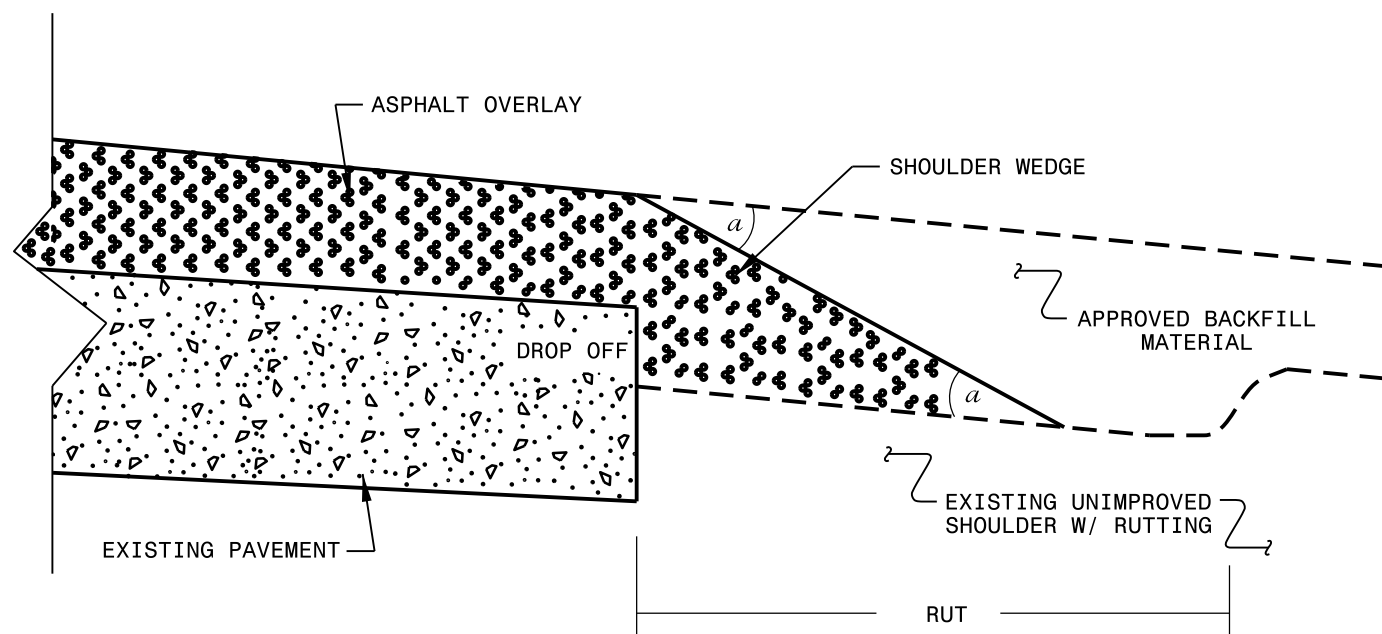
- 1) DETAIL DOES NOT APPLY TO OGAFB AND ULTRA-THIN BONDED WEARING COURSE.
- 2) BACKFILL SHOULDER WITH APPROVED MATERIAL.
- 3) THE SHOULDER WEDGE DEVICE MAY BE DISENGAGED AT PAVED DRIVEWAYS, SIDE STREETS, HIGH SHOULDERS, AND OTHER LOCATIONS NOT FEASIBLE TO CONSTRUCT AS APPROVED BY THE ENGINEER.



