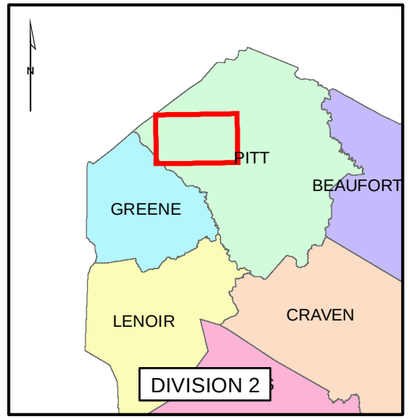


PITT COUNTY

DB00338

WBS# 2017CPT.02.01.10741.1

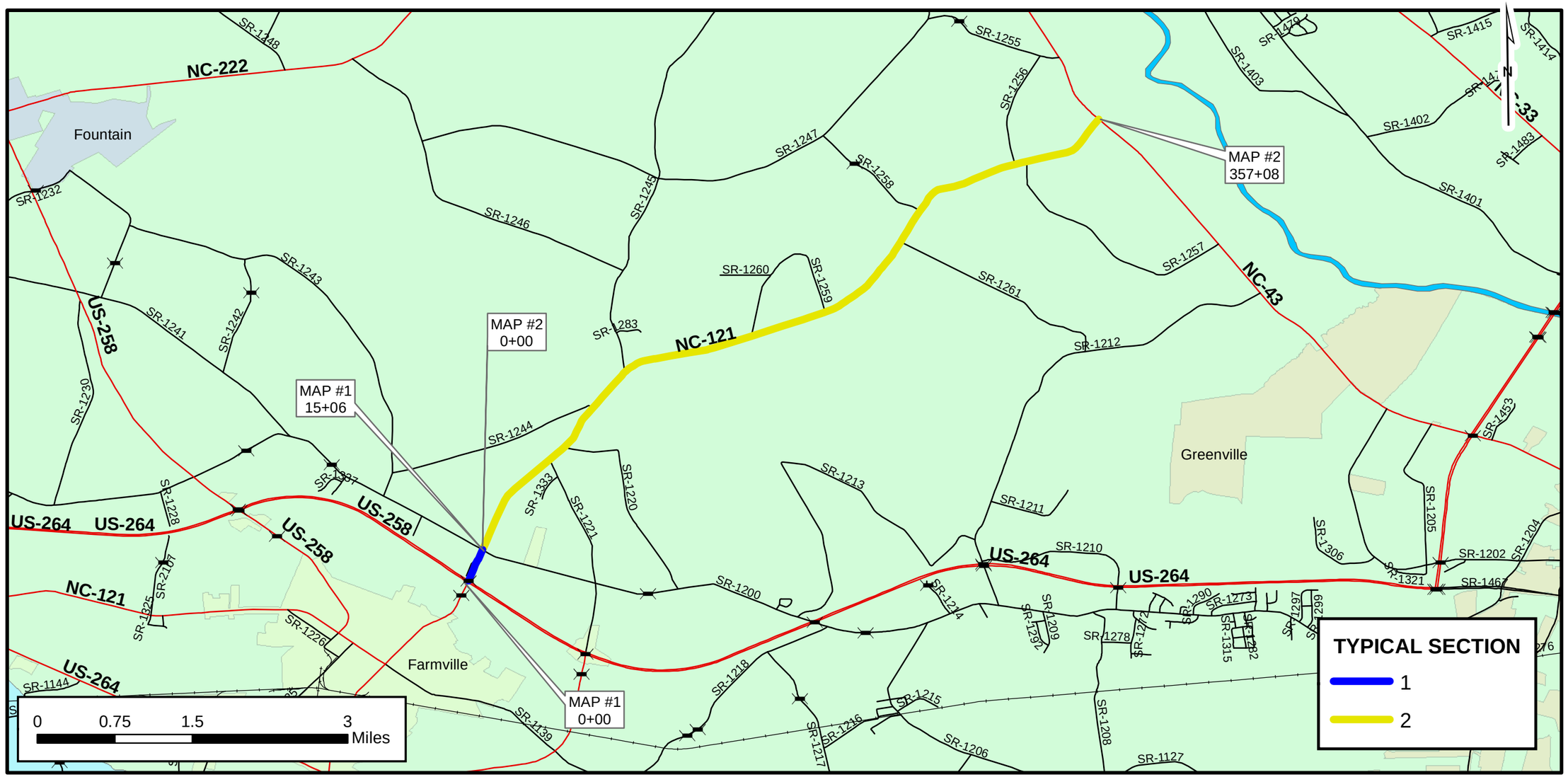
PROJECT REFERENCE NO.	SHEET NO.
DB00338	1

LOCATION:

MAP 1 - NC 121 FROM US 264 OVERPASS BRIDGE #446 TO SR 1200
MAP 2 - NC 121 FROM SR 1200 TO NC 43

TYPE OF WORK: MILLING, STRENGTHENING, RESURFACING & SHOULDER RECONSTRUCTION.

