

04-OCT-2019 09:21
 S:\Contracts\Contracting\Resurfacing Projects\Division\I-6029 Pasquotank Oct 2019\I-6029_Diddc_pshl.dgn
 jhowerTon AT CSD-292595

TIP PROJECT: I-6029

CONTRACT: C204370

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PASQUOTANK COUNTY

**LOCATION: US 17 FROM PERQUIMANS COUNTY LINE TO
NORTH END OF US 17 BYPASS**

TYPE OF WORK: DRAINAGE, REPLACE GUARDRAIL, MILLING & RESURFACING

| | | |
|-----------------|-----------------------------|-------------|
| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. |
| N.C. | I-6029 | 1 |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION |
| 47978.1.1 | | PE |
| 47978.3.GV1 | NHPIM-0017(175) | CONST |

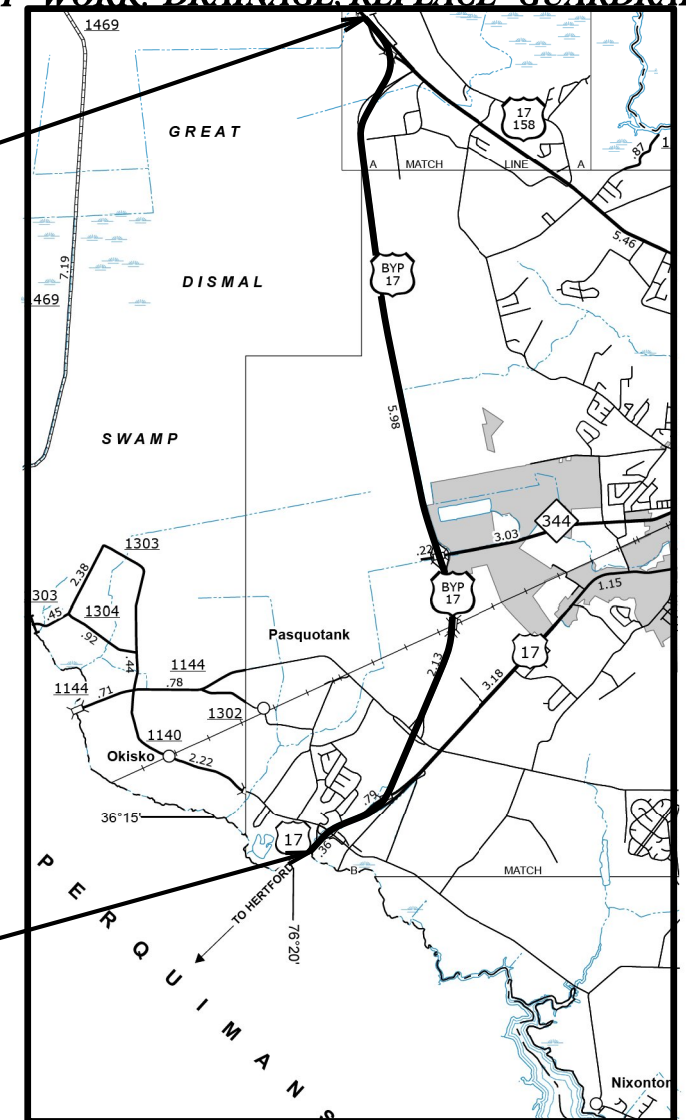


MAP 1
BEGIN PROJECT
WBS #47978.3.GV1
STA. 10+00.00 AT CENTERLINE SOUTH BOUND LANES
AT SOUTH END OF BRIDGE
BEGIN CONSTRUCTION AT 10+12.04

MAP 2
END PROJECT WBS #47978.3.GV1
STA. 584+83.54 +/-
INCLUDING RAMPS AT EXIT 254

MAP 1
END PROJECT WBS #47978.3.GV1
STA. 536+29.57 +/-
INCLUDING RAMPS AT EXIT 254

MAP 2
BEGIN PROJECT
WBS #47978.3.GV1
STA. 10+00.00 AT CENTERLINE OF NORTH BOUND LANES
AT NORTH END BRIDGE
BEGIN CONSTRUCTION AT 56+75.66



GRAPHIC SCALES

NTS

PROJECT LENGTH

LENGTH ROADWAY MAP #1 = 9.907 MI.
 LENGTH STRUCTURES MAP #1 = 0.061 MI.
 LENGTH ROADWAY MAP #2 = 9.751 MI.
 LENGTH STRUCTURES MAP #2 = 0.061 MI.