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°

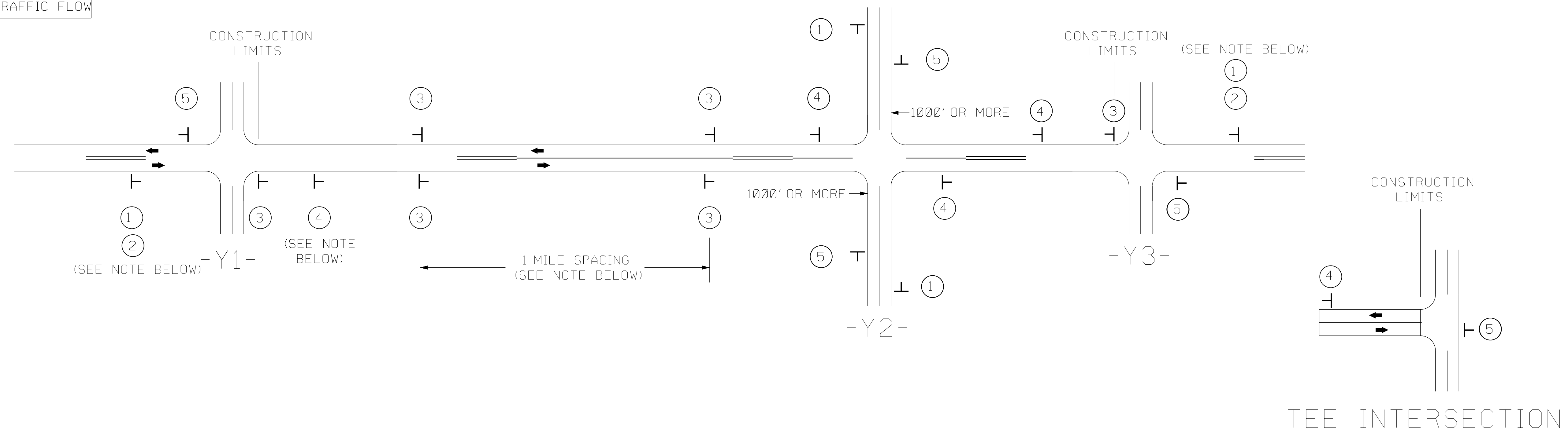
CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950 FAX 919-250-4119	
SHOULDER WEDGE DETAILS	
ORIGINAL BY: T.SPELL	DATE: 7-19-11
MODIFIED BY:	DATE: 2/2/16
CHECKED BY:	DATE:
FILE SPEC.:	s:\usr\detatl1s\stand\shoulderwedgedeta11.dgn

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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

SIGNING FOR RESURFACING PROJECTS

LEGEND
 T STATIONARY SIGN
 ← DIRECTION OF TRAFFIC FLOW



MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	①	 W20-1 48" X 48"	PLACE 1000' PRIOR TO BEGINNING OF CONSTRUCTION LIMITS. ONLY USED ON -Y- LINES IF RESURFACING LIMITS EXTEND 1000' ALONG -Y- LINE.		
	②	 W7-3aP 24" X 18"	#2 SIGN ONLY USED WHEN CONSTRUCTION LIMITS ARE 2 OR MORE MILES IN LENGTH. (NO FRACTIONAL OR DECIMAL NUMBERS)		
	③	 SP 13107 48" X 48"	- ALTERNATE THE FOLLOWING TWO SIGNS: - PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY 1/2 MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.		
		 SP 48" X 48"			
	④	 SP 13106 48" X 48"	- THESE ARE FOR -Y- LINES THAT ARE "THROUGH" ROADWAYS. - DEAD END AND SUBDIVISION ROADS ARE NOT "THROUGH" ROADWAYS. - INSTALL 500' +/- FROM EACH -Y- LINE APPROACH AS SHOWN ABOVE. - 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. - A MAXIMUM OF 2 SIGN SETS PER MILE. DO NOT INSTALL WHEN -Y- LINES ARE WITHIN 0.5 MILES FROM "END ROAD WORK" SIGN. - FOR TEE INTERSECTIONS, INSTALL WITHIN 500' +/- OF THE INTERSECTION ALONG -L- LINE.		
⑤	 C20-2 A 48" X 24"	PLACE 500' FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.			
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.					
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.		

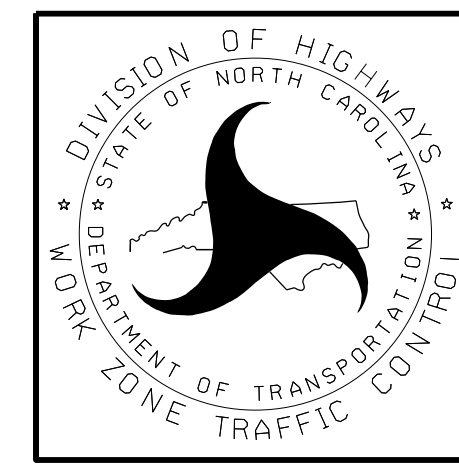
NO REQUIRED STATIONARY SIGNING FOR THE FOLLOWING -Y- LINE CONDITIONS:

- 1) LESS THAN 1000' OF RESURFACING ALONG -Y- LINE
- 2) SUBDIVISION ROADS
- 3) DEAD END ROADS

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.