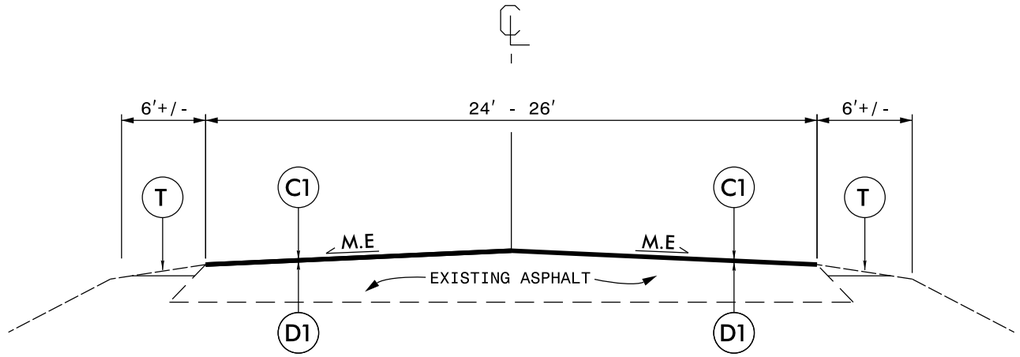
NCDOT
DIVISION 2



PROJECT REFERENCE NO.	SHEET NO.
DB00338	2

TYPICAL SECTION NO. 1

MAP 1 – NC 121 FROM THE US 264 OVERPASS BRIDGE #446 TO SR 1200

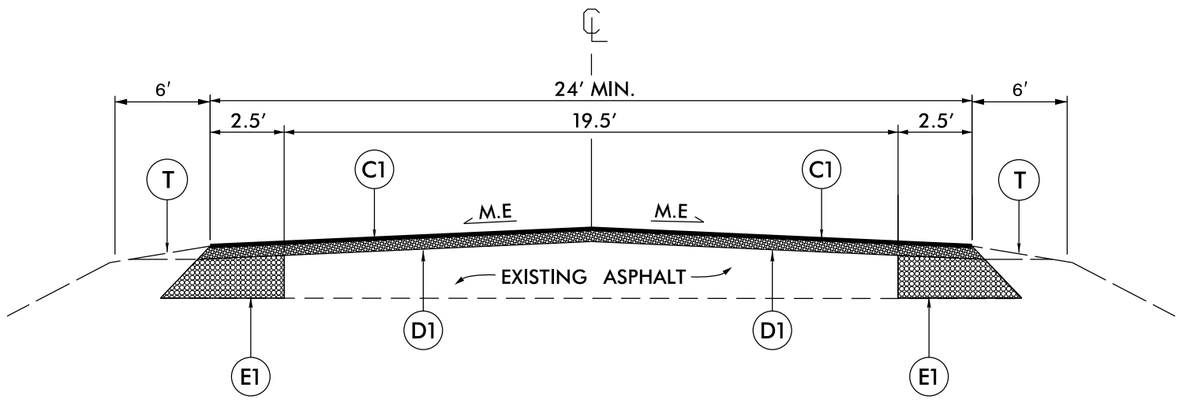


NOTES:

1. PLACE ASPHALT INTERMEDIATE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
2. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH OF EXISTING ASPHALT PAVEMENT.
3. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE AND Y-LINE SECTIONS, AS DIRECTED BY THE ENGINEER, SEE DETAIL 1.

TYPICAL SECTION NO. 2

MAP 2 – NC 121 FROM SR 1200 TO NC 43



NOTE:

1. PLACE 2.5' SYMMETRICAL WIDENING. MAKE FLUSH WITH THE EXISTING ASHALT.
2. TRENCHING SHALL BE PERFORMED USING A MILLING MACHINE OR SIMILAR DEVICE.
3. PLACE ASPHALT INTERMEDIATE COURSE AT FULL WIDTH, INCLUDING NEW WIDENING.
4. PLACE ASPHALT SURFACE COURSE AT FULL WIDTH, INCLUDING NEW WIDENING.
5. INCLUDES INCIDENTAL MILLING AT THE ENDS OF MAIN LINE SECTIONS OR AS DIRECTED BY THE ENGINEER. SEE DETAIL 1