 LENGTH ROADWAY STATE PROJECT WBS #47978.3.1 = 19.658 MI.
 LENGTH STRUCTURES STATE PROJECT WBS #47978.3.1 = 0.122 MI.
 TOTAL LENGTH STATE PROJECT WBS #47978.3.1 = 19.780 MILES

Prepared in the Office of:
DIVISION OF HIGHWAYS
113 Airport Dr., Edenton NC, 27944

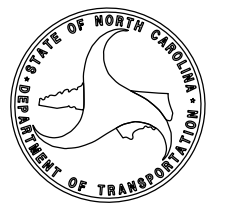
2018 STANDARD SPECIFICATIONS

LETTING DATE:
OCTOBER 15, 2019

W. B. HOBBS, PE
 DIVISION PROJECT TEAM LEAD

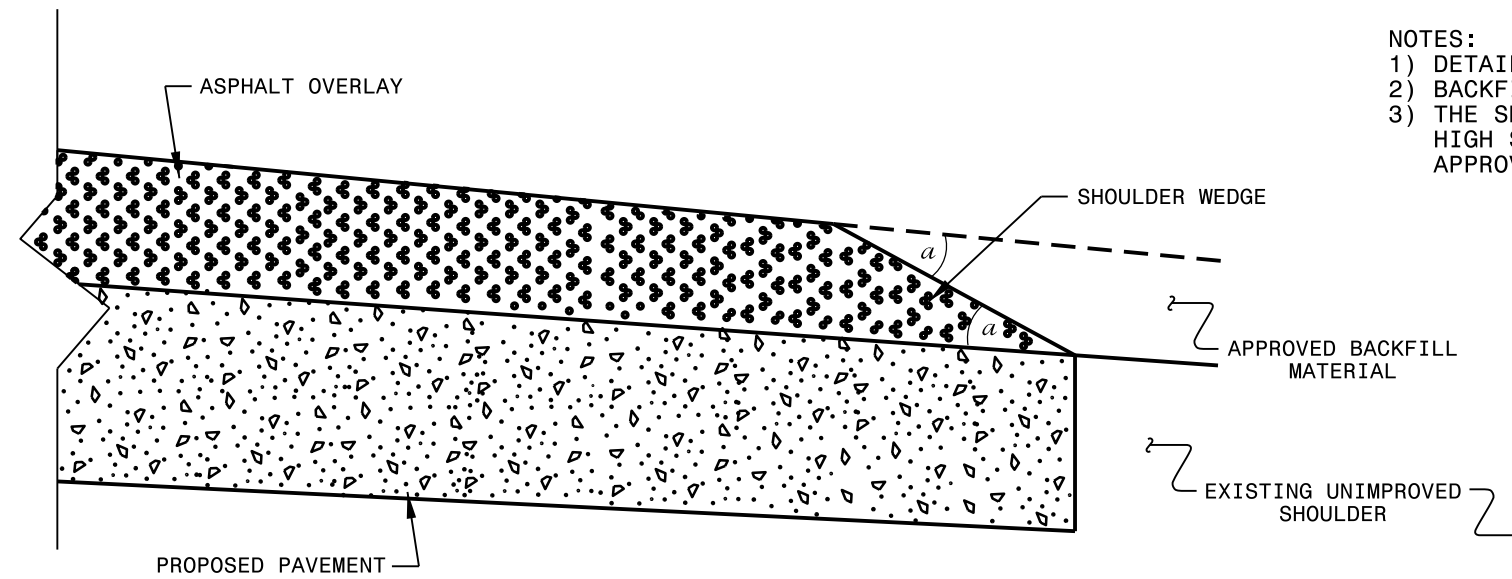
CHRIS SLACHTA
 DIVISION PROPOSALS ENGINEER

S. P. FENWICK, PLS
 DIVISION DESIGN
 ENGINEER



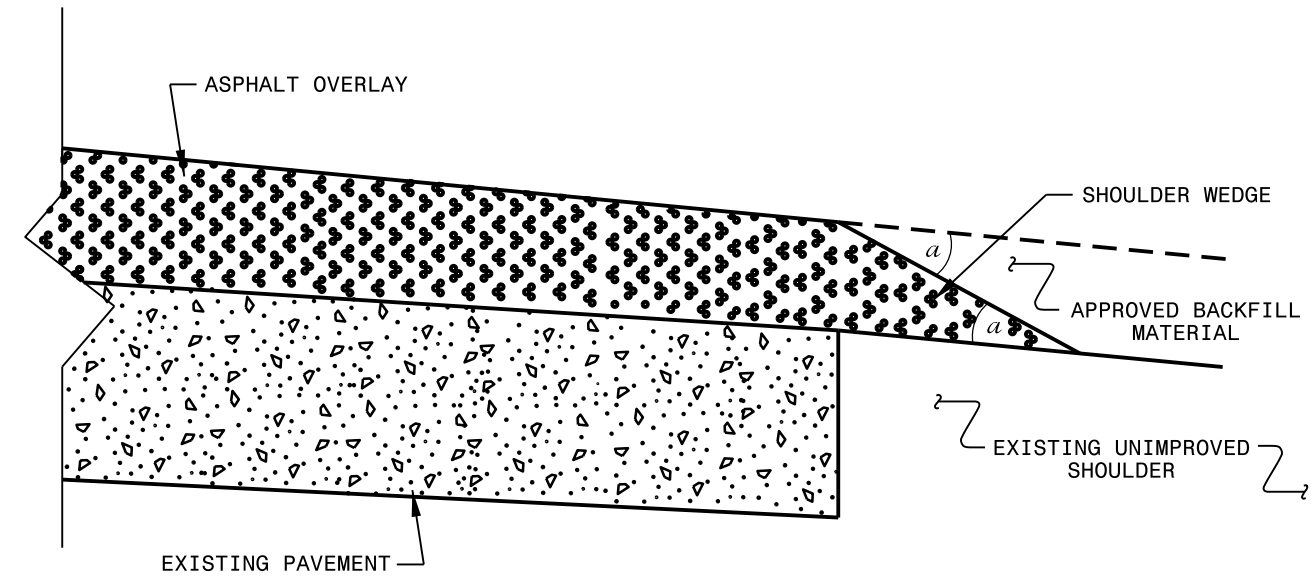
NOTES:

- 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.



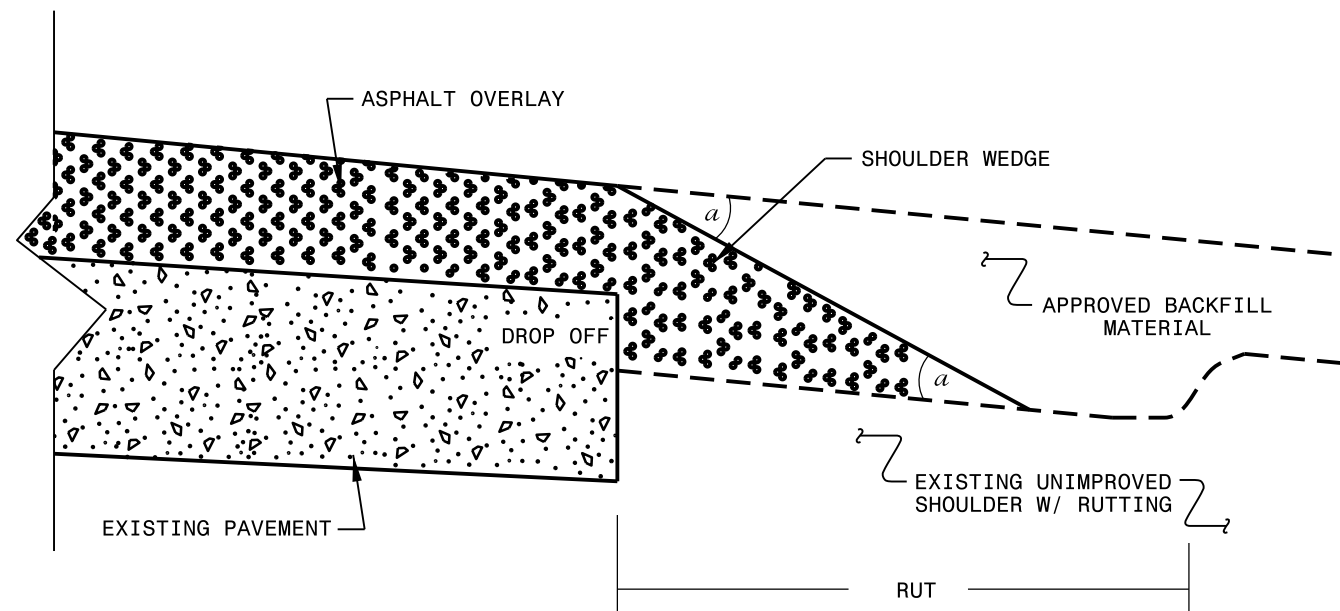
SHOULDER WEDGE DETAIL

(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.: szusr/details/stand/shoulderwedgedetail.dgn | | |