PLACED 500' IN ADVANCE OF FLAGGER.

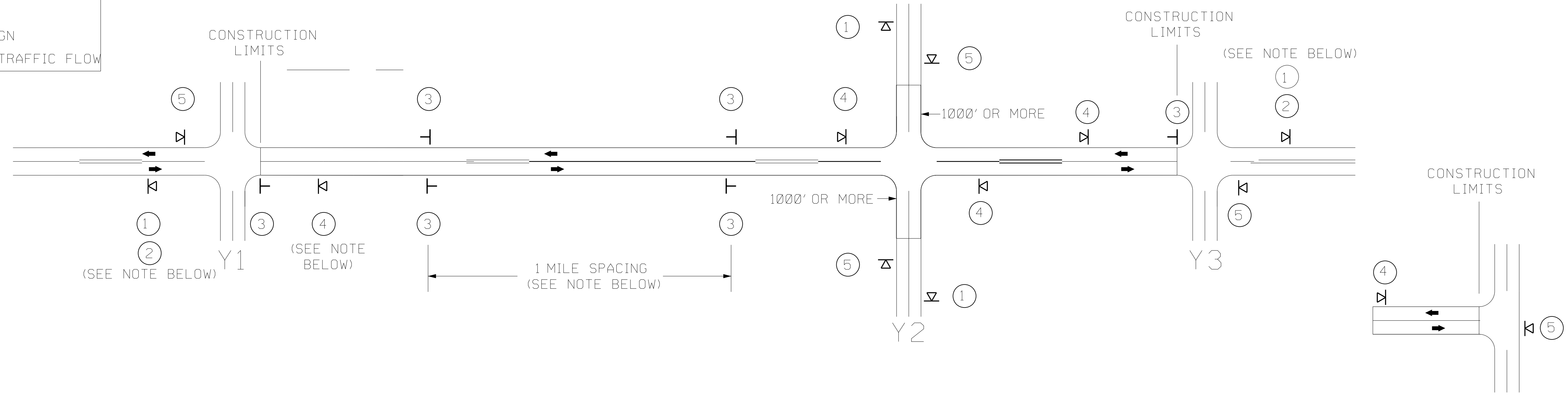


ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2-LANE ROADWAY
RESURFACING

SIGNING FOR ASPHALT SURFACE TREATMENT

LEGEND

- PORTABLE SIGN
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW



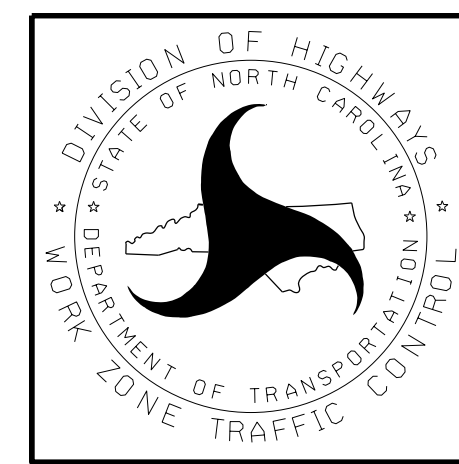
MAINLINE (-L-) SIGNING

-Y- LINE SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION	<p>① </p> <p>② </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. 2) SUBDIVISION ROADS 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 </p> <p></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 </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></p> <p>PLACED 500' IN ADVANCE OF FLAGGER.</p> <p></p> <p>PLACED 250' IN ADVANCE OF FLAGGER.</p>
	<p>⑤ </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.