PAVEMENT SCHEDULE

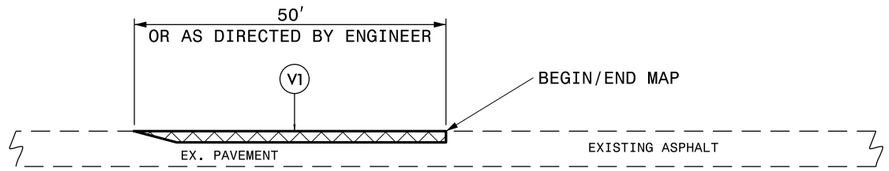
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S 9.5B, AT AN AVERAGE RATE OF 168.0 LBS. PER SQ. YD.
D1	PROP. APPROX. 2½" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 285.0 LBS. PER SQ. YD.
E1	PROP. APPROX. 6" ASPHALT CONCRETE BASE COURSE, TYPE B 25.0B, AT AN AVERAGE RATE OF 684.0 LBS. PER SQ. YD.
T	SHOULDER RECONSTRUCTION
V1	INCIDENTAL MILLING.

DRAWINGS NOT TO SCALE

NOTE: PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.

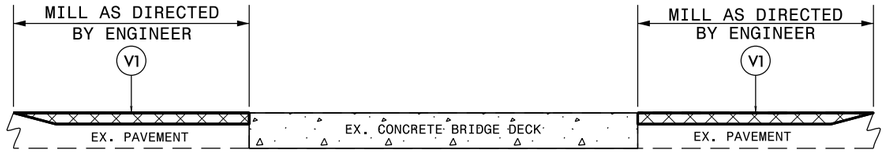
PROJECT REFERENCE NO.	SHEET NO.
DB00338	3

MILLING TYPICALS



DETAIL 1
BEGIN/END MAP TIE-IN

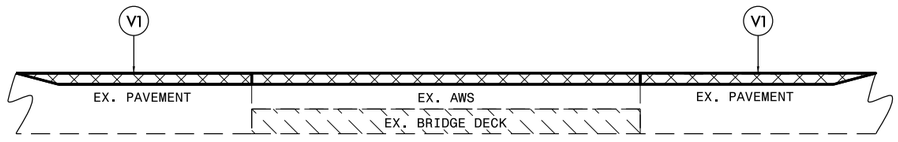
NOTE:
1. MILLING SHALL BE PERFORMED AT MAIN LINE TIE-INS AND Y-LINE TIE-INS AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.



DETAIL 2
BRIDGE MILLING

NOTE:

1. MILLING SHALL BE PERFORMED AT THE BRIDGE APPROACHES AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THIS DETAIL.

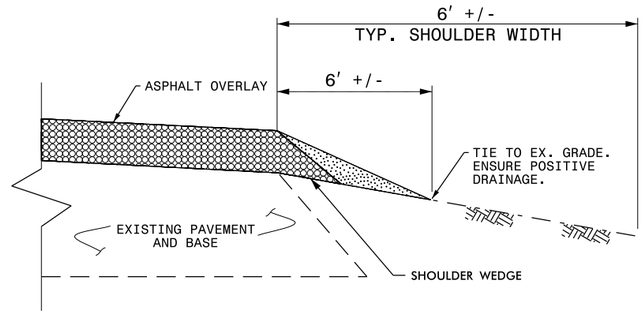


DETAIL 3
BRIDGE MILLING

NOTE:

1. INCLUDES MILLING FOR THE ENTIRE WIDTH OF THE BRIDGE WEARING SURFACE, AS DIRECTED BY THE ENGINEER.

SHOULDER RECONSTRUCTION TYPICAL



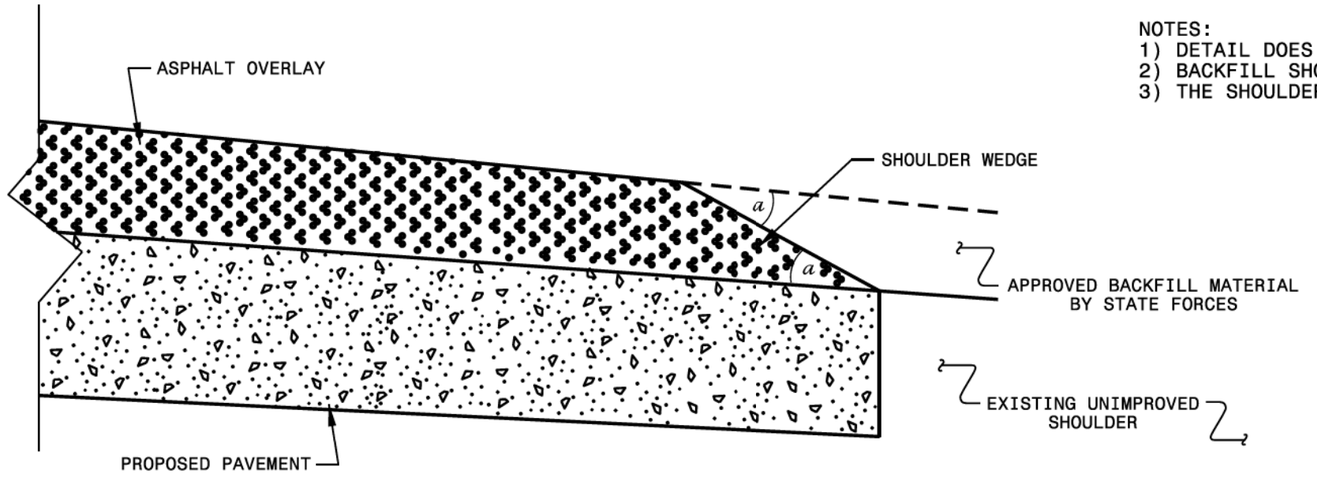
SHOULDER RECONSTRUCTION DETAIL

NOTE:

1. SHOULDERS SHALL BE RECONSTRUCTED AS SHOWN IN STD. DWG. NO. 560.01 & 560.02, WITH A MINIMUM SLOPE OF 1" PER FOOT TO ENSURE POSITIVE DRAINAGE AWAY FROM THE ROADWAY.
2. A VEGETATIVE BUFFER SHALL BE MAINTAINED BETWEEN THE DISTURBED AREA ALONG THE EDGE OF PAVEMENT AND THE DITCH SHOULDER POINT TO MINIMIZE EROSION. PULLING DITCHES OR CUTTING SHOULDERS TO GENERATE BORROW MATERIAL WILL NOT BE ALLOWED.
3. REQUIRED BORROW MATERIAL MAY BE OBTAINED FROM NCDOT STOCKPILES. ANY EXCESS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR IN AN APPROVED DISPOSAL SITE.

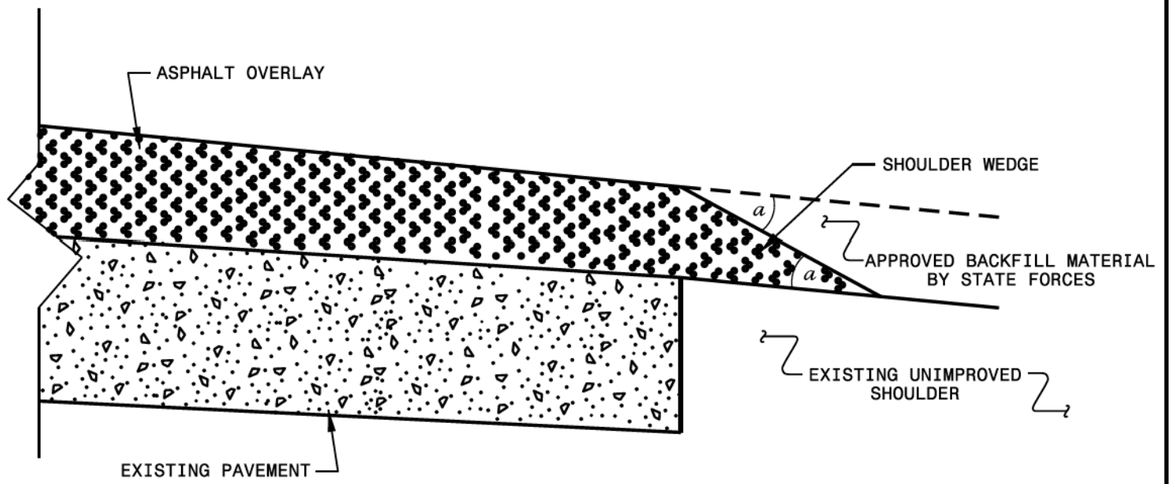
PROJECT REFERENCE NO.	SHEET NO.
DB00338	4

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 AND SIDE STREETS.