| | |
|-------------|-----------|
| PROJECT NO. | SHEET NO. |
| I-6029 | 5 |

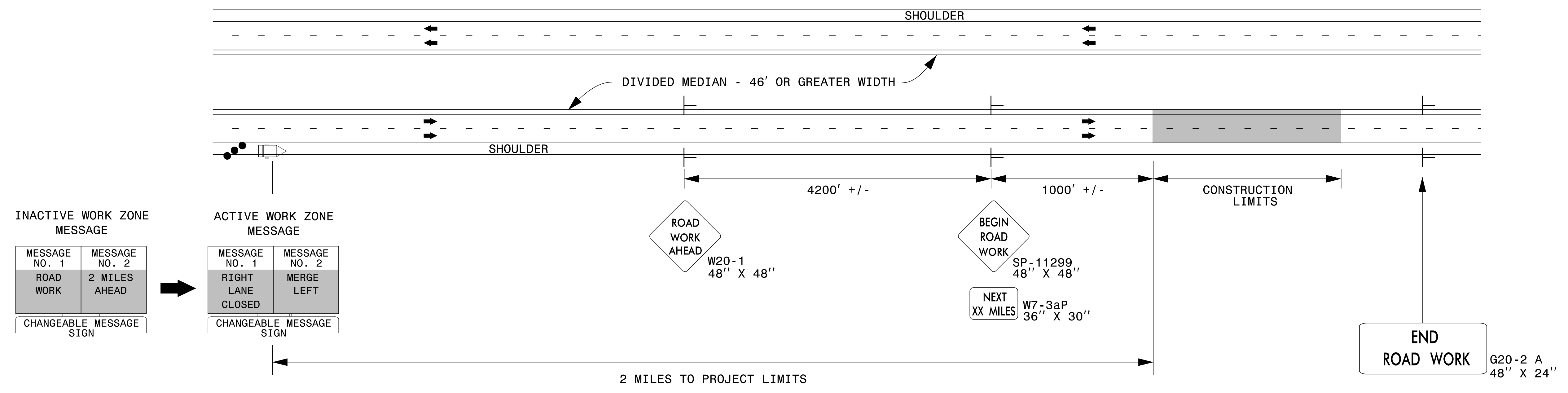
SUMMARY OF QUANTITIES

| PROJECT NO | COUNTY | MAP NO | ROUTE | DESCRIPTION | TYP NO | LANE S | LANE TYPE | FINAL SURFACE TESTING REQUIRED | WARM MIX ASPHALT REQUIRED | LENGTH | WIDTH | MILLING ASPHALT PAVEMENT, 1.5" | INCIDENTAL MILLING | ASPHALT CONC SURFACE COURSE, S9.5C | ASPHALT FOR PLANT MIX | POLYMER MODIFIED ASPHALT FOR PLANT MIX | OGAFC, TYPE FC-1 MODIFIED | PATCHING EXISTING PAVEMENT | MILLED RUMBLE STRIPS (ASPHALT CONCRETE) | MAS. DR. STR. (CONC DROP INLET, TYPE D) | FRAME WITH 2 GRATES, 840.22 STD | GUARDRAIL END UNITS, TYPE TL-3 | TEMP. SILT FENCE | SEDIMENT CONTR. OL STONE | 1/4" HARD WARE CLOTH | COIR FIBER WATTLE | STEEL BEAM GUARDRAIL | |
|----------------------------------|------------|--------|------------------|--|--------|--------|-----------|--------------------------------|---------------------------|--------------|-------|--------------------------------|--------------------|------------------------------------|-----------------------|--|---------------------------|----------------------------|---|---|---------------------------------|--------------------------------|------------------|--------------------------|----------------------|-------------------|----------------------|-----|
| | | | | | | | | | | MI | FT | SY | SY | TONS | TONS | TONS | TONS | TON | LF | EA | EA | EA | LF | TON | LF | | LF | |
| 47978.3.GV1 | Pasquotank | 1 | US 17 BYPASS SBL | NORTH END US 17 BYPASS TO PERQUIMANS COUNTY LINE | 1 | 2 | MD | NO | NO | 9.97 | 30 | 179,887 | 22,529 | 16,719 | 1,004 | 403 | 6,602 | 150 | 105,283 | | | 8 | | | | | | 200 |
| | | 2 | US 17 BYPASS NBL | PERQUIMANS COUNTY LINE TO NORTH END US 17 BYPASS | 1 | 2 | MD | NO | NO | 9.81 | 30 | 177,071 | 8,952 | 16,100 | 966 | 396 | 6,501 | 150 | 103,594 | 6 | 6 | 6 | 400 | 2 | 120 | 120 | 175 | |
| TOTAL FOR PROJ NO. I-6029 | | | | | | | | | | 19.78 | | 356,958 | 31,481 | 32,819 | 1,970 | 799 | 13,103 | 300 | 208,877 | 6 | 6 | 14 | 400 | 2 | 120 | 120 | 375 | |