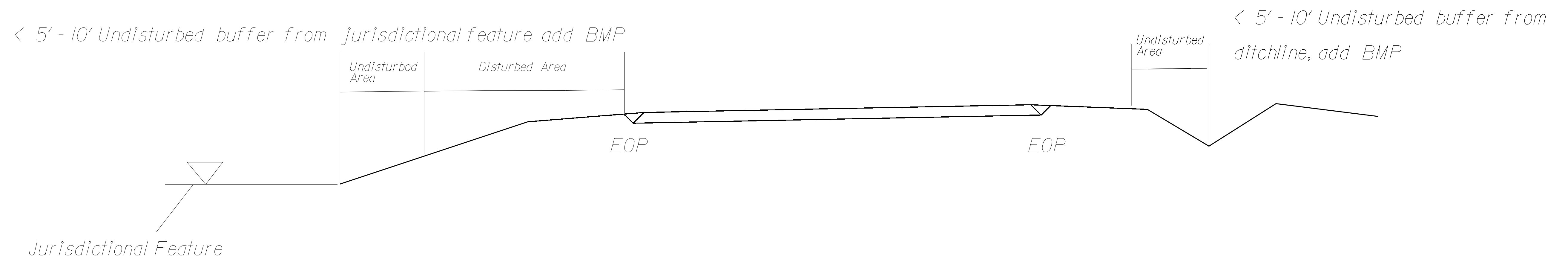
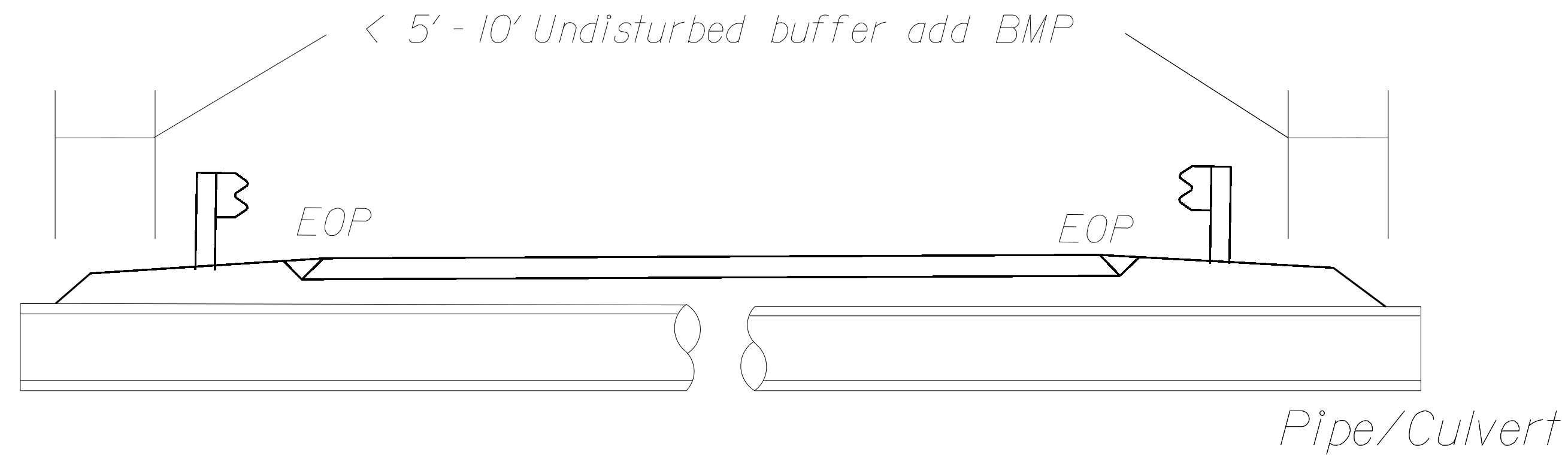