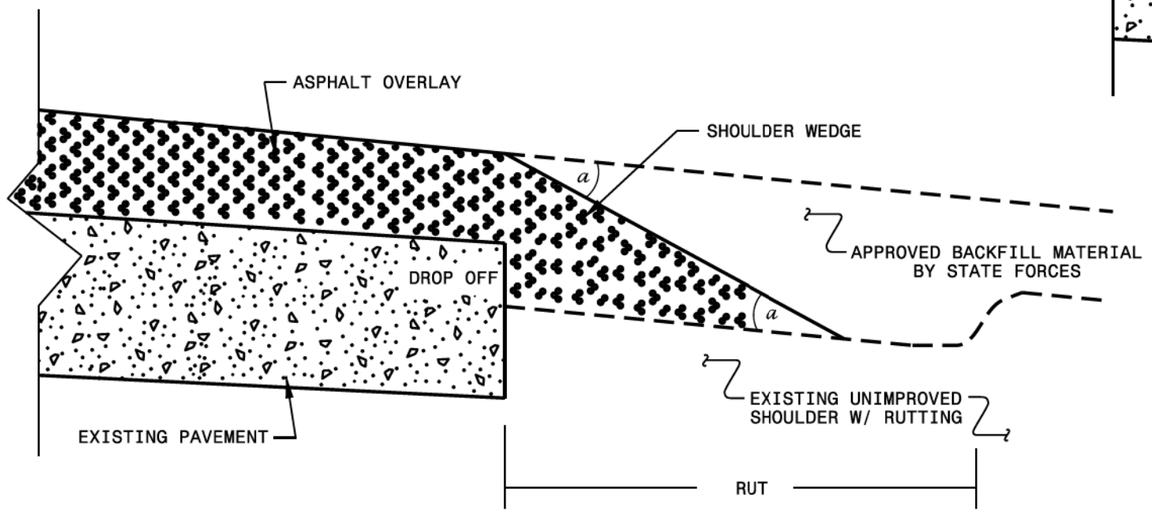
SHOULDER WEDGE DETAIL

(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.: s:\usr\details\stand\shoulderwedgedetail.dgn

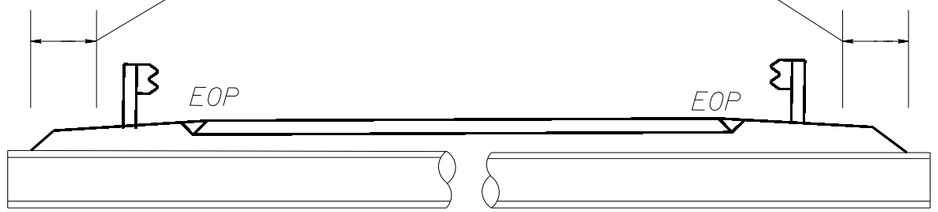
PROJECT REFERENCE NO.	SHEET NO.
DB00338	5

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

BMP Options: Wattle, Silt Fence or Hardened Aggregate.

EROSION CONTROL DETAIL

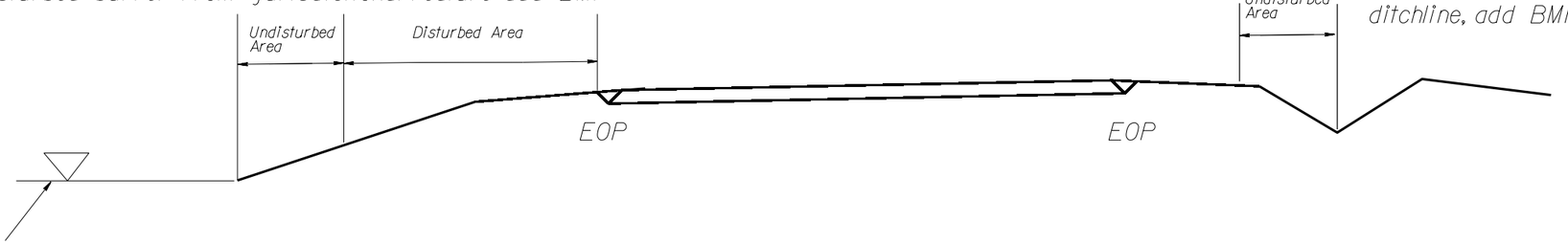
< 5' - 10' Undisturbed buffer add BMP



Pipe/Culvert

< 5' - 10' Undisturbed buffer from jurisdictional feature add BMP

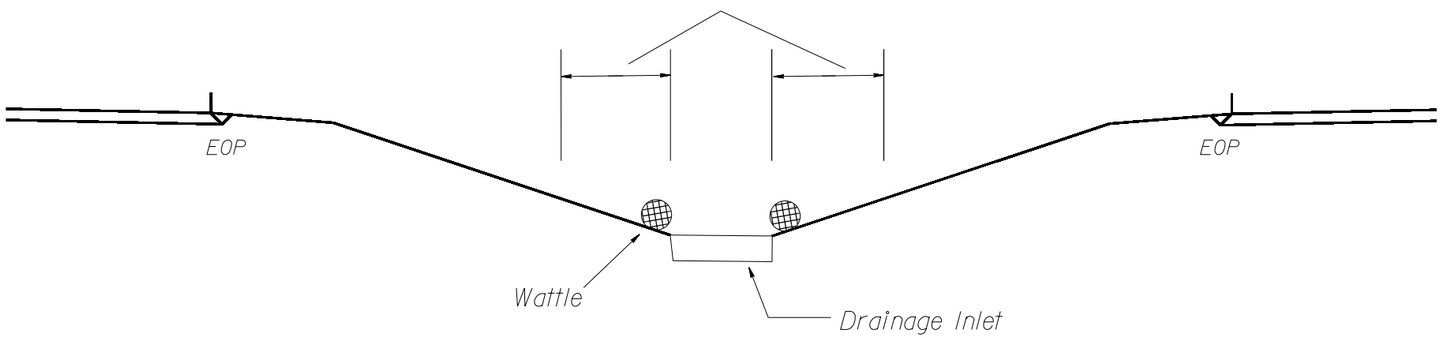
< 5' - 10' Undisturbed buffer from ditchline, add BMP