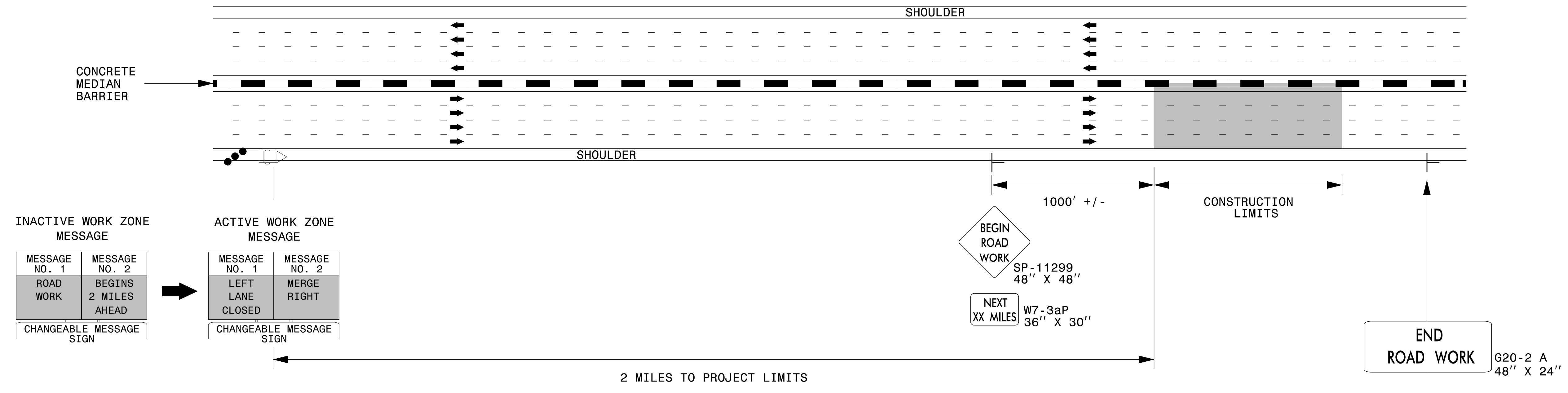
THERMOPLASTIC AND PAINT QUANTITIES

| PROJECT NO | COUNTY | MAP NO | ROUTE | DESCRIPTION | TYP NO | LANE S | LANE TYPE | LENGTH | WIDTH | 4413000000 | 44570000 | 4688000000-E | | 4725000000 | 4810000000-E | | 48910000 | 4905000000-N | |
|----------------------------------|------------|--------|-----------------|--|--------|--------|-----------|--------|-------|-----------------------------------|-----------------------|---|--|---------------------------------|--------------------------------|---------------------------------|----------------------------------|---|--------------|
| | | | | | | | | MI | FT | WORK ZONE ADV/GEN WARNING SIGNING | TEMP. TRAFFIC CONTROL | THERMO PVT MKG LINES (6" 90 MILS WHITE) | THERMO PVT MKG LINES (6" 90 MILS YELLOW) | THERMO PVT MKG SYMBOL (90 MILS) | PAINT PVT MKG LINES (4" WHITE) | PAINT PVT MKG LINES (4" YELLOW) | THERMO PVT MKG LINES 24" 90 MILS | SNOWPLOW-ABLE PVT MARKERS (CRYSTAL/RED) | |
| 47978.3.GV1 | Pasquotank | 1 | US17 BYPASS SBL | NORTH END US 17 BYPASS TO PERQUIMANS COUNTY LINE | 1 | 2 | MD | 9.97 | 30 | 300 | * | 71,002 | 57,842 | 13 | 71,002 | 57,842 | | 658 | |
| | | 2 | US17 BYPASS NBL | PERQUIMANS COUNTY LINE TO END US 17 BYPASS | 1 | 2 | MD | 9.81 | 30 | 300 | | 69,346 | 56,397 | 20 | 69,346 | 56,397 | 48 | 647 | |
| TOTAL FOR PROJ NO. I-6029 | | | | | | | | | | 19.78 | 600 | 1 | 140,348 | 114,239 | 33 | 140,348 | 114,239 | 48 | 1,305 |
| | | | | | | | | | | | | 254,587 | | 254,587 | | | | | |

DIVIDED MEDIANS WITH WIDTHS 46' OR GREATER



DIVIDED MEDIANS WITH WIDTHS LESS THAN 46' OR WITH PERMANENT MEDIAN BARRIER

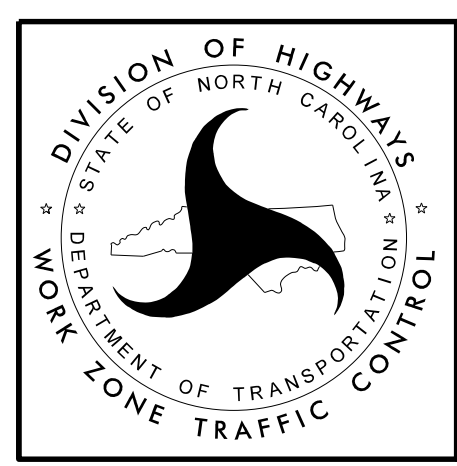


NOTES:

- 1) LATERAL CLEARANCE AT ALL SIGN LOCATIONS SHALL BE 6' AS MEASURED FROM THE EDGE OF PAVEMENT.
- 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) FOR MEDIAN WIDTHS LESS THAN 46' (MEASURED EDGELINE TO EDGELINE) USE THE BOTTOM DRAWING.
- 4) IF STATIONARY GENERAL WARNING SIGNS ARE USED, THEY WILL BE PAID FOR PER SECTION 104 OF THE NCDOT STANDARD SPECIFICATIONS AS EXTRA WORK.
- 5) INSTALL "ROAD WORK AHEAD" (W20-1) ALONG ENTRANCE RAMP 500' PRIOR TO RAMP TERMINAL, AND "END ROAD WORK" (G20-2a) AT THE END OF EXIT RAMP WITHIN THE WORK ZONE.
- 6) 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 AND WITH DIVIDED MEDIANS OF 46' OR GREATER. THESE PORTABLE SIGNS ARE INCIDENTAL TO THE OTHER ITEMS OF WORK INCLUDED IN THE TEMPORARY TRAFFIC CONTROL (LUMP SUM) PAY ITEM.