ADVANCE WARNING SIGNS FOR 2-LANE ROADWAY ASPHALT SURFACE TREATMENT

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

BMP Options: Wattle or Silt Fence

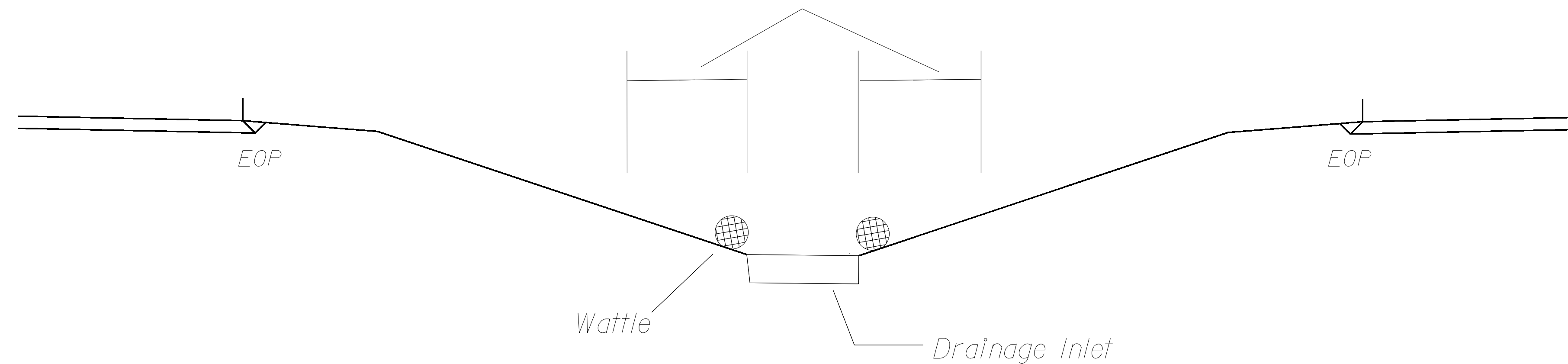
EROSION CONTROL DETAIL



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