Jurisdictional Feature

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

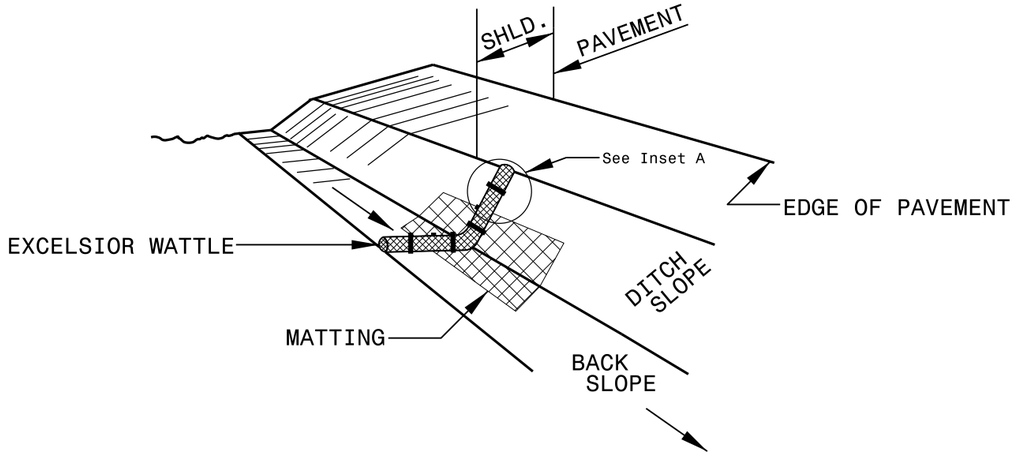
< 5' - 10' Undisturbed buffer from inlet, add wattle



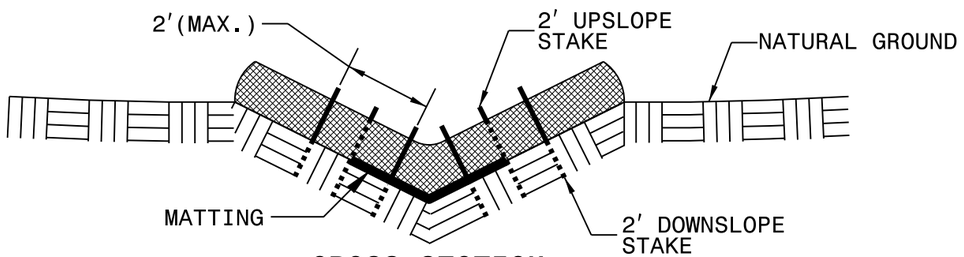
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
DB00338	6

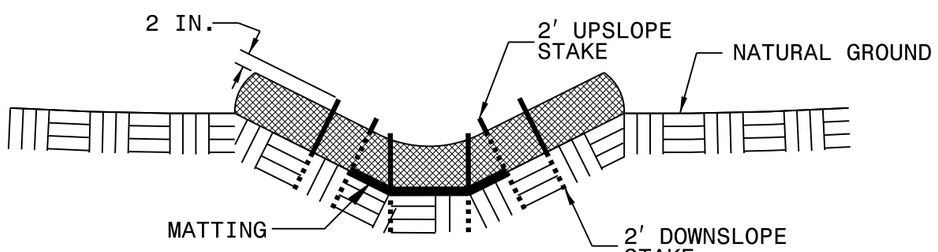
WATTLE DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

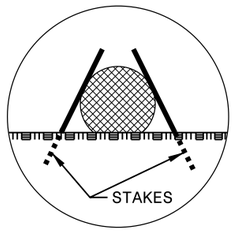
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

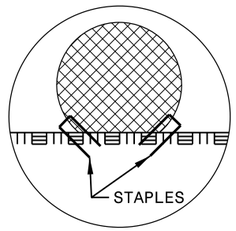
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