LEGEND

- CHANGEABLE MESSAGE SIGN (CMS)
- STATIONARY SIGN
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DRUM

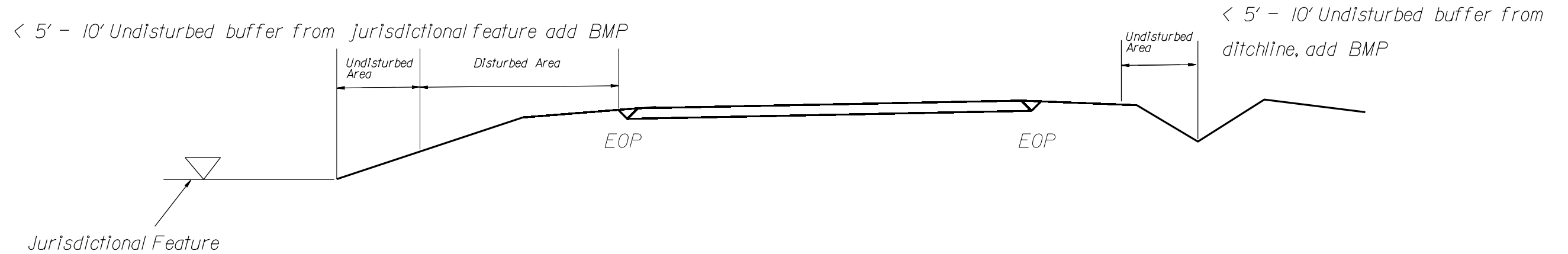
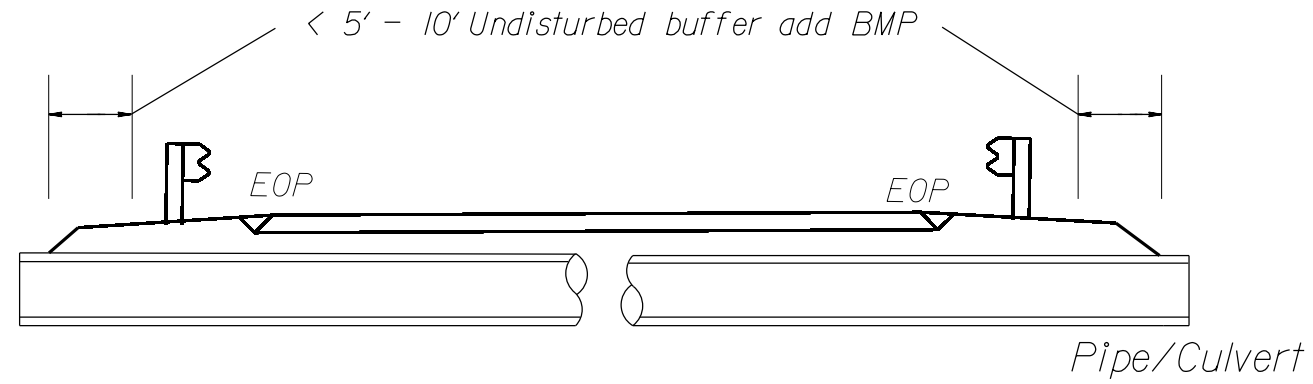


**RESURFACING ADVANCE
WARNING SIGNS FOR
HIGH SPEED FACILITIES
≥ 60 MPH**

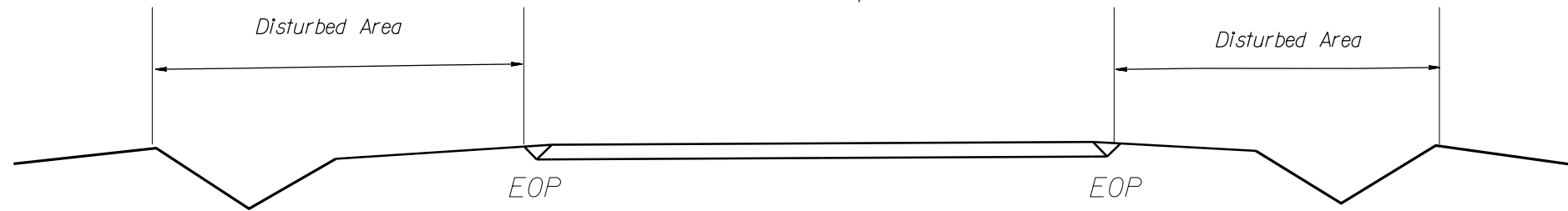
NOTES: Less than 5' - 10' undisturbed buffer from ROW, ditchline, water feature, or drainage inlet, add BMP.