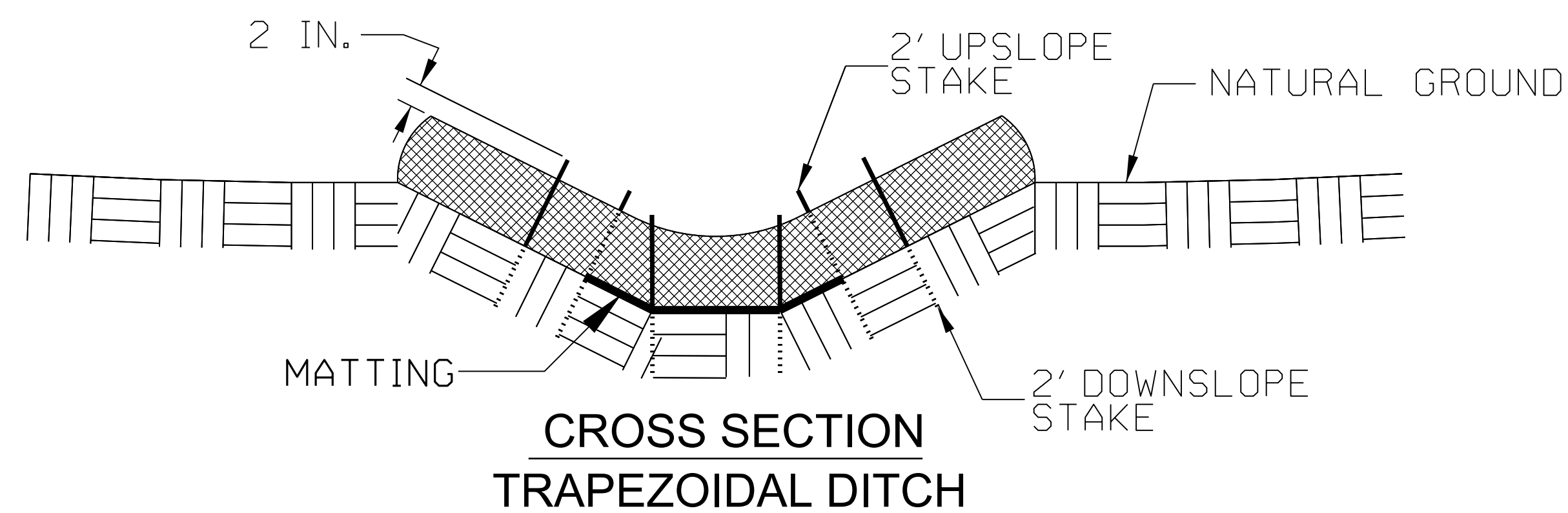
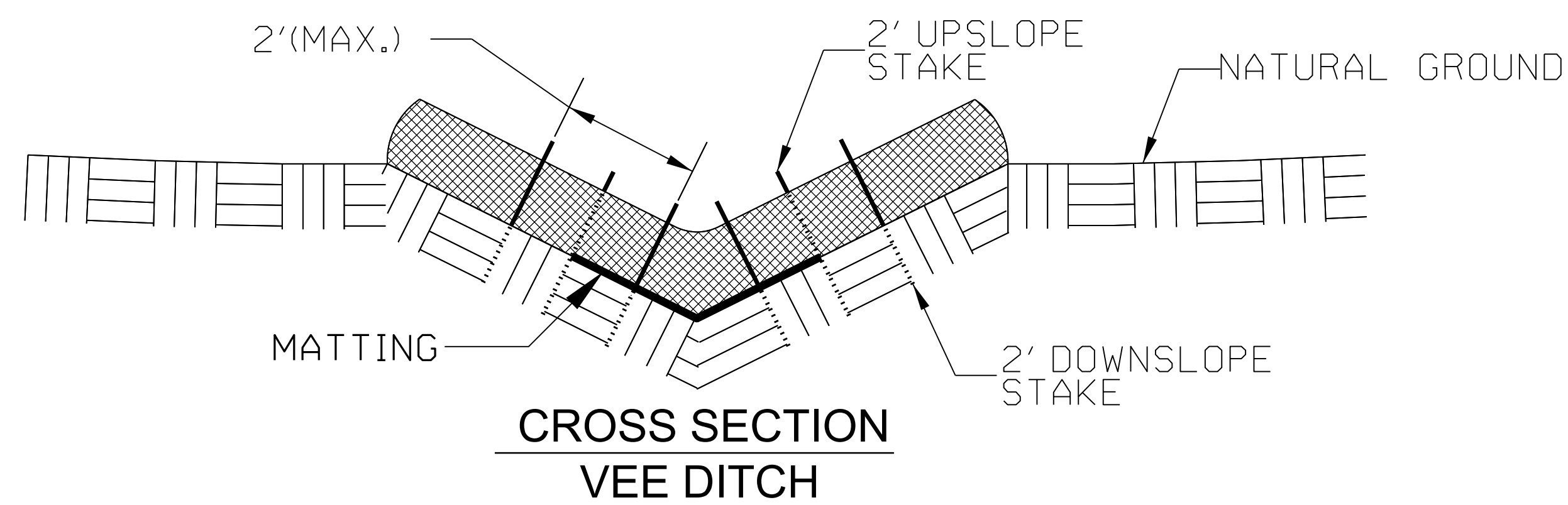
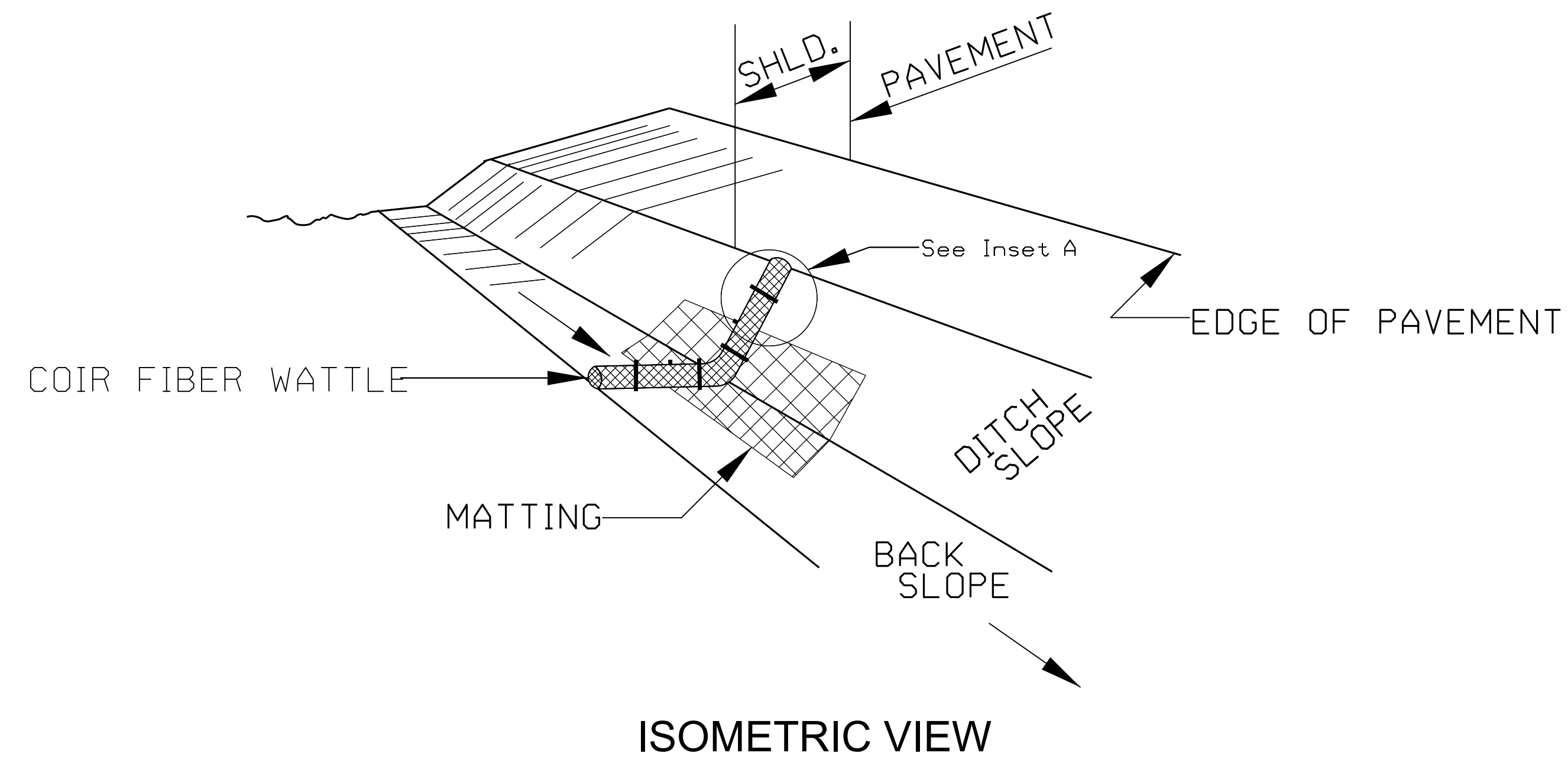