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

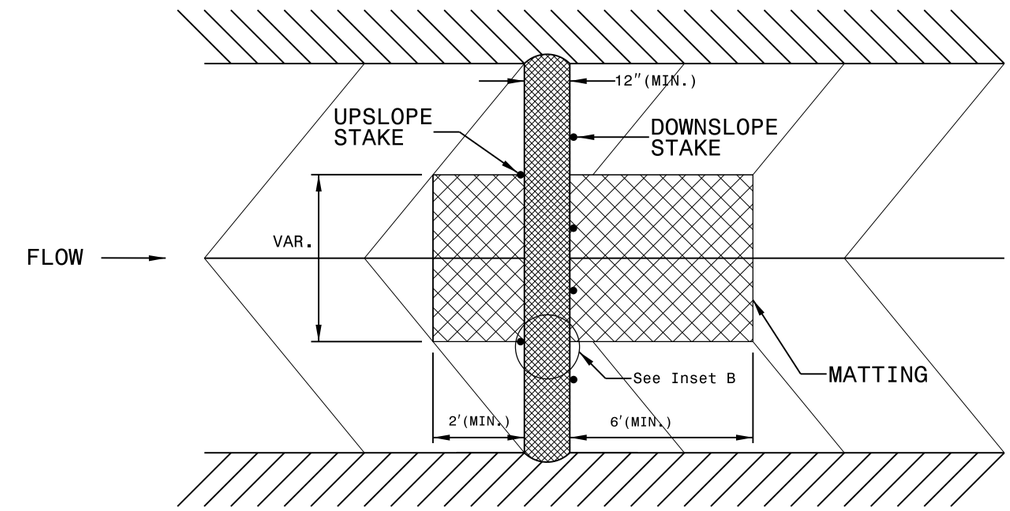
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



INSET A



INSET B



TOP VIEW

NOT TO SCALE

PROJECT NO.	SHEET NO.
DB00338	7

SUMMARY OF QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	FINAL SURFACE TESTING REQUIRED	WARM MIX ASPHALT REQUIRED	LENGTH MI	WIDTH FT	HAULING NCDOT SUPPLIED SHOULDER MATERIAL EA	INCIDENTAL STONE BASE TONS	SHOULDER RECONSTRUCTION SMI	INCIDENTAL MILLING SY	BASE COURSE, B25.0B TONS	INTERMEDIATE COURSE, I19.0B TONS	SURFACE COURSE, S9.5B TONS	ASPHALT BINDER FOR PLANT MIX TONS	TEMPORARY SILT FENCE LF	WATTLE LF	SEED & MULCHING AC	RESPONSE FOR EROSION CONTROL EA
2017CPT.02.01.10741.1	Pitt	1	NC 121	US 264 OVERPASS BRIDGE #446 TO SR 1200	1	2	2WU	NO	NO	0.310	26	12	25	0.62	300		600	365	51	50	25	0.47	1
TOTAL FOR MAP NO. 1										**0.310**		**12**	**25**	**0.62**	**300**		**600**	**365**	**51**	**50**	**25**	**0.47**	**1**
2017CPT.02.01.10741.1	Pitt	2	NC 121	SR 1200 TO NC 43	2	2	2WU	NO	NO	6.771	19	372	150	13.54	675	7,600	15,100	8,400	1,563	200	50	10.16	2
TOTAL FOR MAP NO. 2										**6.771**		**372**	**150**	**13.54**	**675**	**7,600**	**15,100**	**8,400**	**1,563**	**200**	**50**	**10.16**	**2**
TOTAL FOR PROJ NO. 2017CPT.02.01.10741.1										**7.081**		**384**	**175**	**14.16**	**975**	**7,600**	**15,700**	**8,765**	**1,614**	**250**	**75**	**10.63**	**3**
GRAND TOTAL										**7.081**		**384**	**175**	**14.16**	**975**	**7,600**	**15,700**	**8,765**	**1,614**	**250**	**75**	**10.63**	**3**