BMP Options: Wattle or Silt Fence

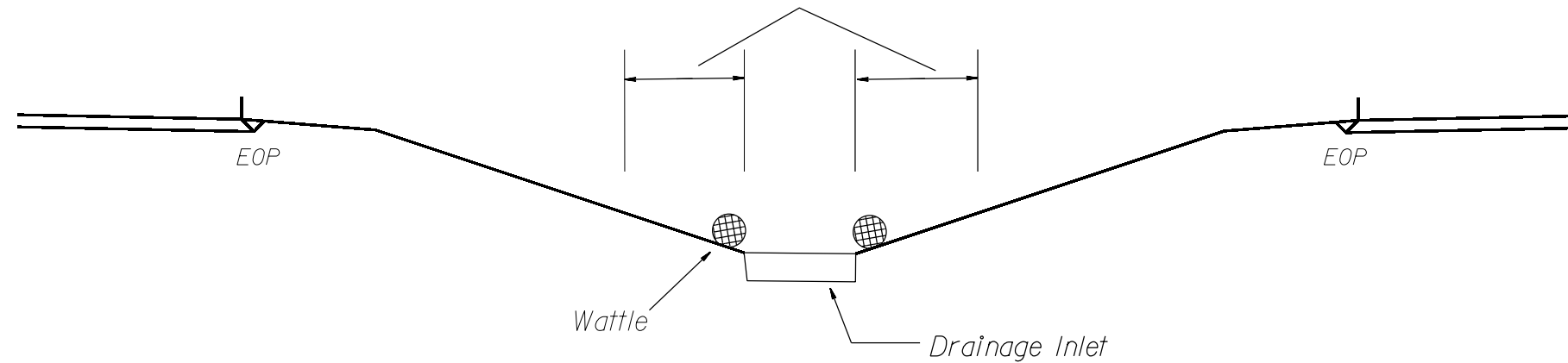
EROSION CONTROL DETAIL



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

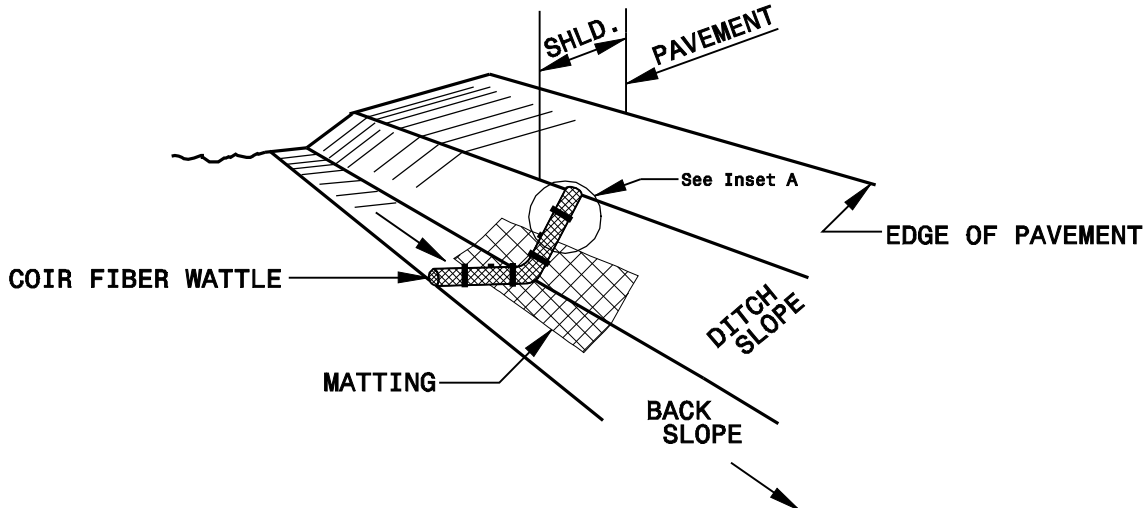
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

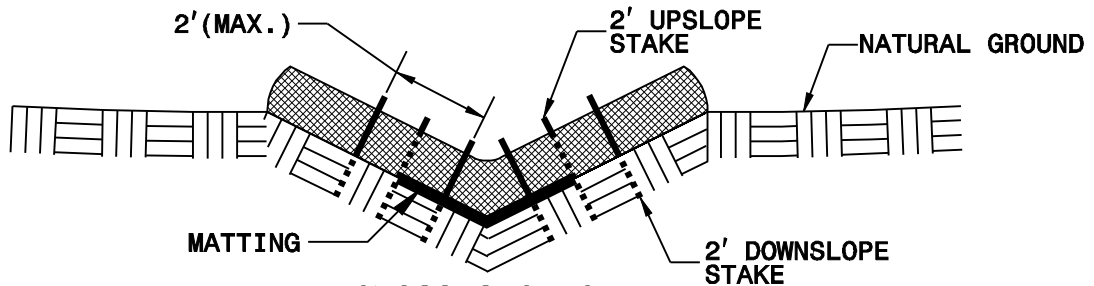
| <i>SITE DESCRIPTION</i> | <i>STABILIZATION TIME</i> | <i>TIMEFRAME EXCEPTIONS</i> |
|--|---------------------------|--|
| PERIMETER DIKES, SWALES, DITCHES AND SLOPES | 7 DAYS | NONE |
| HIGH QUALITY WATER (HQW) ZONES | 7 DAYS | NONE |
| SLOPES STEEPER THAN 3:1 | 7 DAYS | IF SLOPES ARE 10' OR LESS IN 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. |