< 5' - 10' Undisturbed buffer from inlet, add wattle



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.

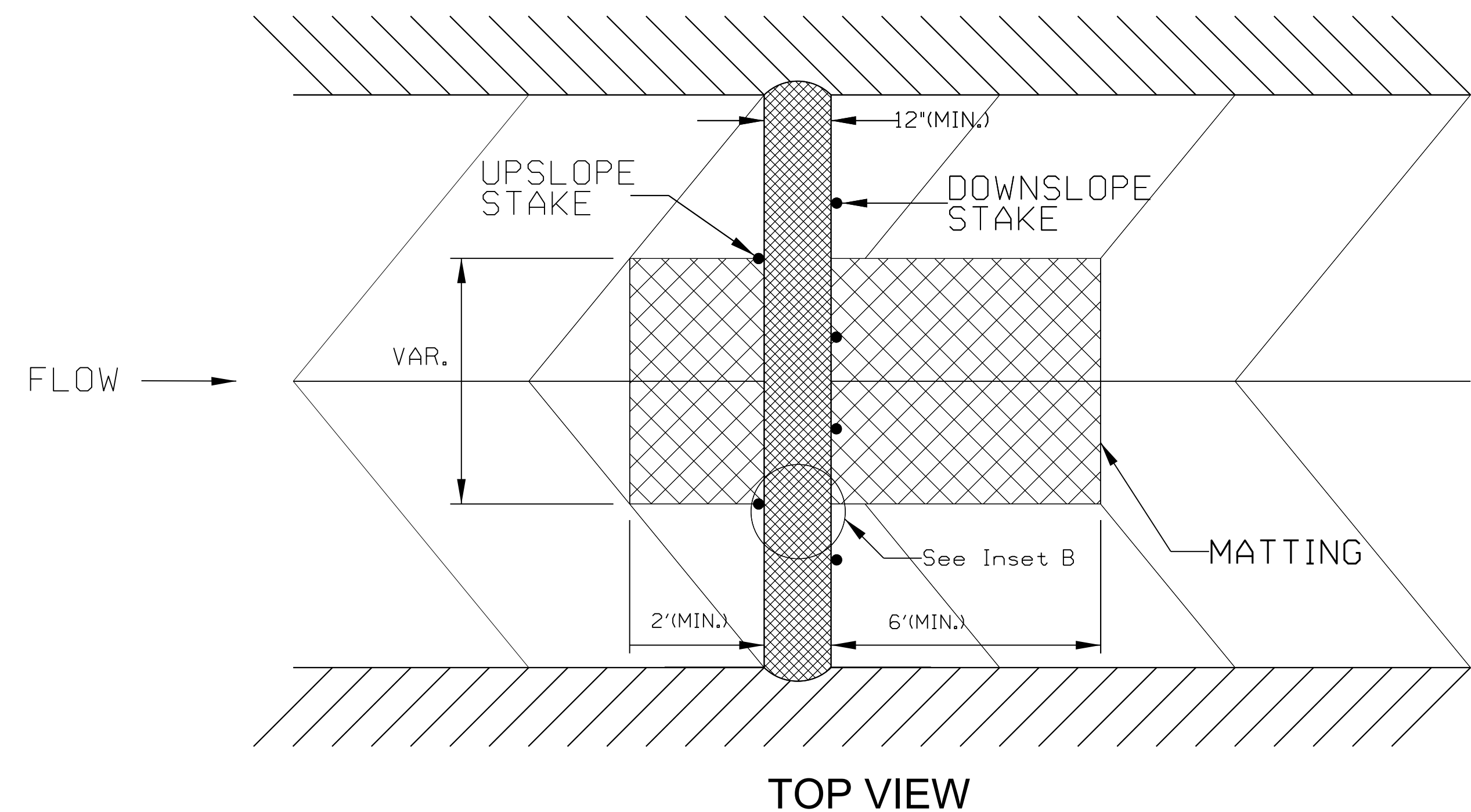
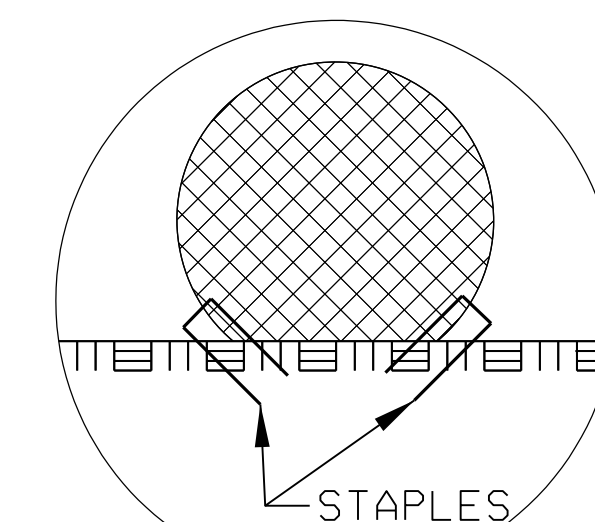
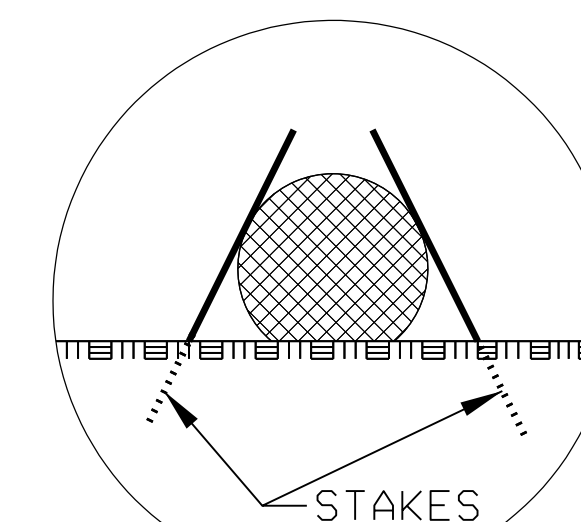
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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.