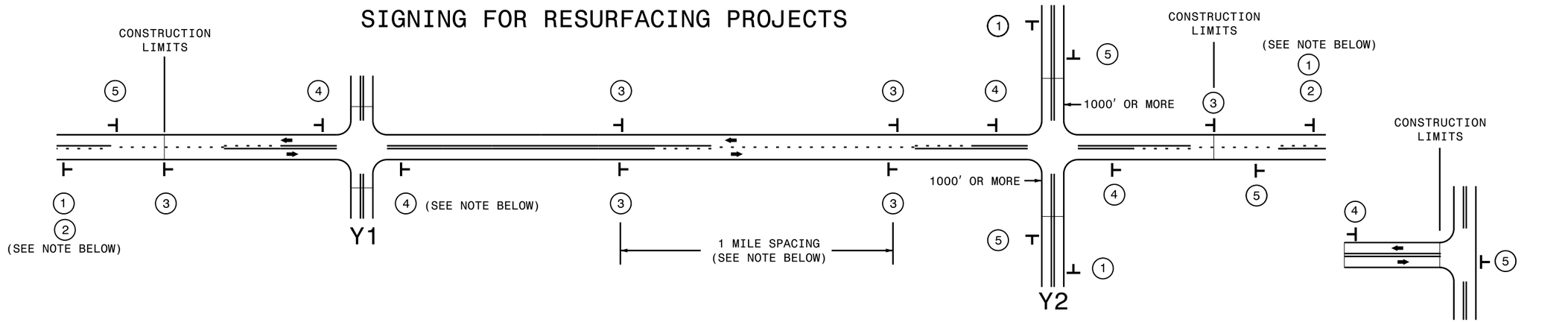
PROJECT NO.	SHEET NO.
DB00338	8

THERMOPLASTIC AND PAINT QUANTITIES

PROJECT NO	COUNTY	MAP NO	ROUTE	DESCRIPTION	TYP NO	LANES	LANE TYPE	LENGTH	WIDTH	4413000000-E WORK ZONE ADVANCE/GENERAL WARNING SIGNING SF	4457000000-N TEMPORARY TRAFFIC CONTROL LS	4688000000-E 6" X 90 M WHITE THERMO LF	4690000000-E 6" X 120 M YELLOW THERMO LF	4710000000-E 24" X 120 M WHITE THERMO LF	4721000000-E THERMO MSG SCHOOL 120 M EA	4810000000-E 4" YELLOW PAINT LF	4810000000-E 4" WHITE PAINT LF	4905000000-N SNOW PLOWABLE MARKERS EA
2017CPT.02.01.10741.1	Pitt	1	NC 121	US 264 OVERPASS BRIDGE #446 TO SR 1200	1	2	2WU	0.310	26	35	0.05	3,336	2,046	15				20
TOTAL FOR MAP NO. 1								**0.310**		**35**	**0.05**	**3,336**	**2,046**	**15**				**20**
2017CPT.02.01.10741.1	Pitt	2	NC 121	SR 1200 TO NC 43	2	2	2WU	6.771	19	760	0.95	72,856	44,689	190	12	44,689	71,502	447
TOTAL FOR MAP NO. 2								**6.771**		**760**	**0.95**	**72,856**	**44,689**	**190**	**12**	**44,689**	**71,502**	**447**
TOTAL FOR PROJ NO. 2017CPT.02.01.10741.1								**7.081**		**795**	**1.00**	**76,192**	**46,735**	**205**	**12**	**44,689**	**71,502**	**467**
GRAND TOTAL								**7.081**		**795**	**1.00**	**76,192**	**46,735**	**205**	**12**	**116,191**		**467**

PROJECT REFERENCE NO.	SHEET NO.
DB00338	9

SIGNING FOR RESURFACING PROJECTS



LEGEND
- ⊢ STATIONARY SIGN
- ← DIRECTION OF TRAFFIC FLOW

MAINLINE (-L-) SIGNING

SIGNING NOTES AND PLACEMENT PER DIRECTION

1	ROAD WORK AHEAD 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	NEXT XX MILES W7-3aP 24″ X 18″	#2 SIGN ONLY USED WHEN RESURFACING LIMITS ARE 2 OR MORE MILES IN LENGTH. ROUND UP TO NEXT WHOLE NUMBER.(NO FRACTIONAL OR DECIMAL NUMBERS)
3	LOW/SOFT SHOULDER SP 13107 48″ X 48″	- PLACE INITIALLY AT THE CONSTRUCTION LIMITS AND SPACE 1 MILE APART THEREAFTER. - AT TEE INTERSECTIONS INSTALL INITIALLY ½ MILE FROM INTERSECTION AND SPACE 1 MILE APART THEREAFTER.
4	ROAD UNDER CONST 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	END ROAD WORK G20-2 A 48″ X 24″	PLACE 500′ FOLLOWING THE END OF CONSTRUCTION LIMITS OR AS SHOWN WHEN WORK ENDS AT A 3-WAY TEE INTERSECTION.

-Y- LINE SIGNING

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, ADVANCE WARNING PORTABLE SIGNS SHALL BE USED ALONG THE -Y- LINE AS SHOWN BELOW. REMOVE UPON COMPLETION OF WORK.

ROAD WORK AHEAD W20-1 48″ X 48″ — PLACED 500′ IN ADVANCE OF FLAGGER.

W20-7 A 48″ X 48″ — PLACED 250′ IN ADVANCE OF FLAGGER.

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

RESURFACING
ADVANCE WARNING SIGNS
FOR
RURAL AND SUBURBAN
2 LANE ROADWAYS