| | |
|-------------------------|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| I-6029 | EC-3 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

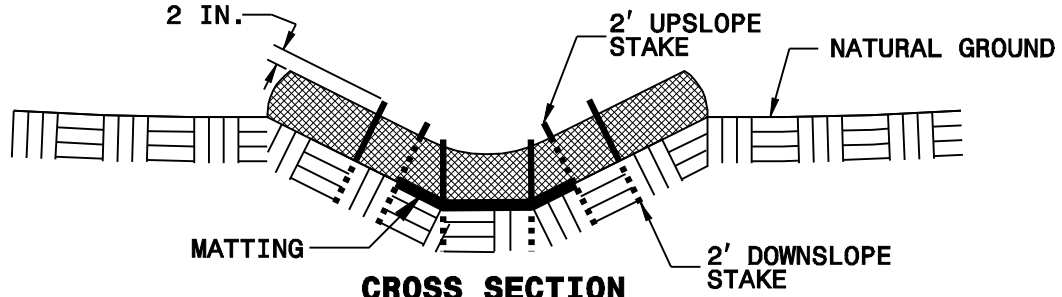
COIR FIBER WATTLE DETAIL



ISOMETRIC VIEW

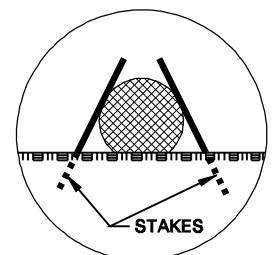


CROSS SECTION VEE DITCH

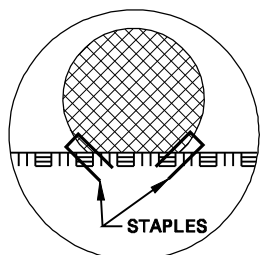


CROSS SECTION TRAPEZOIDAL DITCH

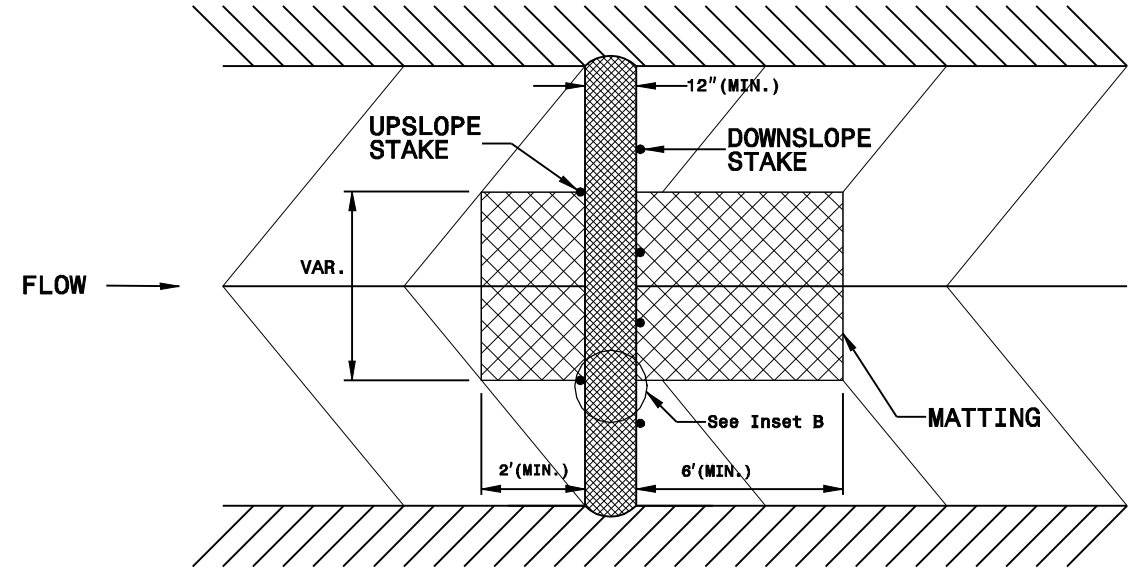
- NOTES:**
- USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.
 - USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
 - ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
 - INSTALL A MINIMUM OF 2 UPSLOPE 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.



INSET A



INSET B



TOP VIEW